



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • [www.aqmd.gov](http://www.aqmd.gov)

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## A G E N D A

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MEETING, JULY 11, 2014

A meeting of the South Coast Air Quality Management District Board will be held at 9:00 a.m., in the Auditorium at SCAQMD Headquarters, 21865 Copley Drive, Diamond Bar, California.

### Questions About an Agenda Item

- The name and telephone number of the appropriate staff person to call for additional information or to resolve concerns is listed for each agenda item.
- In preparation for the meeting, you are encouraged to obtain whatever clarifying information may be needed to allow the Board to move expeditiously in its deliberations.

### Meeting Procedures

- The public meeting of the SCAQMD Governing Board begins at 9:00 a.m. The Governing Board generally will consider items in the order listed on the agenda. However, any item may be considered in any order.
- After taking action on any agenda item not requiring a public hearing, the Board may reconsider or amend the item at any time during the meeting.

### Questions About Progress of the Meeting

- During the meeting, the public may call the Clerk of the Board's Office at (909) 396-2500 for the number of the agenda item the Board is currently discussing.

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The agenda and documents in the agenda packet will be made available upon request in appropriate alternative formats to assist persons with a disability. Disability-related accommodations will also be made available to allow participation in the Board meeting. Any accommodations must be requested as soon as practicable. Requests will be accommodated to the extent feasible. Please telephone the Clerk of the Boards Office at (909) 396-2500 from 7:00 a.m. to 5:30 p.m. Tuesday through Friday.

All documents (i) constituting non-exempt public records, (ii) relating to an item on the agenda, and (iii) having been distributed to at least a majority of the Governing Board after the agenda is posted, are available prior to the meeting for public review at the South Coast Air Quality Management District Clerk of the Board's Office, 21865 Copley Drive, Diamond Bar, CA 91765.

The Agenda is subject to revisions. For the latest version of agenda items herein or missing agenda items, check the District's web page ([www.aqmd.gov](http://www.aqmd.gov)) or contact the Clerk of the Board, (909) 396-2500. Copies of revised agendas will also be available at the Board meeting.

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## **CALL TO ORDER**

- Pledge of Allegiance
- Opening Comments: William A. Burke, Ed.D., Chair  
Other Board Members  
Barry R. Wallerstein, D. Env., Executive Officer
- Recognition from Chaffey Unified School District to SCAQMD

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Staff/Phone (909) 396-

## **CONSENT CALENDAR (Items 1 through 26)**

Note: Consent Calendar items held for discussion will be moved to Item No. 27

1. Approve Minutes of June 6, 2014 Board Meeting and Minutes of June 13, 2014 Special Board Meeting **McDaniel/2500**
2. Set Public Hearings September 5, 2014 to Consider Amendments and/or Adoption to SCAQMD Rules and Regulations **Wallerstein/3131**
  - (A). Amend Rule 1111 - NO<sub>x</sub> Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces **Chang/3186**

PAR 1111 delays the compliance date for condensing (high efficiency) units until April 1, 2015. The proposed amendment would also add a mitigation fee-based compliance option to allow up to three years' delay for residential furnace manufacturers that require additional time to produce furnaces that meet the 14 ng/Joule emission limit. The proposed mitigation fee will be used to mitigate the air emissions impacts of the delay. (Reviewed: Stationary Source Committee, March 21 and June 20, 2014)
  - (B). Amend Rule 1151 - Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations **Fine/2239**

In an effort to enhance the understanding of current applicable rule requirements, the proposed amendment seeks to make administrative changes to the rule by removing obsolete rule language, and making minor revisions and editorial corrections. The proposed amendment also adds new definitions to promote clarity and consistency, revises the transfer efficiency equivalency section and adds an exemption for automotive graphic arts operations. (Review: Stationary Source Committee, July 25, 2014)


**Budget/Fiscal Impact**

3. Recognize Revenue and Appropriate Funds from Clean Fuels, Carl Moyer AB 923 and Proposition 1B-Goods Movement for Administrative Support, Outreach and Education, and Related Activities **Miyasato/3249**

The Technology Advancement Office executes hundreds of contracts annually to implement incentive, demonstration and technology transfer projects, involving ongoing administrative support, outreach and education, and other related activities. This action is to recognize up to \$1,250,000 in revenue in the General Fund and appropriate \$1,250,000 to the Science & Technology Advancement FY 2014-15 Budget, Services and Supplies Major Object, Professional and Special Services Account, from the following special revenue funds: \$850,000 from the Clean Fuels Program Fund (31); \$100,000 from the Carl Moyer Program AB 923 Special Revenue Fund (80); and \$300,000 from the Prop 1B Funding-Goods Movement Fund (81). The appropriations will ensure flexibility and expediency in administering and addressing implementation issues for these programs. (Reviewed: Technology Committee, June 20, 2014; Recommended for Approval)

4. Recognize Revenue from Participating Members of California Natural Gas Vehicle Partnership and Approve Expenditures for Activities and Projects during FYs 2014-15 and 2015-16 **Miyasato/3249**

The SCAQMD Board established the California Natural Gas Vehicle Partnership (CNGVP) to promote greater deployment of natural gas vehicles in California. The participating members pay two-year membership fees to fund program administration and activities and projects to achieve the goals of the CNGVP. This action is to recognize revenue from participating and future CNGVP members; transfer \$25,000 from the Clean Fuels Fund (31) into the Natural Gas Vehicle Partnership Fund (40) for SCAQMD's two-year membership for FYs 2014-15 and 2015-16; approve the FYs 2014-15 and 2015-16 CNGVP budget; amend the contract for CNGVP website maintenance; and authorize the Executive Officer to approve individual expenditures, as selected by the CNGVP for FYs 2014-15 and 2015-16, up to \$75,000 but not to exceed \$225,000 for each fiscal year. (Reviewed: Technology Committee, June 20, 2014; Recommended for Approval)

5. Recognize Revenue, Amend Air Filtration Contract and Execute New Contract to Upgrade and Demonstrate Zero-Emission Heavy-Duty Vehicles  **Miyasato/3249**

The SCAQMD applied for and expects to receive a \$500,000 award from U.S. EPA under Section 105 of the Clean Air Act to sponsor Clean Air Technology Initiative projects. Staff proposes to utilize these funds to cosponsor school bus air filtration and zero-emission yard tractor projects. This action is to recognize the \$500,000 award from U.S. EPA into the Advanced Technology, Outreach and Education Fund (17). Secondly, this action is to amend a contract with IQAir to add \$170,000 from the Advanced Technology, Outreach and Education Fund (17) to install and test air filtration systems in school buses. Lastly, this action is to execute a new contract with TransPower to upgrade and demonstrate two electric yard tractors at a cost not to exceed \$405,000, comprised of \$330,000 from the Advanced Technology, Outreach and Education Fund (17) and \$75,000 from the Clean Fuels Fund (31). (Reviewed: Technology Committee, June 20, 2014; Recommended for Approval)

6. Approve Truck Projects under “Year 4” Proposition 1B-Goods Movement Program **Miyasato/3249**

At its April 4, 2014 meeting, the Board approved a list of heavy-duty truck projects under the “Year 4” Proposition 1B-Goods Movement Program, subject to CARB’s final approval. Some truck projects were not included in the recommended list either because of missing information for completion of evaluations or for not furnishing the campaign contribution disclosure forms on time. Since then staff has continued working with these applicants and more truck projects have become eligible. These actions are to augment the list of truck projects, previously approved by the Board, with additional truck projects as outlined in Table 1, subject to CARB’s final approval. These additional projects will not delay the program implementation schedule, as the final approval will be subsequent to completion of compliance checks by CARB, after which contracts will be executed. (Reviewed: Technology Committee, June 20, 2014; Recommended for Approval)

7. **Transfer and Appropriate Funding to Establish Air Quality Sensor Performance Evaluation Center** **Miyasato/3249**

Manufacturers have begun marketing “low-cost” air monitoring sensors to measure air pollution, and local environmental groups and the public are considering them as inexpensive options to independently evaluate air quality. However, there are no ongoing established local, state or federal programs to evaluate the validity of data obtained from such devices or their overall performance. This action is to establish an Air Quality Sensor Performance Evaluation Center (AQ-SPEC) to perform systematic, detailed characterizations of currently available air monitoring sensors using both field- and laboratory-based testing and to communicate the results to the public. This action is to also transfer and appropriate funding up to \$852,000 from the BP ARCO Settlement Projects Fund (46) to release solicitation documents and issue purchase orders or contracts for equipment and web development, fund program implementation costs and create and fill two new positions to support the AQ-SPEC. (Reviewed: Technology Committee, June 20, 2014; Recommended for Approval)

8. **Issue RFP to Implement Enhanced Fleet Modernization Program** **Miyasato/3249**

There is strong interest from the state legislature to provide incentives for eligible low-income owners of older passenger cars to scrap and replace their vehicles with newer, cleaner and more fuel efficient vehicles. To address this, CARB is amending its AB 118 Enhanced Fleet Modernization Program (EFMP) Regulation to focus on providing greater incentives for older vehicle scrapping and replacement to eligible low- and middle-income owners. Funding to implement the EFMP is available from AB 118, including funding to conduct a pilot program to assess innovative approaches targeting outreach to low- and middle-income vehicle owners for participation in the EFMP. This action is to issue an RFP to solicit proposals to implement one or more pilot programs under the AB 118 EFMP in the South Coast Air Basin in an amount up to \$1.5 million. (Reviewed: Technology Committee, June 20, 2014; Recommended for Approval)

9. **Issue RFPs to Demonstrate Commercial-Grade Electric Lawn and Garden Equipment** **Miyasato/3249**

Implementing a Commercial-Grade Electric Lawn and Garden Equipment Demonstration Program with local landscape professionals as well as municipalities will promote zero emission lawn and garden equipment and accelerate market penetration in the South Coast Air Basin. This action is to issue two RFPs: the first RFP will solicit proposals from qualified manufacturers and vendors to identify and procure commercial-grade electric lawn mowers; the second RFP will solicit proposals for commercial-grade cordless electric hand-held lawn and garden equipment. The equipment will be loaned on a rotating basis to eligible participating local gardening and landscape professionals and the manufacturers and vendors will provide training and technical support to participants. (Reviewed: Technology Committee, June 20, 2014; Recommended for Approval)

10. **Issue Program Announcement for Low-Emission Leaf Blower Vendors** **Miyasato/3249**

To follow up on the successful Leaf Blower Exchange Programs, staff proposes a similar incentive in the fall of 2014 to generate cost-effective emission reductions. This action is to issue a Program Announcement to solicit competitive bids from manufacturers of low-emission leaf blowers in sufficient quantities and at the lowest possible price. (Reviewed: Mobile Source Committee, June 20, 2014; Recommended for Approval)
  
11. **Recognize Revenue and Appropriate Funds for Enhanced Particulate Monitoring Program, NATTS, PAMS, PM2.5 and Near-Road NO2 Programs; and Solicit Competitive Bids and Issue Purchase Orders for Air Monitoring Equipment** **Tisopulos/3123**

The U.S. Government has allocated \$2,968,841 for the Enhanced Particulate Monitoring Program for FY 2014-15. In addition, the U.S. EPA has allocated \$293,716 for the NATTS Program for FY 2014-15. These actions are to: 1) recognize revenue and appropriate funds for the Enhanced Particulate Monitoring and NATTS Programs; 2) recognize revenue and appropriate funding for the remaining balance of the NATTS, PAMS, PM2.5 and Near-Road NO2 Program funds; and 3) solicit competitive bids and issue purchase orders for air monitoring equipment. (Reviewed: Administrative Committee, June 13, 2014; Recommended for Approval)
  
12. **Execute Contract for Media, Advertising and Public Outreach for Check Before You Burn Program** **Atwood/3687**

On September 6, 2013, the Board awarded a contract to Sensis for \$493,000 to plan and implement a Media, Advertising and Public Outreach Campaign for the FY 2013-14 Check Before You Burn program. The existing contract with the firm will expire on September 30, 2014. This action is to execute a contract with Sensis for one additional year. (Reviewed: Stationary Source Committee, June 20, 2014; Recommended for Approval)
  
13. **Issue RFP for Management Firm to Operate SCAQMD's Diamond Bar Headquarters Cafeteria** **Johnson/3018**

The current contract to manage and operate SCAQMD's headquarters cafeteria expires December 31, 2014. This action is to issue an RFP to solicit proposals from qualified food service management firms interested in providing this service for the next three-year period. (Reviewed: Administrative Committee, June 13, 2014; Recommended for Approval)

14. **Authorize Purchase of PeopleSoft and Oracle Software Support** **Marlia/3148**

The SCAQMD uses the PeopleSoft Integrated Financial/Human Resources System. The software package provides purchasing, accounting, asset management, financial management, project reporting, payroll, and human resource functionality for the SCAQMD. The PeopleSoft system uses Oracle database software. The maintenance support for this system expires August 13, 2014. This action is to obtain approval for the purchase of PeopleSoft and Oracle software maintenance support for another year. Funds for this expense are included in the FY 2014-15 Budget. (Reviewed: Administrative Committee, June 13, 2014; Committee took no action due to lack of campaign contribution disclosure form.)

15. **Authorize Purchase of OnBase Software Support** **Marlia/3148**

SCAQMD uses the OnBase software for its electronic document management system to manage critical documents and to support the Record Retention Policy. Software subscription and support for OnBase expires on July 31, 2014. This action is to obtain approval for sole source purchase of OnBase software subscription and support for one year. Funds for this purchase (\$120,380) are included in the FY 2014-15 Budget. (Reviewed: Administrative Committee, June 13, 2014; Recommended for Approval)

16. **Amend Existing Contract with Carmen Group Incorporated for Legislative Representation in Washington, D.C.** **Smith/3242**

The current contract with the Carmen Group Incorporated for legislative and regulatory representation in Washington D.C. will expire on July 14, 2014. This contract, as of January 14, 2014, had an option for two one-year extensions. A six-month extension was exercised at that time. To further the agency's policy positions at the federal level, this proposal exercises a second six-month contract extension, through January 14, 2015, for the Carmen Group Incorporated at a cost of \$109,620. (Reviewed: Legislative Committee, June 13, 2014; Recommended for Approval)

17. **Establish List of Prequalified Counsel to Represent and Advise SCAQMD on Legal Matters Related to Environmental Law and Represent and Advise SCAQMD Hearing Board** **Wiese/3460**

On April 4, 2014, the Board approved issuance of an RFP to prequalify outside counsel having expertise in the California Environmental Quality Act, SCAQMD rulemaking and planning procedures, administrative law and related issues for the SCAQMD and the SCAQMD Hearing Board. The RFP was issued jointly to limit costs. The evaluation of responding firms has been completed. This action is to establish two lists of prequalified counsel--one to represent the SCAQMD and one to represent the SCAQMD Hearing Board in environmental law areas. (Reviewed: Administrative Committee, June 13, 2014; Recommended for Approval)

18. Approve Contract Awards and Modifications Approved by MSRC **Pettis**

The MSRC approved a final award under the Signal Synchronization Partnership Program as part of their FYs 2012-14 AB 2766 Discretionary Fund Work Program. Additionally, every year the MSRC adopts an Administrative Budget which includes transference of funds to the SCAQMD Budget to cover administrative expenses. At this time the MSRC seeks Board approval of the contract award and the fund transfer. (Reviewed: Mobile Source Air Pollution Reduction Review Committee, June 19, 2014, Recommended for Approval)

**Items 19 through 26 - Information Only/Receive and File**

19. Legislative & Public Affairs Report **Smith/3242**

This report highlights the May 2014 outreach activities of Legislative and Public Affairs, which include: Environmental Justice Update, Community Events/Public Meetings, Business Assistance, and Outreach to Business and Federal, State, and Local Government. (No Committee Review)

20. Report to Legislature and CARB on SCAQMD's Regulatory Activities for Calendar Year 2013 **Smith/3242**

The SCAQMD is required by law to submit a report to the Legislature on its regulatory activities for the preceding calendar year. The report is to include a summary of each rule and rule amendment adopted by SCAQMD, number of permits issued, denied, or cancelled, emission offset transactions, budget and forecast, and an update on the Clean Fuels program. Also included is the Annual RECLAIM Audit Report, as required by RECLAIM Rule 2015: Backstop Provisions. (No Committee Review)

21. Hearing Board Report **Camarena/2500**

This reports the actions taken by the Hearing Board during the period of May 1 through May 31, 2014. (No Committee Review)

22. Civil Filings and Civil Penalties Report **Wiese/3460**

This reports the monthly penalties from May 1 through May 31, 2014, and legal actions filed by the General Counsel's Office during May 1 through May 31, 2014. An Index of District Rules is attached with the penalty report. (Reviewed: Stationary Source Committee, June 20, 2014)



23. **Lead Agency Projects and Environmental Documents Received by SCAQMD** **Chang/3186**

This report provides, for the Board's consideration, a listing of CEQA documents received by the SCAQMD between May 1, 2014 and May 31, 2014, and those projects for which the SCAQMD is acting as lead agency pursuant to CEQA. (Reviewed: Mobile Source Committee, June 20, 2014)

24. **Rule and Control Measure Forecast** **Chang/3186**

This report highlights SCAQMD rulemaking activities and public workshops potentially scheduled for the year 2014. (No Committee Review)

25. **Report of RFPs Scheduled for Release in July** **O'Kelly/2828**

This report summarizes the RFPs for budgeted services over \$75,000 scheduled to be released for advertisement for the month of July. (Reviewed: Administrative Committee, June 13, 2014; Recommended for Approval)

26. **Report on Major Projects for Information Management Scheduled to Start During First Six Months of FY 2014-15** **Marlia/3148**

Information Management is responsible for data systems management services in support of all SCAQMD operations. This action is to report on major automation contracts and projects to be initiated by Information Management during the first six months of FY 2014-15. (Reviewed: Administrative Committee, June 13, 2014; Recommended for Approval)

27. **Items Deferred from Consent Calendar**

**BOARD CALENDAR**

28. **Administrative Committee (Receive & File)** **Chair: Burke** **Wallerstein/3131**

29. **Investment Oversight Committee (Receive & File)** **Chair: Antonovich** **O'Kelly/2828**

30. Legislative Committee (Receive & File) **Chair: Gonzales Smith/3242**

Receive and file; and take the following actions as recommended:

<b>Agenda Item</b>	<b>Recommended Action</b>
Amend Existing Contract with the Carmen Group Incorporated for Legislative Representation in Washington, D.C.	Approve
AB 1720(Bloom) Vehicles: Bus Gross Weight	Support
AB 1857 (Frazier) Department of Transportation: Vehicle and Equipment Procurement	Support
AB 2565 (Muratsuchi) Rental Property: Electric Vehicle Charging Stations	Move to Board for Discussion

31. Mobile Source Committee (Receive & File) **Chair: Parker Chang/3186**

32. Stationary Source Committee (Receive & File) **Chair: Yates Nazemi/2662**

33. Technology Committee (Receive & File) **Chair: J. Benoit Miyasato/3249**

34. Mobile Source Air Pollution Reduction Review Committee (Receive & File) **Board Liaison: Antonovich Hogo/3184**

35. California Air Resources Board Monthly Report (Receive & File) **Board Rep: Mitchell McDaniel/2500**

36. California Fuel Cell Partnership Executive Board Meeting Notes and Quarterly Updates **E** **Miyasato/3249**

This report summarizes the California Fuel Cell Partnership Executive Board meeting held April 15, 2014, and provides updates for quarters beginning October 2013 and January 2014. (Reviewed: Technology Committee, June 20, 2014; Recommended for Approval)

**Staff Presentation/Board Discussion**

37. Report on Hexavalent Chromium Monitoring at Cement Manufacturing Facilities, Development of Cement Facility Closure Plan, and Recommendations Regarding Future Rulemaking Efforts **Fine/2239**

In 2009, the Board adopted amendments to Rule 1156 - Further Reductions of Particulate Emissions from Cement Manufacturing Facilities to address the elevated hexavalent chromium (Cr+6) ambient concentrations found through MATES III sampling efforts. The amended rule requires the facilities to conduct ambient monitoring for Cr+6. Pursuant to the resolution commitments, staff presents the second biannual report to the Board on the monitoring results at the two impacted facilities. The resolution also required the development of a facility closure plan in the event a facility ceases all or partial operations. This report will discuss potential amendments to Rule 1156 to address monitoring requirements and the closure plan. (Reviewed: Stationary Source Committee, June 20, 2014)

**PUBLIC HEARINGS**

38. Amend Rule 2449 – Control of Oxides of Nitrogen Emissions from Off-Road Diesel Vehicles **Hogo/3184**

In May 2008, the Board adopted Rule 2449 implementing the Surplus Off-Road Opt-in for NOx (SOON) provisions of the State In-Use Off-Road Diesel Vehicle Regulation. On December 14, 2011, CARB amended the In-Use Off-Road Diesel Vehicle Regulation and removed Section 2449.2, Title 13 of the California Code of Regulation (CCR). As part of that action, CARB renumbered the SOON Provision Section 2449.3 to Section 2449.2. Staff is proposing an administrative amendment to SCAQMD Rule 2449 to revise the reference from Section 2449.3 to Section 2449.2 of Title 13 of the California Code of Regulation. This action is to adopt the resolution: 1) Determining that the proposed amendments to Rule 2449 are exempt from the CEQA; and 2) Amending Rule 2449. (Reviewed: Mobile Source Committee, June 20, 2014)

39. 2013 Annual Report on AB 2588 Air Toxics Hot Spots Program **Chang/3186**

The Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) requires local air pollution districts to prepare an annual report. Key accomplishments for 2013 include: 1) reviewed and approved five facility health risk assessments (HRAs), which included two public notices and a total of 11 public meetings; 2) notified two facilities to prepare HRAs; 3) notified two facilities to prepare air toxic inventory reports; 4) required one facility to prepare a risk reduction plan; 5) completed development of a mapping tool to display health risks from retail gas stations and perchloroethylene dry cleaners; 6) prioritized approximately 50 facilities; and 7) updated AB 2588 website information. (Reviewed: Stationary Source Committee, May 16, 2014)

**PUBLIC COMMENT PERIOD – (Public Comment on Non-Agenda Items, Pursuant to Government Code Section 54954.3)**

**BOARD MEMBER TRAVEL – (No Written Material)**

Board member travel reports have been filed with the Clerk of the Boards, and copies are available upon request.

**CLOSED SESSION - (No Written Material)**

**Wiese/3460**

It is necessary for the Board to recess to closed session pursuant to Government Code section 54956.9(a) and 54956.9(d)(1) to confer with its counsel regarding pending litigation which has been initiated formally and to which the District is a party. The actions are:

- Exide Technologies, Inc. v. SCAQMD, et al., Los Angeles Superior Court Case No. BS146770 (Writ of Mandate);
- People of the State of California, ex rel SCAQMD v. Exide Technologies, Inc., Los Angeles Superior Court Case No. BC533528;
- In the Matter of SCAQMD v. Exide Technologies, Inc., SCAQMD Hearing Board Case No. 3151-29 (Order for Abatement);
- Exide Technologies, Inc., Petition for Variance, SCAQMD Hearing Board Case No. 3151-31;
- In re: Exide Technologies, Inc., U.S. Bankruptcy Court for the District of Delaware, Case No. 13-11482 (KJC) (Bankruptcy case);
- Friends of the Fire Rings v. SCAQMD, San Diego Superior Court, North County, Case No. 37-2014-00008860-CU-WM-NC (Nov. 26, 2013; transferred March 20, 2014);
- National Association for Surface Finishing, et al. v. U.S. EPA, et al., U.S. Court of Appeals, D.C. Circuit, Case No. 12-1459 (Consolidated with Nos. 12-1460, 13-1147) (seeking authorization to file amicus brief);
- People of the State of California, ex rel. Kamala D. Harris, Attorney General v. SCAQMD, Consent Agreement and Stipulation for Entry of Final Judgment and Order, Los Angeles Superior Court;
- Petition for Declaratory Order by U.S. Environmental Protection Agency, Surface Transportation Board Docket No. FD 35803 (Railroad Rules);
- Quantification Settlement Agreement Cases, Court of Appeal of the State of California, Third Appellate District, Case No. C074592 (seeking authorization to file amicus brief);
- SCAQMD v. City of Los Angeles, et al, Los Angeles Superior Court Case No. BS143381 (SCIG);

- SCAQMD v. Superior Court of the County of Los Angeles, California Supreme Court Case No. S218900; Court of Appeal, Second Appellate District, Case No. B256002 (Browning-Ferris Industries); and
- SCAQMD v. U.S. EPA, U.S. Court of Appeals Ninth Circuit No. 13-73936 (Morongo Redesignation).

It is also necessary for the Board to recess to closed session pursuant to Government Code sections 54956.9(a) and 54956.9(d)(4) to consider initiation of litigation (one case).

Also, it is necessary for the Board to recess to closed session pursuant to Government Code section 54956.9(b) due to significant exposure to litigation (one case).

## **ADJOURNMENT**

**\*\*\*PUBLIC COMMENTS\*\*\***

Members of the public are afforded an opportunity to speak on any listed item before or during consideration of that item. Please notify the Clerk of the Board, (909) 396-2500, if you wish to do so. All agendas are posted at SCAQMD Headquarters, 21865 Copley Drive, Diamond Bar, California, at least 72 hours in advance of the meeting. At the end of the agenda, an opportunity is also provided for the public to speak on any subject within the SCAQMD's authority. Speakers may be limited to three (3) minutes each.

Note that on items listed on the Consent Calendar and the balance of the agenda any motion, including action, can be taken (consideration is not limited to listed recommended actions). Additional matters can be added and action taken by two-thirds vote, or in the case of an emergency, by a majority vote. Matters raised under Public Comments may not be acted upon at that meeting other than as provided above.

Written comments will be accepted by the Board and made part of the record, provided 25 copies are presented to the Clerk of the Board. Electronic submittals to [cob@aqmd.gov](mailto:cob@aqmd.gov) of 10 pages or less including attachment, in MS WORD, plain or HTML format will also be accepted by the Board and made part of the record if received no later than 5:00 p.m., on the Tuesday prior to the Board meeting.

**ACRONYMS**

AQIP = Air Quality Investment Program	NESHAPS = National Emission Standards for Hazardous Air Pollutants
AVR = Average Vehicle Ridership	NGV = Natural Gas Vehicle
BACT = Best Available Control Technology	NO <sub>x</sub> = Oxides of Nitrogen
Cal/EPA = California Environmental Protection Agency	NSPS = New Source Performance Standards
CARB = California Air Resources Board	NSR = New Source Review
CEMS = Continuous Emissions Monitoring Systems	PAMS = Photochemical Assessment Monitoring Stations
CEC = California Energy Commission	PAR = Proposed Amended Rule
CEQA = California Environmental Quality Act	PHEV = Plug-In Hybrid Electric Vehicle
CE-CERT =College of Engineering-Center for Environmental Research and Technology	PM <sub>10</sub> = Particulate Matter ≤ 10 microns
CNG = Compressed Natural Gas	PM <sub>2.5</sub> = Particulate Matter ≤ 2.5 microns
CO = Carbon Monoxide	PON = Public Opportunity Notice
CTG = Control Techniques Guideline	PR = Proposed Rule
DOE = Department of Energy	RFP = Request for Proposals
EV = Electric Vehicle	RFQ = Request for Quotations
FY = Fiscal Year	SCAG = Southern California Association of Governments
GHG = Greenhouse Gas	SIP = State Implementation Plan
HRA = Health Risk Assessment	SO <sub>x</sub> = Oxides of Sulfur
IAIC = Interagency AQMP Implementation Committee	SOON = Surplus Off-Road Opt-In for NO <sub>x</sub>
LEV = Low Emission Vehicle	SULEV = Super Ultra Low Emission Vehicle
LNG = Liquefied Natural Gas	TCM = Transportation Control Measure
MATES = Multiple Air Toxics Exposure Study	ULEV = Ultra Low Emission Vehicle
MOU = Memorandum of Understanding	U.S. EPA = United States Environmental Protection Agency
MSERCs = Mobile Source Emission Reduction Credits	VOC = Volatile Organic Compound
MSRC = Mobile Source (Air Pollution Reduction) Review Committee	VMT = Vehicle Miles Traveled
NATTS =National Air Toxics Trends Station	ZEV = Zero Emission Vehicle

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BOARD MEETING DATE: July 11, 2014

AGENDA NO. 1

MINUTES: Governing Board Monthly Meeting

SYNOPSIS: Attached are the Minutes of the June 6, 2014 meeting and the Minutes of the June 13, 2014 special meeting.

**RECOMMENDED ACTION:**

Approve Minutes of the June 6, 2014 Board Meeting and Minutes of the June 13, 2014 Special Board Meeting.

Sandra McDaniel,  
Clerk of the Boards

SM:dg

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**FRIDAY, JUNE 6, 2014**

Notice having been duly given, the regular meeting of the South Coast Air Quality Management District Board was held at District Headquarters, 21865 Copley Drive, Diamond Bar, California. Members present:

William A. Burke, Ed.D., Chairman  
Speaker of the Assembly Appointee

Mayor Dennis R. Yates, Vice Chairman  
Cities of San Bernardino County

Supervisor Michael D. Antonovich (arrived at 9:10 a.m.)  
County of Los Angeles

Mayor Pro Tem Ben Benoit  
Cities of Riverside County

Supervisor John J. Benoit  
County of Riverside

Councilmember Joe Buscaino  
City of Los Angeles

Councilmember Michael A. Cacciotti  
Cities of Los Angeles County – Eastern Region

Supervisor Josie Gonzales (arrived at 9:10 a.m.)  
County of San Bernardino

Dr. Joseph K. Lyou  
Governor's Appointee

Mayor Judith Mitchell  
Cities of Los Angeles County – Western Region

Supervisor Shawn Nelson  
County of Orange

Dr. Clark E. Parker, Sr.  
Senate Rules Committee Appointee

Mayor Miguel A. Pulido  
Cities of Orange County



**CALL TO ORDER:** Chairman Burke called the meeting to order at 9:05 a.m.

- Pledge of Allegiance: Led by Dr. Parker.
- Opening Comments

Councilman Cacciotti. Explained that he attended the Electric Lawn Mower Exchange at the Rose Bowl on May 17, 2014. He displayed photos taken throughout the trade-in process and commended staff for their efforts in coordinating a successful event. He added that he also attended an event at Temple City Park on June 5, 2014 regarding the commercial lawn program trial which is being well-received by the municipalities that have been able to test the battery-operated ride-along lawn mower.

### **CONSENT CALENDAR**

1. Approve Minutes of May 2, 2014 Board Meeting
2. Set Public Hearing July 11, 2014 to Consider Amendments and/or Adoption to SCAQMD Rules and Regulations:

Amend Rule 2449 – Control of Oxides of Nitrogen Emissions from Off-Road Diesel Vehicles

#### ***Budget/Fiscal Impact***

3. Execute Contract to Evaluate Emissions Inventories and Model Performance using Mobile Smog Chamber Studies
4. Amend Contract for Enhancement of New Annual Emissions Reporting System
5. Execute Contract for Purchase and Installation of Seating for Auditorium and Conference Rooms at Diamond Bar Headquarters
6. Execute Contract for Workers' Compensation Claims Third-Party Administration
7. Issue Purchase Order for Dedicated CNG Sedans
8. Establish List of Prequalified Providers for Temporary Employment Services
9. Approve Contract Awards and Modifications Approved by MSRC

**Items 10 through 18 - Information Only/Receive and File**

10. Legislative & Public Affairs Report
11. Hearing Board Report
12. Civil Filings and Civil Penalties Report
13. Lead Agency Projects and Environmental Documents Received by SCAQMD
14. Rule and Control Measure Forecast
15. Report of RFPs and RFQs Scheduled for Release in June
16. Remove Various Fixed Assets from SCAQMD Inventory
17. Annual Meeting of Brain & Lung Tumor and Air Pollution Foundation
18. Status Report on Major Projects for Information Management Scheduled to Start During Last Six Months of FY 2013-14

**BOARD CALENDAR**

20. Administrative Committee
21. ***Staff recommended that this item be delayed until the July meeting.***
22. Legislative Committee
23. Stationary Source Committee
24. Mobile Source Air Pollution Reduction Review Committee

Mayor Yates noted that he serves on the Board of Directors for SANBAG who will be awarded a contract under Item No. 9, but that he will not receive any compensation as a result of the award.

Agenda Item Nos. 13, 17, 20 and 22 through 24 were withheld for comment.

MOVED BY CACCIOTTI, SECONDED BY YATES, AGENDA ITEMS 1 THROUGH 12, 14 THROUGH 16, 18, AND 19 APPROVED AS RECOMMENDED, BY THE FOLLOWING VOTE:

AYES: B. Benoit, J. Benoit, Burke, Buscaino, Cacciotti, Lyou, Mitchell, Nelson, Parker, Pulido and Yates.

NOES: None.

ABSENT: Antonovich and Gonzales.

(Supervisors Antonovich and Gonzales arrived at 9:10 a.m.)

19. Items Deferred from Consent Calendar

13. Lead Agency Projects and Environmental Documents Received by SCAQMD

Supervisor Nelson raised a concern about the District using a trip generation methodology for the large warehouse projects listed on attachment A-2, other than the widely-used Institute of Traffic Engineers standards; and requested that the Mobile Source Committee receive regular updates on this matter.

Dr. Wallerstein noted that the Board previously approved the use of the California Emissions Estimator Model (CalEEMod) method, and directed a survey study to be completed. The study has been completed and the results have been analyzed by researchers at UCR and will be presented at the July 25, 2014 Mobile Source Committee, as well as through meetings with industry and other interested parties in a working group.

Mayor Yates noted that as a member of the Board of Directors at SANBAG, he is aware of concerns being raised by builders on the method being used to count trips and how that will affect their ability to attract industry to the Inland Empire.

Supervisor Gonzales noted the importance of balancing air quality impacts with the development of new economic opportunities, including job creation and tax revenue, within the region.

In response to Dr. Parker's question regarding if the standard being used have been approved by traffic engineers, Dr. Wallerstein noted that traffic engineers have been involved in the study effort, which includes measuring truck trips and car trips to 33 warehouses. He added that one issue from a land-use, planning and air quality perspective is that many of the projects do not have a set tenant, which makes getting an accurate trip count during the CEQA process difficult. He assured the Board that discussions will begin forthwith with stakeholders to discuss the study findings.

Chairman Burke agreed that due to the impact on the industry, a resolution needs to be reached expeditiously.

MOVED BY NELSON, SECONDED BY PULIDO, AGENDA ITEM 13 APPROVED WITH THE DIRECTION TO STAFF TO PRESENT THE MOBILE SOURCE COMMITTEE WITH ADDITIONAL INFORMATION ABOUT THE TRAFFIC METHODOLOGY UTILIZED FOR BUILDING PROJECTS, BY THE FOLLOWING VOTE:

AYES: Antonovich, B. Benoit, J. Benoit, Burke, Buscaino, Cacciotti, Gonzales, Lyou, Mitchell, Nelson, Parker, Pulido and Yates.

NOES: None.

ABSENT: None.

17. Annual Meeting of Brain & Lung Tumor and Air Pollution Foundation

In response to Councilman Cacciotti's inquiry, Dr. Jean Ospital, Health Effects Officer, summarized the current research projects, being funded by the Foundation.

Chairman Burke directed staff to ask Doctor Black to provide a status report to the Board in the fall.

Supervisor Gonzales suggested that a comparison of similar research or medical reports in other parts of the country dealing with health concerns such as brain tumors and respiratory diseases, be

included in a future report to more accurately gauge whether the Foundation is investing in the right areas to gain the information that will ultimately be used to the benefit of the residents in the Basin.

Chairman Burke noted that even though he believes the research being conducted is ground-breaking, it may be of benefit to review the findings of other studies and analysis to ensure the Foundation's resources are being properly allocated.

Dr. Lyou suggested connecting with local epidemiologists and public health specialists and having them speak to the Board or a Board committee regarding their areas of expertise.

Mayor Pulido commented that the focus should be on finding the most relevant studies; and suggested the development of a metric to connect the amount of emissions from a particular source with the damage to human health and the resulting cost per ton emitted. He also urged for additional public outreach by sharing pertinent study results or medical articles regarding air pollution and health effects.

Councilman Cacciotti highlighted a report of a recently released Los Angeles County Public Health study that focused on the cost of asthma and included the incidents of asthma across different ethnic groups among the approximately 214,000 children in Los Angeles County that are affected. He stressed the importance of trying to spread a message that shows clear connections between air pollution and asthma and other health risks.

Supervisor Antonovich noted the importance of spreading the message that a balanced diet is an important factor to a healthier lifestyle.

Mayor Yates commented that while the air quality has improved over the past thirty-five years, the incidents of asthma and the need for inhalers amongst youth sports players, has steadily increased.

Chairman Burke added that he will work with Dr. Wallerstein to take into account the comments made by the Board Members.

MOVED BY PULIDO, SECONDED BY CACCIOTTI, AGENDA ITEM 17 APPROVED AS RECOMMENDED, RECEIVING AND FILING THE ANNUAL REPORT OF THE BRAIN & LUNG TUMOR AND AIR POLLUTION FOUNDATION, BY THE FOLLOWING VOTE:

AYES: Antonovich, B. Benoit, J. Benoit, Burke, Buscaino, Cacciotti,

Gonzales, Lyou, Mitchell, Nelson,  
Parker, Pulido and Yates.

NOES: None.

ABSENT: None.

- 20. Administrative Committee
- 22. Legislative Committee
- 23. Stationary Source Committee

Dr. Lyou requested clarification regarding utilizing errata sheets for proposed changes to agenda items as a result of discussion at the May 9 Administrative Committee meeting as he has proposed additions to the reports for Items 22 and 23.

Dr. Wallerstein responded that staff will be presenting the Administrative Committee with a change to the Board's policies reflective of the guidance provided at the May 9 Committee meeting, and in the interim he advised against the use of errata sheets until further clarification from the Committee is provided.

Dr. Lyou proposed revisions on Item 22 with the addition of air toxics to the principles regarding funding related issues; and on Item 23 provided further clarification on the discussion regarding the Annual Report AB 2588.

MOVED BY LYOU, SECONDED BY  
BUSCAINO, AGENDA ITEMS 20, 22 AND 23  
APPROVED AS RECOMMENDED,  
RECEIVING AND FILING THE COMMITTEE  
REPORTS, AND ADOPTING THE POSITIONS  
ON LEGISLATION AS SET FORTH BELOW,  
BY THE FOLLOWING VOTE:

AYES: Antonovich, B. Benoit, J. Benoit,  
Burke, Buscaino, Cacciotti,  
Gonzales, Lyou, Mitchell, Nelson,  
Parker, Pulido and Yates.

NOES: None.

ABSENT: None.

**Agenda Item**

**Recommended Action**

AB 1499 (Skinner) Electricity: Self-Generation Incentive Program	Support
AB 1624 (Gordon) Self-Generation Incentive Program	Support
SB 1265 (Hueso) State Vehicle Fleet Purchases: Minimum Fuel Economy Standard	Support
Principles Regarding SCAQMD's Position On Funding Related Issues	Adopt
AB 1330 (Perez) Environmental Justice – Guidance on legislative language	Approve in Concept

**Amend Item No. 22 Attachment 4, Principles Regarding SCAQMD's Position on Funding Related Issues, as follows:**

- 2. On any legislation relating to incentive programs or other funding opportunities for air pollution reduction, improved air quality and public health benefits, staff shall work with the legislature and stakeholders to ensure that the region served by the Agency receives its fair share of funding. Specifically, funding should primarily, but not exclusively, be allocated based on the severity of air pollution and the number of people impacted, or in technical terms, the population weighted exposure to **toxic air contaminants and** criteria air pollutants above federal standards for particulate matter (PM 2.5) and Ozone.*
- 3. Given limited local and state resources with which to address multiple challenges, including those of mobility, goods movement, greenhouse gas and air pollution, SCAQMD staff will advocate that funding allocations give priority to those investments that best generate criteria **or air toxics** pollution reduction co-benefits.*

**Amend Item 2 on page 2 of Item No. 23 as follows:**

- 2. 2013 Annual Report on AB 2588 Air Toxics Hot Sports Program**  
*Susan Nakamura, Director of Strategic Initiatives, provided a summary of the AB 2588 annual report. Staff summarized key activities in 2013 and future activities for the AB 2588 program. Dr. Lyou asked if there is **an increased** a toxic risk associated with **periodic increase in the higher** VOC emissions from refineries **observed during the fence line monitoring study**. Barry Wallerstein replied that the VOC emissions were **a short-term observation and additional monitoring will be required before drawing any conclusions**.*

24. Mobile Source Air Pollution Reduction Review Committee

Councilman Cacciotti requested that the Board Members be provided with notice when the regional workshops for the development of the FY 2014-15 Work Program are announced.

MOVED BY YATES, SECONDED BY CACCIOTTI, AGENDA ITEM 24 APPROVED AS RECOMMENDED, RECEIVING AND FILING THE MSRC REPORT, BY THE FOLLOWING VOTE:

AYES: Antonovich, B. Benoit, J. Benoit, Burke, Buscaino, Cacciotti, Gonzales, Lyou, Mitchell, Nelson, Parker, Pulido and Yates.

NOES: None.

ABSENT: None.

25. California Air Resources Board Monthly Report

MOVED BY BUSCAINO, DULY SECONDED, AGENDA ITEM 25 APPROVED AS RECOMMENDED, RECEIVING AND FILING THE CARB REPORT, BY THE FOLLOWING VOTE:

AYES: Antonovich, B. Benoit, J. Benoit, Burke, Buscaino, Cacciotti, Gonzales, Lyou, Mitchell, Nelson, Parker, Pulido and Yates.

NOES: None.

ABSENT: None.

**Staff Presentation/Board Discussion**

26. Approve Proposed Drought Management and Water Conservation Plan

Mohsen Nazemi, DEO/Engineering and Compliance, gave the staff presentation.

In response to Councilman Cacciotti's questioning if other ways to improve water conservation at District Headquarters have been considered,



Dr. Wallerstein noted that staff plans to present an item to the Board regarding replacement of outdated bathroom fixtures.

MOVED BY YATES, SECONDED BY CACCIOTTI, AGENDA ITEM NO. 26 APPROVED AS RECOMMENDED BY STAFF, ADOPTING RESOLUTION NO. 14-10 ADOPTING A DROUGHT MANAGEMENT AND WATER CONSERVATION PLAN/ACTION ITEMS, BY THE FOLLOWING VOTE:

AYES: Antonovich, B. Benoit, J. Benoit, Burke, Buscaino, Cacciotti, Gonzales, Lyou, Mitchell, Nelson, Parker and Yates.

NOES: None.

ABSENT: Pulido.

## **PUBLIC HEARINGS**

Dr. Wallerstein noted that Items 27 and 28 would be considered concurrently.

- 27. Adopt Executive Officer's FY 2014-15 SCAQMD Budget and Work Program
- 28. Amend Regulation III - Fees

Michael O'Kelly, Chief Financial Officer, gave the staff presentation.

The public hearing was opened and the following individuals addressed the Board on Agenda Items 27 and 28.

### **BILL LA MARR, California Small Business Alliance**

Expressed appreciation for the ability to provide input as a member of the Budget Advisory Committee; noted that the proposed fee increase is a poor way to reward businesses for their continued investments and diligence in reducing emissions; and offered suggestions to control costs in an effort to avoid annual fee increases, including streamlining the permitting process.

### **CURTIS COLEMAN, on behalf of the Southern California Air Quality Alliance**

Noted his involvement in the Budget Advisory Committee; applauded the fiscal responsibility shown over the past ten years; and urged that the filling of

vacant positions in the permit processing department be prioritized, to speed up the processing of permit applications.

There being no further public testimony on this item, the public hearing was closed.

Dr. Wallerstein noted a renewed effort towards streamlining the permitting process, starting with a presentation to the Stationary Source Committee on the status of the permit process and convening the Permit Work Group. He noted that six vacant permit processing engineer positions have recently been authorized to be filled and additional positions could also be authorized pursuant to the Board's direction.

In response to Mayor Yates' question about the possibility of CARB utilizing vacant space at the SCAQMD Headquarters, Dr. Wallerstein explained that while they are looking to relocate from their El Monte location, their space requirements for testing facilities require more land than is available at the District Headquarters.

MOVED BY YATES, SECONDED BY CACCIOTTI,  
THE FOLLOWING ACTIONS APPROVED ON  
AGENDA ITEMS 27 AND 28 AS RECOMMENDED  
BY STAFF:

- 1) REMOVE FROM RESERVES AND DESIGNATIONS ALL AMOUNTS ASSOCIATED WITH THE FY 2013-14 BUDGET;
- 2) APPROVE TOTAL APPROPRIATIONS OF \$132,220,074;
- 3) APPROVE A PROJECTED JUNE 30, 2015 RESERVES AND DESIGNATIONS FUND BALANCE OF \$14,830,899 AND TOTAL UNDESIGNATED OF \$23,103,647;
- 4) APPROVE TOTAL REVENUES OF \$132,220,074;
- 5) APPROVE THE ADDITION OF ONE (1) NET AUTHORIZED/FUNDED POSITION AND AS DETAILED IN THE FY 2014-15 DRAFT BUDGET;
- 6) APPROVE THE FY 2014-15 GOALS AND PRIORITY OBJECTIVES AS PREVIOUSLY INCLUDED IN THE FY 2014-15 DRAFT BUDGET;

- 7) INCREASE THE FY 2013-14 GENERAL FUND REVENUE BUDGET AND APPROVE THE TRANSFER OF \$5 MILLION FROM THE UNDESIGNATED FUND BALANCE TO THE DEBT SERVICE FUND;
- 8) INCREASE THE FY 2013-14 GENERAL FUND REVENUE BUDGET BY \$219,181;
- 9) APPROVE A MINIMUM UNRESERVED FUND BALANCE RESERVE POLICY OF 20% OF GENERAL FUND REVENUES;
- 10) CONVENE PERMIT WORK GROUP TO DISCUSS PERMIT STREAMLINING MEASURES; AND
- 11) ADOPT RESOLUTION NO. 14-11, AMENDING REGULATION III - FEES, INCLUDING RULES 301, 303, 304, 304.1, 306, 307.1, 308, 309, 311, 313, 314 AND 315, AND CERTIFYING THE NOTICE OF EXEMPTION.

BY THE FOLLOWING VOTE:

AYES: Antonovich, B. Benoit, J. Benoit, Burke, Buscaino, Cacciotti, Gonzales, Lyou, Mitchell, Nelson, Parker, Pulido and Yates.

NOES: None.

ABSENT: None.

29. Proposed Withdrawal of SIP Submittals for Select Rules and Regulations

Staff waived the oral presentation on Agenda Item 29.

The public hearing was opened, and there being no requests to speak, the public hearing was closed.

MOVED BY YATES, SECONDED BY CACCIOTTI, AGENDA ITEM NO. 29 APPROVED AS RECOMMENDED BY STAFF, ADOPTING RESOLUTION NO. 14-12 CERTIFYING THAT THE PROPOSED WITHDRAWAL OF SIP SUBMITTALS IS NOT SUBJECT TO CEQA AND APPROVING THE WITHDRAWAL OF SELECT RULES AND REGULATIONS FROM A SET OF SIP SUBMITTALS, BY THE FOLLOWING VOTE:

AYES: Antonovich, B. Benoit, J. Benoit, Burke, Buscaino, Cacciotti, Gonzales, Lyou, Mitchell, Nelson, Parker, Pulido and Yates.

NOES: None.

ABSENT: None.

30. Amend Rule 2202 - On-Road Motor Vehicle Mitigation Options, Rule 2202 Implementation Guidelines, Rule 301 Permitting and Associated Fees, and Rule 311 Air Quality Investment Program Fees

Dr. Elaine Chang, DEO/Planning and Rules, gave the staff presentation.

The public hearing was opened and the following individual addressed the Board on Agenda Item 30.

CURTIS COLEMAN, on behalf Richard Friedman and Earth Guard Environmental Services

Expressed support for the proposed amendments and thanked staff for their efforts in providing a satisfactory resolution to credit providers.

There being no further public testimony on this item, the public hearing was closed.

MOVED BY CACCIOTTI, SECONDED BY GONZALES, AGENDA ITEM NO. 30 APPROVED AS RECOMMENDED BY STAFF, ADOPTING RESOLUTION NO. 14-13 CERTIFYING THE NOTICE OF EXEMPTION AND AMENDING RULE 2202, RULE 2202 IMPLEMENTATION GUIDELINES, RULE 301 AND RULE 311, BY THE FOLLOWING VOTE:

AYES: Antonovich, B. Benoit, J. Benoit, Burke, Buscaino, Cacciotti, Gonzales, Lyou, Mitchell, Nelson, Parker, Pulido and Yates.

NOES: None.

ABSENT: None.

31. Adopt 2016 AQMP Reasonably Available Control Technology Demonstration

Staff waived the oral presentation on Agenda Item 31.

The public hearing was opened, and there being no requests to speak, the public hearing was closed.

MOVED BY YATES, SECONDED BY CACCIOTTI, AGENDA ITEM NO. 31 APPROVED AS RECOMMENDED BY STAFF, ADOPTING RESOLUTION NO. 14-14 CERTIFYING THAT THE SCAQMD'S CURRENT AIR POLLUTION RULES AND REGULATIONS FULFILL THE 8-HOUR OZONE RACT REQUIREMENTS, AND ADOPTING THE RACT SIP REVISION; CERTIFYING THE NOTICE OF EXEMPTION FOR THE 2015 AQMP REASONABLY AVAILABLE CONTROL TECHNOLOGY DEMONSTRATION; AND DIRECTING STAFF TO FORWARD THE 2016 AQMP REASONABLY AVAILABLE CONTROL TECHNOLOGY DEMONSTRATION TO CARB FOR REVIEW AND SUBMISSION TO THE U.S. EPA, BY THE FOLLOWING VOTE:

AYES: Antonovich, B. Benoit, J. Benoit, Burke, Buscaino, Cacciotti, Gonzales, Lyou, Mitchell, Nelson, Parker, Pulido and Yates.

NOES: None.

ABSENT: None.

**PUBLIC COMMENT PERIOD** – (Public Comment on Non-Agenda Items, Pursuant to Government Code Section 54954.3)

Doelorez Mejia, Eastside Coalition Against Exide Toxic Technologies, spoke out against the negative impacts to communities in the Los Angeles area as a result of Exide Technologies' operations and urged the Board to keep Exide Technologies closed.

**CLOSED SESSION**

The Board recessed to closed session at 10:45 a.m., pursuant to Government Code sections 54956.9(a) and 54956.9(d)(1) to confer with its counsel regarding pending litigation which has been initiated formally and to which the District is a party, as follows:

- Exide Technologies, Inc. v. SCAQMD, et al., Los Angeles Superior Court Case No. BS146770 (Writ of Mandate);
- People of the State of California, ex rel SCAQMD v. Exide Technologies, Inc., Los Angeles Superior Court Case No. BC533528;
- In the Matter of SCAQMD v. Exide Technologies, Inc., SCAQMD Hearing Board Case No. 3151-29 (Order for Abatement);
- Exide Technologies, Inc., Petition for Variance, SCAQMD Hearing Board Case No. 3151-31;
- In re: Exide Technologies, Inc., U.S. Bankruptcy Court for the District of Delaware, Case No. 13-11482 (KJC) (Bankruptcy case);
- National Association for Surface Finishing, et al. v. U.S. EPA, et al., U.S. Court of Appeals, D.C. Circuit, Case No. 12-1459 (Consolidated with Nos. 12-1460, 13-1147) (seeking authorization to file amicus brief); and
- People of the State of California, ex rel. Kamala D. Harris, Attorney General v. SCAQMD, Consent Agreement and Stipulation for Entry of Final Judgment and Order, Los Angeles Superior Court.

Following Closed Session, General Counsel Kurt Wiese announced that a report of any reportable actions taken in closed session will be filed with the Clerk of the Board and made available upon request.

**ADJOURNMENT**

There being no further business, the meeting was adjourned by Kurt Wiese at 11:30 a.m.

The foregoing is a true statement of the proceedings held by the South Coast Air Quality Management District Board on June 6, 2014.

Respectfully Submitted,

Denise Garzaro  
Senior Deputy Clerk

Date Minutes Approved: \_\_\_\_\_

\_\_\_\_\_  
Dr. William A. Burke, Chairman

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**ACRONYMS**

CARB = California Air Resources Board  
CNG = Compressed Natural Gas  
FY = Fiscal Year  
MSRC = Mobile Source (Air Pollution Reduction) Review Committee  
NOx = Oxides of Nitrogen  
PAR = Proposed Amended Rule  
RACT= Retrofit Available Control Technology  
RFP = Request for Proposals  
RFQ = Request for Quotations  
SANBAG = San Bernardino Associated Governments  
SIP = State Implementation Plan

**FRIDAY, JUNE 13, 2014**

Notice having been duly given, the special meeting of the South Coast Air Quality Management District Board was held at District Headquarters, 21865 Copley Drive, Diamond Bar, California. The following members participated from the teleconference and videoconference locations listed in the meeting notice, unless noted otherwise:

William A. Burke, Ed.D., Chairman  
Speaker of the Assembly Appointee

Mayor Dennis R. Yates, Vice Chairman (present at SCAQMD Headquarters)  
Cities of San Bernardino County

Councilmember Ben Benoit  
Cities of Riverside County

Supervisor John J. Benoit  
County of Riverside

Supervisor Josie Gonzales (present at SCAQMD Headquarters)  
County of San Bernardino

Dr. Joseph K. Lyou  
Governor's Appointee

Mayor Judith Mitchell  
Cities of Los Angeles County – Western Region

Supervisor Shawn Nelson  
County of Orange

Dr. Clark E. Parker, Sr.  
Senate Rules Committee Appointee

**Members Absent:**

Supervisor Michael D. Antonovich  
County of Los Angeles

Councilmember Joe Buscaino  
City of Los Angeles

Councilmember Michael A. Cacciotti  
Cities of Los Angeles County – Eastern Region

Mayor Miguel A. Pulido  
Cities of Orange County



The meeting was called to order by Chairman Burke at 8:45 a.m.

1. Approve Substituting Source of Funds for School Bus Replacements

Dr. Matt Miyasato, DEO of Science & Technology Advancement, reported briefly on the item, which involved the substitution of previous funds that SCAQMD was awarded to replace school buses, with Proposition 1B funds from the California Air Resources Board that will expire on June 30, 2014.

Dr. Miyasato called attention to an errata sheet, which was distributed to Board Members, and explained that staff inadvertently left out of the recommended action on this item that a portion of the funds transferred out of the Proposition 1B-School Bus fund would go towards reimbursing SCAQMD for administrative costs. The errata sheet contained the following modifications:

Kindly modify the text in the Board Letter under RECOMMENDED ACTION with the following language:

**RECOMMENDED ACTIONS:**

- 1.** Approve substitution of \$520,755 in Carl Moyer AB 923 funds (Fund 80) with the same amount in Proposition 1B-School Bus funds (Fund 82) for the replacement of six of the sixteen school buses paid to Fullerton School District since February 2014, under Grant #G13211; **and**
- 2.** **Transfer up to \$63,191 from the Prop 1B Lower Emission School Bus Fund (82) to the General Fund (01) to reimburse the General Fund for administrative costs.**

Kindly modify the text in the Board Letter under PROPOSAL with the following language:

**This action is to also transfer up to \$63,191 from the Prop 1B Lower Emission School Bus Fund (82) to the General Fund (01) to reimburse the General Fund for administrative costs.**

Dr. Burke and Mayor Yates questioned distribution of an errata sheet for this item, in light of the Board's Administrative Committee's recent discussion regarding elimination of errata sheets for agenda items at Board meetings.

Executive Officer Dr. Barry Wallerstein explained that the purpose of the modification in the errata sheet is to clarify, for audit tracking records, that a portion of the funds will go towards administrative costs. If this clarifying language is not included, it could result in a finding when an audit is conducted. Staff would have chosen to delay the item in lieu of preparing an errata sheet, were it not for the need to take action prior to expiration of the funds on June 30th.

Supervisor Nelson spoke in support of approving the item at this time with the changes in the errata sheet, given that it would bring needed school buses to more schools. Dr. Burke and Mayor Yates concurred in the importance of the school bus replacements for additional schools.

MOVED BY SUPERVISOR BENOIT, SECONDED BY DR. PARKER, AGENDA ITEM NO. 1 WAS APPROVED AS RECOMMENDED BY STAFF, WITH THE MODIFICATION TO INCLUDE ACTION NO. 2 AS SET FORTH IN THE ERRATA SHEET AND NOTED ABOVE, BY ROLL CALL VOTE OF THE BOARD, AS FOLLOWS:

AYES: B. Benoit, J. Benoit, Burke, Gonzales, Lyou, Mitchell, Nelson, Parker, and Yates.

NOES: None.

ABSENT: Antonovich, Buscaino, Cacciotti, and Pulido.

## 2. Public Comment

There was no public comment, and no members of the public present at SCAQMD nor any of the video-/teleconference locations.

**ADJOURNMENT**

There being no further business, the meeting was adjourned at 8:55 a.m.

The foregoing is a true statement of the proceedings held by the South Coast Air Quality Management District Board on June 13, 2014.

Respectfully Submitted,

SAUNDRA McDANIEL  
Clerk of the Boards

Date Minutes Approved: \_\_\_\_\_

\_\_\_\_\_  
Dr. William A. Burke, Chairman

BOARD MEETING DATE: July 11, 2014

AGENDA NO. 2

PROPOSAL: Set Public Hearings September 5, 2014 to Consider Amendments and/or Adoption to SCAQMD Rules and Regulations:

- (A) Amend Rule 1111 - NO<sub>x</sub> Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces. PAR 1111 delays the compliance date for condensing (high efficiency) units until April 1, 2015. The proposed amendment would also add a mitigation fee-based compliance option to allow up to three years' delay for residential furnace manufacturers that require additional time to produce furnaces that meet the 14 ng/Joule emission limit. The proposed mitigation fee will be used to mitigate the air emissions impacts of the delay. (Reviewed: Stationary Source Committee, March 21 and June 20, 2014)
  
- (B) Amend Rule 1151 - Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations. In an effort to enhance the understanding of current applicable rule requirements, the proposed amendment seeks to make administrative changes to the rule by removing obsolete rule language, and making minor revisions and editorial corrections. The proposed amendment also adds new definitions to promote clarity and consistency, revises the transfer efficiency equivalency section and adds an exemption for automotive graphic arts operations. (Review: Stationary Source Committee, July 25, 2014)

The complete text of the proposed amendments, staff reports, and other supporting documents are available from the District's Public Information Center, (909) 396-2550, and on the Internet ([www.aqmd.gov](http://www.aqmd.gov)) as of August 6, 2014.

RECOMMENDED ACTION:

Set Public Hearings September 5, 2014 to amend Rules 1111 and 1151.

Barry R. Wallerstein, D.Env.  
Executive Officer

BOARD MEETING DATE: July 11, 2014

AGENDA NO. 3

**PROPOSAL:** Recognize Revenue and Appropriate Funds from Clean Fuels, Carl Moyer AB 923 and Proposition 1B-Goods Movement for Administrative Support, Outreach and Education, and Related Activities

**SYNOPSIS:** The Technology Advancement Office executes hundreds of contracts annually to implement incentive, demonstration and technology transfer projects, involving ongoing administrative support, outreach and education, and other related activities. This action is to recognize up to \$1,250,000 in revenue in the General Fund and appropriate \$1,250,000 to the Science & Technology Advancement FY 2014-15 Budget, Services and Supplies Major Object, Professional and Special Services Account, from the following special revenue funds: \$850,000 from the Clean Fuels Program Fund (31); \$100,000 from the Carl Moyer Program AB 923 Special Revenue Fund (80); and \$300,000 from the Prop 1B Funding-Goods Movement Fund (81). The appropriations will ensure flexibility and expediency in administering and addressing implementation issues for these programs.

**COMMITTEE:** Technology, June 20, 2014, Recommended for Approval

**RECOMMENDED ACTIONS:**

Recognize up to \$1,250,000 in the General Fund and appropriate \$1,250,000 to the Science & Technology Advancement FY 2014-15 Budget (Org. 49), Services and Supplies Major Object, Professional and Special Services Account, from the following special revenue funds:

- a. \$850,000 from the Clean Fuels Program Fund (31);
- b. \$100,000 from the administrative portion of the Carl Moyer Program AB 923 Special Revenue Fund (80); and

- c. \$300,000 from the administrative portion of the Prop 1B Funding-Goods Movement Fund (81).

Barry R. Wallerstein, D.Env.  
Executive Officer

MMM:DAH

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### **Background**

The Technology Advancement Office (TAO) conducts the agency's research, development, demonstration and deployment activities, implements several on- and off-road incentive programs and performs various technology outreach and education activities including event cosponsorships. The funding authorizations associated with these activities are the Clean Fuels Program Fund (31), the Carl Moyer Program AB 923 Special Revenue Fund (80) and the Prop 1B Funding-Goods Movement Fund (81). Overall, TAO administers and monitors thousands of contracts annually.

The SCAQMD recognizes and appropriates the revenues from these special programs to special revenue funds, separate from the SCAQMD's General Fund budget, to clearly delineate the program operation revenues, which have statutory constraints imposed on their use. Additionally, the Clean Fuels, Carl Moyer and Prop 1B Programs allow up to five percent for administrative costs.

### **Proposal**

This action is to recognize a small portion of funds from the Clean Fuels Fund (31) and a portion of the administrative funds from the Carl Moyer Program AB 923 Special Revenue Fund (80) and Prop 1B-Goods Movement Fund (81) into the SCAQMD's General Fund and to appropriate those funds into the Science & Technology Advancement (STA) FY 2014-15 Budget to allow management flexibility and expediency in addressing program implementation issues and to support administrative, outreach and education, and related activities to successfully implement and oversee these programs.

### Clean Fuels Program

The appropriation of funds would enable a range of activities involved in implementing the Clean Fuels Program. These activities are expected to include but not be limited to the following areas:

#### *Technical Assistance*

Technical assistance is needed in the areas of battery electric and hybrid vehicles, low-emission engine development, emissions testing and analysis, natural gas and hydrogen fueling infrastructure development, alternative fuel vehicles and health impacts studies.

### *Expert Consultation*

Consultants provide expertise on new and emerging technologies, development of emission control technologies and analyses of demonstration projects including alternative fuels, fuel cells, natural gas and hydrogen fueling infrastructure, battery and hybrid electric vehicles, renewable energy and particulate matter control technology. Assignments for these consultants are expected to be short term and time sensitive.

### *Outreach & Education and Conference Sponsorships*

SCAQMD is often asked to provide support for technical conferences and other outreach and education activities related to implementation of the Clean Fuels Program and the Technology Advancement Office. These conferences provide opportunities for the SCAQMD to inform the public, communicate its programs to broad audiences and receive input from public and private organizations. Public outreach and education is important for commercialization and to foster acceptance of new technologies.

### *Advanced Technology Vehicle Leases*

In order to showcase and demonstrate a variety of advanced, low-emission technologies, the SCAQMD often leases clean vehicles to educate public and private organizations on the benefits of advanced technologies, as well as provide valuable in-use test data to the manufacturers.

### *Administrative & Other Costs*

Funds are also required to support the administrative operation of the Clean Fuels Program. These costs can include but are not limited to postage and public notice advertisements for solicitations and other project-related mailings, travel and conference-related expenses for participation at program planning and implementation events and meetings and costs necessary to enhance or expand existing program-related activities.

### Carl Moyer and Prop 1B Programs

The appropriation of funds would facilitate support for various activities related to the implementation of these incentive programs. These activities are expected to include but not be limited to the following areas:

### *Technical Assistance*

Technical assistance is needed for evaluation of different types of vehicles and equipment to determine their eligibility and the amount of incentive funding that can be provided in compliance with the requirements of the Carl Moyer and Prop 1B Program guidelines and applicable rules and regulations.

### *Expert Consultation*

Consultants provide expertise on availability of new and emerging technologies and commercialization potential of lower-emitting vehicles and related infrastructure. Assignments for these consultants are expected to be short term and time sensitive.

### *Outreach & Education and Conference Sponsorships*

During each funding cycle, the SCAQMD conducts several equipment-specific and general workshops. SCAQMD staff participates in conferences and performs extensive outreach activities to enhance public awareness for the Carl Moyer and Prop 1B Programs. Staff also helps potential applicants to take advantage of funding opportunities in all eligible equipment categories. In addition, SCAQMD participates in conferences to communicate its incentive-funding programs to broad audiences and to inform the public about these opportunities. Public outreach plays an important role in commercialization of new technologies.

### *Administrative & Other Costs*

Funds are also required to support the operation of the Carl Moyer and Prop 1B Programs. These costs can include but are not limited to postage and public notice advertisements for solicitations and other project-related mailings as well as costs associated with performing or meeting program objectives.

### **Benefits to SCAQMD**

The appropriation of funds from these three special revenue funds to STA's FY 2014-15 Budget will ensure successful implementation and oversight of TAO's demonstration and incentive programs and outreach and education efforts, ultimately achieving emissions reductions and moving the region closer to attainment of air quality standards. These activities are included in the *Technology Advancement Office Clean Fuels Program 2014 Plan Update* under "Assessment and Technical Support of Advanced Technologies and Information Dissemination" and "Support for Implementation of Various Clean Fuels Vehicle Incentive Programs."

### **Resource Impacts**

There are sufficient funds to appropriate up to \$1,250,000 from the following special revenue funds: \$850,000 from the Clean Fuels Program Fund (31); \$100,000 from the administrative portion of the Carl Moyer Program AB 923 Special Revenue Fund (80); and \$300,000 from the administrative portion of the Prop 1B Funding-Goods Movement Fund (81). The funds will be recognized into the SCAQMD's General Fund then appropriated into STA's FY 2014-15 Budget (Org 49), Services and Supplies Major Object, Professional and Special Services Account. Any unspent funds will be transferred back to the appropriate special revenue fund after FY 2014-15 year end.


The Clean Fuels Program Fund (31) was established as a special revenue fund resulting from the state-mandated Clean Fuels Program. The Clean Fuels Program, under Health



and Safety Code Sections 40448.5 and 40512 and Vehicle Code Section 9250.11, establishes mechanisms to collect revenues from mobile sources to support projects to increase the utilization of clean fuels, including the development of the necessary advanced enabling technologies. Funds collected from motor vehicles are restricted, by statute, to be used for projects and program activities related to mobile sources that support the objectives of the Clean Fuels Program.

BOARD MEETING DATE: July 11, 2014

AGENDA NO. 4

**PROPOSAL:** Recognize Revenue from Participating Members of California Natural Gas Vehicle Partnership and Approve Expenditures for Activities and Projects during FYs 2014-15 and 2015-16 

**SYNOPSIS:** The SCAQMD Board established the California Natural Gas Vehicle Partnership (CNGVP) to promote greater deployment of natural gas vehicles in California. The participating members pay two-year membership fees to fund program administration and activities and projects to achieve the goals of the CNGVP. This action is to recognize revenue from participating and future CNGVP members; transfer \$25,000 from the Clean Fuels Fund (31) into the Natural Gas Vehicle Partnership Fund (40) for SCAQMD's two-year membership for FYs 2014-15 and 2015-16; approve the FYs 2014-15 and 2015-16 CNGVP budget; amend the contract for CNGVP website maintenance; and authorize the Executive Officer to approve individual expenditures, as selected by the CNGVP for FYs 2014-15 and 2015-16, up to \$75,000 but not to exceed \$225,000 for each fiscal year.

**COMMITTEE:** Technology, June 20, 2014; Recommended for Approval

**RECOMMENDED ACTIONS:**

1. Recognize, upon receipt, up to \$120,000 in funding over a two-year period from participating members of the CNGVP into the Natural Gas Vehicle Partnership Fund (40);
2. Authorize the transfer of \$25,000 from the Clean Fuels Fund (31) to the Natural Gas Vehicle Partnership Fund (40) as SCAQMD's contribution for the two-year membership for FYs 2014-15 and 2015-16;
3. Approve the CNGVP budget for FYs 2014-15 and 2015-16 as provided in Table 3;
4. Amend contract with Gladstein, Neandross & Associates (GNA) for CNGVP website maintenance to extend the performance period through June 30, 2016, and add \$60,000 from the Natural Gas Vehicle Partnership Fund (40); and
5. Authorize the Executive Officer to approve expenditures from the Natural Gas Vehicle Partnership Fund (40) for activities and projects selected by the CNGVP

designed to meet partnership goals, as described in this letter and Table 4, for FYs 2014-15 and 2015-16 in budgeted amounts up to \$75,000 for individual expenditures but not to exceed \$225,000 for each fiscal year, contingent upon availability of funds.

Barry R. Wallerstein, D.Env.  
Executive Officer

CSL:HH:DKS

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### **Background**

On February 1, 2002, the Board approved the creation of the CNGVP to accelerate development of advanced natural gas vehicle technologies, establish a benchmark for lowering emissions from petroleum-based engines and provide a pathway for fuel cell use in the future.

Under this initiative, the SCAQMD spearheaded the formation of the CNGVP (comprising state and federal air quality, transportation and energy agencies, together with vehicle and engine manufacturers, fuel providers, transit organizations and refuse haulers) to facilitate the advancement of natural gas vehicle technology and deployment. The Partnership's Steering Committee meets on a periodic basis with high-level representation from each participating member.

Over the past two years, the CNGVP sponsored or participated in the following activities:

1. CNGVP members participated in the National Petroleum Council (NPC) Future Transportation Fuels Study. On August 1, 2012, the NPC released its report, "Advancing Technology for America's Transportation Future," which indicated an increasing deployment of advanced technology vehicles, including natural gas and hydrogen vehicles.
2. Cosponsorship of the SCAQMD "A World We Can Change" High School Conference & Expo in March 2013 and the ACT Expo in May 2014.

At the end of 2013, The Kroger Company joined the CNGVP. The Kroger Company has been deploying natural gas vehicles in their fleet and plans to expand their deployment of natural gas vehicles and infrastructure development over the next several years.

**Proposal**

This action is to recognize revenue from participating and future CNGVP members; transfer funds from the Clean Fuels Fund (31) into the Natural Gas Vehicle Partnership Fund (40) for SCAQMD’s two-year membership for FYs 2014-15 and 2015-16; approve the FYs 2014-15 and 2015-16 CNGVP budget; amend the contract for CNGVP website maintenance; and authorize the Executive Officer to approve individual expenditures, as selected by the CNGVP for FYs 2014-15 and 2015-16.

The CNGVP Steering Committee currently comprises ten members (as shown in Table 1). In addition, Table 2 lists the 13 Associate Members consisting of public agencies, school districts and environmental organizations.

**Table 1. CNGVP Steering Committee Membership**

California Air Resources Board Clean Energy Sempra Energy Utilities South Coast Air Quality Management District U.S. Department of Energy Westport Innovations Inc. Waste Management, Inc. CR&R Inc. Agility Fuel Systems The Kroger Company
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**Table 2. CNGVP Associate Membership**

California Energy Commission City of Los Angeles Coalition for Clean Air Colton Unified School District Foothill Transit Los Angeles Metropolitan Transportation Authority Natural Resources Defense Council Orange County Transportation Authority San Joaquin Valley Air Pollution Control District SunLine Transit Agency Union of Concerned Scientists U.S. Environmental Protection Agency University of California Davis
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Each of the private sector Steering Committee members contributes a two-year membership fee of \$25,000 (or \$10,000, if the entity is an end-user who desires to be on

the Steering Committee) to fund specific projects to achieve the goals of the CNGVP. The SCAQMD Board previously created a special revenue fund called the Natural Gas Vehicle Partnership Fund (40) to receive membership fees and has been contributing the two-year membership fee of \$25,000 since its inception.

In March 2013, the SCAQMD Board approved the CNGVP's FYs 2012-13 and 2013-14 Budget. Table 3 shows the expenditure to date since the budget was approved.

**Table 3. CNGVP Expenditures**

<b>CALIFORNIA NGV PARTNERSHIP STEERING COMMITTEE</b>	
<b>Available Funds (as of March 2013)</b>	<b>\$360,257</b>
Total Fund Balance	
<b>Expenditures (March 2013 – May 2014)</b>	<b>(\$30,865)</b>
Website Maintenance (Gladstein, Neandross, & Assoc. – C12308)	(\$37,500)
<b>Total Expenditures to Date</b>	<b>(\$68,365)</b>
De-Obligation of Contract C12029	<b>\$32,640</b>
<b>Interest Earned (March 2013 – May 2014)</b>	<b>\$2,103</b>
<b>Membership Dues Received</b>	<b>\$77,500</b>
<b>Available Balance for FYs 2014-15 and 2015-16</b>	<b>\$404,135</b>

The CNGVP Steering Committee two-year memberships are currently up for renewal. If all current members renew their memberships, the Natural Gas Vehicle Partnership Fund (40) would be replenished with revenues totaling \$120,000 over the next two years. The proposed budget for FYs 2014-15 (July 1, 2014 to June 30, 2015) and 2015-16 (July 1, 2015 to June 30, 2016) is outlined in Table 4.

**Table 4. FYs 2014-15 and 2015-16 Proposed Budget**

<b>CALIFORNIA NGV PARTNERSHIP STEERING COMMITTEE</b>	
<b>Available Funds for FYs 2014-15 and 2015-16</b>	<b>\$404,135</b>
<b>Anticipated Membership Dues</b>	<b>\$120,000</b>
<b>Expenditures (Anticipated)</b>	
Special Consultation and Activity Coordination	(\$100,000)
Website Contract (July 1, 2014 through June 30, 2016)	(60,000)
Conference/Exhibition Sponsorships	(65,000)
Facility and Meeting Support	(3,200)
<b>Total Anticipated Expenditures for FYs 2014-15 and 2015-16</b>	<b>(\$228,200)</b>
<b>Estimated Fund Balance</b>	<b>\$295,935</b>

For the upcoming FYs 2014-15 and 2015-16, the CNGVP membership will be directing their efforts to further the commercialization of natural gas engine platforms that have significantly lower emissions than the current 2010 on-road emission standards. The CNGVP will also continue efforts to enhance the refueling infrastructure in California with an emphasis on greater use of renewable natural gas.

Furthermore, the CNGVP plans to continue cosponsoring relevant conferences, identifying projects and studies to further the deployment of next-generation natural gas engines and advancing the use of renewable natural gas. In addition, at its May 6, 2014 meeting, the CNGVP Steering Committee approved amending the contract with GNA for CNGVP website maintenance to extend the performance period through June 30, 2016, at a cost not to exceed \$60,000 based upon the current rate of \$2,500/month from the Natural Gas Vehicle Partnership Fund (Fund 40).

The proposed budget in Table 4 reflects the actions taken by the Steering Committee as discussed above. If there is a need to modify the budget by the Partnership's Steering Committee during FYs 2014-15 or 2015-16, the Executive Officer will report back to the Board to seek approval to modify the budget.

### **Benefits to SCAQMD**

The implementation of this initiative has brought public and private stakeholders together to assist in the development and deployment of advanced natural gas vehicles and refueling infrastructure expansion. The Partnership will continue its leadership role to work with OEMs, government and the public towards the advancement of natural gas


vehicles in the marketplace to further address criteria pollutant emissions as well as greenhouse gases and energy needs. This will, in turn, increase the natural gas role as a low-emission displacement or augmentation to petroleum fuel where economically feasible. These activities are included in the *Technology Advancement Office Clean Fuels Program 2014 Plan Update* under “Infrastructure and Deployment (NG)” and “Assessment and Technical Support of Advanced Technologies and Information Dissemination.”

**Resource Impact**

The current fund balance totaling \$404,135 plus anticipated membership fees over the next two years in the amount of \$120,000 are sufficient to cover anticipated CNGVP expenditures, projected at \$228,200 for FYs 2014-15 and 2015-16. The source of funds is from the CNGVP’s membership dues over the two-year period. In addition, the SCAQMD’s two-year membership for FYs 2015-15 and 2015-16 will not exceed \$25,000 from the Clean Fuels Fund (31). There are sufficient funds in the Clean Fuels Fund (31) for this membership fee. The Clean Fuels Program Fund (31) was established as a special revenue fund resulting from the state-mandated Clean Fuels Program. The Clean Fuels Program, under Health and Safety Code Sections 40448.5 and 40512 and Vehicle Code Section 9250.11, establishes the mechanism to collect revenues from mobile sources to support projects to increase the utilization of clean fuels, including the development of the necessary advanced enabling technologies. Funds collected from motor vehicles are restricted, by statute, to be used for projects and program activities related to mobile sources that support the objectives of the Clean Fuels Program. There are no other fiscal impacts associated with these recommended actions.

BOARD MEETING DATE: July 11, 2014

AGENDA NO. 5

**PROPOSAL:** Recognize Revenue, Amend Air Filtration Contract and Execute New Contract to Upgrade and Demonstrate Zero-Emission Heavy-Duty Vehicles 

**SYNOPSIS:** The SCAQMD applied for and expects to receive a \$500,000 award from U.S. EPA under Section 105 of the Clean Air Act to sponsor Clean Air Technology Initiative projects. Staff proposes to utilize these funds to cosponsor school bus air filtration and zero-emission yard tractor projects. This action is to recognize the \$500,000 award from U.S. EPA into the Advanced Technology, Outreach and Education Fund (17). Secondly, this action is to amend a contract with IQAir to add \$170,000 from the Advanced Technology, Outreach and Education Fund (17) to install and test air filtration systems in school buses. Lastly, this action is to execute a new contract with TransPower to upgrade and demonstrate two electric yard tractors at a cost not to exceed \$405,000, comprised of \$330,000 from the Advanced Technology, Outreach and Education Fund (17) and \$75,000 from the Clean Fuels Fund (31).

**COMMITTEE:** Technology, June 20, 2014; Recommended for Approval

**RECOMMENDED ACTIONS:**

1. Recognize \$500,000, upon receipt, from the U.S. EPA into the Advanced Technology, Outreach and Education Fund (17) to cosponsor school bus air filtration and zero-emission yard tractor projects; and
2. Authorize the Chairman to:
  - a. Amend a contract with IQAir adding \$170,000 from the Advanced Technology, Outreach and Education Fund (17) to install and test air filtration systems in school buses; and



- b. Execute a new contract with TransPower to upgrade and demonstrate two electric yard tractors at a cost not to exceed \$405,000, comprised of \$330,000 from the Advanced Technology, Outreach and Education Fund (17) and \$75,000 from the Clean Fuels Fund (31).

Barry R. Wallerstein, D.Env.  
Executive Officer

MMM:HH:RP:AAO:RC

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### **Background**

SCAQMD staff applied for an award from the U.S. EPA under Section 105 of the Clean Air Act (CAA) for Clean Air Technology Initiative (CATI) projects and expects to receive a \$500,000 award. CATI was established by the U.S. EPA, CARB, San Joaquin Valley Air Pollution Control District and SCAQMD to identify and implement projects that would significantly reduce emissions in communities such as San Bernardino where residents are disproportionately affected by emissions from diesel traffic along the Los Angeles and Inland Empire goods movement corridors and from diesel activities at the Ports, warehouses and railyards. Staff proposes using these funds to cosponsor school bus air filtration and zero-emission electric yard tractor technology projects in communities highly impacted by heavy diesel activities.

#### *School Bus Air Filtration Project*

On March 4, 2011, the Board authorized execution of a \$200,000 contract with IQAir to install air filtration systems at schools in Boyle Heights and San Bernardino. Air filtration systems at two schools in Boyle Heights and San Bernardino were installed successfully by September 2013. Staff proposes to capitalize on results from a recent CARB proof-of-concept study which demonstrated that air filtration systems inside passenger vehicles and school buses achieve significant reductions in ultrafine PM levels from outdoor road levels.

#### *Electric Yard Tractor Project*

In 2012 and 2013, TransPower developed and placed into regular revenue service two prototype electric yard tractors hauling heavy containers at a San Antonio retailer facility under demanding duty cycles similar to those at port terminals, warehouse distribution centers and railyards. The tractors accumulated nearly 1,000 miles of actual service and demonstrated they could operate under the duty cycle for as long as 13 hours between battery charges.

In light of these results, staff worked further with TransPower to identify additional improvements needed to accelerate early commercialization of the electric tractors and believes deploying the yard tractors at various facilities such as warehouse distribution

centers will help to gain additional information on the performance of zero-emission yard tractors under various operations.

### **Proposal**

This action is to recognize, upon receipt, CATI funds from the U.S. EPA into the Advanced Technology, Outreach and Education Fund (17) and to amend a contract with IQAir and execute a new contract with TransPower using these funds as follows:

#### *School Bus Air Filtration Project*

This project with IQAir would install and test stand-alone air filtration and ventilation systems on school buses and conduct in-use testing to verify the removal of ultrafine PM, black carbon and PM<sub>2.5</sub> emissions inside school buses with and without operation of the air filtration systems and under open and closed window conditions. LAUSD proposes to loan school buses of three different sizes (small, medium and large) to temporarily install air filtration and monitoring equipment to measure reductions in ultrafine PM, black carbon and PM<sub>2.5</sub> during morning and evening commuting hours. Data will be collected under realistic driving conditions with students on-board the buses. This work will follow up on CARB's proof of concept study which installed air filtration systems in passenger vehicles and school buses. In-cabin and on-road ultrafine PM concentrations showed between 90-93% reductions from outdoor road levels in passenger vehicles. Stand-alone air filtration systems were installed on six school buses and preliminary data analysis showed an 80-90% reduction of in-cabin ultrafine PM from outdoor road levels with operation of the air filtration systems.

#### *Electric Yard Tractor Project*

This project with TransPower would upgrade and demonstrate two electric yard tractors at warehouse distribution centers in the South Coast Air Basin. The upgrade of the two heavy-duty electric yard tractors will incorporate all of the lessons learned during the demonstration of the tractors in San Antonio, Texas, including, at a minimum:

- Adaptation of a heavier duty transmission and shifting mechanism;
- Improvement of automated shifting software, monitoring and protection of batteries when vehicles are unattended, integration of battery monitoring and overall tractor control software, the battery management system sensor design and an electrically driven accessory inverter;
- Modification of battery cell packaging to improve accessibility for servicing; and
- Demonstration of the electric yard tractors at various goods movement facilities in the SCAQMD as part of a loaner program.

### **Benefits to SCAQMD**

The proposed school bus air filtration and electric yard tractor projects support the implementation of CATI plans and SCAQMD's Clean Communities Plan which identifies Boyle Heights and San Bernardino as two areas to begin development of a

Community Exposure Reduction Plan to identify strategies to reduce criteria and toxic pollutants. In addition, the electric yard tractor project promotes the development of zero-emission goods movement equipment, specifically involving ports, warehouses, distribution centers, and railyards in the South Coast Air Basin. Zero-emission transportation and goods movement technologies are also included within SCAG's Regional Transportation Plan, the joint CARB, SCAQMD and San Joaquin Valley APCD *Vision for Clean Air* document, and SCAQMD's FY 2013-14 Goals and Objectives.

Installation of air filtration systems in school buses will reduce children's exposure to the negative health impacts of ultrafine particulate matter. It will also demonstrate how existing school buses can easily be retrofitted to incorporate air filtration technologies and help foster acceptance and commercialization of these air filtration technologies for school buses.

Furthermore, successful demonstration of battery electric yard tractors will move the technology closer to commercialization for wide-scale market deployment and the region closer to attainment of clean air standards by eliminating diesel particulate matter and NO<sub>x</sub> emissions. Additionally, since yard tractors are used to move goods in and around warehouse distribution centers, marine port terminals, and railyards, the application of zero-emission technologies will improve the air quality in these disproportionately impacted communities.

These activities are included in the *Technology Advancement Office Clean Fuels Program 2014 Plan Update* under "Electric/Hybrid Technologies & Infrastructure."

### **Sole Source Justification**

Section VIII.B.3 of the Procurement Policy and Procedure identifies four provisions under which a sole source award may be justified for contracts funded in whole or in part with federal funds. This request for sole source awards to IQAir and TransPower are made under provision B.3a: The item is available from a single source.

### *School Bus Air Filtration Project*

In 2010, SCAQMD released a Program Announcement (PON2010-02) to solicit and test the effectiveness of qualified air filtration devices in reducing the exposure of children to outdoor-infiltrated and indoor-generated ultrafine particles and black carbon emissions by at least 85% while maintaining a noise level below 45 decibels. In addition, staff contacted over 150 manufacturers, and nine companies provided a total of 15 different air filtration systems in the testing opportunity. Based on test results, IQAir's stand-alone air filtration device was the only technology that satisfied both performance requirements. As such, IQAir air filtration technology is selected for a follow-on evaluation on school buses.

Electric Yard Tractor Project

TransPower’s prototype electric yard tractors were placed into regular service hauling heavy containers weighing as much as 80,000 pounds and achieved operating speed of up to 43 miles per hour. The tractors also showed they could operate under demanding duty cycle for as long as 13 hours between battery charges. As such, TransPower’s electric tractor is selected for a follow-on demonstration study because staff is unaware of any other electric vehicle technology that has achieved similar performance metrics in an actual service environment.

**Resource Impacts**

The total SCAQMD cost for both the amended and new contracts shall not exceed \$575,000, comprised of \$500,000 to be recognized from U.S. EPA into the Advanced Technology, Outreach and Education Fund (17) and \$75,000 from the Clean Fuels Fund (31). Projects costs are summarized in the tables below.

<b>Proposed Project</b>	<b>Funding Partners</b>	<b>Funding Amount</b>
Installation of Air Filtration Systems in School Buses	U.S. EPA	\$170,000
	Total	\$170,000

<b>Proposed Project</b>	<b>Funding Partners</b>	<b>Funding Amount</b>
Electric Yard Tractor Project	U.S. EPA	\$330,000
	SCAQMD (requested)	\$75,000
	Total	\$405,000

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BOARD MEETING DATE: July 11, 2014

AGENDA NO. 6

**PROPOSAL:** Approve Truck Projects under “Year 4” Proposition 1B-Goods Movement Program

**SYNOPSIS:** At its April 4, 2014 meeting, the Board approved a list of heavy-duty truck projects under the “Year 4” Proposition 1B-Goods Movement Program, subject to CARB’s final approval. Some truck projects were not included in the recommended list either because of missing information for completion of evaluations or for not furnishing the campaign contribution disclosure forms on time. Since then staff has continued working with these applicants and more truck projects have become eligible. These actions are to augment the list of truck projects, previously approved by the Board, with additional truck projects as outlined in Table 1, subject to CARB’s final approval. These additional projects will not delay the program implementation schedule, as the final approval will be subsequent to completion of compliance checks by CARB, after which contracts will be executed.

**COMMITTEE:** Technology, June 20, 2014; Recommended for Approval

**RECOMMENDED ACTION:**

Approve additional truck projects as outlined in Table 1, to augment the projects previously approved by the Board, subject to CARB’s final ranking and compliance check approval under the Proposition 1B-Goods Movement Program.

Barry R. Wallerstein, D.Env.  
Executive Officer

## **Background**

At its April 4, 2014 meeting, the Board approved goods movement truck projects under the second solicitation phase of the “Year 4” Proposition 1B-Goods Movement Program. Some truck projects were not included in staff’s recommended list either because of missing information for completion of evaluations or for not furnishing the campaign contribution disclosure forms on time. Since then staff has worked with these applicants and more truck projects have become eligible.

## **Outreach**

Relative to the Proposition 1B-Goods Movement Program projects, and in accordance with SCAQMD’s Procurement Policy and Procedure, a public notice advertising the RFP/RFQ and inviting bids was published in the Los Angeles Times, the Orange County Register, the San Bernardino Sun, and Riverside County Press Enterprise newspapers to leverage the most cost-effective method of outreach to the South Coast Basin.

Additionally, potential bidders may have been notified utilizing SCAQMD’s own electronic listing of certified minority vendors. Notice of the RFP/RFQ has been e-mailed to the Black and Latino Legislative Caucuses and various minority chambers of commerce and business associations, and placed on the Internet at SCAQMD’s website (<http://www.aqmd.gov>). Information is also available on SCAQMD’s bidder’s 24-hour telephone message line (909) 396-2724.

## **Proposal**

This action is to approve additional truck projects, as outlined in Table 1, to augment the projects previously approved by the Board on April 4, 2014, all of which are subject to CARB’s final ranking and compliance check approval under the Proposition 1B-Goods Movement Program. These truck projects have now become eligible because they either provided missing information and/or furnished campaign contribution disclosure forms.

## **Benefits to SCAQMD**

The successful implementation of these truck projects will reduce NO<sub>x</sub>, PM and other pollutant emissions in a cost-effective and expeditious manner, which will help achieve the goals of the AQMP. The new equipment/vehicles funded under this program are expected to operate for many years, providing long-term emission reduction benefits in the region.

## **Resource Impacts**

On February 7, 2014, the Board recognized revenue from CARB into SCAQMD’s Proposition 1B-Goods Movement Program Fund (81), as part of the “Year 4” Proposition 1B-Goods Movement Program, including a minimum of \$11,809,524 for second phase project funding. Funding for the truck projects listed in Table 1, as well as

the ones previously approved, shall not exceed \$11,809,524, in addition to any unused funds from the first phase of the “Year 4” Proposition 1B truck projects, from the Proposition 1B-Goods Movement Program Fund (81).

**Attachment**

Table 1: Heavy-Duty Diesel Truck Projects

**Table 1: Heavy-Duty Diesel Truck Projects**

The following seven (7) projects are being added to the list of eligible trucks as supporting documents and Campaign Contributions Disclosure forms have been received.

<b>PROJECT ID</b>	<b>APPLICANT NAME</b>	<b>PROJECT</b>	<b>PROP 1B AWARD</b>
652-001GNA	Bellinger Trucking	Replacement	\$40,000
701-001-GNA	KG Trucking, Inc.	Replacement	\$40,000
711-001-GNA	Faustino Andrade	Replacement	\$40,000
713-001-GNA	Faustino Andrade	Replacement	\$40,000
757-771157-MW	Romas "R" US, Inc./Ricardo Meier	Replacement	\$40,000
1212-001-MC	Vicente Villegas	Replacement	\$50,000
520-001-GNA	Rosales Brothers Trucking	Replacement	\$40,000



BOARD MEETING DATE: July 11, 2014

AGENDA NO. 7

**PROPOSAL:** Transfer and Appropriate Funding to Establish Air Quality Sensor Performance Evaluation Center

**SYNOPSIS:** Manufacturers have begun marketing “low-cost” air monitoring sensors to measure air pollution, and local environmental groups and the public are considering them as inexpensive options to independently evaluate air quality. However, there are no ongoing established local, state or federal programs to evaluate the validity of data obtained from such devices or their overall performance. This action is to establish an Air Quality Sensor Performance Evaluation Center (AQ-SPEC) to perform systematic, detailed characterizations of currently available air monitoring sensors using both field- and laboratory-based testing and to communicate the results to the public. This action is to also transfer and appropriate funding up to \$852,000 from the BP ARCO Settlement Projects Fund (46) to release solicitation documents and issue purchase orders or contracts for equipment and web development, fund program implementation costs and create and fill two new positions to support the AQ-SPEC.

**COMMITTEE:** Technology, June 20, 2014; Recommended for Approval with recommendation that the long-term goal of this program is for it to become self-sustaining.

**RECOMMENDED ACTIONS:**

1. Transfer up to \$852,000 from the BP ARCO Settlement Projects Fund (46) to the General Fund;
2. Appropriate up to \$852,000 in Science & Technology Advancement’s FY 2014-15 budget as follows:
  - a) \$503,000 in the Capital Outlay Major Object in accordance with Tables 1A, 1B and 2 for equipment and development of website;
  - b) \$115,000 in the Services & Supplies Major Object in accordance with Table 3 for proposed recurring program implementation expenses; and
  - c) \$234,000 in the Salaries and Employee Benefits Major Object in accordance with Table 4 to fund two new positions to support AQ-SPEC.

3. Authorize the Procurement Manager, in accordance with SCAQMD Procurement Policy and Procedure, to:
  - a) Release RFQs and issue purchase orders in an amount not to exceed \$314,000 for laboratory and field equipment as listed in Table 1A;
  - b) Issue purchase orders in an amount not to exceed \$89,000 for laboratory and field equipment as listed in Table 1B; and
  - c) Purchase or lease air monitoring sensors and purchase other supplies for field and laboratory testing in accordance with the SCAQMD Procurement Policy and Procedure, in an amount not to exceed \$115,000 per year as listed in Table 3;
4. Authorize the Executive Officer to release an RFP and execute subsequent purchase order or contract in an amount not to exceed \$100,000 for development of an information website to summarize testing results and disseminate information on technical specifications and capabilities of commercially available sensors to interested organizations and the public as listed in Table 2; and
5. Create and fill two new positions in the Office of Science & Technology Advancement to establish, support and maintain the AQ-SPEC in an amount not to exceed \$234,000 for the first year of the program as listed in Table 4 as follows:
  - a) One Air Quality Instrument Specialist II in Quality Assurance; and
  - b) One Air Quality Specialist in Quality Assurance.

Barry R. Wallerstein, D.Env.  
Executive Officer

MMM:LT:AP:PMF:RE:JL

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### **Background**

Manufacturers have recently begun marketing “low-cost” air monitoring sensors to measure air pollution, and considering how fast the air monitoring sensor technology is evolving, it is likely that the availability of such sensors in terms of type and numbers will continue to grow in the future. These devices, provided they produce reliable data, can significantly augment and improve current ambient air monitoring capabilities that predominantly rely on more sophisticated and expensive fixed-site federal-reference monitoring devices and methods. Specifically, these devices can be deployed near specific sources to better characterize local levels of air contaminants or over a wider geographic area to identify spatial and temporal trends. Given their low cost, these sensors are becoming an attractive means for local environment groups and individuals to attempt to independently evaluate air quality. The new approach is receiving acknowledgement from U.S. EPA and may move air monitoring towards a different paradigm which includes traditional air monitoring by air regulatory agencies supplemented by community-based monitoring using such low-cost air monitoring

sensors. Due to their low cost and ease of use, in addition to enhancing current monitoring capabilities, such devices also have the potential of becoming highly effective tools in introducing students to and engaging them in air quality matters.

There is, however, no independent objective means by which these devices can be evaluated, and data from these monitors are usually accepted at face value with no opportunity to evaluate their accuracy and overall quality. In fact, preliminary tests performed in the U.S. and in Europe seem to suggest that many of the commercially available air monitoring sensors have poor reliability, do not perform well in the field under “actual” ambient conditions, and do not typically correlate well with data obtained using “standard” measurement methods employed by regulatory agencies. Poor quality data obtained from unreliable sensors, especially that in conflict with data obtained from traditional, more sophisticated monitoring networks, may not only lead to confusion but may also jeopardize the successful evolution of the “low-cost” sensor technology. Therefore, there is an urgent need to better characterize the actual performance of air monitoring sensors as well as educate the public and users lacking specific technical training about the potential applications of these devices as well as their limitations.

### **Proposal**

In an effort to provide the public with much-needed information about the actual performance of commercially available “low-cost” monitoring sensors, this action is to establish a testing center at SCAQMD. The AQ-SPEC would perform a thorough performance characterization of currently available “low-cost” sensors using both field- and laboratory-based testing and communicate such results to the public through an information website. This action is also to transfer and appropriate funding to release solicitation documents and issue purchase orders or contracts for equipment and web development, fund program implementation costs and create and fill two new positions to support the AQ-SPEC.

### Field Testing

Air quality sensors would be operated side-by-side with more “standardized” air monitoring equipment such as Federal Reference Methods and Federal Equivalent Methods (FRM and FEM, respectively), which are routinely used to measure the ambient concentration of gaseous or particle pollutants for regulatory purposes. The testing would be conducted at one or more of SCAQMD’s existing air monitoring stations (e.g. 710 station, a near-roadway site where concentrations of diesel PM, VOCs and other combustion pollutants are elevated) to test their overall performance. A Quality Assurance Project Plan (QAPP) document to formalize the field and laboratory testing procedure(s) is under development and will be available soon.

### Laboratory Testing

Sensors that demonstrated an acceptable performance in the field would then be brought back to the lab for more detailed testing. A “characterization chamber” (to be set-up inside the SCAQMD laboratory or in another dedicated area) would be used to challenge the sensors with known concentrations of different particle and gaseous pollutants (i.e. both individual pollutants and different pollutant mixtures) under different temperature and relative humidity levels. The QAPP document mentioned earlier also includes the details of the laboratory testing procedure.

### Information Website

Testing results for each sensor will be summarized in a technical report, along with other relevant information, and posted online on a dedicated website to educate the public about the capabilities of commercially available sensors and their potential applications. Other scientific organizations (i.e. air quality agencies, universities and national labs) would also be encouraged to submit their test data and reports to avoid duplication of efforts and to expand our knowledge on available sensor technology and their performance. All air monitoring sensors tested under this program would be purchased or leased directly from the manufacturer.

### Proposed Purchases through RFQ Process

Two dedicated sets of FRM and FEM air monitoring instruments would be purchased to test the performance of “low-cost” sensors both in the field and in the laboratory. These include devices for measuring gaseous (i.e. ozone, sulfur dioxide, nitrogen oxides, carbon monoxide, and hydrogen sulfide) and particulate (i.e. fine and coarse particles) pollutants, as well as VOCs. Instruments for measuring other important air toxics, such as black carbon (an indicator of diesel particulate, a well-known carcinogen) and ultrafine particles (another combustion product that has been associated with adverse health effects in humans), are already available from previous air toxics studies (i.e. MATES IV). Data loggers will also be purchased to acquire, visualize and store data from the various monitoring instruments and sensors. A “characterization chamber” will be purchased to challenge the air sensors with known concentrations of different particle and gaseous pollutants and under different temperature and relative humidity levels. The chamber will also include an integrated aerosol generator and an aerosol neutralizer to test particle measuring sensors for their ability to accurately detect particles of different sizes. Table 1A includes a complete list of all field and laboratory equipment which would be purchased through an RFQ process and their estimated cost.

### Proposed Purchases through Sole Source Purchase Orders

A Calibration/Dilution System with Ozone Generator (Teledyne Model T700U) would be purchased for precision gas analyzers. Using highly accurate mass flow controllers combined with compressed sources of standard gases, calibration standards are provided for multipoint span and zero checks using up to four gas sources. The Model T700U is

designed for the demanding requirements of very sensitive measurements and is ideal for testing air monitoring sensors with wide sensitivity and accuracy ranges.

A High Performance Zero Air System (Teledyne Model T701H) would be purchased to provide a self-contained source of high purity zero air for dilution calibrators, and would be used in conjunction with the Teledyne Model T700U calibration/dilution system mentioned above. It is ideal for use with highly sensitive gaseous analyzers in ambient background and trace level applications, and it has been used for accurately monitoring gaseous pollutants at all SCAQMD network air monitoring stations for several years.

An Aerodynamic Particle Sizer Spectrometer (APS) (TSI Model 3321) would be purchased to provide high-resolution, real-time aerodynamic measurements of particles from 0.5 to 20 microns. This particle sizer also measures light-scattering intensity in the equivalent optical size range of 0.37 to 20 microns. The APS would be used to characterize the particle size distribution of aerosols generated in the laboratory (i.e. inside the characterization chamber) to evaluate the ability of specific air monitoring sensors to accurately detect particles of different sizes.

Table 1B summarizes the equipment to be purchased from Teledyne Technologies and TSI Instruments through sole source purchase orders and the estimated costs.

#### Proposed Purchase Order or Contract through RFP Process

An essential part of the AQ-SPEC would be to communicate relevant facts about the air monitoring sensors with the public through the development of an information website (Table 2). The website would include a summary of the AQ-SPEC testing results, information on technical specifications and capabilities of commercially available sensors, validation and calibrations procedures, and potential applications. A well-organized air monitoring sensor website would be a valuable resource for citizens, community groups and various organizations in need of appropriate sensor technologies for specific applications, developers looking for opportunities to fill technology and price point gaps, and federal, state and local air quality officials seeking to understand and communicate the value and limitations of these technologies to the public. A purchase order or contract would be executed based on the results of an RFP to identify a vendor for development of the website.

#### Proposed Recurring Program Implementation Expenditures

Staff would maintain an updated list of all commercially available “low-cost” air monitoring sensors and periodically purchase or lease these devices directly from the manufacturer for testing. Other recurring program implementation costs associated with establishing the AQ-SPEC, summarized in Table 3, include certification, calibration and/or repair of field and laboratory equipment and purchase of “certified” gas standards for laboratory testing and other testing supplies.

### Proposed Annual Staffing Costs

Two full-time positions would be created and filled in the Office of Science & Technology Advancement to support the AQ-SPEC, as follows:

- One Air Quality Instrument Specialist II in Quality Assurance - to conduct field evaluations of air monitoring sensors and operate, repair and maintain field equipment
- One Air Quality Specialist in Quality Assurance - to validate and analyze air monitoring sensor data, evaluate sensor performance, write reports and manage the content of the air monitoring sensor website

Given the rapid proliferation of portable sensor technology for air quality monitoring applications, it is expected that these new staff positions will dedicate 100% of their time to establish, support and maintain the AQ-SPEC. Table 4 summarizes the proposed staffing and associated costs.

### **Outreach**

In accordance with SCAQMD's Procurement Policy and Procedure, a public notice advertising the RFQs and RFP and inviting bids will be published in the Los Angeles Times, the Orange County Register, the San Bernardino Sun, and Riverside County Press Enterprise newspapers to leverage the most cost-effective method of outreach to the South Coast Basin.

Additionally, potential bidders may be notified utilizing SCAQMD's own electronic listing of certified minority vendors. Notice of the RFP/RFQ will be e-mailed to the Black and Latino Legislative Caucuses and various minority chambers of commerce and business associations, and placed on the Internet at SCAQMD's website (<http://www.aqmd.gov>) where it can be viewed by making the selection "Grants & Bids." Information is also available on SCAQMD's bidder's 24-hour telephone message line (909) 396-2724.

### **Sole Source Justification**

Section VIII.B.2 of the Procurement Policy and Procedure identifies four major provisions under which a sole source award may be justified. Section VIII.B.2.d(6) of the SCAQMD's Procurement Policy and Procedure allows for sole source purchases in which "Other circumstances exist which in the determination of the Executive Officer require such waiver in the best interests of the SCAQMD." Such circumstances may include but are not limited to "Projects requiring compatibility with existing specialized equipment." The purchase of the calibration/dilution and high performance zero air systems from Teledyne Technologies is proposed under this section since identical items are already in use in SCAQMD's air monitoring network stations and have been integrated well with a history of reliability. The request for sole source purchase of the

APS Spectrometer through TSI Instruments is made under Section VIII.B.2(1): “The unique experience and capabilities of the proposed contractor or contractor team.”

### **Benefits to SCAQMD**

Establishment of the AQ-SPEC will create the first air monitoring sensor center in the country and provide staff and the public with valuable knowledge on additional available sensor technology as well as their performance and data reliability and potential applications. The availability of such information will help contribute to and possibly shape the successful evolution and deployment of “low-cost” sensor technology. Furthermore, this effort will provide SCAQMD with an effective tool to engage and educate students on air quality matters.

### **Resource Impacts**

An estimated \$852,000 is required to establish, support and maintain the AQ-SPEC, including first year staffing costs (as listed in Tables 1-4). Up to \$852,000 will be transferred from the BP ARCO Settlement Projects Fund (46) and appropriated into the General Fund in Fiscal Year 2014-15. Ongoing costs beyond Fiscal Year 2014-15 will be identified for consideration in future annual budgets. To defray future implementation costs, staff will pursue cost-sharing opportunities with other agencies (e.g., CARB, U.S. EPA, CAPCOA, etc.) as well as consider charging a “fee for service” to interested parties.

### **Attachments**

Table 1A - Proposed Purchases through RFQ Process

Table 1B - Proposed Purchases through Sole Source Purchase Orders

Table 2 - Proposed Purchase Order or Contract through RFP Process

Table 3 - Proposed Recurring Program Implementation Expenditures

Table 4 – Proposed Annual Staffing Costs

**Table 1A**  
**Proposed Purchases through RFQ Process**

Description	Qty	Estimated Cost
Ozone (O3) Analyzer	2	\$26,000
Sulfur Dioxide (SO2) Analyzer	2	\$30,000
Nitrogen Oxides (NOx) Analyzer	2	\$32,000
Carbon Monoxide (CO) Analyzer	2	\$28,000
Hydrogen Sulfide (H2S) Analyzer	2	\$32,000
Continuous PM FEM Analyzer	2	\$48,000
Total Non-methane HydroCarbon (NMHC) Analyzer	2	\$48,000
Data Loggers	2	\$20,000
Customized Testing Chamber With Integrated Aerosol Generator and Aerosol Neutralizer	1	\$50,000
<b>Total Proposed Purchases through RFQ Process</b>		<b>\$314,000</b>

**Table 1B**  
**Proposed Purchases through Sole Source Purchase Orders**

Description	Qty	Estimated Cost
Calibration/Dilution System With Ozone (O3) Generator	1	\$23,000
High Performance Zero Air System	1	\$8,000
Aerodynamic Particle Sizer	1	\$58,000
<b>Total Proposed Purchases through Sole Source Purchase Orders</b>		<b>\$89,000</b>



**Table 2**  
**Proposed Purchase Order or Contract through RFP Process**

Description	Estimated Cost
Development of an Air Monitoring Sensors Website	\$100,000
<b>Total Proposed Purchase Order or Contract through RFP Process</b>	<b>\$100,000</b>

**Table 3**  
**Proposed Recurring Program Implementation Expenditures**

Description	Acct	Estimated Cost
Sensor Purchase or Lease (Approximately 50 Sensors)	67300	\$60,000 / year
Instruments Certification, Calibration and Repair	67600	\$20,000 / year
NIOSH or NIST Certified Standards	67550	\$15,000 / year
Misc. Supplies	68050	\$20,000 / year
<b>Total Proposed Recurring Program Implementation Expenditures</b>		<b>\$115,000 / year</b>

**Table 4**  
**Proposed Annual Staffing Costs**

Title	Quantity	Division	Estimated Cost
Air Quality Instrument Specialist II	1	Quality Assurance	\$109,000 / year
Air Quality Specialist	1	Quality Assurance	\$125,000 / year
<b>Total Proposed Annual Staffing Costs</b>	<b>2</b>		<b>\$234,000*</b>

\*Salaries & Employee Benefits at Step 3 include base salary, retirement cost, insurance, FICA & SDI.

BOARD MEETING DATE: July 11, 2014

AGENDA NO. 8

PROPOSAL: Issue RFP to Implement Enhanced Fleet Modernization Program

SYNOPSIS: There is strong interest from the state legislature to provide incentives for eligible low-income owners of older passenger cars to scrap and replace their vehicles with newer, cleaner and more fuel efficient vehicles. To address this, CARB is amending its AB 118 Enhanced Fleet Modernization Program (EFMP) Regulation to focus on providing greater incentives for older vehicle scrapping and replacement to eligible low- and middle-income owners. Funding to implement the EFMP is available from AB 118, including funding to conduct a pilot program to assess innovative approaches targeting outreach to low- and middle-income vehicle owners for participation in the EFMP. This action is to issue an RFP to solicit proposals to implement one or more pilot programs under the AB 118 EFMP in the South Coast Air Basin in an amount up to \$1.5 million.

COMMITTEE: Technology, June 20, 2014; Recommended for Approval

**RECOMMENDED ACTION:**

Approve release of RFP #P2015-06 to develop and implement a pilot vehicle retirement and replacement program under the EFMP.

Barry R. Wallerstein, D.Env.  
Executive Officer

MMM:HH:DKS:DRC:LB

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**Background**

CARB recently amended the 2009 guidelines for the EFMP, a voluntary vehicle retirement and replacement program for light- and medium-duty vehicles. The program was authorized by Assembly Bill 118 and California Health and Safety Code Section 44125 and is funded by a \$1 surcharge applied to motor vehicle registration. The

program was designed with two distinct components, a vehicle retirement-only component and a pilot vehicle replacement voucher component. The vehicle retirement-only component is administered by the California Bureau of Automotive Repair (BAR) on a statewide basis, while the pilot replacement voucher component was made available to the SCAQMD and the San Joaquin Valley Air Pollution Control District (SJVAPCD) to administer. The SCAQMD administered a pilot replacement voucher EFMP in 2012, but the program experienced a low participation level. CARB's recent amendments in June 2014 to the EFMP guidelines address two recent acts of legislation, Assembly Bill 8 and Senate Bill 459. These bills aim to improve the EFMP by focusing on low-income participants and also by providing more program flexibility in order to improve participation levels.

The SCAQMD has a history of implementing voluntary light- and medium-duty vehicle retirement, repair and replacement programs. Each program had its own specific set of requirements as determined by the program funding source, covering such areas as incentive levels and eligibility criteria. SCAQMD has provided light- and medium-duty vehicle incentives through the following programs:

- Since 1993, SCAQMD has been administering an old vehicle scrapping program. Through this program, participants receive an incentive for voluntary scrapping of older model year vehicles. Incentives provided for participation in this program are generally lower than those offered by other vehicle scrapping programs. This program provides a mechanism by which Mobile Source Emission Reduction Credits are generated and may be purchased for compliance with SCAQMD rules.
- In 2007, SCAQMD implemented the High Emitter Repair or Scrap (HEROS) program which provided incentives for the scrap or repair of high-emitting vehicles. This was followed up in 2011 by the High Emitter Scrap or Replacement (HEROS 2) program, which focuses only on vehicle scrapping. A vehicle replacement voucher was offered for the replacement of the scrapped vehicle if the consumer was interested in a replacement vehicle.
- The vehicle replacement voucher component of the EFMP was offered in 2012 in coordination with the HEROS 2 program and a non-SCAQMD program called the Vehicle Repair, Retirement and Replacement for Motorists (VRRRM) for HEROS program, which was made available through a settlement grant from the Reformulated Gasoline Settlement Fund.

Other examples of vehicle retirement, repair and replacement programs in California include:

- The statewide Consumer Assistance Program (CAP) administered by BAR, through which incentives are offered for vehicle repair or retirement and a statewide EFMP for vehicle retirement.

- Currently, five local air pollution control districts in California administer Voluntary Accelerated Vehicle Retirement (VAVR) programs using Carl Moyer funding. These programs provide incentives for vehicle retirement.
- The SJVAPCD offers vehicle retirement and repair incentives through its Polluting Automobile Scrap & Salvage (PASS) program.
- Valley Clean Air Now (Valley CAN) initiated its “Tune-In and Tune-Up” Program in 2003 for the repair of high-emitting vehicles in the San Joaquin Valley. The repair component of PASS is implemented through this program and continues to this day.
- The VRRRM Program was implemented from 2010 through 2012. The Program offered statewide and regional incentives for the repair, retirement and replacement of polluting vehicles. Besides offering the VRRRM for HEROS element previously discussed, a VRRRM for CAP element was implemented which supplemented repair incentives for vehicle owners participating in BAR’s statewide CAP program. Another VRRRM element supplemented the SJVAPCD’s PASS program.

Staff has been working closely with CARB staff on the amendments to the EFMP regulation. Given the focus on increasing participation from lower-income consumers, staff believes that there are several approaches that need to be demonstrated as part of a pilot program to determine the best approaches for a long-term sustainable retirement and replacement program under the EFMP.

**Proposal**

This action is to issue RFP #P2015-06 to solicit proposals to conduct one or more pilot programs in the South Coast Air Basin for implementation of the AB 118 EFMP, as amended by CARB in June 2014. The strongest proposals will demonstrate: 1) an approach to outreach effectively to lower-income and disadvantaged communities; 2) how to direct interested consumers to the appropriate entities to retire their vehicles; and 3) how to direct interested consumers to participating new and used car dealerships to identify an eligible replacement vehicle. In addition, potential bidders should have a strong understanding of the EFMP guidelines adopted by CARB to ensure that the vehicle considered for retirement and the replacement vehicles meet all eligibility and processing requirements.

An optional bidders’ conference will be conducted to assist potential bidders in understanding the objectives of the program and to provide an opportunity for potential bidders to ask clarification questions and potentially meet other potential bidders to form project teams.

Staff anticipates making a recommendation on a contract award at the November 7, 2014 Board meeting. Awards may be recommended to a single entity or project team or

to multiple awardees if there are viable different proposed approaches to implement the program.

### **Outreach**

In accordance with SCAQMD's Procurement Policy and Procedure, a public notice advertising the RFP and inviting bids will be published in the Los Angeles Times, the Orange County Register, the San Bernardino Sun, and Riverside County Press Enterprise newspapers to leverage the most cost-effective method of outreach to the Basin.

Additionally, potential bidders may have been notified utilizing SCAQMD's own electronic listing of certified minority vendors. Notice of the RFP will be e-mailed to the Black and Latino Legislative Caucuses and various minority chambers of commerce and business associations, and placed on the Internet at SCAQMD's website (<http://www.aqmd.gov>) where it can be viewed by making the selection "Grants & Bids". Information is also available on SCAQMD's bidder's 24-hour telephone message line (909) 396-2724.

### **Bid Evaluation**

Proposals will be reviewed and evaluated by a diverse, technically qualified panel in accordance with criteria contained in the attached RFP.

### **Benefits to SCAQMD**

Through this program, additional progress will be made in reducing emissions from light- and medium-duty vehicles by incentivizing the turnover of high-emitting vehicles with cleaner, more efficient ones. Modifications to the EFMP made by the State are geared to provide additional program flexibility to increase participation levels and to ensure that those who are low-income and those who live in disadvantaged communities have the opportunity to participate and experience the benefits of the program.

### **Resource Impacts**

The SCAQMD anticipates receiving from CARB, a grant award of up to \$1.5 million to implement the EFMP. As such, the total funding proposed for this RFP will be up to \$1.5 million. A maximum of 10 percent and 5 percent of this amount would be allocated for payment to contractor(s) for program administration and outreach activities, respectively.

### **Attachment**

RFP #P2015-06 for the Implementation of the Enhanced Fleet Modernization Program

# **SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

## **REQUEST FOR PROPOSALS**

### **RFP #P2015-06**

#### **RFP for the Implementation of the Enhanced Fleet Modernization Program**

The South Coast Air Quality Management District (SCAQMD) requests proposals for the following purpose according to terms and conditions attached. In the preparation of this Request for Proposals (RFP) the words "Proposer," "Contractor," and "Consultant" are used interchangeably.

#### **PURPOSE**

The SCAQMD is soliciting proposals to conduct one or more pilot programs to implement the AB 118 Enhanced Fleet Modernization Program (EFMP) in the South Coast Air Basin. There is a strong interest from the state legislature in providing financial assistance to lower income owners of older passenger cars and light-duty trucks who are interested in replacing their older vehicles with newer cleaner and more fuel efficient vehicles. As such, in June 2014, the California Air Resources Board (CARB) amended its Regulation for the AB 118 Enhanced Fleet Modernization Program (Sections 2620 to 2630, Title 13 of the California Code of Regulations) to focus on providing additional funding to low-income vehicle owners to retire and replace their older higher emitting vehicles, and to provide updated guidelines for EFMP implementation to increase participation in the program.

This RFP is seeking proposals for innovative approaches to increase consumer participation in the Pilot Retire and Replace Program of the EFMP with a strong emphasis on extensive outreach to low-income consumers of older vehicles and conducting a streamlined and positive consumer experience in having their older higher emitting vehicles retired and replaced with newer cleaner fuel efficient vehicles. The strongest proposals will have demonstrated: (1) the ability to conduct innovative programs that outreach to low-income consumers to the maximum extent possible; (2) work with and assist interested consumers to the appropriate entities to retire their vehicles; and (3) work with and assist interested consumers to participating new and used car dealerships to identify eligible replacement vehicles. A strong project team will provide effective coordination and oversight of tasks in addition to having demonstrated experience in conducting programs that address the three elements described above. It is encouraged that prospective bidders team with entities (which may include BAR-qualified scrappers, car dealerships, and media/outreach companies) that have experience in one or all three elements of the program.

Total funding for this RFP will be up to \$1.5 million with an expected time frame of 12 months from contract initiation to completion. The SCAQMD Governing Board may award to one or more proposals to maximize the efficacy of the program. Additional funding may be added at the time the SCAQMD Governing Board considers contract awards.

**INDEX - The following are contained in this RFP:**

Section I	Background/Information
Section II	Contact Person
Section III	Schedule of Events
Section IV	Participation in the Procurement Process
Section V	Statement of Work/Schedule of Deliverables
Section VI	Required Qualifications
Section VII	Proposal Submittal Requirements
Section VIII	Proposal Submission
Section IX	Proposal Evaluation/Contractor Selection Criteria
Section X	Funding
Section XI	Draft Contract

Attachment A - Certifications and Representations

**SECTION I: BACKGROUND / INFORMATION**

The South Coast Air Quality Management District (SCAQMD) is the regional air pollution control agency for the four-county South Coast Air Basin (Basin) (Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino counties), and the Riverside County portions of the Salton Sea Air Basin (SSAB) and Mojave Desert Air Basin (MDAB), covering an area of approximately 10,743 square miles.

The EFMP is a vehicle retirement and replacement program authorized by the California Alternative and Renewable Fuel, Vehicle Technology, Clean Air, and Carbon Reduction Act of 2007 (Assembly Bill 118, Statutes of 2007, Chapter 750; Health and Safety Code sections 44125-44126) section 44125(a). Guidelines for the EFMP program were established by the California Air Resources Board in consultation with the Bureau of Automotive Repair in August of 2010. Through two recent acts of California legislation (Assembly Bill 8 and Senate Bill 459), EFMP guidelines were recently amended by the California Air Resources Board (CARB) and are incorporated in amended Title 13, California Code of Regulations, sections 2620-2630.

The EFMP is a voluntary program that provides incentives to eligible owners of light- and medium-duty vehicles for the early retirement of these vehicles. The pilot retire and replace component of the program also provides incentives for the replacement of retired vehicles with cleaner, more fuel-efficient ones, or alternatively, provides for mass transit passes in lieu of replacement vehicles.

The Pilot Retire and Replace Program places an emphasis on:

- Targeted outreach in low-income and disadvantaged communities;
- Providing significant assistance to program participants to complete the transactions;
- Ensuring that retired vehicles have sufficient remaining useful lives and functionality; and
- Provides for additional tiered incentives for purchases of more environmentally friendly replacement vehicles and alternatively offers vouchers for public transportation, car sharing, vanpooling, or other mobility options.

Several approaches have been implemented to solicit consumer participation to accelerate old vehicle retirement in the past. Such approaches include third party entrepreneurs who

conducted outreach to consumers and provided incentives to interested consumers to scrap their older vehicles. Such programs were implemented successfully as part of the SCAQMD Rule 2202 Air Quality Improvement Program. Other programs such as the SCAQMD High-Emitter Repair and Replacement Program and the Vehicle Repair, Retirement, and Replace for Motorists (VRRRM) Program provided funding assistance to consumers to either repair or retire their vehicles. Consumers who retired their vehicles were given vouchers for replacement vehicles. The VRRRM Program funded by a grant from the Reformulated Gasoline Settlement Fund, relied on car dealerships to attract participation in the program. Another program currently operating in the San Joaquin Valley, conducts weekend events to attract consumers to repair their vehicles if their vehicles failed emission screening tests.

Given the demographic diversity of the South Coast Air Basin, the SCAQMD believes that multiple approaches will be needed to maximize participation in the EFMP. As such, the SCAQMD proposes to retain contractor services to implement the Pilot Retire and Replace Program of the EFMP. The proposed program has multiple components, all of which are covered under this RFP.

**SECTION II: CONTACT PERSON**

Questions regarding the content or intent of this RFP, or on procedural matters should be addressed to:

Ms. Lori Berard  
 Mobile Source Division, On-Road Section  
 South Coast Air Quality Management District  
 21865 East Copley Drive  
 Diamond Bar, CA 91765  
 Tel. No.: (909) 396-2436  
 E-mail: [lberard@aqmd.gov](mailto:lberard@aqmd.gov)

**SECTION III: SCHEDULE OF EVENTS**

July 11, 2014	Board Approval of RFP
July 11, 2014	RFP Released
July 30, 2014	OPTIONAL Bidder's Conference at 1:30 pm in Room CC6
September 17, 2014	<b>Proposals Due by 1 p.m.</b>
November 7, 2014	Recommendation to Board
December 5, 2014	Anticipated Contract Start
December 31, 2015	Final Report Due

An OPTIONAL Bidders Conference will be held at the SCAQMD Headquarters in Diamond Bar, California at 1:30 pm on Wednesday, July 30th in Room CC6. **Attendance is strongly encouraged.** Staff plans to discuss the requirements of the CARB EFMP regulation and answer questions regarding the RFP. Please contact Lori Berard at (909) 396-2436 by close of business on Tuesday, July 29, 2014 if you plan to attend.



## **SECTION IV: PARTICIPATION IN THE PROCUREMENT PROCESS**

A. It is the policy of the SCAQMD to ensure that all businesses including minority business enterprises, women business enterprises, disabled veteran business enterprises and small businesses have a fair and equitable opportunity to compete for and participate in SCAQMD contracts.

B. Definitions:

The definition of minority, women or disadvantaged business enterprises set forth below is included for purposes of determining compliance with the affirmative steps requirement described in Paragraph G below on procurements funded in whole or in part with federal grant funds which involve the use of subcontractors. The definition provided for disabled veteran business enterprise, local business, small business enterprise, low-emission vehicle business and off-peak hours delivery business are provided for purposes of determining eligibility for point or cost considerations in the evaluation process.

1. "Women business enterprise" (WBE) as used in this policy means a business enterprise that meets all of the following criteria:
  - a. a business that is at least 51 percent owned by one or more women, or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more or women.
  - b. a business whose management and daily business operations are controlled by one or more women.
  - c. a business which is a sole proprietorship, corporation, or partnership with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, foreign firm, or other foreign-based business.
2. "Disabled veteran" as used in this policy is a United States military, naval, or air service veteran with at least 10 percent service-connected disability who is a resident of California.
3. "Disabled veteran business enterprise" (DVBE) as used in this policy means a business enterprise that meets all of the following criteria:
  - a. is a sole proprietorship or partnership of which at least 51 percent is owned by one or more disabled veterans or, in the case of a publicly owned business, at least 51 percent of its stock is owned by one or more disabled veterans; a subsidiary which is wholly owned by a parent corporation but only if at least 51 percent of the voting stock of the parent corporation is owned by one or more disabled veterans; or a joint venture in which at least 51 percent of the joint venture's management and control and earnings are held by one or more disabled veterans.
  - b. the management and control of the daily business operations are by one or more disabled veterans. The disabled veterans who exercise management and control are not required to be the same disabled veterans as the owners of the business.

- c. is a sole proprietorship, corporation, or partnership with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, firm, or other foreign-based business.
4. "Local business" as used in this policy means a company that has an ongoing business within geographical boundaries of the SCAQMD at the time of bid or proposal submittal and performs 90% of the work related to the contract within the geographical boundaries of the SCAQMD and satisfies the requirements of subparagraph H below.
5. "Small business" as used in this policy means a business that meets the following criteria:
  - a. 1) an independently owned and operated business; 2) not dominant in its field of operation; 3) together with affiliates is either:
    - A service, construction, or non-manufacturer with 100 or fewer employees, and average annual gross receipts of ten million dollars (\$10,000,000) or less over the previous three years, or
    - A manufacturer with 100 or fewer employees.
  - b. Manufacturer means a business that is both of the following:
    - 1) Primarily engaged in the chemical or mechanical transformation of raw materials or processed substances into new products.
    - 2) Classified between Codes 311000 and 339000, inclusive, of the North American Industrial Classification System (NAICS) Manual published by the United States Office of Management and Budget, 2007 edition.
6. "Joint ventures" as defined in this policy pertaining to certification means that one party to the joint venture is a DVBE or small business and owns at least 51 percent of the joint venture.
7. "Low-Emission Vehicle Business" as used in this policy means a company or contractor that uses low-emission vehicles in conducting deliveries to the SCAQMD. Low-emission vehicles include vehicles powered by electric, compressed natural gas (CNG), liquefied natural gas (LNG), liquefied petroleum gas (LPG), ethanol, methanol, hydrogen and diesel retrofitted with particulate matter (PM) traps.
8. "Off-Peak Hours Delivery Business" as used in this policy means a company or contractor that commits to conducting deliveries to SCAQMD during off-peak traffic hours defined as between 10:00 a.m. and 3:00 p.m.
9. "Benefits Incentive Business" as used in this policy means a company or contractor that provides janitorial, security guard or landscaping services to the SCAQMD and

commits to providing employee health benefits (as defined below in Section VIII.D.2.d) for full time workers with affordable deductible and co-payment terms.

10. "Minority Business Enterprise" (MBE) as used in this policy means a business that is at least 51 percent owned by one or more minority person(s), or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more or minority persons.
    - a. a business whose management and daily business operations are controlled by one or more minority persons.
    - b. a business which is a sole proprietorship, corporation, or partnership with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, foreign firm, or other foreign-based business.
    - c. "Minority person" for purposes of this policy, means a Black American, Hispanic American, Native-American (including American Indian, Eskimo, Aleut, and Native Hawaiian), Asian-Indian (including a person whose origins are from India, Pakistan, and Bangladesh), Asian-Pacific-American (including a person whose origins are from Japan, China, the Philippines, Vietnam, Korea, Samoa, Guam, the United States Trust Territories of the Pacific, Northern Marianas, Laos, Cambodia, and Taiwan).
  11. "Disadvantaged Business Enterprise" as used in this policy means a business that is an entity owned and/or controlled by a socially and economically disadvantaged individual(s) as described by Title X of the Clean Air Act Amendments of 1990 (42 U.S.C. 7601 note) (10% statute), and Public Law 102-389 (42 U.S.C. 4370d)(8% statute), respectively;
    - a Small Business Enterprise (SBE);
    - a Small Business in a Rural Area (SBRA);
    - a Labor Surplus Area Firm (LSAF); or
    - a Historically Underutilized Business (HUB) Zone Small Business Concern, or a concern under a successor program.
- C. Under Request for Quotations (RFQ), DVBEs, DVBE business joint ventures, small businesses, and small business joint ventures shall be granted a preference in an amount equal to 5% of the lowest cost responsive bid. Low-Emission Vehicle Businesses shall be granted a preference in an amount equal to 5 percent of the lowest cost responsive bid. Off-Peak Hours Delivery Businesses shall be granted a preference in an amount equal to 2 percent of the lowest cost responsive bid. Local businesses (if the procurement is not funded in whole or in part by federal grant funds) shall be granted a preference in an amount equal to 2% of the lowest-cost responsive bid.
  - D. Under Request for Proposals, DVBEs, DVBE joint ventures, small businesses, and small business joint ventures shall be awarded ten (10) points in the evaluation process. A non-DVBE or large business shall receive seven (7) points for subcontracting at least twenty five (25%) of the total contract value to a DVBE and/or small business. Low-Emission Vehicle Businesses shall be awarded five (5) points in the evaluation process. On procurements, which are not funded in whole or in part by federal grant funds local

businesses, shall receive five (5) points. Off-Peak Hours Delivery Businesses shall be awarded two (2) points in the evaluation process.

- E. SCAQMD will ensure that discrimination in the award and performance of contracts does not occur on the basis of race, color, sex, national origin, marital status, sexual preference, creed, ancestry, medical condition, or retaliation for having filed a discrimination complaint in the performance of SCAQMD contractual obligations.
- F. SCAQMD requires Contractor to be in compliance with all state and federal laws and regulations with respect to its employees throughout the term of any awarded contract, including state minimum wage laws and OSHA requirements.
- G. When contracts are funded in whole or in part by federal funds, and if subcontracts are to be let, the Contractor must comply with the following, evidencing a good faith effort to solicit disadvantaged businesses. Contractor shall submit a certification signed by an authorized official affirming its status as a MBE or WBE, as applicable, at the time of contract execution. SCAQMD reserves the right to request documentation demonstrating compliance with the following good faith efforts prior to contract execution.
  - 1. Ensure Disadvantaged Business Enterprises (DBEs) are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities. For Indian Tribal, State and Local Government recipients, this will include placing DBEs on solicitation lists and soliciting them whenever they are potential sources.
  - 2. Make information on forthcoming opportunities available to DBEs and arrange time frames for contracts and establish delivery schedules, where the requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process. This includes, whenever possible, posting solicitations for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date.
  - 3. Consider in the contracting process whether firms competing for large contracts could subcontract with DBEs. For Indian Tribal, State and Local Government recipients, this will include dividing total requirements when economically feasible into smaller tasks or quantities to permit maximum participation by DBEs in the competitive process.
  - 4. Encourage contracting with a consortium of DBEs when a contract is too large for one of these firms to handle individually.
  - 5. Using the services and assistance of the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.
  - 6. If the prime contractor awards subcontracts, require the prime contractor to take the above steps.
- H. To the extent that any conflict exists between this policy and any requirements imposed by federal and state law relating to participation in a contract by a certified

MBE/WBE/DVBE as a condition of receipt of federal or state funds, the federal or state requirements shall prevail.

- I. When contracts are not funded in whole or in part by federal grant funds, a local business preference will be awarded. For such contracts that involve the purchase of commercial off-the-shelf products, local business preference will be given to suppliers or distributors of commercial off-the-shelf products who maintain an ongoing business within the geographical boundaries of SCAQMD. However, if the subject matter of the RFP or RFQ calls for the fabrication or manufacture of custom products, only companies performing 90% of the manufacturing or fabrication effort within the geographical boundaries of SCAQMD shall be entitled to the local business preference.
- J. In compliance with federal fair share requirements set forth in 40 CFR Part 33, SCAQMD shall establish a fair share goal annually for expenditures with federal funds covered by its procurement policy.

**SECTION V: STATEMENT OF WORK/SCHEDULE OF DELIVERABLES**

The overall objective is to develop and implement the Pilot Retire and Replace Program element of the Enhanced Fleet Modernization program (EFMP). The program applies to low-income residents to promote cleaner replacement vehicles, and to enhance emissions reductions gained by the program.

Four tasks have been identified for this project as follows:

- 1 Initial Meeting with SCAQMD Staff
- 2 Marketing/Outreach Implementation
- 3 Processing Eligible Vehicles
- 4 Monitoring/Reporting

Potential bidders should address all tasks based on their background and expertise in their proposal based on the format provided in Section VII – Proposal Submittal Requirements. The four tasks listed below are integral to the goal of retiring and replacing as close as possible around 250 high-emitting vehicles. The SCAQMD reserves the right to select individual tasks for award to fit its needs and resources.

**A. Statement of Work**

**Task 1 – Initial Meeting with SCAQMD**

All contracting parties need to meet together with SCAQMD staff to discuss and establish program coordination details including responsibilities, contacts, timelines, and other logistics prior to program kickoff.

**Task 2 – Marketing/Outreach Implementation**

The purpose of this task is to generate public awareness and interest to attract a large number of consumers to potentially participate in the EFMP. Interested consumers would need to be informed on their eligibility to participate in the EFMP early in the process through

an understanding of whether their vehicle is eligible to participate in the program and whether they are eligible to receive vouchers for replacement vehicles. In addition, there is a need to focus on lower-income consumers residing in disadvantaged communities. Effective outreach would result in vehicle owners who are willing to participate in subsequent smog check testing or alternative method to confirm vehicle eligibility with subsequent scrapping and replacement of vehicles.

- A. Contractor shall describe the specific effort/tasks to conduct marketing and outreach to attract consumers to participate in the program.
  - 1. Examples of outreach activities could include, but not limited to, weekend events for vehicle pre-screening; advertisement through dealerships; general advertisement through print media at specific venues; radio or TV advertisement; or door-to-door interactions to solicit interest.
  - 2. As an example of an event oriented outreach, Contractor would provide a welcoming environment; obtain/provide permits, security, event staffing, traffic management, and event signage for venue locations; and interact with potential participants and pre-screen vehicles for EFMP eligibility.
  - 3. Interested participants could be initially prequalified to participate in the EFMP subject to the EFMP requirements, with subsequent confirmation that their vehicles are eligible to participate in the program.
  - 4. A draft campaign strategy and other creative materials may be included.
  - 5. Given the ethnic diversity in the South Coast Air Basin, describe the approach in outreaching to various ethnic communities in the South Coast Air Basin.
  
- B. Identify metrics to monitor the performance of the marketing and outreach efforts.

### **Task 3 – Processing of Eligible Vehicles**

- A. Contractor shall describe in detail the steps that will be taken to:
  - 1. Evaluate vehicles for retirement eligibility;
  - 2. Evaluate vehicles for significant remaining useful lives as required under the EFMP Regulation;
  - 3. Hire and manage bilingual staff to coordinate/interface with consumers by answering questions and performing follow-up calls related to upcoming events/activities, vehicle eligibility requirements, vehicle screening or testing, vehicle scrapping, and vehicle replacement;
  - 4. Establish, convey, and coordinate program details with automobile dealerships and dismantlers;
  - 5. Develop and process consumer applications;
  - 6. Retire eligible vehicles in coordination with participating automobile dismantlers;
  - 7. Issue replacement vouchers;
  - 8. Oversee and approve vehicle replacements in coordination with participating automobile dealerships;
  - 9. Ensure that eligible consumers receive the full benefits of the program, and
  - 10. Coordinate incentive reimbursements with participating entities such as consumers, dismantlers, and automobile dealerships;
  
- B. Contractor shall describe the actions that will be taken to transfer/make accessible relevant program data to automobile dealerships and automobile dismantlers for smooth program operation.

- C. Contractor shall describe the mechanisms/process and steps for the input/transfer of relevant program data from automobile dealerships and automobile dismantlers to the Contractor.
- D. Contractor shall describe the overall management of the program to ensure each element identified Task 3.A is performed in an efficient manner.

#### **Task 4 – Monitoring/Reporting**

In addition to identifying recordkeeping/reporting requirements that are specified in the EFMP, Contractor should specify the content of program data and reports that will be made accessible to SCAQMD for the purpose of monitoring program activity and whether the data/reports will be accessible on a real time basis.

- A. Under Task 2, Contractor shall prepare a report describing the results of the marketing/outreach effort/activities. The report shall include a discussion of “lessons learned” and specific recommendations where the marketing/outreach activities could be enhanced in future programs.
- B. Under Task 3, Contractor shall prepare brief weekly reports on consumer participation and provide such reports to the SCAQMD staff for review. The reports shall contain at a minimum, information regarding the number of consumers interested in the program, the number of consumers applying to the program; the number of consumers who were income eligible and the eligibility level; the number of consumers with eligible vehicles; and the time for each consumer to complete the process and obtain a replacement vehicle.

#### **B. Schedule of Deliverables/Tasks**

Contractor shall provide a schedule to conduct Tasks 1, 2, and 3 including project milestones and progress milestones. As part of the schedule, Contractor shall allow time to meet with SCAQMD staff to discuss program performance and potential need to adjust the program under either Tasks 2 or 3 should the expected performance not be met.

Execution of Task 4 shall be contingent upon approval by SCAQMD staff of the final program plan report specified in the Deliverables portion of this Section as well as the monthly data analysis and transmittal of data. It should be noted that SCAQMD costs for contract(s) resulting from this RFP shall not exceed \$1,500,000 in total. In the event that additional funding either direct or in-kind (e.g., use of facilities or equipment), for this project is secured, the contract for this project will be amended and the scope of the work expanded.

#### **SECTION VI: REQUIRED QUALIFICATIONS**

Include detailed specifications on experience, education, and training. Also indicate proof of qualification requirements such as licenses, memberships and/or endorsements.

Teams of qualified corporations, non-profit organizations, non-governmental organizations and/or individuals are encouraged to submit bids.

The most desirable proposals will have project team members that:

- Have a strong understanding of the provisions of the EFMP as provided in Sections 2620 to 2630, Title 13, California Code of Regulations;
- Are experienced in conducting similar retirement and/or replacement programs;
- Are experienced in conducting outreach campaigns to solicit public participation and successfully implemented outreach programs with significant number of participation; and/or
- Are experienced in processing applications to determine income and/or vehicle eligibility of interested participants.

## **SECTION VII: PROPOSAL SUBMITTAL REQUIREMENTS**

Submitted proposals must follow the format outlined below and all requested information must be supplied. Failure to submit proposals in the required format will result in elimination from proposal evaluation.

Each proposal must be submitted in three separate volumes:

- Volume I - Technical Proposal
- Volume II - Cost Proposal
- Volume III - Certifications and Representations included in Attachment A to this RFP, should be executed by an authorized official of the Contractor.

A separate cover letter including the name, address, and telephone number of the contractor, and signed by the person or persons authorized to represent the firm should accompany the proposal submission. Firm contact information as follows should also be included in the cover letter:

1. Address and telephone number of office in, or nearest to, Diamond Bar, California.
2. Name and title of firm's representative designated as contact.

A separate Table of Contents should be provided for Volumes I and II.

### **VOLUME I - TECHNICAL PROPOSAL**

#### **DO NOT INCLUDE ANY COST INFORMATION IN THE TECHNICAL VOLUME**

Summary/Project Description (Section A) - State overall approach to meeting the objectives and satisfying the scope of work to be performed, the sequence of activities, and a description of methodology or techniques to be used.

Potential bidders shall address each of the following elements needed to implement a successful program:



**A. Knowledge and Understanding of the EFMP Regulation (Sections 2620-2630, CCR, Title 13)**

The most successful bidders will have demonstrated knowledge and understanding of the guidelines and requirements to develop and conduct a vehicle retirement and replacement program including, but not limited to, the eligibility of vehicles; amount of funding assistance available; and the identification of administrative costs and program costs.

**B. Detailed Discussion of the Proposed Approach**

Provide a detailed description of the proposed approach to implement the vehicle retirement and replacement program. Potential bidders should provide a detailed description of the tasks that will be conducted under the proposed approach including, but not limited to, outreach to the public regarding the program; how potential participants can receive further information to participate in the program; the process to determine vehicle eligibility and income eligibility; the process for retirement of eligible vehicles; and the process for obtaining an eligible replacement vehicle including the processing of the replacement voucher. Include a discussion on outreach to various ethnic communities in the South Coast Air Basin.

The proposed approach may include other activities that potentially can complement the EFMP program or current activities that the EFMP program can potentially complement. Such activities can be considered as in-kind or cost-sharing match to the EFMP program. Note that at this time, funding is only available for the EFMP program. Potential bidders can discuss complementary activities for consideration with the understanding that funding may or may not be available for these activities.

**C. Detailed Discussion of the Proposed Project Management**

Potential bidders (individual or project team) shall provide a detailed discussion of the proposed project management of the program including the overall project management structure; activities to track progress in conducting the program; and methods to report progress and provide such information to the SCAQMD on a routine basis.

The project description needs to provide significant detail on how each of the tasks identified in Section V will be implemented and how all of the relevant EFMP requirements will be met. The project description should explain why the selected approaches will optimize the program for successful participation and implementation. If there is an additional approach that the bidder believes is important, that approach may be proposed as an option. However, the bidder should recognize that the current available funding can only be used for the funding and administration of the EFMP. The project description needs to include sufficient information to demonstrate that the bidder understands and will meet the EFMP program requirements for each of the tasks selected by the bidder.

As an example, in the project description for Task 2 – Marketing/Outreach Implementation, the bidder needs to identify how participation in the program will be maximized by consumers and automobile dealerships, especially in the targeting of low-income consumers and identification of disadvantaged communities and why this approach is advantageous. The bidder also needs to describe how eligibility requirements will be conveyed to the public and to automobile dealerships (e.g. call center, website, etc.).

Include in the project description, detailed discussions of how each of tasks identified in Section V will be accomplished. Given the bidders areas of expertise and experience, the bidders may focus specifically on conducting either Tasks 2 or 3 individually with an understanding that the individual bidders may be recommended, as part of the evaluation panel review under Section IX, to be teamed with other successful bidders with complementary expertise to maximize the overall program efficacy in meeting program objectives.

Program Schedule (Section B) - Provide projected milestones or benchmarks for submitting reports within the total time allowed. In addition, include a discussion of the level of communications with SCAQMD staff on the progress of the program and potential need to adjust the implementation of the program as necessary based on performance metrics identified in Task 2 and weekly reports as provided in Task 3.

Project Organization (Section C) - Describe the proposed management structure, program monitoring procedures, and organization of the proposed team.

Qualifications (Section D) - Describe the technical capabilities of the firm. Provide references of other similar studies performed during the last five years demonstrating ability to successfully complete the project. Include contact name, title, and telephone number for any references listed. Provide a statement of your firm's background and experience in performing similar projects for other governmental organizations.

Assigned Personnel (Section E) - Provide the following information on the staff to be assigned to this project:

1. List all key personnel assigned to the project by level and name. Provide a resume or similar statement of the qualifications of the lead person and all persons assigned to the project. Substitution of project manager or lead personnel will not be permitted without prior written approval of SCAQMD.
2. Provide a spreadsheet of the labor hours proposed for each labor category at the task level.
3. Provide a statement indicating whether or not 100% of the work will be performed within the geographical boundaries of the SCAQMD.
4. Provide a statement of the education and training program provided by, or required of, the staff identified for participation in the project, particularly with reference to management consulting, governmental practices and procedures, and technical matters.
5. Provide a summary of your firm's general qualifications to meet required qualifications and fulfill statement of work, including additional firm personnel and resources beyond those who may be assigned to the project.

Subcontractors (Section F) - This project may require expertise in multiple technical areas. List any subcontractors that may be used and the work to be performed by them.

Conflict of Interest (Section G) - Address possible conflicts of interest with other clients affected by actions performed by the firm on behalf of SCAQMD. Although the Proposer will not be automatically disqualified by reason of work performed for such firms, SCAQMD reserves the right to consider the nature and extent of such work in evaluating the proposal.

Additional Data (Section H) - Provide other essential data that may assist in the evaluation of this proposal.

## **VOLUME II - COST PROPOSAL**

Name and Address - The Cost Proposal must list the name and complete address of the Proposer in the upper left-hand corner.

Cost Proposal – SCAQMD anticipates awarding one or more time and material contracts. Note that the EFMP Guidelines contain a 10% administrative cost limit and an additional 5% cost limit to address lower income consumer participation. Prospective bidders should delineate items that are considered administrative (as determined by the California Air Resources Board) from the program cost. Cost sharing with other program or funding is encouraged, but not a requirement. Cost information must be provided as listed below:

1. Detail must be provided by the following categories:
  - A. Labor - List the total number of hours and the hourly billing rate for each level of professional staff. A breakdown of the proposed billing rates must identify the direct labor rate, overhead rate and amount, fringe benefit rate and amount, General and Administrative rate and amount, and proposed profit or fee. Provide a basis of estimate justifying the proposed labor hours and proposed labor mix.
  - B. Subcontractor Costs - List subcontractor costs and identify subcontractors by name. Itemize subcontractor charges per hour or per day.
  - C. Travel Costs - Indicate amount of travel cost and basis of estimate to include trip destination, purpose of trip, length of trip, airline fare or mileage expense, per diem costs, lodging and car rental.
  - D. Other Direct Costs -This category may include such items as postage and mailing expense, printing and reproduction costs, etc. Provide a basis of estimate for these costs.

## **VOLUME III - CERTIFICATIONS AND REPRESENTATIONS**

(see Attachment A to this RFP)

### **SECTION VIII: PROPOSAL SUBMISSION**

All proposals must be submitted according to specifications set forth in the section above. Failure to adhere to these specifications may be cause for rejection of proposal.

Signature - All proposals should be signed by an authorized representative of the Proposer.

Due Date - The Proposer shall submit eight (8) complete copies of the proposal in a sealed envelope, plainly marked in the upper left-hand corner with the name and address of the Proposer and the words "Request for Proposals #2015-06." **All proposals are due no later than 1:00 p.m., September 17, 2014, and should be directed to:**

Procurement Unit  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765-4178  
(909) 396-3520

**Late bids/proposals will not be accepted under any circumstances.** Any correction or resubmission made by the Proposer will not extend the submittal due date.

Grounds for Rejection - A proposal may be immediately rejected if:

- It is not prepared in the format described, or
- It is signed by an individual not authorized to represent the firm.

Disposition of Proposals - SCAQMD reserves the right to reject any or all proposals. All responses become the property of SCAQMD. One copy of the proposal shall be retained for SCAQMD files. Additional copies and materials will be returned only if requested and at the proposer's expense.

Modification or Withdrawal - Once submitted, proposals cannot be altered without the prior written consent of SCAQMD. All proposals shall constitute firm offers and may not be withdrawn for a period of ninety (90) days following the last day to accept proposals.

## **SECTION IX: PROPOSAL EVALUATION/CONTRACTOR SELECTION CRITERIA**

- A. Proposals will be evaluated by a panel of three to five members familiar with the subject matter of the project. The panel shall be appointed by the SCAQMD Governing Board (Governing Board) or its designee. The panel will make a recommendation to the Governing Board for final selection of a contractor and negotiation of a contract. Sufficient detail should be provided in the proposal to ensure that all program elements have been adequately addressed.
- B. Each member of the evaluation panel shall be accorded equal weight in his or her rating of proposals. The evaluation panel members shall evaluate the proposals according to the specified criteria and numerical weightings set forth below.

1.	<b>Technical Proposal</b>	(maximum 70 Points )
	• Understanding the Problem/Requirements	<b>5 points</b>
	• Technical/Management Approach Including Internal Quality Control Measures	<b>60 points</b>
	- Proposed Approach to Implement the EFMP	30 points
	- Outreach Campaign to Solicit Participation	20 points
	- Proposed Process to Assist Eligible Participants through the Retirement and Replacement of their Vehicles	10 points
	• Contractor Qualifications/ Previous Experience on Similar Projects	<b><u>5 points</u></b>
	<b>Subtotal</b>	<b>70 points</b>

In step 1, all proposers would be required to score a minimum of 56 points to be considered technically qualified. Those considered technically qualified would proceed to Step 2.

<b>Cost Proposal</b>	(maximum 30 Points )
• Cost, including Cost Sharing	<b>30 points</b>
- <i>Proposal proposing the lowest cost to implement the program will receive maximum points – others will be prorated accordingly</i>	
<b>Subtotal</b> -----	<b>30 points</b>

**Total** 100 points

In step 1, all proposers would be required to score a minimum of 56 points to be considered technically qualified. Those considered technically qualified would proceed to Step 2.

**Additional Points**

- Small Business or Small Business Joint Venture	<b>10 points</b>
- DVBE or DVBE Joint Venture	<b>10 points</b>
- Use of DVBE or Small Business Subcontractors	<b>7 points</b>
- Local Business (Non-EPA Funded Projects Only)	<b>5 points</b>
- Low Emission Vehicle Business	<b>5 points</b>
- Off Peak Hours Delivery Business	<b>2 points</b>

**The cumulative points awarded for small business, DVBE, use of small business or DVBE subcontractors, low-emission vehicle business, local business, and off-peak hours delivery business shall not exceed 15 points.**

**Self-Certification for Additional Points**

**The award of these additional points shall be contingent upon Proposer completing the Self-Certification section of Attachment A – Certifications and Representations and/or inclusion of a statement in the proposal self-certifying that Proposer qualifies for additional points as detailed above.**

2. To receive additional points in the evaluation process for the categories of Small Business or Small Business Joint Venture, DVBE or DVBE Joint Venture or Local Business (for non-EPA funded projects), the proposer must submit a self-certification or certification from the State of California Office of Small Business Certification and Resources at the time of proposal submission certifying that the proposer meets the requirements set forth in Section III. To receive points for the use of DVBE and/or Small Business subcontractors, at least 25 percent of the total contract value must be subcontracted to DVBEs and/or Small Businesses. To receive points as a Low-Emission Vehicle Business, the proposer must demonstrate to the Governing Board or designee, that supplies and materials delivered to the SCAQMD are delivered in vehicles that operate on either clean-fuels or if powered by diesel fuel, that the vehicles have particulate traps installed. To receive points as an Off-Peak Hours Delivery Business, the proposer must submit, at proposal submission, certification of its commitment to delivering supplies and materials to SCAQMD between the hours of 10:00 a.m. and 3:00 p.m. The cumulative points awarded for small business, DVBE, use of Small Business or DVBE Subcontractors,

Local Business, Low-Emission Vehicle Business and Off-Peak Hour Delivery Business shall not exceed 15 points.

The Procurement Section will be responsible for monitoring compliance of suppliers awarded purchase orders based upon use of low-emission vehicles or off-peak traffic hour delivery commitments through the use of vendor logs which will identify the contractor awarded the incentive. The purchase order shall incorporate terms which obligate the supplier to deliver materials in low-emission vehicles or deliver during off-peak traffic hours. The Receiving department will monitor those qualified supplier deliveries to ensure compliance to the purchase order requirements. Suppliers in non-compliance will be subject to a two percent of total purchase order value penalty. The Procurement Manager will adjudicate any disputes regarding either low-emission vehicle or off-peak hour deliveries.

3. For procurement of Research and Development (R & D) projects or projects requiring technical or scientific expertise or special projects requiring unique knowledge and abilities, technical factors including past experience shall be weighted at 70 points and cost shall be weighted at 30 points. A proposal must receive at least 56 out of 70 points on R & D projects and projects requiring technical or scientific expertise or special projects requiring unique knowledge and abilities, in order to be deemed qualified for award.
  4. The lowest cost proposal will be awarded the maximum cost points available and all other cost proposals will receive points on a prorated basis. For example if the lowest cost proposal is \$1,000 and the maximum points available are 30 points, this proposal would receive the full 30 points. If the next lowest cost proposal is \$1,100 it would receive 27 points reflecting the fact that it is 10% higher than the lowest cost (90% of 30 points = 27 points).
- C. During the selection process the evaluation panel may wish to interview some proposers for clarification purposes only. No new material will be permitted at this time.
- D. The Governing Board may award the contract to a proposer other than the proposer receiving the highest rating in the event the Governing Board determines that another proposer from among those technically qualified would provide the best value to SCAQMD considering cost and technical factors. The determination shall be based solely on the Evaluation Criteria contained in the Request for Proposal (RFP), on evidence provided in the proposal and on any other evidence provided during the bid review process. Evidence provided during the bid review process is limited to clarification by the Proposer of information presented in his/her proposal.
- E. Selection will be made based on the above-described criteria and rating factors. The selection will be made by and is subject to Governing Board approval. All proposers will be notified of the results by letter.
- F. The Governing Board has approved a Bid Protest Procedure which provides a process for a bidder or prospective bidder to submit a written protest to the SCAQMD Procurement Manager in recognition of two types of protests: Protest Regarding

Solicitation and Protest Regarding Award of a Contract. Copies of the Bid Protest Policy can be secured through a request to the SCAQMD Procurement Department.

- G. The Governing Board may award contracts to more than one proposer if in their sole judgment the purposes of the (contract or award) would best be served by selecting multiple proposers.
- H. If additional funds become available, the Governing Board may increase the amount awarded. The Governing Board may also select additional proposers for a grant or contract if additional funds become available.
- I. Disposition of Proposals – Pursuant to the SCAQMD’s Procurement Policy and Procedure, SCAQMD reserves the right to reject any or all proposals. All proposals become the property of SCAQMD, and are subject to the California Public Records Act. One copy of the proposal shall be retained for SCAQMD files. Additional copies and materials will be returned only if requested and at the proposer’s expense.
- J. Upon mutual agreement of the parties of any resultant contract from this RFP, the original contract term may be extended.

**SECTION X: FUNDING**

SCAQMD anticipates awarding one or more time and materials contract. The total funding for the work contemplated by this RFP will be a maximum \$1,500,000 for the full term of the contract.

**SECTION XI: DRAFT CONTRACT (Provided as a sample only)**



**South Coast  
Air Quality Management District**

This Contract consists of \*\*\* pages.

1. PARTIES - The parties to this Contract are the South Coast Air Quality Management District (referred to here as "SCAQMD") whose address is 21865 Copley Drive, Diamond Bar, California 91765-4178, and \*\*\* (referred to here as "CONTRACTOR") whose address is \*\*\*.
2. RECITALS
  - A. SCAQMD is the local agency with primary responsibility for regulating stationary source air pollution within the geographical boundaries of the SCAQMD in the State of California. SCAQMD is authorized to enter into this Contract under California Health and Safety Code Section 40489. SCAQMD desires to contract with CONTRACTOR for services described in Attachment 1 - Statement of Work, attached here and made a part here by this reference. CONTRACTOR warrants that it is well-qualified and has the experience to provide such services on the terms set forth here.
  - B. CONTRACTOR is authorized to do business in the State of California and attests that it is in good tax standing with the California Franchise Tax Board.
  - C. All parties to this Contract have had the opportunity to have this Contract reviewed by their attorney.
3. PERFORMANCE REQUIREMENTS
  - A. CONTRACTOR agrees to obtain and maintain the required licenses, permits, and all other appropriate legal authorizations from all applicable federal, state and local jurisdictions and pay all applicable fees. CONTRACTOR further agrees to immediately notify SCAQMD in writing of any change in its licensing status which has a material impact on the CONTRACTOR's performance under this Contract.
  - B. CONTRACTOR shall submit reports to SCAQMD as outlined in Attachment 1 - Statement of Work. All reports shall be submitted in an environmentally friendly format: recycled paper; stapled, not bound; black and white, double-sided print; and no three-ring, spiral, or plastic binders or cardstock covers. SCAQMD reserves the right to review, comment, and request changes to any report produced as a result of this Contract.
  - C. CONTRACTOR shall perform all tasks set forth in Attachment 1 - Statement of Work, and shall not engage, during the term of this Contract, in any performance of work that is in direct or indirect conflict with duties and responsibilities set forth in Attachment 1 - Statement of Work.
  - D. CONTRACTOR shall be responsible for exercising the degree of skill and care customarily required by accepted professional practices and procedures subject to SCAQMD's final approval which SCAQMD will not unreasonably withhold. Any costs incurred due to the failure to meet the foregoing standards, or otherwise defective services which require re-performance, as directed by SCAQMD, shall be the responsibility of CONTRACTOR. CONTRACTOR's failure to achieve the performance goals and objectives stated in Attachment 1- Statement of Work, is not a basis for requesting re-performance unless work conducted by CONTRACTOR is deemed by SCAQMD to have failed the foregoing standards of performance.
  - E. CONTRACTOR shall require its subcontractors to abide by the requirements set forth in this Contract.



4. TERM - The term of this Contract is from July 1, 2014 to June 30, 2017, unless further extended by amendment of this Contract in writing. No work shall commence until this Contract is fully executed by all parties.
5. TERMINATION
  - A. In the event any party fails to comply with any term or condition of this Contract, or fails to provide services in the manner agreed upon by the parties, including, but not limited to, the requirements of Attachment 1 – Statement of Work, this failure shall constitute a breach of this Contract. The non-breaching party shall notify the breaching party that it must cure this breach or provide written notification of its intention to terminate this contract. Notification shall be provided in the manner set forth in Clause 11. The non-breaching party reserves all rights under law and equity to enforce this contract and recover damages.
  - B. SCAQMD reserves the right to terminate this Contract, in whole or in part, without cause, upon thirty (30) days' written notice. Once such notice has been given, CONTRACTOR shall, except as and to the extent or directed otherwise by SCAQMD, discontinue any Work being performed under this Contract and cancel any of CONTRACTOR's orders for materials, facilities, and supplies in connection with such Work, and shall use its best efforts to procure termination of existing subcontracts upon terms satisfactory to SCAQMD. Thereafter, CONTRACTOR shall perform only such services as may be necessary to preserve and protect any Work already in progress and to dispose of any property as requested by SCAQMD.
  - C. CONTRACTOR shall be paid in accordance with this Contract for all Work performed before the effective date of termination under Clause 5.B. Before expiration of the thirty (30) days' written notice, CONTRACTOR shall promptly deliver to SCAQMD all copies of documents and other information and data prepared or developed by CONTRACTOR under this Contract with the exception of a record copy of such materials, which may be retained by CONTRACTOR.
6. STOP WORK – SCAQMD may, at any time, by written notice to CONTRACTOR, require CONTRACTOR to stop all or any part of the work tasks in this Contract. A stop work order may be issued for reasons including, but not limited to, the project exceeding the budget, out of scope work, delay in project schedule, or misrepresentations. Upon receipt of the stop work order, CONTRACTOR shall immediately take all necessary steps to comply with the order. CONTRACTOR shall resume the work only upon receipt of written instructions from SCAQMD cancelling the stop work order. CONTRACTOR agrees and understands that CONTRACTOR will not be paid for performing work while the stop work order is in effect, unless SCAQMD agrees to do so in its written cancellation of the stop work order.
7. INSURANCE
  - A. CONTRACTOR shall furnish evidence to SCAQMD of workers' compensation insurance for each of its employees, in accordance with either California or other states' applicable statutory requirements prior to commencement of any work on this Contract.
  - B. CONTRACTOR shall furnish evidence to SCAQMD of general liability insurance with a limit of at least \$1,000,000 per occurrence, and \$2,000,000 in a general aggregate prior to commencement of any work on this Contract. SCAQMD shall be named as an additional insured on any such liability policy, and thirty (30) days written notice prior to cancellation of any such insurance shall be given by CONTRACTOR to SCAQMD.
  - C. CONTRACTOR shall furnish evidence to SCAQMD of automobile liability insurance with limits of at least \$100,000 per person and \$300,000 per accident for bodily injuries, and \$50,000 in property damage, or \$1,000,000 combined single limit for bodily injury or property damage, prior to commencement of any work on this Contract. SCAQMD shall be named as an additional insured on any such liability policy,

and thirty (30) days written notice prior to cancellation of any such insurance shall be given by CONTRACTOR to SCAQMD.

- D. If CONTRACTOR fails to maintain the required insurance coverage set forth above, SCAQMD reserves the right either to purchase such additional insurance and to deduct the cost thereof from any payments owed to CONTRACTOR or terminate this Contract for breach.
- E. All insurance certificates should be mailed to: SCAQMD Risk Management, 21865 Copley Drive, Diamond Bar, CA 91765-4178. **The SCAQMD Contract Number must be included on the face of the certificate.**
- F. CONTRACTOR must provide updates on the insurance coverage throughout the term of the Contract to ensure that there is no break in coverage during the period of contract performance. Failure to provide evidence of current coverage shall be grounds for termination for breach of Contract.

8. INDEMNIFICATION - CONTRACTOR agrees to hold harmless, defend and indemnify SCAQMD, its officers, employees, agents, representatives, and successors-in-interest against any and all loss, damage, costs, lawsuits, claims, demands, causes of action judgments, attorney's fees, or any other expenses arising from or related to any third party claim against SCAQMD, its officers, employees, agents, representatives, or successors in interest that arise or result in whole or in part, from any actual or alleged act or omission of CONTRACTOR, its employees, subcontractors, agents or representatives in the performance of this Contract.

9. PAYMENT

- A. SCAQMD shall pay CONTRACTOR a fixed price of \*\*\* Dollars (\$\*\*\*) for work performed under this Contract in accordance with Attachment 2 - Payment Schedule, attached here and included here by reference. Payment shall be made by SCAQMD to CONTRACTOR within thirty (30) days after approval by SCAQMD of an invoice prepared and furnished by CONTRACTOR showing services performed and referencing tasks and deliverables as shown in Attachment 1 - Statement of Work, and the amount of charge claimed. Each invoice must be prepared in duplicate, on company letterhead, and list SCAQMD's Contract number, period covered by invoice, and CONTRACTOR's social security number or Employer Identification Number and submitted to: South Coast Air Quality Management District, Attn: \*\*\*.
- B. SCAQMD reserves the right to disallow charges when the invoiced services are not performed satisfactorily in SCAQMD's sole judgment.

10. INTELLECTUAL PROPERTY RIGHTS - Title and full ownership rights to any software, documents, or reports developed under this Contract shall at all times remain with SCAQMD. Such material is agreed to be SCAQMD proprietary information.

- A. Rights of Technical Data - SCAQMD shall have the unlimited right to use technical data, including material designated as a trade secret, resulting from the performance of services by CONTRACTOR under this Contract. CONTRACTOR shall have the right to use technical data for its own benefit.
- B. Copyright - CONTRACTOR agrees to grant SCAQMD a royalty-free, nonexclusive, irrevocable license to produce, translate, publish, use, and dispose of all copyrightable material first produced or composed in the performance of this Contract.

11. NOTICES - Any notices from either party to the other shall be given in writing to the attention of the persons listed below, or to other such addresses or addressees as may hereafter be designated in writing for notices by either party to the other. Notice shall be given by certified, express, or registered mail, return receipt requested, and shall be effective as of the date of receipt indicated on the return receipt card.

SCAQMD: South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765-4178  
Attn: \*\*\*

CONTRACTOR: \*\*\*  
\*\*\*  
\*\*\*  
Attn: \*\*\*

12. INDEPENDENT CONTRACTOR – CONTRACTOR is an independent contractor. CONTRACTOR, its officers, employees, agents, representatives, or subcontractors shall in no sense be considered employees or agents of SCAQMD, nor shall CONTRACTOR, its officers, employees, agents, representatives, or subcontractors be entitled to or eligible to participate in any benefits, privileges, or plans, given or extended by SCAQMD to its employees. SCAQMD will not supervise, direct, or have control over, or be responsible for, CONTRACTOR's or subcontractor's means, methods, techniques, work sequences or procedures or for the safety precautions and programs incident thereto, or for any failure by them to comply with any local, state, or federal laws, or rules or regulations, including state minimum wage laws and OSHA requirements. CONTRACTOR shall promptly notify SCAQMD of any material changes to subcontracts that affect the Contract's scope of work, deliverable schedule, and/or payment/cost schedule.
13. CONFIDENTIALITY - It is expressly understood and agreed that SCAQMD may designate in a conspicuous manner the information which CONTRACTOR obtains from SCAQMD as confidential. CONTRACTOR agrees to:
  - A. Observe complete confidentiality with respect to such information, including without limitation, agreeing not to disclose or otherwise permit access to such information by any other person or entity in any manner whatsoever, except that such disclosure or access shall be permitted to employees or subcontractors of CONTRACTOR requiring access in fulfillment of the services provided under this Contract.
  - B. Ensure that CONTRACTOR's officers, employees, agents, representatives, and independent contractors are informed of the confidential nature of such information and to assure by agreement or otherwise that they are prohibited from copying or revealing, for any purpose whatsoever, the contents of such information or any part thereof, or from taking any action otherwise prohibited under this clause.
  - C. Not use such information or any part thereof in the performance of services to others or for the benefit of others in any form whatsoever whether gratuitously or for valuable consideration, except as permitted under this Contract.
  - D. Notify SCAQMD promptly and in writing of the circumstances surrounding any possession, use, or knowledge of such information or any part thereof by any person or entity other than those authorized by this clause.
  - E. Take at CONTRACTOR expense, but at SCAQMD's option and in any event under SCAQMD's control, any legal action necessary to prevent unauthorized use of such information by any third party or entity which has gained access to such information at least in part due to the fault of CONTRACTOR.
  - F. Take any and all other actions necessary or desirable to assure such continued confidentiality and protection of such information.
  - G. Prevent access to such information by any person or entity not authorized under this Contract.
  - H. Establish specific procedures in order to fulfill the obligations of this clause.
  - I. Notwithstanding the above, nothing herein is intended to abrogate or modify the provisions of Government Code Section 6250 et.seq. (Public Records Act).

14. PUBLICATION

- A. SCAQMD shall have the right of prior written approval of any document which shall be disseminated to the public by CONTRACTOR in which CONTRACTOR utilized information obtained from SCAQMD in connection with performance under this Contract.
- B. Information, data, documents, or reports developed by CONTRACTOR for SCAQMD, pursuant to this Contract, shall be part of SCAQMD public record unless otherwise indicated. CONTRACTOR may use or publish, at its own expense, such information provided to SCAQMD. The following acknowledgment of support and disclaimer must appear in each publication of materials, whether copyrighted or not, based upon or developed under this Contract.

"This report was prepared as a result of work sponsored, paid for, in whole or in part, by the South Coast Air Quality Management District (SCAQMD). The opinions, findings, conclusions, and recommendations are those of the author and do not necessarily represent the views of SCAQMD. SCAQMD, its officers, employees, contractors, and subcontractors make no warranty, expressed or implied, and assume no legal liability for the information in this report. SCAQMD has not approved or disapproved this report, nor has SCAQMD passed upon the accuracy or adequacy of the information contained herein."

- C. CONTRACTOR shall inform its officers, employees, and subcontractors involved in the performance of this Contract of the restrictions contained herein and require compliance with the above.

- 15. NON-DISCRIMINATION - In the performance of this Contract, CONTRACTOR shall not discriminate in recruiting, hiring, promotion, demotion, or termination practices on the basis of race, religious creed, color, national origin, ancestry, sex, age, or physical or mental disability and shall comply with the provisions of the California Fair Employment & Housing Act (Government Code Section 12900 et seq.), the Federal Civil Rights Act of 1964 (P.L. 88-352) and all amendments thereto, Executive Order No. 11246 (30 Federal Register 12319), and all administrative rules and regulations issued pursuant to said Acts and Order.
- 16. SOLICITATION OF EMPLOYEES - CONTRACTOR expressly agrees that CONTRACTOR shall not, during the term of this Contract, nor for a period of six months after termination, solicit for employment, whether as an employee or independent contractor, any person who is or has been employed by SCAQMD during the term of this Contract without the consent of SCAQMD.
- 17. PROPERTY AND SECURITY - Without limiting CONTRACTOR obligations with regard to security, CONTRACTOR shall comply with all the rules and regulations established by SCAQMD for access to and activity in and around SCAQMD premises.
- 18. ASSIGNMENT - The rights granted hereby may not be assigned, sold, licensed, or otherwise transferred by either party without the prior written consent of the other, and any attempt by either party to do so shall be void upon inception.
- 19. NON-EFFECT OF WAIVER - The failure of CONTRACTOR or SCAQMD to insist upon the performance of any or all of the terms, covenants, or conditions of this Contract, or failure to exercise any rights or remedies hereunder, shall not be construed as a waiver or relinquishment of the future performance of any such terms, covenants, or conditions, or of the future exercise of such rights or remedies, unless otherwise provided for herein.
- 20. ATTORNEYS' FEES - In the event any action is filed in connection with the enforcement or interpretation of this Contract, each party shall bear its own attorneys' fees and costs.

21. FORCE MAJEURE - Neither SCAQMD nor CONTRACTOR shall be liable or deemed to be in default for any delay or failure in performance under this Contract or interruption of services resulting, directly or indirectly, from acts of God, civil or military authority, acts of public enemy, war, strikes, labor disputes, shortages of suitable parts, materials, labor or transportation, or any similar cause beyond the reasonable control of SCAQMD or CONTRACTOR.
22. SEVERABILITY - In the event that any one or more of the provisions contained in this Contract shall for any reason be held to be unenforceable in any respect by a court of competent jurisdiction, such holding shall not affect any other provisions of this Contract, and the Contract shall then be construed as if such unenforceable provisions are not a part hereof.
23. HEADINGS - Headings on the clauses of this Contract are for convenience and reference only, and the words contained therein shall in no way be held to explain, modify, amplify, or aid in the interpretation, construction, or meaning of the provisions of this Contract.
24. DUPLICATE EXECUTION - This Contract is executed in duplicate. Each signed copy shall have the force and effect of an original.
25. GOVERNING LAW - This Contract shall be construed and interpreted and the legal relations created thereby shall be determined in accordance with the laws of the State of California. Venue for resolution of any disputes under this Contract shall be Los Angeles County, California.
26. PRE-CONTRACT COSTS - Any costs incurred by CONTRACTOR prior to CONTRACTOR receipt of a fully executed Contract shall be incurred solely at the risk of the CONTRACTOR. In the event that a formal Contract is not executed, the SCAQMD shall not be liable for any amounts expended in anticipation of a formal Contract. If a formal Contract does result, pre-contract cost expenditures authorized by the Contract will be reimbursed in accordance with the cost schedule and payment provision of the Contract.
27. CITIZENSHIP AND ALIEN STATUS
  - A. CONTRACTOR warrants that it fully complies with all laws regarding the employment of aliens and others, and that its employees performing services hereunder meet the citizenship or alien status requirements contained in federal and state statutes and regulations including, but not limited to, the Immigration Reform and Control Act of 1986 (P.L. 99-603). CONTRACTOR shall obtain from all covered employees performing services hereunder all verification and other documentation of employees' eligibility status required by federal statutes and regulations as they currently exist and as they may be hereafter amended. CONTRACTOR shall have a continuing obligation to verify and document the continuing employment authorization and authorized alien status of employees performing services under this Contract to insure continued compliance with all federal statutes and regulations. Notwithstanding the above, CONTRACTOR, in the performance of this Contract, shall not discriminate against any person in violation of 8 USC Section 1324b.
  - B. CONTRACTOR shall retain such documentation for all covered employees for the period described by law. CONTRACTOR shall indemnify, defend, and hold harmless SCAQMD, its officers and employees from employer sanctions and other liability which may be assessed against CONTRACTOR or SCAQMD, or both in connection with any alleged violation of federal statutes or regulations pertaining to the eligibility for employment of persons performing services under this Contract.
28. REQUIREMENT FOR FILING STATEMENT OF ECONOMIC INTERESTS - In accordance with the Political Reform Act of 1974 (Government Code Sec. 81000 et seq.) and regulations issued by the Fair Political Practices Commission (FPPC), SCAQMD has determined that the nature of the work to be performed under

this Contract requires CONTRACTOR to submit a Form 700, Statement of Economic Interests for Designated Officials and Employees, for each of its employees assigned to work on this Contract. These forms may be obtained from SCAQMD's General Counsels' office.

- 29. OPTION TO EXTEND THE TERM OF THE CONTRACT - SCAQMD reserves the right to extend the contract for a one-year period commencing \*\*\*\*\* (enter date) at the (Not-to-Exceed Amount) set forth in Attachment 2. In the event that SCAQMD elects to extend the contract, a written notice of its intent to extend the contract shall be provided to CONTRACTOR no later than thirty (30) days prior to Contract expiration.
- 30. PROPOSAL INCORPORATION – CONTRACTOR's proposal dated \*\*\* submitted in response to Request for Proposal (RFP) #\*\*\*, is expressly incorporated herein by this reference and made a part hereof of this Contract.
- 31. SUBCONTRACTOR APPROVAL – If CONTRACTOR intends to subcontract all or a portion of the work under this Contract, then CONTRACTOR must first obtain written approval from SCAQMD's Executive Officer or designee prior to subcontracting any work. Any material changes to the subcontract(s) that affect the scope of work, deliverable schedule, and/or payment/cost schedule shall also require the prior written approval of the Executive Officer or designee. No subcontract charges will be reimbursed unless the required approvals have been obtained from SCAQMD.
- 32. ENTIRE CONTRACT - This Contract represents the entire agreement between the parties hereto related to CONTRACTOR providing services to SCAQMD and there are no understandings, representations, or warranties of any kind except as expressly set forth herein. No waiver, alteration, or modification of any of the provisions herein shall be binding on any party unless in writing and signed by the party against whom enforcement of such waiver, alteration, or modification is sought.

IN WITNESS WHEREOF, the parties to this Contract have caused this Contract to be duly executed on their behalf by their authorized representatives.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

\*\*\*

\_\_\_\_\_  
Barry R. Wallerstein, D.Env., Executive Officer  
OR  
Dr. William A. Burke, Chairman, Governing Board

\_\_\_\_\_  
Name:  
Title:

Date: \_\_\_\_\_

Date: \_\_\_\_\_

ATTEST:  
Saundra McDaniel, Clerk of the Board

By: \_\_\_\_\_

APPROVED AS TO FORM:  
Kurt R. Wiese, General Counsel

By: \_\_\_\_\_

//Standard Boilerplate  
Revised: April 3, 2013

# **ATTACHMENT A**

## **CERTIFICATIONS AND REPRESENTATIONS**



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • [www.aqmd.gov](http://www.aqmd.gov)

## **Business Information Request**

Dear SCAQMD Contractor/Supplier:

The South Coast Air Quality Management District (SCAQMD) is committed to ensuring that our contractor/supplier records are current and accurate. If your firm is selected for award of a purchase order or contract, it is imperative that the information requested herein be supplied in a timely manner to facilitate payment of invoices. In order to process your payments, we need the enclosed information regarding your account. **Please review and complete the information identified on the following pages, complete the enclosed W-9 form, remember to sign both documents for our files, and return them as soon as possible to the address below:**

**Attention: Accounts Payable, Accounting Department  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765-4178**

If you do not return this information, we will not be able to establish you as a vendor. This will delay any payments and would still necessitate your submittal of the enclosed information to our Accounting department before payment could be initiated. Completion of this document and enclosed forms would ensure that your payments are processed timely and accurately.

If you have any questions or need assistance in completing this information, please contact Accounting at (909) 396-3777. We appreciate your cooperation in completing this necessary information.

Sincerely,

Michael B. O'Kelly  
Chief Financial Officer

DH:tm

Enclosures: Business Information Request  
Disadvantaged Business Certification  
W-9  
Form 590 Withholding Exemption Certificate  
Federal Contract Debarment Certification  
Campaign Contributions Disclosure  
Direct Deposit Authorization

REV 3/13





# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • [www.aqmd.gov](http://www.aqmd.gov)

## BUSINESS INFORMATION REQUEST

Business Name	
Division of	
Subsidiary of	
Website Address	
Type of Business <i>Check One:</i>	<input type="checkbox"/> Individual <input type="checkbox"/> DBA, Name _____, County Filed in _____ <input type="checkbox"/> Corporation, ID No. _____ <input type="checkbox"/> LLC/LLP, ID No. _____ <input type="checkbox"/> Other _____

## REMITTING ADDRESS INFORMATION

Address			
City/Town			
State/Province		Zip	
Phone	(    )    -    Ext	Fax	(    )    -
Contact		Title	
E-mail Address			
Payment Name if Different			

All invoices must reference the corresponding Purchase Order Number(s)/Contract Number(s) if applicable and mailed to:

**Attention: Accounts Payable, Accounting Department**  
**South Coast Air Quality Management District**  
**21865 Copley Drive**  
**Diamond Bar, CA 91765-4178**

## DISADVANTAGED BUSINESS CERTIFICATION

Federal guidance for utilization of disadvantaged business enterprises allows a vendor to be deemed a small business enterprise (SBE), minority business enterprise (MBE) or women business enterprise (WBE) if it meets the criteria below.

- is certified by the Small Business Administration or
- is certified by a state or federal agency or
- is an independent MBE(s) or WBE(s) business concern which is at least 51 percent owned and controlled by minority group member(s) who are citizens of the United States.

Statements of certification:

As a prime contractor to the SCAQMD, \_\_\_\_\_ (name of business) will engage in good faith efforts to achieve the fair share in accordance with 40 CFR Section 33.301, and will follow the six affirmative steps listed below **for contracts or purchase orders funded in whole or in part by federal grants and contracts.**

1. Place qualified SBEs, MBEs, and WBEs on solicitation lists.
2. Assure that SBEs, MBEs, and WBEs are solicited whenever possible.
3. When economically feasible, divide total requirements into small tasks or quantities to permit greater participation by SBEs, MBEs, and WBEs.
4. Establish delivery schedules, if possible, to encourage participation by SBEs, MBEs, and WBEs.
5. Use services of Small Business Administration, Minority Business Development Agency of the Department of Commerce, and/or any agency authorized as a clearinghouse for SBEs, MBEs, and WBEs.
6. If subcontracts are to be let, take the above affirmative steps.

**Self-Certification Verification: Also for use in awarding additional points, as applicable, in accordance with SCAQMD Procurement Policy and Procedure:**

Check all that apply:

- Small Business Enterprise/Small Business Joint Venture     Women-owned Business Enterprise  
 Local business     Disabled Veteran-owned Business Enterprise/DVBE Joint Venture  
 Minority-owned Business Enterprise

Percent of ownership: \_\_\_\_\_ %

Name of Qualifying Owner(s): \_\_\_\_\_

I, the undersigned, hereby declare that to the best of my knowledge the above information is accurate. Upon penalty of perjury, I certify information submitted is factual.

_____ <i>NAME</i>	_____ <i>TITLE</i>
_____ <i>TELEPHONE NUMBER</i>	_____ <i>DATE</i>

## Definitions

**Disabled Veteran-Owned Business Enterprise** means a business that meets all of the following criteria:

- is a sole proprietorship or partnership of which is at least 51 percent owned by one or more disabled veterans, or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more disabled veterans; a subsidiary which is wholly owned by a parent corporation but only if at least 51 percent of the voting stock of the parent corporation is owned by one or more disabled veterans; or a joint venture in which at least 51 percent of the joint venture's management and control and earnings are held by one or more disabled veterans.
- the management and control of the daily business operations are by one or more disabled veterans. The disabled veterans who exercise management and control are not required to be the same disabled veterans as the owners of the business.
- is a sole proprietorship, corporation, partnership, or joint venture with its primary headquarters office located in the United States and which is not a branch or subsidiary of a foreign corporation, firm, or other foreign-based business.

**Joint Venture** means that one party to the joint venture is a DVBE and owns at least 51 percent of the joint venture. In the case of a joint venture formed for a single project this means that DVBE will receive at least 51 percent of the project dollars.

**Local Business** means a business that meets all of the following criteria:

- has an ongoing business within the boundary of the SCAQMD at the time of bid application.
- performs 90 percent of the work within SCAQMD's jurisdiction.

**Minority-Owned Business Enterprise** means a business that meets all of the following criteria:

- is at least 51 percent owned by one or more minority persons or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more minority persons.
- is a business whose management and daily business operations are controlled or owned by one or more minority person.
- is a business which is a sole proprietorship, corporation, partnership, joint venture, an association, or a cooperative with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, foreign firm, or other foreign business.

"Minority" person means a Black American, Hispanic American, Native American (including American Indian, Eskimo, Aleut, and Native Hawaiian), Asian-Indian American (including a person whose origins are from India, Pakistan, or Bangladesh), Asian-Pacific American (including a person whose origins are from Japan, China, the Philippines, Vietnam, Korea, Samoa, Guam, the United States Trust Territories of the Pacific, Northern Marianas, Laos, Cambodia, or Taiwan).

**Small Business Enterprise** means a business that meets the following criteria:

- a. 1) an independently owned and operated business; 2) not dominant in its field of operation; 3) together with affiliates is either:
  - **A service, construction, or non-manufacturer with 100 or fewer employees, and average annual gross receipts of ten million dollars (\$10,000,000) or less over the previous three years, or**
  - A manufacturer with 100 or fewer employees.
- b. Manufacturer means a business that is both of the following:
  - 1) Primarily engaged in the chemical or mechanical transformation of raw materials or processed substances into new products.

- 2) Classified between Codes 311000 to 339000, inclusive, of the North American Industrial Classification System (NAICS) Manual published by the United States Office of Management and Budget, 2007 edition.

**Small Business Joint Venture** means that one party to the joint venture is a Small Business and owns at least 51 percent of the joint venture. In the case of a joint venture formed for a single project this means that the Small Business will receive at least 51 percent of the project dollars.

**Women-Owned Business Enterprise** means a business that meets all of the following criteria:

- is at least 51 percent owned by one or more women or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more women.
- is a business whose management and daily business operations are controlled or owned by one or more women.
- is a business which is a sole proprietorship, corporation, partnership, or a joint venture, with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, foreign firm, or other foreign business.

## Request for Taxpayer Identification Number and Certification

**Give Form to the  
 requester. Do not  
 send to the IRS.**

Print or type See Specific Instructions on page 2.	Name (as shown on your income tax return)	
	Business name/disregarded entity name, if different from above	
	Check appropriate box for federal tax classification (required): <input type="checkbox"/> Individual/sole proprietor <input type="checkbox"/> C Corporation <input type="checkbox"/> S Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust/estate <input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶ _____ <input type="checkbox"/> Exempt payee <input type="checkbox"/> Other (see instructions) ▶ _____	
	Address (number, street, and apt. or suite no.)	Requester's name and address (optional)
	City, state, and ZIP code	
	List account number(s) here (optional)	

**Part I Taxpayer Identification Number (TIN)**

Enter your TIN in the appropriate box. The TIN provided must match the name given on the "Name" line to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

<b>Social security number</b>		
	-	
	-	

**Note.** If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

<b>Employer identification number</b>							
	-						

**Part II Certification**

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. citizen or other U.S. person (defined below).

**Certification instructions.** You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 4.

<b>Sign Here</b>	Signature of U.S. person ▶ _____	Date ▶ _____
------------------	----------------------------------	--------------

**General Instructions**

Section references are to the Internal Revenue Code unless otherwise noted.

**Purpose of Form**

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

**Note.** If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

**Definition of a U.S. person.** For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

**Special rules for partnerships.** Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases:

- The U.S. owner of a disregarded entity and not the entity,
- The U.S. grantor or other owner of a grantor trust and not the trust, and
- The U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

**Foreign person.** If you are a foreign person, do not use Form W-9. Instead, use the appropriate Form W-8 (see Publication 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

**Nonresident alien who becomes a resident alien.** Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items:

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
2. The treaty article addressing the income.
3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
4. The type and amount of income that qualifies for the exemption from tax.
5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

**Example.** Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity not subject to backup withholding, give the requester the appropriate completed Form W-8.

**What is backup withholding?** Persons making certain payments to you must under certain conditions withhold and pay to the IRS a percentage of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

#### Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester,
2. You do not certify your TIN when required (see the Part II instructions on page 3 for details),
3. The IRS tells the requester that you furnished an incorrect TIN,
4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or
5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See the instructions below and the separate instructions for the Requester of Form W-9.

Also see *Special rules for partnerships* on page 1.

#### Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account, for example, if the grantor of a grantor trust dies.

#### Penalties

**Failure to furnish TIN.** If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

**Civil penalty for false information with respect to withholding.** If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

**Criminal penalty for falsifying information.** Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

**Misuse of TINs.** If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

#### Specific Instructions

##### Name

If you are an individual, you must generally enter the name shown on your income tax return. However, if you have changed your last name, for instance, due to marriage without informing the Social Security Administration of the name change, enter your first name, the last name shown on your social security card, and your new last name.

If the account is in joint names, list first, and then circle, the name of the person or entity whose number you entered in Part I of the form.

**Sole proprietor.** Enter your individual name as shown on your income tax return on the "Name" line. You may enter your business, trade, or "doing business as (DBA)" name on the "Business name/disregarded entity name" line.

**Partnership, C Corporation, or S Corporation.** Enter the entity's name on the "Name" line and any business, trade, or "doing business as (DBA)" name on the "Business name/disregarded entity name" line.

**Disregarded entity.** Enter the owner's name on the "Name" line. The name of the entity entered on the "Name" line should never be a disregarded entity. The name on the "Name" line must be the name shown on the income tax return on which the income will be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a domestic owner, the domestic owner's name is required to be provided on the "Name" line. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on the "Business name/disregarded entity name" line. If the owner of the disregarded entity is a foreign person, you must complete an appropriate Form W-8.

**Note.** Check the appropriate box for the federal tax classification of the person whose name is entered on the "Name" line (Individual/sole proprietor, Partnership, C Corporation, S Corporation, Trust/estate).

**Limited Liability Company (LLC).** If the person identified on the "Name" line is an LLC, check the "Limited liability company" box only and enter the appropriate code for the tax classification in the space provided. If you are an LLC that is treated as a partnership for federal tax purposes, enter "P" for partnership. If you are an LLC that has filed a Form 8832 or a Form 2553 to be taxed as a corporation, enter "C" for C corporation or "S" for S corporation. If you are an LLC that is disregarded as an entity separate from its owner under Regulation section 301.7701-3 (except for employment and excise tax), do not check the LLC box unless the owner of the LLC (required to be identified on the "Name" line) is another LLC that is not disregarded for federal tax purposes. If the LLC is disregarded as an entity separate from its owner, enter the appropriate tax classification of the owner identified on the "Name" line.

**Other entities.** Enter your business name as shown on required federal tax documents on the "Name" line. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on the "Business name/disregarded entity name" line.

### Exempt Payee

If you are exempt from backup withholding, enter your name as described above and check the appropriate box for your status, then check the "Exempt payee" box in the line following the "Business name/disregarded entity name," sign and date the form.

Generally, individuals (including sole proprietors) are not exempt from backup withholding. Corporations are exempt from backup withholding for certain payments, such as interest and dividends.

**Note.** If you are exempt from backup withholding, you should still complete this form to avoid possible erroneous backup withholding.

The following payees are exempt from backup withholding:

1. An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2),
  2. The United States or any of its agencies or instrumentalities,
  3. A state, the District of Columbia, a possession of the United States, or any of their political subdivisions or instrumentalities,
  4. A foreign government or any of its political subdivisions, agencies, or instrumentalities, or
  5. An international organization or any of its agencies or instrumentalities.
- Other payees that may be exempt from backup withholding include:
6. A corporation,
  7. A foreign central bank of issue,
  8. A dealer in securities or commodities required to register in the United States, the District of Columbia, or a possession of the United States,
  9. A futures commission merchant registered with the Commodity Futures Trading Commission,
  10. A real estate investment trust,
  11. An entity registered at all times during the tax year under the Investment Company Act of 1940,
  12. A common trust fund operated by a bank under section 584(a),
  13. A financial institution,
  14. A middleman known in the investment community as a nominee or custodian, or
  15. A trust exempt from tax under section 664 or described in section 4947.

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 15.

IF the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt payees except for 9
Broker transactions	Exempt payees 1 through 5 and 7 through 13. Also, C corporations.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 5
Payments over \$600 required to be reported and direct sales over \$5,000 <sup>1</sup>	Generally, exempt payees 1 through 7 <sup>2</sup>

<sup>1</sup> See Form 1099-MISC, Miscellaneous Income, and its instructions.

<sup>2</sup> However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney, and payments for services paid by a federal executive agency.

### Part I. Taxpayer Identification Number (TIN)

**Enter your TIN in the appropriate box.** If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN. However, the IRS prefers that you use your SSN.

If you are a single-member LLC that is disregarded as an entity separate from its owner (see *Limited Liability Company (LLC)* on page 2), enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

**Note.** See the chart on page 4 for further clarification of name and TIN combinations.

**How to get a TIN.** If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local Social Security Administration office or get this form online at [www.ssa.gov](http://www.ssa.gov). You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at [www.irs.gov/businesses](http://www.irs.gov/businesses) and clicking on Employer Identification Number (EIN) under Starting a Business. You can get Forms W-7 and SS-4 from the IRS by visiting [IRS.gov](http://IRS.gov) or by calling 1-800-TAX-FORM (1-800-829-3676).

If you are asked to complete Form W-9 but do not have a TIN, write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

**Note.** Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

**Caution:** A disregarded domestic entity that has a foreign owner must use the appropriate Form W-8.

### Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if item 1, below, and items 4 and 5 on page 4 indicate otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on the "Name" line must sign. Exempt payees, see *Exempt Payee* on page 3.

**Signature requirements.** Complete the certification as indicated in items 1 through 3, below, and items 4 and 5 on page 4.

**1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983.** You must give your correct TIN, but you do not have to sign the certification.

**2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983.** You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

**3. Real estate transactions.** You must sign the certification. You may cross out item 2 of the certification.

**4. Other payments.** You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

**5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions.** You must give your correct TIN, but you do not have to sign the certification.

### What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account)	The actual owner of the account or, if combined funds, the first individual on the account <sup>1</sup>
3. Custodian account of a minor (Uniform Gift to Minors Act)	The minor <sup>2</sup>
4. a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee <sup>1</sup>
b. So-called trust account that is not a legal or valid trust under state law	The actual owner <sup>1</sup>
5. Sole proprietorship or disregarded entity owned by an individual	The owner <sup>3</sup>
6. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulation section 1.671-4(b)(2)(i)(A))	The grantor <sup>4</sup>
For this type of account:	Give name and EIN of:
7. Disregarded entity not owned by an individual	The owner
8. A valid trust, estate, or pension trust	Legal entity <sup>4</sup>
9. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
10. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
11. Partnership or multi-member LLC	The partnership
12. A broker or registered nominee	The broker or nominee
13. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
14. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulation section 1.671-4(b)(2)(i)(B))	The trust

<sup>1</sup> List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

<sup>2</sup> Circle the minor's name and furnish the minor's SSN.

<sup>3</sup> You must show your individual name and you may also enter your business or "DBA" name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

<sup>4</sup> List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships* on page 1.

\*Note. Grantor also must provide a Form W-9 to trustee of trust.

**Note.** If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

### Secure Your Tax Records from Identity Theft

Identity theft occurs when someone uses your personal information such as your name, social security number (SSN), or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN.
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Publication 4535, Identity Theft Prevention and Victim Assistance.

Victims of identity theft who are experiencing economic harm or a system problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

**Protect yourself from suspicious emails or phishing schemes.** Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to [phishing@irs.gov](mailto:phishing@irs.gov). You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at: [spam@uce.gov](mailto:spam@uce.gov) or contact them at [www.ftc.gov/idtheft](http://www.ftc.gov/idtheft) or 1-877-IDTHEFT (1-877-438-4338).

Visit [IRS.gov](http://IRS.gov) to learn more about identity theft and how to reduce your risk.

### Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.



# 2013 Withholding Exemption Certificate

# 590

This form can only be used to certify exemption from nonresident withholding under California Revenue and Taxation Code (R&TC) Section 18662. Do not use this form for exemption from wage withholding.

File this form with your withholding agent. (Please type or print)

Withholding agent's name \_\_\_\_\_

Payee's name \_\_\_\_\_

Payee's  SSN or ITIN  FEIN  
 CA corp. no.  CA SOS file no

Address (number and street, PO Box, or PMB no.) \_\_\_\_\_

Apt. no./ Ste. no. \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

ZIP Code \_\_\_\_\_

Read the following carefully and check the box that applies to the payee.

I certify that for the reasons checked below, the payee named on this form is exempt from the California income tax withholding requirement on payment(s) made to the entity or individual.

- Individuals — Certification of Residency:**  
I am a resident of California and I reside at the address shown above. If I become a nonresident at any time, I will promptly notify the withholding agent. See instructions for General Information D, Who is a Resident, for the definition of a resident.
- Corporations:**  
The above-named corporation has a permanent place of business in California at the address shown above or is qualified through the California Secretary of State (SOS) to do business in California. The corporation will file a California tax return and withhold on payments of California source income to nonresidents when required. If this corporation ceases to have a permanent place of business in California or ceases to do any of the above, I will promptly notify the withholding agent. See instructions for General Information F, What is a Permanent Place of Business, for the definition of permanent place of business.
- Partnerships or limited liability companies (LLC):**  
The above-named partnership or LLC has a permanent place of business in California at the address shown above or is registered with the California SOS, and is subject to the laws of California. The partnership or LLC will file a California tax return and will withhold on foreign and domestic nonresident partners or members when required. If the partnership or LLC ceases to do any of the above, I will promptly inform the withholding agent. For withholding purposes, a limited liability partnership (LLP) is treated like any other partnership.
- Tax-Exempt Entities:**  
The above-named entity is exempt from tax under California Revenue and Taxation Code (R&TC) Section 23701 \_\_\_\_\_ (insert letter) or Internal Revenue Code Section 501(c) \_\_\_\_\_ (insert number). The tax-exempt entity will withhold on payments of California source income to nonresidents when required. If this entity ceases to be exempt from tax, I will promptly notify the withholding agent. Individuals cannot be tax-exempt entities.
- Insurance Companies, Individual Retirement Arrangements (IRAs), or Qualified Pension/Profit Sharing Plans:**  
The above-named entity is an insurance company, IRA, or a federally qualified pension or profit-sharing plan.
- California Trusts:**  
At least one trustee and one noncontingent beneficiary of the above-named trust is a California resident. The trust will file a California fiduciary tax return and will withhold on foreign and domestic nonresident beneficiaries when required. If the trustee becomes a nonresident at any time, I will promptly notify the withholding agent.
- Estates — Certification of Residency of Deceased Person:**  
I am the executor of the above-named person's estate. The decedent was a California resident at the time of death. The estate will file a California fiduciary tax return and will withhold on foreign and domestic nonresident beneficiaries when required.
- Nonmilitary Spouse of a Military Servicemember:**  
I am a nonmilitary spouse of a military servicemember and I meet the Military Spouse Residency Relief Act (MSRRA) requirements. See instructions for General Information E, MSRRA.

**CERTIFICATE:** Please complete and sign below.

Under penalties of perjury, I hereby certify that the information provided in this document is, to the best of my knowledge, true and correct. If conditions change, I will promptly notify the withholding agent.

Payee's name and title (type or print) \_\_\_\_\_ Daytime telephone no. \_\_\_\_\_

Payee's signature  \_\_\_\_\_ Date \_\_\_\_\_

# Instructions for Form 590

## Withholding Exemption Certificate

References in these instructions are to the California Revenue and Taxation Code (R&TC).

### General Information

For purposes of California income tax, references to a spouse, husband, or wife also refer to a Registered Domestic Partner (RDP) unless otherwise specified. For more information on RDPs, get FTB Pub. 737, Tax Information for Registered Domestic Partners. **Private Mail Box (PMB)** – Include the PMB in the address field. Write “PMB” first, then the box number. Example: 111 Main Street PMB 123.

**Foreign Address** – Enter the information in the following order: City, Country, Province/Region, and Postal Code. Follow the country's practice for entering the postal code. Do not abbreviate the country's name.

### A Purpose

Use Form 590, Withholding Exemption Certificate, to certify an exemption from nonresident withholding. California residents or entities should complete and present Form 590 to the withholding agent. The withholding agent is then relieved of the withholding requirements if the agent relies in good faith on a completed and signed Form 590 unless told by the Franchise Tax Board (FTB) that the form should not be relied upon.

**Important** – This form cannot be used for exemption from wage and real estate withholding.

- If you are an employee, any wage withholding questions should be directed to the FTB General Information number, 800.852.5711. Employers should call 888.745.3886 or go to [edd.ca.gov](http://edd.ca.gov).
- Sellers of California real estate use Form 593-C, Real Estate Withholding Certificate, to claim an exemption from real estate withholding.

### B Requirement

R&TC Section 18662 requires withholding of income or franchise tax on payments of California source income made to nonresidents of California.

Withholding is required on the following, but is not limited to:

- Payments to nonresidents for services rendered in California.
- Distributions of California source income made to domestic nonresident S corporation shareholders, partners and members and allocations of California source income made to foreign partners and members.
- Payments to nonresidents for rents if the payments are made in the course of the withholding agent's business.
- Payments to nonresidents for royalties with activities in California.

- Distributions of California source income to nonresident beneficiaries from an estate or trust.
- Prizes and winnings received by nonresidents for contests in California.

However, withholding is optional if the total payments of California source income are \$1,500 or less during the calendar year.

For more information on withholding get FTB Pub. 1017, Resident and Nonresident Withholding Guidelines. To get a withholding publication see General Information H, Publications, Forms, and Additional Information.

**Backup Withholding** – Beginning on or after January 1, 2010, with certain limited exceptions, payers that are required to withhold and remit backup withholding to the Internal Revenue Service (IRS) are also required to withhold and remit to the FTB. The California backup withholding rate is 7% of the payment. For California purposes, dividends, interests, and any financial institutions release of loan funds made in the normal course of business are exempt from backup withholding. For additional information on California backup withholding, go to [ftb.ca.gov](http://ftb.ca.gov) and search for **backup withholding**.

If a payee has backup withholding, the payee must contact the FTB to provide a valid Taxpayer Identification Number (TIN) before filing a tax return. The following are acceptable TINs: social security number (SSN); individual taxpayer identification number (ITIN); federal employer identification number (FEIN); California corporation number (CA Corp No.); or California Secretary of State (SOS) file number. Failure to provide a valid TIN will result in the denial of the backup withholding credit. For more information go to [ftb.ca.gov](http://ftb.ca.gov) and search for **backup withholding**.

**Who is Excluded from Withholding** – The following are excluded from withholding and completing this form:

- The United States and any of its agencies or instrumentalities
- A state, a possession of the United States, the District of Columbia, or any of its political subdivisions or instrumentalities
- A foreign government or any of its political subdivisions, agencies, or instrumentalities

### C Who Certifies this Form

Form 590 is certified by the payee. An incomplete certificate is invalid and the withholding agent should not accept it. If the withholding agent receives an incomplete certificate, the withholding agent is required to withhold tax on payments made to the payee until a valid certificate is received. In lieu of a completed certificate on the preprinted form, the

withholding agent may accept as a substitute certificate a letter from the payee explaining why the payee is not subject to withholding. The letter must contain all the information required on the certificate in similar language, including the under penalty of perjury statement and the payee's taxpayer identification number. The withholding agent must retain a copy of the certificate or substitute for at least four years after the last payment to which the certificate applies, and provide it upon request to the FTB.

For example, if an entertainer (or the entertainer's business entity) is paid for a performance, the entertainer's information must be provided. Do not submit the entertainer's agent or promoter information.

The grantor of a grantor trust shall be treated as the payee for withholding purposes.

Therefore, if the payee is a grantor trust and one or more of the grantors is a nonresident, withholding is required. If all of the grantors on the trust are residents, no withholding is required. Resident grantors can check the box on Form 590 labeled “Individuals — Certification of Residency.”

### D Who is a Resident

A California resident is any individual who is in California for other than a temporary or transitory purpose or any individual domiciled in California who is absent for a temporary or transitory purpose.

An individual domiciled in California who is absent from California for an uninterrupted period of at least 546 consecutive days under an employment-related contract is considered outside California for other than a temporary or transitory purpose.

An individual is still considered outside California for other than a temporary or transitory purpose if return visits to California do not total more than 45 days during any taxable year covered by an employment contract.

This provision does not apply if an individual has income from stocks, bonds, notes, or other intangible personal property in excess of \$200,000 in any taxable year in which the employment-related contract is in effect.

A spouse/RDP absent from California for an uninterrupted period of at least 546 days to accompany a spouse/RDP under an employment-related contract is considered outside of California for other than a temporary or transitory purpose.

Generally, an individual who comes to California for a purpose which will extend over a long or indefinite period will be considered a resident. However, an individual who comes to perform a particular contract of short duration will be considered a nonresident.

For assistance in determining resident status, get FTB Pub. 1031, Guidelines for Determining Resident Status, and FTB Pub. 1032, Tax Information for Military Personnel, or call the FTB at 800.852.5711 or 916.845.6500.

## E Military Spouse Residency Relief Act (MSRRA)

Generally, for tax purposes you are considered to maintain your existing residence or domicile. If a military servicemember and nonmilitary spouse have the same state of domicile, the MSRRA provides:

- A spouse shall not be deemed to have lost a residence or domicile in any state solely by reason of being absent to be with the servicemember serving in compliance with military orders.
- A spouse shall not be deemed to have acquired a residence or domicile in any other state solely by reason of being there to be with the servicemember serving in compliance with military orders.

Domicile is defined as the one place:

- Where you maintain a true, fixed, and permanent home
- To which you intend to return whenever you are absent

A military servicemember's nonmilitary spouse is considered a nonresident for tax purposes if the servicemember and spouse have the same domicile outside of California and the spouse is in California solely to be with the servicemember who is serving in compliance with Permanent Change of Station orders. Note: California may require nonmilitary spouses of military servicemembers to provide proof that they meet the criteria for California personal income tax exemption as set forth in the MSRRA.

Income of a military servicemember's nonmilitary spouse for services performed in California is not California source income subject to state tax if the spouse is in California to be with the servicemember serving in compliance with military orders, and the servicemember and spouse have the same domicile in a state other than California.

For additional information or assistance in determining whether the applicant meets the MSRRA requirements, get FTB Pub. 1032.

## F What is a Permanent Place of Business

A corporation has a permanent place of business in California if it is organized and existing under the laws of California or if it is a foreign corporation qualified to transact intrastate business by the California SOS. A corporation that has not qualified to transact intrastate business (e.g., a corporation engaged exclusively in interstate commerce) will be considered as having a permanent place of business in California only if it maintains a permanent office in California that is permanently staffed by its employees.

## G Withholding Agent

Keep Form 590 for your records. Do not send this form to the FTB unless it has been specifically requested.

For more information, contact Withholding Services and Compliance, see General Information H.

The payee must notify the withholding agent if any of the following situations occur:

- The individual payee becomes a nonresident.
- The corporation ceases to have a permanent place of business in California or ceases to be qualified to do business in California.
- The partnership ceases to have a permanent place of business in California.
- The LLC ceases to have a permanent place of business in California.
- The tax-exempt entity loses its tax-exempt status.

The withholding agent must then withhold and report the withholding using Form 592, Resident and Nonresident Withholding Statement, and remit the withholding using Form 592-V, Payment Voucher for Resident and Nonresident Withholding. Form 592-B, Resident and Nonresident Withholding Tax Statement, is retained by the withholding agent and a copy is given to the payee.

## H Additional Information

To get additional nonresident withholding information, contact the Withholding Services and Compliance.

WITHHOLDING SERVICES AND  
COMPLIANCE MS F 182  
FRANCHISE TAX BOARD  
PO BOX 942867  
SACRAMENTO CA 94267-0651

Telephone: 888.792.4900  
916.845.4900  
Fax: 916.845.9512

You can download, view, and print California tax forms and publications at [ftb.ca.gov](http://ftb.ca.gov).

OR to get forms by mail write to:

TAX FORMS REQUEST UNIT MS F284  
FRANCHISE TAX BOARD  
PO BOX 307  
RANCHO CORDOVA CA 95741-0307

For all other questions unrelated to withholding or to access the TTY/TDD numbers, see the information below.

### Internet and Telephone Assistance

Website: [ftb.ca.gov](http://ftb.ca.gov)  
Telephone: 800.852.5711 from within the  
United States  
916.845.6500 from outside the  
United States

TTY/TDD: 800.822.6268 for persons with  
hearing or speech impairments

### Asistencia Por Internet y Teléfono

Sitio web: [ftb.ca.gov](http://ftb.ca.gov)  
Teléfono: 800.852.5711 dentro de los  
Estados Unidos  
916.845.6500 fuera de los Estados  
Unidos

TTY/TDD: 800.822.6268 personas con  
discapacidades auditivas  
y del habla

## **Certification Regarding Debarment, Suspension, and Other Responsibility Matters**

The prospective participant certifies to the best of its knowledge and belief that it and the principals:

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- (b) Have not within a three year period preceding this proposal been convicted of or had a civil judgment rendered against them or commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction: violation of Federal or State antitrust statute or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (c) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (b) of this certification; and
- (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

I understand that a false statement on this certification may be grounds for rejection of this proposal or termination of the award. In addition, under 18 USC Sec. 1001, a false statement may result in a fine of up to \$10,000 or imprisonment for up to 5 years, or both.

---

Typed Name & Title of Authorized Representative

---

Signature of Authorized Representative Date

I am unable to certify to the above statements. My explanation is attached.

---

EPA Form 5700-49 (11-88)



## CAMPAIGN CONTRIBUTIONS DISCLOSURE

In accordance with California law, bidders and contracting parties are required to disclose, at the time the application is filed, information relating to any campaign contributions made to South Coast Air Quality Management District (SCAQMD) Board Members or members/alternates of the MSRC, including: the name of the party making the contribution (which includes any parent, subsidiary or otherwise related business entity, as defined below), the amount of the contribution, and the date the contribution was made. 2 C.C.R. §18438.8(b).

California law prohibits a party, or an agent, from making campaign contributions to SCAQMD Governing Board Members or members/alternates of the Mobile Source Air Pollution Reduction Review Committee (MSRC) of more than \$250 while their contract or permit is pending before the SCAQMD; and further prohibits a campaign contribution from being made for three (3) months following the date of the final decision by the Governing Board or the MSRC on a donor's contract or permit. Gov't Code §84308(d). For purposes of reaching the \$250 limit, the campaign contributions of the bidder or contractor plus contributions by its parents, affiliates, and related companies of the contractor or bidder are added together. 2 C.C.R. §18438.5.

In addition, SCAQMD Board Members or members/alternates of the MSRC must abstain from voting on a contract or permit if they have received a campaign contribution from a party or participant to the proceeding, or agent, totaling more than \$250 in the 12-month period prior to the consideration of the item by the Governing Board or the MSRC. Gov't Code §84308(c).

The list of current SCAQMD Governing Board Members can be found at the SCAQMD website ([www.aqmd.gov](http://www.aqmd.gov)). The list of current MSRC members/alternates can be found at the MSRC website (<http://www.cleantransportationfunding.org>).

### **SECTION I.**

**Contractor (Legal Name):** \_\_\_\_\_

DBA, Name _____, County Filed in _____ Corporation, ID No. _____ LLC/LLP, ID No. _____
--

**List any parent, subsidiaries, or otherwise affiliated business entities of Contractor:** (*See definition below*).

\_\_\_\_\_  
\_\_\_\_\_

### **SECTION II.**

Has Contractor and/or any parent, subsidiary, or affiliated company, or agent thereof, made a campaign contribution(s) totaling \$250 or more in the aggregate to a current member of the South Coast Air Quality Management Governing Board or member/alternate of the MSRC in the 12 months preceding the date of execution of this disclosure?

Yes     No    **If YES, complete Section II below and then sign and date the form. If NO, sign and date below. Include this form with your submittal.**

**Campaign Contributions Disclosure, continued:**

Name of Contributor \_\_\_\_\_

\_\_\_\_\_  
Governing Board Member or MSRC Member/Alternate      Amount of Contribution      Date of Contribution

Name of Contributor \_\_\_\_\_

\_\_\_\_\_  
Governing Board Member or MSRC Member/Alternate      Amount of Contribution      Date of Contribution

Name of Contributor \_\_\_\_\_

\_\_\_\_\_  
Governing Board Member or MSRC Member/Alternate      Amount of Contribution      Date of Contribution

Name of Contributor \_\_\_\_\_

\_\_\_\_\_  
Governing Board Member or MSRC Member/Alternate      Amount of Contribution      Date of Contribution

**I declare the foregoing disclosures to be true and correct.**

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**DEFINITIONS**

Parent, Subsidiary, or Otherwise Related Business Entity (2 Cal. Code of Regs., §18703.1(d).)

- (1) Parent subsidiary. A parent subsidiary relationship exists when one corporation directly or indirectly owns shares possessing more than 50 percent of the voting power of another corporation.
- (2) Otherwise related business entity. Business entities, including corporations, partnerships, joint ventures and any other organizations and enterprises operated for profit, which do not have a parent subsidiary relationship are otherwise related if any one of the following three tests is met:
  - (A) One business entity has a controlling ownership interest in the other business entity.
  - (B) There is shared management and control between the entities. In determining whether there is shared management and control, consideration should be given to the following factors:
    - (i) The same person or substantially the same person owns and manages the two entities;
    - (ii) There are common or commingled funds or assets;
    - (iii) The business entities share the use of the same offices or employees, or otherwise share activities, resources or personnel on a regular basis;
    - (iv) There is otherwise a regular and close working relationship between the entities; or
  - (C) A controlling owner (50% or greater interest as a shareholder or as a general partner) in one entity also is a controlling owner in the other entity.



South Coast  
**AIR QUALITY MANAGEMENT DISTRICT**  
 21865 Copley Dr., Diamond Bar, CA 91765-4178  
 www.aqmd.gov

### Direct Deposit Authorization

**STEP 1: Please check all the appropriate boxes**

- |  |  |
|--|--|
| <input type="checkbox"/> Individual (Employee, Governing Board Member) | <input type="checkbox"/> New Request           |
| <input type="checkbox"/> Vendor/Contractor                             | <input type="checkbox"/> Cancel Direct Deposit |
| <input type="checkbox"/> Changed Information                           |  |

**STEP 2: Payee Information**

Last Name		First Name		Middle Initial	Title
Vendor/Contractor Business Name (if applicable)					
Address				Apartment or P.O. Box Number	
City		State	Zip	Country	
Taxpayer ID Number		Telephone Number		Email Address	

**Authorization**

- I authorize South Coast Air Quality Management District (SCAQMD) to direct deposit funds to my account in the financial institution as indicated below. I understand that the authorization may be rejected or discontinued by SCAQMD at any time. If any of the above information changes, I will promptly complete a new authorization agreement. If the direct deposit is not stopped before closing an account, funds payable to me will be returned to SCAQMD for distribution. This will delay my payment.
- This authorization remains in effect until SCAQMD receives written notification of changes or cancellation from you.
- I hereby release and hold harmless SCAQMD for any claims or liability to pay for any losses or costs related to insufficient fund transactions that result from failure within the Automated Clearing House network to correctly and timely deposit monies into my account.

**STEP 3:**

You must verify that your bank is a member of an Automated Clearing House (ACH). Failure to do so could delay the processing of your payment. You must attach a voided check or have your bank complete the bank information and the account holder must sign below.

**To be Completed by your Bank**

<b>Staple Voided Check Here</b>	Name of Bank/Institution				
	Account Holder Name(s)				
	<input type="checkbox"/> Saving <input type="checkbox"/> Checking		Account Number		Routing Number
	Bank Representative Printed Name		Bank Representative Signature		Date
	ACCOUNT HOLDER SIGNATURE:				Date

For SCAQMD Use Only

Input By \_\_\_\_\_

Date \_\_\_\_\_

BOARD MEETING DATE: July 11, 2014

AGENDA NO. 9

**PROPOSAL:** Issue RFPs to Demonstrate Commercial-Grade Electric Lawn and Garden Equipment

**SYNOPSIS:** Implementing a Commercial-Grade Electric Lawn and Garden Equipment Demonstration Program with local landscape professionals as well as municipalities will promote zero emission lawn and garden equipment and accelerate market penetration in the South Coast Air Basin. This action is to issue two RFPs: the first RFP will solicit proposals from qualified manufacturers and vendors to identify and procure commercial-grade electric lawn mowers; the second RFP will solicit proposals for commercial-grade cordless electric hand-held lawn and garden equipment. The equipment will be loaned on a rotating basis to eligible participating local gardening and landscape professionals and the manufacturers and vendors will provide training and technical support to participants.

**COMMITTEE:** Technology, June 20, 2014; Recommended for Approval

**RECOMMENDED ACTION:**

Approve issuance of the following RFPs to solicit proposals to demonstrate commercial-grade electric lawn and garden equipment:

1. RFP #P2015-04–Commercial-Grade Electric Lawn Mower Demonstration
2. RFP #P2015-05–Commercial-Grade Cordless Electric Hand-Held Lawn and Garden Equipment Demonstration

Barry R. Wallerstein, D.Env.  
Executive Officer



## **Background**

Since 2003, the Lawn Mower Exchange Program has been a great success having replaced approximately 50,000 gasoline-fueled residential lawn mowers with zero-emission electric lawn mowers in the South Coast Air Basin (Basin). However, with a significant portion of NO<sub>x</sub> and PM emissions from lawn and garden equipment attributed to the commercial sector, a program to promote the use of zero-emission equipment in commercial gardening and landscaping operations is necessary to achieve a significant impact on these emissions. The SCAQMD has been demonstrating commercial-grade electric lawn mowers – two 60” riding mowers and two 33” walk-behind mowers – with local professional landscape services. Building on this experience, a Commercial-Grade Electric Lawn and Garden Equipment Demonstration Program is being developed to demonstrate a variety of cordless electric equipment including additional lawn mowers and other types of electric lawn and garden equipment, such as leaf blowers and string trimmers including pre-commercial prototypes, to accelerate their market penetration and deployment in the Basin.

## **Proposal**

This action is to issue two RFPs to solicit proposals to demonstrate commercial-grade electric lawn and garden equipment. RFP #P2015-04 is for the demonstration of electric lawn mowers and RFP #P2015-05 is for hand-held cordless electric lawn and garden equipment, such as leaf blowers, string trimmers, hedge trimmers and chainsaws. Prototype equipment are also eligible to participate in this Program.

The RFPs will solicit proposals from qualified manufacturers and vendors to identify and procure eligible electric lawn and garden equipment to implement the demonstration program. Vendors will provide up to five of each selected piece of equipment along with supporting accessories such as batteries and chargers sufficient to complete multiple gardening tasks over an eight-hour work day. Vendors will be responsible for training users on safe and proper operation and maintenance of the equipment and providing necessary technical and logistical support in a timely manner. As part of the demonstration, participating local gardening and landscape professionals as well as municipalities, universities and other entities that utilize these type of equipment will be loaned the equipment on a rotating basis for 60-90 days and complete a user survey on the performance and durability of the equipment.

## **Benefits to SCAQMD**

Successful demonstration of commercial-grade electric lawn and garden equipment will promote and accelerate market acceptance and deployment of these technologies in the Basin. This will help to eliminate NO<sub>x</sub> and PM emissions from the use of commercial gasoline- and diesel-fueled lawn and garden equipment and contribute to the attainment of clean air standards in the Basin.

**Outreach**

In accordance with SCAQMD's Procurement Policy and Procedure, a public notice advertising the RFP and inviting bids will be published in the Los Angeles Times, the Orange County Register, the San Bernardino Sun, and Riverside County Press Enterprise newspapers to leverage the most cost-effective method of outreach to the region.

Additionally, potential bidders may be notified utilizing SCAQMD's own electronic listing of certified minority vendors. Notice of the RFP will be e-mailed to the Black and Latino Legislative Caucuses and various minority chambers of commerce and business associations, and placed on the Internet at SCAQMD's website (<http://www.aqmd.gov>) where it can be viewed by making the selection "Grants & Bids". Information is also available on SCAQMD's bidder's 24-hour telephone message line (909) 396-2724.

**Resource Impacts**

The funding amount and revenue sources will be determined based on the evaluation of submitted proposals.

**Attachments**

RFP #P2015-04—Commercial-Grade Electric Lawn Mower Demonstration

RFP #P2015-05—Commercial-Grade Cordless Electric Hand-Held Lawn and Garden Equipment Demonstration

# **SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

## **REQUEST FOR PROPOSALS**

**RFP #P2015-04**

### **Commercial-Grade Electric Lawn Mower Demonstration**

The South Coast Air Quality Management District (SCAQMD) requests proposals for the following purpose according to terms and conditions attached. In the preparation of this Request for Proposals (RFP) the words "Proposer," "Contractor," "Contractor Team," "Bidder," and "Proponent" are used interchangeably.

#### **PURPOSE**

The purpose of this RFP is to solicit proposals from qualified manufacturers and vendors to identify and procure commercial-grade electric lawn mowers and necessary technical support to implement a two-year demonstration program. This program would loan commercial-grade lawn mowers to professional landscape services as well as local municipalities, universities and other eligible entities (Participants) for demonstration to accelerate market penetration of these technologies in the South Coast Air Basin (Basin).

#### **INDEX**

The following are contained in this RFP:

Section I	Background/Information
Section II	Contact Person
Section III	Schedule of Events
Section IV	Participation in the Procurement Process
Section V	Statement of Work/Deliverables
Section VI	Proposal Submittal Requirements
Section VII	Proposal Submission
Section VIII	Proposal Evaluation/Contractor Selection Criteria
Section IX	Funding/Award
Section X	Draft Contract

Attachment A - Certifications and Representations

#### **SECTION I: BACKGROUND/INFORMATION**

The SCAQMD is a regional governmental agency responsible for meeting air quality health standards in Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties encompassing 10,743 square miles with close to 17 million residents. Despite a remarkable improvement since the 1970's, the air quality in Southern California is still among the worst in the nation. In fact, the region is facing a serious challenge to reduce substantial NOx emissions in order to meet the stringent federal 8-hr ozone standards by 2023 and 2032.

Since its inception in 2003, the SCAQMD's Lawn Mower Exchange Program has been a great success having replaced approximately 50,000 gasoline-fueled residential lawn mowers with zero-emission electric lawn mowers in the Basin. However, with a significant portion of NOx and PM emissions from lawn and garden equipment attributed to the commercial sector, a program to promote the use of zero-emission equipment in commercial gardening and landscaping operations is much needed to have a significant impact on these emissions. The SCAQMD has been demonstrating four commercial-grade electric lawn mowers – two 60" riding mowers and two 33" walk-behind mowers - with local professional landscape services and municipalities in the Basin. Building on this experience, SCAQMD has developed the Commercial-Grade Electric Lawn and Garden Equipment Demonstration Program to demonstrate a variety of equipment including additional lawn mowers and other electric lawn and garden equipment such as leaf blowers and string trimmers to accelerate market acceptance and deployment of these technologies.

This RFP is to identify and procure commercial-grade electric lawn mowers from qualified manufacturers and vendors that can also provide necessary technical and logistical support for a two-year demonstration program. Eligible electric lawn mowers must be of commercial-grade capable of completing multiple gardening tasks over an eight-hour workday. Prototype lawn mowers are eligible for this RFP. If selected, vendors will provide up to five of each proposed electric lawn mowers and supporting accessories like batteries and chargers. Vendors are not required to be physically located within the Basin but must have the resources to provide necessary technical and logistics support in a timely manner during the demonstration period. As part of the demonstration, Participants will each try out the demonstration units for 60-90 days on a rotating basis and provide a user survey on the performance and durability of the equipment.

## **SECTION II: CONTACT PERSON**

Questions regarding the content or intent of this RFP, or on procedural matters should be addressed to:

Brian Choe  
Air Quality Specialist  
Science and Technology Advancement  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765  
Tel: (909) 396-2617  
Fax: (909) 396-3252  
E-mail: [bchoe@aqmd.gov](mailto:bchoe@aqmd.gov)

## **SECTION III: SCHEDULE OF EVENTS**

July 11, 2014  
July 23, 2014  
August 14, 2014  
August 15 – 29, 2014

RFP Released  
Bidders Conference\*  
Proposals Due – **No Later than 1:00 pm**  
Proposal Evaluations

October 3, 2014  
November 7, 2014

Governing Board Approval  
Anticipated Contract Execution

\*Participation in the bidder's conference is optional. Such participation would assist in notifying potential bidders of any updates or amendments. The Bidders Conference will be held in Room CC-7 at the SCAQMD Headquarters in Diamond Bar, California at 10:00 a.m. on Wednesday, July 23, 2014. If necessary, SCAQMD may provide a conference call line for the meeting. Bidders planning to participate in the conference should notify Brian Choe by email at [bchoe@aqmd.gov](mailto:bchoe@aqmd.gov) or by phone at (909) 396-2617 by the close of business on Friday, July 18, 2014.

#### **SECTION IV: PARTICIPATION IN THE PROCUREMENT PROCESS**

A. It is the policy of the South Coast Air Quality Management District to ensure that all businesses including minority business enterprises, women business enterprises, disabled veteran business enterprises and small businesses have a fair and equitable opportunity to compete for and participate in SCAQMD contracts.

B. Definitions:

The definition of minority, women or disadvantaged business enterprises set forth below is included for purposes of determining compliance with the affirmative steps requirement described in Paragraph G below on procurements funded in whole or in part with federal grant funds which involve the use of subcontractors. The definition provided for disabled veteran business enterprise, local business, small business enterprise, low-emission vehicle business and off-peak hours delivery business are provided for purposes of determining eligibility for point or cost considerations in the evaluation process.

1. "Women business enterprise" (WBE) as used in this policy means a business enterprise that meets all of the following criteria:
  - a. a business that is at least 51 percent owned by one or more women, or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more women.
  - b. a business whose management and daily business operations are controlled by one or more women.
  - c. a business which is a sole proprietorship, corporation, or partnership with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, foreign firm, or other foreign-based business.
2. "Disabled veteran" as used in this policy is a United States military, naval, or air service veteran with at least 10 percent service-connected disability who is a resident of California.
3. "Disabled veteran business enterprise" (DVBE) as used in this policy means a business enterprise that meets all of the following criteria:
  - a. is a sole proprietorship or partnership of which at least 51 percent is owned by one or more disabled veterans or, in the case of a publicly owned business, at least 51 percent of its stock is owned by one or more disabled veterans; a subsidiary which

- is wholly owned by a parent corporation but only if at least 51 percent of the voting stock of the parent corporation is owned by one or more disabled veterans; or a joint venture in which at least 51 percent of the joint venture's management and control and earnings are held by one or more disabled veterans.
- b. the management and control of the daily business operations are by one or more disabled veterans. The disabled veterans who exercise management and control are not required to be the same disabled veterans as the owners of the business.
  - c. is a sole proprietorship, corporation, or partnership with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, firm, or other foreign-based business.
4. "Local business" as used in this policy means a company that has an ongoing business within the SCAQMD at the time of bid or proposal submittal and performs 90% of the work related to the contract within the SCAQMD and satisfies the requirements of subparagraph H below.
  5. "Small business" as used in this policy means a business that meets the following criteria:
    - a. 1) an independently owned and operated business; 2) not dominant in its field of operation; 3) together with affiliates is either:
      - A service, construction, or non-manufacturer with 100 or fewer employees, and average annual gross receipts of ten million dollars (\$10,000,000) or less over the previous three years, or
      - A manufacturer with 100 or fewer employees.
    - b. Manufacturer means a business that is both of the following:
      - 1) Primarily engaged in the chemical or mechanical transformation of raw materials or processed substances into new products.
      - 2) Classified between Codes 311000 and 339000, inclusive, of the North American Industrial Classification System (NAICS) Manual published by the United States Office of Management and Budget, 2007 edition.
  6. "Joint ventures" as defined in this policy pertaining to certification means that one party to the joint venture is a DVBE or small business and owns at least 51 percent of the joint venture.
  7. "Low-Emission Vehicle Business" as used in this policy means a company or contractor that uses low-emission vehicles in conducting deliveries to the SCAQMD. Low-emission vehicles include vehicles powered by electric, compressed natural gas (CNG), liquefied natural gas (LNG), liquefied petroleum gas (LPG), ethanol, methanol, hydrogen and diesel retrofitted with particulate matter (PM) traps.

8. "Off-Peak Hours Delivery Business" as used in this policy means a company or contractor that commits to conducting deliveries to the SCAQMD during off-peak traffic hours defined as between 10:00 a.m. and 3:00 p.m.
9. "Benefits Incentive Business" as used in this policy means a company or contractor that provides janitorial, security guard or landscaping services to the SCAQMD and commits to providing employee health benefits (as defined below in Section VIII.D.2.d) for full time workers with affordable deductible and co-payment terms.
10. "Minority Business Enterprise" as used in this policy means a business that is at least 51 percent owned by one or more minority person(s), or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more minority persons.
  - a. a business whose management and daily business operations are controlled by one or more minority persons.
  - b. a business which is a sole proprietorship, corporation, or partnership with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, foreign firm, or other foreign-based business.
  - c. "Minority person" for purposes of this policy, means a Black American, Hispanic American, Native-American (including American Indian, Eskimo, Aleut, and Native Hawaiian), Asian-Indian (including a person whose origins are from India, Pakistan, and Bangladesh), Asian-Pacific-American (including a person whose origins are from Japan, China, the Philippines, Vietnam, Korea, Samoa, Guam, the United States Trust Territories of the Pacific, Northern Marianas, Laos, Cambodia, and Taiwan).
11. "Disadvantaged Business Enterprise" as used in this policy means a business that is an entity owned and/or controlled by a socially and economically disadvantaged individual(s) as described by Title X of the Clean Air Act Amendments of 1990 (42 U.S.C. 7601 note) (10% statute), and Public Law 102-389 (42 U.S.C. 4370d)(8% statute), respectively;
  - a Small Business Enterprise (SBE);
  - a Small Business in a Rural Area (SBRA);
  - a Labor Surplus Area Firm (LSAF); or
  - a Historically Underutilized Business (HUB) Zone Small Business Concern, or a concern under a successor program.

- C. Under Request for Quotations (RFQ), DVBEs, DVBE business joint ventures, small businesses, and small business joint ventures shall be granted a preference in an amount equal to 5% of the lowest cost responsive bid. Low-Emission Vehicle Businesses shall be granted a preference in an amount equal to 5 percent of the lowest cost responsive bid. Off-Peak Hours Delivery Businesses shall be granted a preference in an amount equal to 2 percent of the lowest cost responsive bid. Local businesses (if the procurement is not funded in whole or in part by federal grant funds) shall be granted a preference in an amount equal to 2% of the lowest cost responsive bid.
- D. Under Request for Proposals, DVBEs, DVBE joint ventures, small businesses, and small business joint ventures shall be awarded ten (10) points in the evaluation process. A

non-DVBE or large business shall receive seven (7) points for subcontracting at least twenty-five (25%) of the total contract value to a DVBE and/or small business. Low-Emission Vehicle Businesses shall be awarded five (5) points in the evaluation process. On procurements which are not funded in whole or in part by federal grant funds local businesses shall receive five (5) points. Off-Peak Hours Delivery Businesses shall be awarded two (2) points in the evaluation process.

- E. SCAQMD will ensure that discrimination in the award and performance of contracts does not occur on the basis of race, color, sex, national origin, marital status, sexual preference, creed, ancestry, medical condition, or retaliation for having filed a discrimination complaint in the performance of SCAQMD contractual obligations.
- F. SCAQMD requires Contractor to be in compliance with all state and federal laws and regulations with respect to its employees throughout the term of any awarded contract, including state minimum wage laws and OSHA requirements.
- G. When contracts are funded in whole or in part by federal funds, and if subcontracts are to be let, the Contractor must comply with the following, evidencing a good faith effort to solicit disadvantaged businesses. Contractor shall submit a certification signed by an authorized official affirming its status as a MBE or WBE, as applicable, at the time of contract execution. The SCAQMD reserves the right to request documentation demonstrating compliance with the following good faith efforts prior to contract execution.
  - 1. Ensure Disadvantaged Business Enterprises (DBEs) are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities. For Indian Tribal, State and Local Government recipients, this will include placing DBEs on solicitation lists and soliciting them whenever they are potential sources.
  - 2. Make information on forthcoming opportunities available to DBEs and arrange time frames for contracts and establish delivery schedules, where the requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process. This includes, whenever possible, posting solicitations for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date.
  - 3. Consider in the contracting process whether firms competing for large contracts could subcontract with DBEs. For Indian Tribal, State and Local Government recipients, this will include dividing total requirements when economically feasible into smaller tasks or quantities to permit maximum participation by DBEs in the competitive process.
  - 4. Encourage contracting with a consortium of DBEs when a contract is too large for one of these firms to handle individually.
  - 5. Using the services and assistance of the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.
  - 6. If the prime contractor awards subcontracts, require the prime contractor to take the above steps.



- H. To the extent that any conflict exists between this policy and any requirements imposed by federal and state law relating to participation in a contract by a certified MBE/WBE/DVBE as a condition of receipt of federal or state funds, the federal or state requirements shall prevail.
- I. When contracts are not funded in whole or in part by federal grant funds, a local business preference will be awarded. For such contracts that involve the purchase of commercial off-the-shelf products, local business preference will be given to suppliers or distributors of commercial off-the-shelf products who maintain an ongoing business within the geographical boundaries of the SCAQMD. However, if the subject matter of the RFP or RFQ calls for the fabrication or manufacture of custom products, only companies performing 90% of the manufacturing or fabrication effort within the geographical boundaries of the SCAQMD shall be entitled to the local business preference.
- J. In compliance with federal fair share requirements set forth in 40 CFR Part 33, the SCAQMD shall establish a fair share goal annually for expenditures with federal funds covered by its procurement policy.

## **SECTION V: STATEMENT OF WORK/DELIVERABLES**

As part of the contract execution, a statement of work will be provided to all contractors that include tasks and deliverables demonstrating compliance with the requirements of the program. Detailed requirements will be provided in the contract to be executed but below is a summary of the requirements:

1. Contractor shall provide up to five of each selected commercial-grade electric lawn mower and supporting accessories like batteries and chargers for a two-year demonstration in commercial gardening and landscaping operations within the Basin.
2. The demonstration equipment must be of commercial grade capable of completing multiple gardening tasks over an eight hour workday. Additional batteries and opportunity charging may be utilized to meet this requirement. Prototypes are eligible for the program, subject to SCAQMD approval.
3. Demonstration equipment will be loaned to Participants for 60-90 days per rotation and Contractor shall be responsible to provide logistics support to transfer the equipment between Participants.
4. Contractor shall be responsible for providing training to Participants on safe and proper operation and maintenance of the equipment.
5. Participants may include professional gardening and landscape services, municipalities, courts, universities and other entities deemed eligible by SCAQMD. Contractor may recommend potential Participants to SCAQMD for an approval.
6. Contractor shall provide necessary technical support in a timely manner during the demonstration period.
7. Contractor shall provide a minimum of two-year warranty for the demonstration equipment.

## **SECTION VI: PROPOSAL SUBMITTAL REQUIREMENTS**

Submitted proposals must follow the format outlined below and all requested information must be supplied. Failure to submit proposals in the required format will result in elimination from proposal evaluation.

### **Cover Letter**

A separate cover letter, including the name, address, telephone number, and e-mail address of the contractor, and signed by the person or persons authorized to represent the firm, should accompany the proposal submission. Firm contact information as follows should also be included in the cover letter:

- Address and telephone number of office in, or nearest to, Diamond Bar, California.
- Name and title of firm's representative designated as contact.

### **Summary**

An overview on the project approach to meet the program objectives and satisfy the scope of work as specified in Section V – Statement of Work/Deliverables, including a brief discussion of the proposer's organization and staff resources to demonstrate its capability to provide necessary technical and logistics support for the program.

### **Equipment Description**

A detailed description of the proposed electric lawn mowers and accessories including, but not limited to, the following technical and performance specifications:

1. Make and model
2. Riding/walk-behind
3. Cutting radius
4. Peak HP
5. Weight
6. Height adjustability (range)
7. Mulching capability
8. Acres cut per charge
9. Mowing time per charge
10. Charging time (from zero charge)
11. Battery type (chemistry, voltage and Ah capacity)
12. Battery life (charge cycles)
13. Swappable batteries
14. Noise rating in dB(A)
15. Warranty information

Please note that SCAQMD considers information submitted in response to this RFP in the public domain. Any trade secret information may be submitted to the SCAQMD in a separate document in which the trade secret information is specifically identified. SCAQMD agrees to treat such trade secret information in accordance with its Public Records Act guidelines relating to trade secret information.

### **Equipment and Service Cost**

The cost of proposed equipment and services including, but not limited to:

1. Commercial-grade electric lawn mower
2. Battery
3. Charger
4. Mulch deck
5. Other accessories
6. Equipment warranty
7. Technical support including training
8. Logistics support and delivery

The price quote should provide equipment/service description, unit cost, quantity and total cost including tax and other fees, if applicable.

#### Qualifications/Experience

Relevant experience and expertise with commercial-grade electric lawn and garden equipment including description of other similar projects your organization was involved in during the past two years. Include contact name, title, and telephone number for any references listed.

#### Additional Data

Provide other essential data that may assist in the evaluation of this proposal.

#### **Certifications and Representations** (see Attachment A to this RFP)

### **SECTION VII: PROPOSAL SUBMISSION**

All proposals must be submitted according to specifications set forth in the section above. Failure to adhere to these specifications may be cause for rejection of proposal.

Signature - All proposals must be signed by an authorized representative of the Proposer.

Due Date - The Proposer shall submit four (4) complete copies of the proposal in a sealed envelope, plainly marked in the upper left-hand corner with the name and address of the Proposer and the words "Request for Proposals #P2015-04." **All proposals are due no later than 1:00 p.m., August 14, 2014, and should be directed to:**

Procurement Unit  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765-4178  
(909) 396-3520

**Late bids/proposals will not be accepted under any circumstances.**

Grounds for Rejection – A proposal may be immediately rejected if:

- It is not prepared in the format described, or
- It is signed by an individual not authorized to represent the firm.

Modification or Withdrawal - Once submitted, proposals cannot be altered without the prior written consent of SCAQMD. All proposals shall constitute firm offers and may not be withdrawn for a period of ninety (90) days following the last day to accept proposals.

**SECTION VIII: PROPOSAL EVALUATION/CONTRACTOR SELECTION CRITERIA**

- A. Proposals will be evaluated by a panel of three to five SCAQMD staff members familiar with the subject matter of the project. The panel shall be appointed by the Executive Officer or his designee. In addition, the evaluation panel may include outside public sector or academic community expertise as deemed desirable by the Executive Officer. The panel will make a recommendation to the Executive Officer and/or the Governing Board of the SCAQMD for final selection of contractor(s) and negotiation of contract(s).
- B. Each member of the evaluation panel shall be accorded equal weight in his or her rating of proposals. The evaluation panel members shall evaluate the proposals according to the specified criteria and numerical weightings set forth below.

1. <u>Project Evaluation Criteria</u>	<u>Points</u>
Understanding of Requirements	30
Contractor Qualifications	20
Past Experience	10
Project Cost	40
<b>Total</b>	<b>100</b>

Additional Points

Small Business or Small Business Joint Venture	10
DVBE or DVBE Joint Venture	10
Use of DVBE or Small Business Subcontractors	7
Low-Emission Vehicle Business	5
Local Business (Non-Federally Funded Projects Only)	5
Off-Peak Hours Delivery Business	2

**The cumulative points awarded for small business, DVBE, use of small business or DVBE subcontractors, low-emission vehicle business, local business, and off-peak hours delivery business shall not exceed 15 points.**

**Note: The award of these additional points shall be contingent upon Proposer completing the Self-Certification section of Attachment A – Certifications and Representations and/or inclusion of a statement in the proposal self-certifying that Proposer qualifies for additional points as detailed above.**

- 2. To receive additional points in the evaluation process for the categories of Small Business or Small Business Joint Venture, DVBE or DVBE Joint Venture or Local Business (for non-EPA funded projects), the proposer must submit a self-certification or certification from the State of California Office of Small Business Certification and Resources at the time of proposal submission certifying that the proposer meets the

requirements set forth in Section III. To receive points for the use of DVBE and/or Small Business subcontractors, at least 25 percent of the total contract value must be subcontracted to DVBEs and/or Small Businesses. To receive points as a Low-Emission Vehicle Business, the proposer must demonstrate to the Executive Officer, or designee, that supplies and materials delivered to the SCAQMD are delivered in vehicles that operate on either clean-fuels or if powered by diesel fuel, that the vehicles have particulate traps installed. To receive points as an Off-Peak Hours Delivery Business, the proposer must submit, at proposal submission, certification of its commitment to delivering supplies and materials to SCAQMD between the hours of 10:00 a.m. and 3:00 p.m. The cumulative points awarded for small business, DVBE, use of Small Business or DVBE Subcontractors, Local Business, Low-Emission Vehicle Business and Off-Peak Hour Delivery Business shall not exceed 15 points.

The Procurement Section will be responsible for monitoring compliance of suppliers awarded purchase orders based upon use of low-emission vehicles or off-peak traffic hour delivery commitments through the use of vendor logs which will identify the contractor awarded the incentive. The purchase order shall incorporate terms which obligate the supplier to deliver materials in low-emission vehicles or deliver during off-peak traffic hours. The Receiving department will monitor those qualified supplier deliveries to ensure compliance to the purchase order requirements. Suppliers in non-compliance will be subject to a two percent of total purchase order value penalty. The Procurement Manager will adjudicate any disputes regarding either low-emission vehicle or off-peak hour deliveries.

3. The lowest cost proposal will be awarded the maximum cost points available and all other cost proposals will receive points on a prorated basis. For example if the lowest cost proposal is \$1,000 and the maximum points available are 30 points, this proposal would receive the full 30 points. If the next lowest cost proposal is \$1,100, it would receive 27 points reflecting the fact that it is 10% higher than the lowest cost (90% of 30 points = 27 points).
- C. During the selection process, the evaluation panel may wish to interview some proposers for clarification purposes only. No new material will be permitted at this time. Additional information provided during the bid review process is limited to clarification by the Proposer of information presented in his/her proposal, upon request by SCAQMD.
  - D. The Executive Officer or Governing Board may award the contract to a proposer other than the proposer receiving the highest rating in the event the Governing Board determines that another Proposer from among those technically qualified would provide the best value to SCAQMD considering cost and technical factors. The determination shall be based solely on the Evaluation Criteria contained in the Request for Proposal (RFP), on evidence provided in the proposal and on any other evidence provided during the bid review process.
  - E. Selection will be made based on the above-described criteria and rating factors. The selection will be made by and is subject to Executive Officer or Governing Board approval. Proposers may be notified of the results by letter.

- F. The Governing Board has approved a Bid Protest Procedure which provides a process for a bidder or prospective bidder to submit a written protest to the SCAQMD Procurement Manager in recognition of two types of protests: Protest Regarding Solicitation and Protest Regarding Award of a Contract. Copies of the Bid Protest Policy can be secured through a request to the SCAQMD Procurement Department.
- G. The Executive Officer or Governing Board may award contracts to more than one proposer if in (his or their) sole judgment the purposes of the (contract or award) would best be served by selecting multiple proposers.
- H. If additional funds become available, the Executive Officer or Governing Board may increase the amount awarded. The Executive Officer or Governing Board may also select additional proposers for a grant or contract if additional funds become available.
- I. Disposition of Proposals – Pursuant to the District’s Procurement Policy and Procedure, SCAQMD reserves the right to reject any or all proposals. All proposals become the property of SCAQMD, and are subject to the California Public Records Act. One copy of the proposal shall be retained for SCAQMD files. Additional copies and materials will be returned only if requested and at the proposer’s expense.

**SECTION IX: FUNDING/AWARD**

Funding amounts will be determined based on the evaluation of proposals submitted.

**SECTION X: DRAFT CONTRACT (Provided as a sample only)**



**South Coast  
Air Quality Management District**

This Contract consists of \*\*\* pages.

1. PARTIES - The parties to this Contract are the South Coast Air Quality Management District (referred to here as "SCAQMD") whose address is 21865 Copley Drive, Diamond Bar, California 91765-4178, and \*\*\* (referred to here as "CONTRACTOR") whose address is \*\*\*.
  
2. RECITALS
  - A. SCAQMD is the local agency with primary responsibility for regulating stationary source air pollution within the geographical boundaries of the South Coast Air Quality Management District in the State of California. SCAQMD is authorized to enter into this Contract under California Health and Safety Code Section 40489. SCAQMD desires to contract with CONTRACTOR for services described in Attachment 1 - Statement of Work, attached here and made a part here by this reference. CONTRACTOR warrants that it is well-qualified and has the experience to provide such services on the terms set forth here.
  - B. CONTRACTOR is authorized to do business in the State of California and attests that it is in good tax standing with the California Franchise Tax Board.
  - C. All parties to this Contract have had the opportunity to have this Contract reviewed by their attorney.
  
3. PERFORMANCE REQUIREMENTS
  - A. CONTRACTOR agrees to obtain and maintain the required licenses, permits, and all other appropriate legal authorizations from all applicable federal, state and local jurisdictions and pay all applicable fees. CONTRACTOR further agrees to immediately notify SCAQMD in writing of any change in its licensing status which has a material impact on the CONTRACTOR's performance under this Contract.
  - B. CONTRACTOR shall submit reports to SCAQMD as outlined in Attachment 1 - Statement of Work. All reports shall be submitted in an environmentally friendly format: recycled paper; stapled, not bound; black and white, double-sided print; and no three-ring, spiral, or plastic binders or cardstock covers. SCAQMD reserves the right to review, comment, and request changes to any report produced as a result of this Contract.
  - C. CONTRACTOR shall perform all tasks set forth in Attachment 1 - Statement of Work, and shall not engage, during the term of this Contract, in any performance of work that is in direct or indirect conflict with duties and responsibilities set forth in Attachment 1 - Statement of Work.
  - D. CONTRACTOR shall be responsible for exercising the degree of skill and care customarily required by accepted professional practices and procedures subject to SCAQMD's final approval which SCAQMD will not unreasonably withhold. Any costs incurred due to the failure to meet the foregoing standards, or otherwise defective services which require re-performance, as directed by SCAQMD, shall be the responsibility of CONTRACTOR. CONTRACTOR's failure to achieve the performance goals and objectives stated in Attachment 1- Statement of Work, is not a basis for requesting re-performance unless work conducted by CONTRACTOR is deemed by SCAQMD to have failed the foregoing standards of performance.
  - E. CONTRACTOR shall post a performance bond in the amount of \*\*\* Dollars (\$\*\*\*) from a surety authorized to issue such bonds within the State.

- F. SCAQMD has the right to review the terms and conditions of the performance bond and to request modifications thereto which will ensure that SCAQMD will be compensated in the event CONTRACTOR fails to perform and also provides SCAQMD with the opportunity to review the qualifications of the entity designated by the issuer of the performance bond to perform in CONTRACTOR's absence and, if necessary, the right to reject such entity.
- G. CONTRACTOR shall require its subcontractors to abide by the requirements set forth in this Contract.

4. TERM - The term of this Contract is from the date of execution by both parties (or insert date) to \*\*\*, unless further extended by amendment of this Contract in writing. No work shall commence until this Contract is fully executed by all parties.

5. TERMINATION

- A. In the event any party fails to comply with any term or condition of this Contract, or fails to provide services in the manner agreed upon by the parties, including, but not limited to, the requirements of Attachment 1 – Statement of Work, this failure shall constitute a breach of this Contract. The non-breaching party shall notify the breaching party that it must cure this breach or provide written notification of its intention to terminate this contract. Notification shall be provided in the manner set forth in Clause 11. The non-breaching party reserves all rights under law and equity to enforce this contract and recover damages.
- B. SCAQMD reserves the right to terminate this Contract, in whole or in part, without cause, upon thirty (30) days' written notice. Once such notice has been given, CONTRACTOR shall, except as and to the extent or directed otherwise by SCAQMD, discontinue any Work being performed under this Contract and cancel any of CONTRACTOR's orders for materials, facilities, and supplies in connection with such Work, and shall use its best efforts to procure termination of existing subcontracts upon terms satisfactory to SCAQMD. Thereafter, CONTRACTOR shall perform only such services as may be necessary to preserve and protect any Work already in progress and to dispose of any property as requested by SCAQMD.
- C. CONTRACTOR shall be paid in accordance with this Contract for all Work performed before the effective date of termination under Clause 5.B. Before expiration of the thirty (30) days' written notice, CONTRACTOR shall promptly deliver to SCAQMD all copies of documents and other information and data prepared or developed by CONTRACTOR under this Contract with the exception of a record copy of such materials, which may be retained by CONTRACTOR.

6. STOP WORK – SCAQMD may, at any time, by written notice to CONTRACTOR, require CONTRACTOR to stop all or any part of the work tasks in this Contract. A stop work order may be issued for reasons including, but not limited to, the project exceeding the budget, out of scope work, delay in project schedule, or misrepresentations. Upon receipt of the stop work order, CONTRACTOR shall immediately take all necessary steps to comply with the order. CONTRACTOR shall resume the work only upon receipt of written instructions from SCAQMD cancelling the stop work order. CONTRACTOR agrees and understands that CONTRACTOR will not be paid for performing work while the stop work order is in effect, unless SCAQMD agrees to do so in its written cancellation of the stop work order.

7. INSURANCE

- A. CONTRACTOR shall furnish evidence to SCAQMD of workers' compensation insurance for each of its employees, in accordance with either California or other states' applicable statutory requirements prior to commencement of any work on this Contract.



- B. CONTRACTOR shall furnish evidence to SCAQMD of general liability insurance with a limit of at least \$1,000,000 per occurrence, and \$2,000,000 in a general aggregate prior to commencement of any work on this Contract. SCAQMD shall be named as an additional insured on any such liability policy, and thirty (30) days written notice prior to cancellation of any such insurance shall be given by CONTRACTOR to SCAQMD.
- C. CONTRACTOR shall furnish evidence to SCAQMD of automobile liability insurance with limits of at least \$100,000 per person and \$300,000 per accident for bodily injuries, and \$50,000 in property damage, or \$1,000,000 combined single limit for bodily injury or property damage, prior to commencement of any work on this Contract. SCAQMD shall be named as an additional insured on any such liability policy, and thirty (30) days written notice prior to cancellation of any such insurance shall be given by CONTRACTOR to SCAQMD.
- D. CONTRACTOR shall furnish evidence to SCAQMD of Professional Liability Insurance with an aggregate limit of not less than \$5,000,000. **[OPTIONAL FOR PROFESSIONAL SERVICES – USE FOR LAW FIRMS AND SOFTWARE RELATED CONTRACTS]**
- E. If CONTRACTOR fails to maintain the required insurance coverage set forth above, SCAQMD reserves the right either to purchase such additional insurance and to deduct the cost thereof from any payments owed to CONTRACTOR or terminate this Contract for breach.
- F. All insurance certificates should be mailed to: SCAQMD Risk Management, 21865 Copley Drive, Diamond Bar, CA 91765-4178. **The SCAQMD Contract Number must be included on the face of the certificate.**
- G. CONTRACTOR must provide updates on the insurance coverage throughout the term of the Contract to ensure that there is no break in coverage during the period of contract performance. Failure to provide evidence of current coverage shall be grounds for termination for breach of Contract.
8. **INDEMNIFICATION** - CONTRACTOR agrees to hold harmless, defend and indemnify SCAQMD, its officers, employees, agents, representatives, and successors-in-interest against any and all loss, damage, costs, lawsuits, claims, demands, causes of action judgments, attorney's fees, or any other expenses arising from or related to any third party claim against SCAQMD, its officers, employees, agents, representatives, or successors in interest that arise or result in whole or in part, from any actual or alleged act or omission of CONTRACTOR, its employees, subcontractors, agents or representatives in the performance of this Contract.
9. **CO-FUNDING** **[USE IF REQUIRED]**
- A. CONTRACTOR shall obtain co-funding as follows: **\*\*\*, \*\*\* Dollars (\$\*\*\*); \*\*\*, \*\*\* Dollars (\$\*\*\*); \*\*\*, \*\*\* Dollars (\$\*\*\*); \*\*\*, \*\*\* Dollars (\$\*\*\*); and \*\*\*, \*\*\* Dollars (\$\*\*\*).**
- B. If CONTRACTOR fails to obtain co-funding in the amount(s) referenced above, then SCAQMD reserves the right to renegotiate or terminate this Contract.
- C. CONTRACTOR shall provide co-funding in the amount of **\*\*\* Dollars (\$\*\*\*)** for this project. If CONTRACTOR fails to provide this co-funding, then SCAQMD reserves the right to renegotiate or terminate this Contract.
10. **PAYMENT**  
**[FIXED PRICE]-use this one or the T&M one below.**
- A. SCAQMD shall pay CONTRACTOR a fixed price of **\*\*\* Dollars (\$\*\*\*)** for work performed under this Contract in accordance with Attachment 2 - Payment Schedule, attached here and included here by reference. Payment shall be made by SCAQMD to CONTRACTOR within thirty (30) days after approval by SCAQMD of an invoice prepared and furnished by CONTRACTOR showing services performed and

referencing tasks and deliverables as shown in Attachment 1 - Statement of Work, and the amount of charge claimed. Each invoice must be prepared in duplicate, on company letterhead, and list SCAQMD's Contract number, period covered by invoice, and CONTRACTOR's social security number or Employer Identification Number and submitted to: South Coast Air Quality Management District, Attn:

\*\*\*

- B. An amount equal to ten percent (10%) shall be withheld from all charges paid until satisfactory completion and final acceptance of work by SCAQMD. **[OPTIONAL]**
- C. SCAQMD reserves the right to disallow charges when the invoiced services are not performed satisfactorily in SCAQMD's sole judgment.

**[T & M]-use this one or the Fixed Price one above.**

- A. SCAQMD shall pay CONTRACTOR a total not to exceed amount of \*\*\* Dollars (\$\*\*\*), including any authorized travel-related expenses, for time and materials at rates in accordance with Attachment 2 – Cost Schedule, attached here and included here by this reference. Payment of charges shall be made by SCAQMD to CONTRACTOR within thirty (30) days after approval by SCAQMD of an itemized invoice prepared and furnished by CONTRACTOR referencing line item expenditures as listed in Attachment 2 and the amount of charge claimed. Each invoice must be prepared in duplicate, on company letterhead, and list SCAQMD's Contract number, period covered by invoice, and CONTRACTOR's social security number or Employer Identification Number and submitted to: South Coast Air Quality Management District, Attn: \*\*\*.
- B. CONTRACTOR shall adhere to total tasks and/or cost elements (cost category) expenditures as listed in Attachment 2. Reallocation of costs between tasks and/or cost category expenditures is permitted up to One Thousand Dollars (\$1,000) upon prior written approval from SCAQMD. Reallocation of costs in excess of One Thousand Dollars (\$1,000) between tasks and/or cost category expenditures requires an amendment to this Contract.
- C. SCAQMD's payment of invoices shall be subject to the following limitations and requirements:
  - i) Charges for equipment, material, and supply costs, travel expenses, subcontractors, and other charges, as applicable, must be itemized by CONTRACTOR. Reimbursement for equipment, material, supplies, subcontractors, and other charges shall be made at actual cost. Supporting documentation must be provided for all individual charges (with the exception of direct labor charges provided by CONTRACTOR). SCAQMD's reimbursement of travel expenses and requirements for supporting documentation are listed below.
  - ii) CONTRACTOR's failure to provide receipts shall be grounds for SCAQMD's non-reimbursement of such charges. SCAQMD may reduce payments on invoices by those charges for which receipts were not provided.
  - iii) SCAQMD shall not pay interest, fees, handling charges, or cost of money on Contract.
- D. SCAQMD shall reimburse CONTRACTOR for travel-related expenses only if such travel is expressly set forth in Attachment 2 – Cost Schedule of this Contract or pre-authorized by SCAQMD in writing.
  - i) SCAQMD's reimbursement of travel-related expenses shall cover lodging, meals, other incidental expenses, and costs of transportation subject to the following limitations:
    - Air Transportation - Coach class rate for all flights. If coach is not available, business class rate is permissible.
    - Car Rental - A compact car rental. A mid-size car rental is permissible if car rental is shared by three or more individuals.
    - Lodging - Up to One Hundred Fifty Dollars (\$150) per night. A higher amount of reimbursement is permissible if pre-approved by SCAQMD.
    - Meals - Daily allowance is Fifty Dollars (\$50.00).
  - ii) Supporting documentation shall be provided for travel-related expenses in accordance with the following requirements:

Lodging, Airfare, Car Rentals - Bill(s) for actual expenses incurred.

Meals - Meals billed in excess of \$50.00 each day require receipts or other supporting documentation for the total amount of the bill and must be approved by SCAQMD.

Mileage - Beginning each January 1, the rate shall be adjusted effective February 1 by the Chief Financial Officer based on the Internal Revenue Service Standard Mileage Rate

Other travel-related expenses - Receipts are required for all individual items.

E. SCAQMD reserves the right to disallow charges when the invoiced services are not performed satisfactorily in SCAQMD's sole judgment.

11. INTELLECTUAL PROPERTY RIGHTS - Title and full ownership rights to any software, documents, or reports developed under this Contract shall at all times remain with SCAQMD. Such material is agreed to be SCAQMD proprietary information.

A. Rights of Technical Data - SCAQMD shall have the unlimited right to use technical data, including material designated as a trade secret, resulting from the performance of services by CONTRACTOR under this Contract. CONTRACTOR shall have the right to use technical data for its own benefit.

B. Copyright - CONTRACTOR agrees to grant SCAQMD a royalty-free, nonexclusive, irrevocable license to produce, translate, publish, use, and dispose of all copyrightable material first produced or composed in the performance of this Contract.

12. NOTICES - Any notices from either party to the other shall be given in writing to the attention of the persons listed below, or to other such addresses or addressees as may hereafter be designated in writing for notices by either party to the other. Notice shall be given by certified, express, or registered mail, return receipt requested, and shall be effective as of the date of receipt indicated on the return receipt card.

SCAQMD: South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765-4178  
Attn: \*\*\*

CONTRACTOR: \*\*\*  
\*\*\*  
\*\*\*  
Attn: \*\*\*

13. INDEPENDENT CONTRACTOR - CONTRACTOR is an independent contractor. CONTRACTOR, its officers, employees, agents, representatives, or subcontractors shall in no sense be considered employees or agents of SCAQMD, nor shall CONTRACTOR, its officers, employees, agents, representatives, or subcontractors be entitled to or eligible to participate in any benefits, privileges, or plans, given or extended by SCAQMD to its employees. SCAQMD will not supervise, direct, or have control over, or be responsible for, CONTRACTOR's or subcontractor's means, methods, techniques, work sequences or procedures or for the safety precautions and programs incident thereto, or for any failure by them to comply with any local, state, or federal laws, or rules or regulations, including state minimum wage laws and OSHA requirements. CONTRACTOR shall promptly notify SCAQMD of any material changes to subcontracts that affect the Contract's scope of work, deliverable schedule, and/or payment/cost schedule.

14. CONFIDENTIALITY - It is expressly understood and agreed that SCAQMD may designate in a conspicuous manner the information which CONTRACTOR obtains from SCAQMD as confidential. CONTRACTOR agrees to:
- A. Observe complete confidentiality with respect to such information, including without limitation, agreeing not to disclose or otherwise permit access to such information by any other person or entity in any manner whatsoever, except that such disclosure or access shall be permitted to employees or subcontractors of CONTRACTOR requiring access in fulfillment of the services provided under this Contract.
  - B. Ensure that CONTRACTOR's officers, employees, agents, representatives, and independent contractors are informed of the confidential nature of such information and to assure by agreement or otherwise that they are prohibited from copying or revealing, for any purpose whatsoever, the contents of such information or any part thereof, or from taking any action otherwise prohibited under this clause.
  - C. Not use such information or any part thereof in the performance of services to others or for the benefit of others in any form whatsoever whether gratuitously or for valuable consideration, except as permitted under this Contract.
  - D. Notify SCAQMD promptly and in writing of the circumstances surrounding any possession, use, or knowledge of such information or any part thereof by any person or entity other than those authorized by this clause.
  - E. Take at CONTRACTOR expense, but at SCAQMD's option and in any event under SCAQMD's control, any legal action necessary to prevent unauthorized use of such information by any third party or entity which has gained access to such information at least in part due to the fault of CONTRACTOR.
  - F. Take any and all other actions necessary or desirable to assure such continued confidentiality and protection of such information.
  - G. Prevent access to such information by any person or entity not authorized under this Contract.
  - H. Establish specific procedures in order to fulfill the obligations of this clause.
  - I. Notwithstanding the above, nothing herein is intended to abrogate or modify the provisions of Government Code Section 6250 et.seq. (Public Records Act).
15. PUBLICATION
- A. SCAQMD shall have the right of prior written approval of any document which shall be disseminated to the public by CONTRACTOR in which CONTRACTOR utilized information obtained from SCAQMD in connection with performance under this Contract.
  - B. Information, data, documents, or reports developed by CONTRACTOR for SCAQMD, pursuant to this Contract, shall be part of SCAQMD public record unless otherwise indicated. CONTRACTOR may use or publish, at its own expense, such information provided to SCAQMD. The following acknowledgment of support and disclaimer must appear in each publication of materials, whether copyrighted or not, based upon or developed under this Contract.

"This report was prepared as a result of work sponsored, paid for, in whole or in part, by the South Coast Air Quality Management District (SCAQMD). The opinions, findings, conclusions, and recommendations are those of the author and do not necessarily represent the views of SCAQMD. SCAQMD, its officers, employees, contractors, and subcontractors make no warranty, expressed or implied, and assume no legal liability for the information in this report. SCAQMD has not approved or disapproved this report, nor has SCAQMD passed upon the accuracy or adequacy of the information contained herein."
  - C. CONTRACTOR shall inform its officers, employees, and subcontractors involved in the performance of this Contract of the restrictions contained herein and require compliance with the above.

16. NON-DISCRIMINATION - In the performance of this Contract, CONTRACTOR shall not discriminate in recruiting, hiring, promotion, demotion, or termination practices on the basis of race, religious creed, color, national origin, ancestry, sex, age, or physical or mental disability and shall comply with the provisions of the California Fair Employment & Housing Act (Government Code Section 12900 et seq.), the Federal Civil Rights Act of 1964 (P.L. 88-352) and all amendments thereto, Executive Order No. 11246 (30 Federal Register 12319), and all administrative rules and regulations issued pursuant to said Acts and Order.
17. SOLICITATION OF EMPLOYEES - CONTRACTOR expressly agrees that CONTRACTOR shall not, during the term of this Contract, nor for a period of six months after termination, solicit for employment, whether as an employee or independent contractor, any person who is or has been employed by SCAQMD during the term of this Contract without the consent of SCAQMD.
18. PROPERTY AND SECURITY - Without limiting CONTRACTOR obligations with regard to security, CONTRACTOR shall comply with all the rules and regulations established by SCAQMD for access to and activity in and around SCAQMD premises.
19. ASSIGNMENT - The rights granted hereby may not be assigned, sold, licensed, or otherwise transferred by either party without the prior written consent of the other, and any attempt by either party to do so shall be void upon inception.
20. NON-EFFECT OF WAIVER - The failure of CONTRACTOR or SCAQMD to insist upon the performance of any or all of the terms, covenants, or conditions of this Contract, or failure to exercise any rights or remedies hereunder, shall not be construed as a waiver or relinquishment of the future performance of any such terms, covenants, or conditions, or of the future exercise of such rights or remedies, unless otherwise provided for herein.
21. ATTORNEYS' FEES - In the event any action is filed in connection with the enforcement or interpretation of this Contract, each party shall bear its own attorneys' fees and costs.
22. FORCE MAJEURE - Neither SCAQMD nor CONTRACTOR shall be liable or deemed to be in default for any delay or failure in performance under this Contract or interruption of services resulting, directly or indirectly, from acts of God, civil or military authority, acts of public enemy, war, strikes, labor disputes, shortages of suitable parts, materials, labor or transportation, or any similar cause beyond the reasonable control of SCAQMD or CONTRACTOR.
23. SEVERABILITY - In the event that any one or more of the provisions contained in this Contract shall for any reason be held to be unenforceable in any respect by a court of competent jurisdiction, such holding shall not affect any other provisions of this Contract, and the Contract shall then be construed as if such unenforceable provisions are not a part hereof.
24. HEADINGS - Headings on the clauses of this Contract are for convenience and reference only, and the words contained therein shall in no way be held to explain, modify, amplify, or aid in the interpretation, construction, or meaning of the provisions of this Contract.
25. DUPLICATE EXECUTION - This Contract is executed in duplicate. Each signed copy shall have the force and effect of an original.

26. GOVERNING LAW - This Contract shall be construed and interpreted and the legal relations created thereby shall be determined in accordance with the laws of the State of California. Venue for resolution of any disputes under this Contract shall be Los Angeles County, California.
27. PRE-CONTRACT COSTS - Any costs incurred by CONTRACTOR prior to CONTRACTOR receipt of a fully executed Contract shall be incurred solely at the risk of the CONTRACTOR. In the event that a formal Contract is not executed, the SCAQMD shall not be liable for any amounts expended in anticipation of a formal Contract. If a formal Contract does result, pre-contract cost expenditures authorized by the Contract will be reimbursed in accordance with the cost schedule and payment provision of the Contract.
28. CITIZENSHIP AND ALIEN STATUS
- A. CONTRACTOR warrants that it fully complies with all laws regarding the employment of aliens and others, and that its employees performing services hereunder meet the citizenship or alien status requirements contained in federal and state statutes and regulations including, but not limited to, the Immigration Reform and Control Act of 1986 (P.L. 99-603). CONTRACTOR shall obtain from all covered employees performing services hereunder all verification and other documentation of employees' eligibility status required by federal statutes and regulations as they currently exist and as they may be hereafter amended. CONTRACTOR shall have a continuing obligation to verify and document the continuing employment authorization and authorized alien status of employees performing services under this Contract to insure continued compliance with all federal statutes and regulations. Notwithstanding the above, CONTRACTOR, in the performance of this Contract, shall not discriminate against any person in violation of 8 USC Section 1324b.
- B. CONTRACTOR shall retain such documentation for all covered employees for the period described by law. CONTRACTOR shall indemnify, defend, and hold harmless SCAQMD, its officers and employees from employer sanctions and other liability which may be assessed against CONTRACTOR or SCAQMD, or both in connection with any alleged violation of federal statutes or regulations pertaining to the eligibility for employment of persons performing services under this Contract.
29. REQUIREMENT FOR FILING STATEMENT OF ECONOMIC INTERESTS - In accordance with the Political Reform Act of 1974 (Government Code Sec. 81000 et seq.) and regulations issued by the Fair Political Practices Commission (FPPC), SCAQMD has determined that the nature of the work to be performed under this Contract requires CONTRACTOR to submit a Form 700, Statement of Economic Interests for Designated Officials and Employees, for each of its employees assigned to work on this Contract. These forms may be obtained from SCAQMD's District Counsels' office. **[REMOVE IF NOT REQUESTED ON CRAM]**
- In addition, the Act requires a contractor to disqualify himself or herself from participating in, making or influencing a decision, which would have a foreseeable material effect on his or her financial interests.
30. COMPLIANCE WITH SINGLE AUDIT ACT REQUIREMENTS **[OPTIONAL - TO BE INCLUDED IN CONTRACTS WITH FOR-PROFIT CONTRACTORS WHICH HAVE FEDERAL PASS-THROUGH FUNDING]** - During the term of the Contract, and for a period of three (3) years from the date of Contract expiration, and if requested in writing by the SCAQMD, CONTRACTOR shall allow the SCAQMD, its designated representatives and/or the cognizant Federal Audit Agency, access during normal business hours to all records and reports related to the work performed under this Contract. CONTRACTOR assumes sole responsibility for reimbursement to the Federal Agency funding the prime grant or contract, a sum of money equivalent to the amount of any expenditures disallowed should the SCAQMD, its designated

representatives and/or the cognizant Federal Audit Agency rule through audit exception or some other appropriate means that expenditures from funds allocated to the CONTRACTOR were not made in compliance with the applicable cost principles, regulations of the funding agency, or the provisions of this Contract.

**[OPTIONAL - TO BE INCLUDED IN CONTRACTS WITH NON-PROFIT CONTRACTORS WHICH HAVE FEDERAL PASS-THROUGH FUNDING]**

- Beginning with CONTRACTOR's current fiscal year and continuing through the term of this Contract, CONTRACTOR shall have a single or program-specific audit conducted in accordance with the requirements of the Office of Management and Budget (OMB) Circular A-133 (Audits of States, Local Governments and Non-Profit Organizations), if CONTRACTOR expended Five Hundred Thousand Dollars (\$500,000) or more in a year in Federal Awards. Such audit shall be conducted by a firm of independent accountants in accordance with Generally Accepted Government Audit Standards (GAGAS). Within thirty (30) days of Contract execution, CONTRACTOR shall forward to SCAQMD the most recent A-133 Audit Report issued by its independent auditors. Subsequent A-133 Audit Reports shall be submitted to the SCAQMD within thirty (30) days of issuance.

CONTRACTOR shall allow the SCAQMD, its designated representatives and/or the cognizant Federal Audit Agency, access during normal business hours to all records and reports related to the work performed under this Contract. CONTRACTOR assumes sole responsibility for reimbursement to the Federal Agency funding the prime grant or contract, a sum of money equivalent to the amount of any expenditures disallowed should the SCAQMD, its designated representatives and/or the cognizant Federal Audit Agency rule through audit exception or some other appropriate means that expenditures from funds allocated to the CONTRACTOR were not made in compliance with the applicable cost principles, regulations of the funding agency, or the provisions of this Contract.

31. **[OPTION TO EXTEND THE TERM OF THE CONTRACT]** - SCAQMD reserves the right to extend the contract for a one-year period commencing **\*\*\*\*\***(enter date) at the **[option price or Not-to-Exceed Amount]** set forth in Attachment 2. In the event that SCAQMD elects to extend the contract, a written notice of its intent to extend the contract shall be provided to CONTRACTOR no later than thirty (30) days prior to Contract expiration. **[REMOVE IF NOT REQUESTED ON CRAM]**
32. **[PROPOSAL INCORPORATION]** – CONTRACTOR's proposal dated **\*\*\*** submitted in response to Request for Proposal (RFP) #**\*\*\***, is expressly incorporated herein by this reference and made a part hereof of this Contract. **[REMOVE IF NOT REQUESTED ON CRAM]**
33. **[KEY PERSONNEL]** - **[insert person's name]** is deemed critical to the successful performance of this Contract. Any changes in key personnel by CONTRACTOR must be approved by SCAQMD. All substitute personnel must possess qualifications/experience equal to the original named key personnel and must be approved by SCAQMD. SCAQMD reserves the right to interview proposed substitute key personnel. **[REMOVE IF NOT REQUESTED ON CRAM]**
34. **[PREVAILING WAGES]** – **[USE FOR INFRASTRUCTURE PROJECTS]** CONTRACTOR is alerted to the prevailing wage requirements of California Labor Code section 1770 et seq. Copies of the prevailing rate of per diem wages are on file at the SCAQMD's headquarters, of which shall be made available to any interested party on request. Notwithstanding the preceding sentence, CONTRACTOR shall be responsible for determining the applicability of the provisions of California Labor Code and complying with the same, including, without limitation, obtaining from the Director of the Department of Industrial Relations the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work, making the

same available to any interested party upon request, paying any applicable prevailing rates, posting copies thereof at the job site and flowing all applicable prevailing wage rate requirements to its subcontractors. CONTRACTOR shall indemnify, defend and hold harmless the South Coast Air Quality Management District against any and all claims, demands, damages, defense costs or liabilities based on failure to adhere to the above referenced statutes.

- 35. SUBCONTRACTOR APPROVAL – If CONTRACTOR intends to subcontract all or a portion of the work under this Contract, then CONTRACTOR must first obtain written approval from SCAQMD’s Executive Officer or designee prior to subcontracting any work. Any material changes to the subcontract(s) that affect the scope of work, deliverable schedule, and/or payment/cost schedule shall also require the prior written approval of the Executive Officer or designee. No subcontract charges will be reimbursed unless the required approvals have been obtained from SCAQMD.
- 36. ENTIRE CONTRACT - This Contract represents the entire agreement between the parties hereto related to CONTRACTOR providing services to SCAQMD and there are no understandings, representations, or warranties of any kind except as expressly set forth herein. No waiver, alteration, or modification of any of the provisions herein shall be binding on any party unless in writing and signed by the party against whom enforcement of such waiver, alteration, or modification is sought.

IN WITNESS WHEREOF, the parties to this Contract have caused this Contract to be duly executed on their behalf by their authorized representatives.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

\*\*\*

\_\_\_\_\_  
Barry R. Wallerstein, D.Env., Executive Officer  
Dr. William A. Burke, Chairman, Governing Board

\_\_\_\_\_  
Name:  
Title:

Date: \_\_\_\_\_

Date: \_\_\_\_\_

ATTEST:  
Saundra McDaniel, Clerk of the Board

By: \_\_\_\_\_

APPROVED AS TO FORM:  
Kurt R. Wiese, General Counsel

By: \_\_\_\_\_

//Standard Boilerplate  
Revised: April 3, 2013



# **ATTACHMENT A**

## **CERTIFICATIONS AND REPRESENTATIONS**



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • [www.aqmd.gov](http://www.aqmd.gov)

## **Business Information Request**

Dear SCAQMD Contractor/Supplier:

The South Coast Air Quality Management District (SCAQMD) is committed to ensuring that our contractor/supplier records are current and accurate. If your firm is selected for award of a purchase order or contract, it is imperative that the information requested herein be supplied in a timely manner to facilitate payment of invoices. In order to process your payments, we need the enclosed information regarding your account. **Please review and complete the information identified on the following pages, complete the enclosed W-9 form, remember to sign both documents for our files, and return them as soon as possible to the address below:**

**Attention: Accounts Payable, Accounting Department  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765-4178**

If you do not return this information, we will not be able to establish you as a vendor. This will delay any payments and would still necessitate your submittal of the enclosed information to our Accounting department before payment could be initiated. Completion of this document and enclosed forms would ensure that your payments are processed timely and accurately.

If you have any questions or need assistance in completing this information, please contact Accounting at (909) 396-3777. We appreciate your cooperation in completing this necessary information.

Sincerely,

Michael B. O'Kelly  
Chief Financial Officer

DH:tm

Enclosures: Business Information Request  
Disadvantaged Business Certification  
W-9  
Form 590 Withholding Exemption Certificate  
Federal Contract Debarment Certification  
Campaign Contributions Disclosure  
Direct Deposit Authorization

REV 3/13



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178

(909) 396-2000 • [www.aqmd.gov](http://www.aqmd.gov)

## BUSINESS INFORMATION REQUEST

Business Name	
Division of	
Subsidiary of	
Website Address	
Type of Business <i>Check One:</i>	<input type="checkbox"/> Individual <input type="checkbox"/> DBA, Name _____, County Filed in _____ <input type="checkbox"/> Corporation, ID No. _____ <input type="checkbox"/> LLC/LLP, ID No. _____ <input type="checkbox"/> Other _____

## REMITTING ADDRESS INFORMATION

Address			
City/Town			
State/Province		Zip	
Phone	(    )    -    Ext	Fax	(    )    -
Contact		Title	
E-mail Address			
Payment Name if Different			

All invoices must reference the corresponding Purchase Order Number(s)/Contract Number(s) if applicable and mailed to:

**Attention: Accounts Payable, Accounting Department  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765-4178**

**DISADVANTAGED BUSINESS CERTIFICATION**

Federal guidance for utilization of disadvantaged business enterprises allows a vendor to be deemed a small business enterprise (SBE), minority business enterprise (MBE) or women business enterprise (WBE) if it meets the criteria below.

- is certified by the Small Business Administration or
- is certified by a state or federal agency or
- is an independent MBE(s) or WBE(s) business concern which is at least 51 percent owned and controlled by minority group member(s) who are citizens of the United States.

Statements of certification:

As a prime contractor to the SCAQMD, \_\_\_\_\_ (name of business) will engage in good faith efforts to achieve the fair share in accordance with 40 CFR Section 33.301, and will follow the six affirmative steps listed below **for contracts or purchase orders funded in whole or in part by federal grants and contracts.**

1. Place qualified SBEs, MBEs, and WBEs on solicitation lists.
2. Assure that SBEs, MBEs, and WBEs are solicited whenever possible.
3. When economically feasible, divide total requirements into small tasks or quantities to permit greater participation by SBEs, MBEs, and WBEs.
4. Establish delivery schedules, if possible, to encourage participation by SBEs, MBEs, and WBEs.
5. Use services of Small Business Administration, Minority Business Development Agency of the Department of Commerce, and/or any agency authorized as a clearinghouse for SBEs, MBEs, and WBEs.
6. If subcontracts are to be let, take the above affirmative steps.

Self-Certification Verification: Also for use in awarding additional points, as applicable, in accordance with SCAQMD Procurement Policy and Procedure:

Check all that apply:

- |   |  |
|---|--|
| <input type="checkbox"/> Small Business Enterprise/Small Business Joint Venture | <input type="checkbox"/> Women-owned Business Enterprise                               |
| <input type="checkbox"/> Local business   | <input type="checkbox"/> Disabled Veteran-owned Business Enterprise/DVBE Joint Venture |
| <input type="checkbox"/> Minority-owned Business Enterprise                     |  |

Percent of ownership: \_\_\_\_\_ %

Name of Qualifying Owner(s): \_\_\_\_\_

I, the undersigned, hereby declare that to the best of my knowledge the above information is accurate. Upon penalty of perjury, I certify information submitted is factual.

\_\_\_\_\_  
**NAME**

\_\_\_\_\_  
**TITLE**

\_\_\_\_\_  
**TELEPHONE NUMBER**

\_\_\_\_\_  
**DATE**

## Definitions

**Disabled Veteran-Owned Business Enterprise** means a business that meets all of the following criteria:

- is a sole proprietorship or partnership of which is at least 51 percent owned by one or more disabled veterans, or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more disabled veterans; a subsidiary which is wholly owned by a parent corporation but only if at least 51 percent of the voting stock of the parent corporation is owned by one or more disabled veterans; or a joint venture in which at least 51 percent of the joint venture's management and control and earnings are held by one or more disabled veterans.
- the management and control of the daily business operations are by one or more disabled veterans. The disabled veterans who exercise management and control are not required to be the same disabled veterans as the owners of the business.
- is a sole proprietorship, corporation, partnership, or joint venture with its primary headquarters office located in the United States and which is not a branch or subsidiary of a foreign corporation, firm, or other foreign-based business.

**Joint Venture** means that one party to the joint venture is a DVBE and owns at least 51 percent of the joint venture. In the case of a joint venture formed for a single project this means that DVBE will receive at least 51 percent of the project dollars.

**Local Business** means a business that meets all of the following criteria:

- has an ongoing business within the boundary of the SCAQMD at the time of bid application.
- performs 90 percent of the work within SCAQMD's jurisdiction.

**Minority-Owned Business Enterprise** means a business that meets all of the following criteria:

- is at least 51 percent owned by one or more minority persons or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more minority persons.
- is a business whose management and daily business operations are controlled or owned by one or more minority person.
- is a business which is a sole proprietorship, corporation, partnership, joint venture, an association, or a cooperative with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, foreign firm, or other foreign business.

"Minority" person means a Black American, Hispanic American, Native American (including American Indian, Eskimo, Aleut, and Native Hawaiian), Asian-Indian American (including a person whose origins are from India, Pakistan, or Bangladesh), Asian-Pacific American (including a person whose origins are from Japan, China, the Philippines, Vietnam, Korea, Samoa, Guam, the United States Trust Territories of the Pacific, Northern Marianas, Laos, Cambodia, or Taiwan).

**Small Business Enterprise** means a business that meets the following criteria:

- a. 1) an independently owned and operated business; 2) not dominant in its field of operation; 3) together with affiliates is either:
  - **A service, construction, or non-manufacturer with 100 or fewer employees, and average annual gross receipts of ten million dollars (\$10,000,000) or less over the previous three years, or**
  - A manufacturer with 100 or fewer employees.
- b. Manufacturer means a business that is both of the following:
  - 1) Primarily engaged in the chemical or mechanical transformation of raw materials or processed substances into new products.
  - 2) Classified between Codes 311000 to 339000, inclusive, of the North American Industrial Classification System (NAICS) Manual published by the United States Office of Management and Budget, 2007 edition.

**Small Business Joint Venture** means that one party to the joint venture is a Small Business and owns at least 51 percent of the joint venture. In the case of a joint venture formed for a single project this means that the Small Business will receive at least 51 percent of the project dollars.

**Women-Owned Business Enterprise** means a business that meets all of the following criteria:

- is at least 51 percent owned by one or more women or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more women.
- is a business whose management and daily business operations are controlled or owned by one or more women.
- is a business which is a sole proprietorship, corporation, partnership, or a joint venture, with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, foreign firm, or other foreign business.

## Request for Taxpayer Identification Number and Certification

Give Form to the  
requester. Do not  
send to the IRS.

Print or type See Specific Instructions on page 2.	Name (as shown on your income tax return)	
	Business name/disregarded entity name, if different from above	
	Check appropriate box for federal tax classification: <input type="checkbox"/> Individual/sole proprietor <input type="checkbox"/> C Corporation <input type="checkbox"/> S Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust/estate  <input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶ _____  <input type="checkbox"/> Other (see instructions) ▶ _____	
	<input type="checkbox"/> Exempt payee	
	Address (number, street, and apt. or suite no.)	Requester's name and address (optional)
City, state, and ZIP code		
List account number(s) here (optional)		

### Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on the "Name" line to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Social security number									

**Note.** If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Employer identification number									

### Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. citizen or other U.S. person (defined below).

**Certification instructions.** You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 4.

<b>Sign Here</b>	Signature of U.S. person ▶	Date ▶
------------------	----------------------------	--------

### General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

#### Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

**Note.** If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

**Definition of a U.S. person.** For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

**Special rules for partnerships.** Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases:

- The U.S. owner of a disregarded entity and not the entity,
- The U.S. grantor or other owner of a grantor trust and not the trust, and
- The U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

**Foreign person.** If you are a foreign person, do not use Form W-9. Instead, use the appropriate Form W-8 (see Publication 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

**Nonresident alien who becomes a resident alien.** Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a “saving clause.” Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items:

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
2. The treaty article addressing the income.
3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
4. The type and amount of income that qualifies for the exemption from tax.
5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

**Example.** Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity not subject to backup withholding, give the requester the appropriate completed Form W-8.

**What is backup withholding?** Persons making certain payments to you must under certain conditions withhold and pay to the IRS a percentage of such payments. This is called “backup withholding.” Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

#### Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester,
2. You do not certify your TIN when required (see the Part II instructions on page 3 for details),
3. The IRS tells the requester that you furnished an incorrect TIN,
4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or
5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See the instructions below and the separate Instructions for the Requester of Form W-9.

Also see *Special rules for partnerships* on page 1.

### Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account, for example, if the grantor of a grantor trust dies.

### Penalties

**Failure to furnish TIN.** If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

**Civil penalty for false information with respect to withholding.** If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

**Criminal penalty for falsifying information.** Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

**Misuse of TINs.** If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

### Specific Instructions

#### Name

If you are an individual, you must generally enter the name shown on your income tax return. However, if you have changed your last name, for instance, due to marriage without informing the Social Security Administration of the name change, enter your first name, the last name shown on your social security card, and your new last name.

If the account is in joint names, list first, and then circle, the name of the person or entity whose number you entered in Part I of the form.

**Sole proprietor.** Enter your individual name as shown on your income tax return on the “Name” line. You may enter your business, trade, or “doing business as (DBA)” name on the “Business name/disregarded entity name” line.

**Partnership, C Corporation, or S Corporation.** Enter the entity’s name on the “Name” line and any business, trade, or “doing business as (DBA) name” on the “Business name/disregarded entity name” line.

**Disregarded entity.** Enter the owner’s name on the “Name” line. The name of the entity entered on the “Name” line should never be a disregarded entity. The name on the “Name” line must be the name shown on the income tax return on which the income will be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a domestic owner, the domestic owner’s name is required to be provided on the “Name” line. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity’s name on the “Business name/disregarded entity name” line. If the owner of the disregarded entity is a foreign person, you must complete an appropriate Form W-8.

**Note.** Check the appropriate box for the federal tax classification of the person whose name is entered on the “Name” line (Individual/sole proprietor, Partnership, C Corporation, S Corporation, Trust/estate).

**Limited Liability Company (LLC).** If the person identified on the “Name” line is an LLC, check the “Limited liability company” box only and enter the appropriate code for the tax classification in the space provided. If you are an LLC that is treated as a partnership for federal tax purposes, enter “P” for partnership. If you are an LLC that has filed a Form 8832 or a Form 2553 to be taxed as a corporation, enter “C” for C corporation or “S” for S corporation. If you are an LLC that is disregarded as an entity separate from its owner under Regulation section 301.7701-3 (except for employment and excise tax), do not check the LLC box unless the owner of the LLC (required to be identified on the “Name” line) is another LLC that is not disregarded for federal tax purposes. If the LLC is disregarded as an entity separate from its owner, enter the appropriate tax classification of the owner identified on the “Name” line.



**Other entities.** Enter your business name as shown on required federal tax documents on the "Name" line. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on the "Business name/disregarded entity name" line.

**Exempt Payee**

If you are exempt from backup withholding, enter your name as described above and check the appropriate box for your status, then check the "Exempt payee" box in the line following the "Business name/disregarded entity name," sign and date the form.

Generally, individuals (including sole proprietors) are not exempt from backup withholding. Corporations are exempt from backup withholding for certain payments, such as interest and dividends.

**Note.** If you are exempt from backup withholding, you should still complete this form to avoid possible erroneous backup withholding.

The following payees are exempt from backup withholding:

1. An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2),
2. The United States or any of its agencies or instrumentalities,
3. A state, the District of Columbia, a possession of the United States, or any of their political subdivisions or instrumentalities,
4. A foreign government or any of its political subdivisions, agencies, or instrumentalities, or
5. An international organization or any of its agencies or instrumentalities.

Other payees that may be exempt from backup withholding include:

6. A corporation,
7. A foreign central bank of issue,
8. A dealer in securities or commodities required to register in the United States, the District of Columbia, or a possession of the United States,
9. A futures commission merchant registered with the Commodity Futures Trading Commission,
10. A real estate investment trust,
11. An entity registered at all times during the tax year under the Investment Company Act of 1940,
12. A common trust fund operated by a bank under section 584(a),
13. A financial institution,
14. A middleman known in the investment community as a nominee or custodian, or
15. A trust exempt from tax under section 664 or described in section 4947.

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 15.

IF the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt payees except for 9
Broker transactions	Exempt payees 1 through 5 and 7 through 13. Also, C corporations.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 5
Payments over \$600 required to be reported and direct sales over \$5,000 <sup>1</sup>	Generally, exempt payees 1 through 7 <sup>2</sup>

<sup>1</sup> See Form 1099-MISC, Miscellaneous Income, and its instructions.

<sup>2</sup> However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney, and payments for services paid by a federal executive agency.

**Part I. Taxpayer Identification Number (TIN)**

**Enter your TIN in the appropriate box.** If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN. However, the IRS prefers that you use your SSN.

If you are a single-member LLC that is disregarded as an entity separate from its owner (see *Limited Liability Company (LLC)* on page 2), enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

**Note.** See the chart on page 4 for further clarification of name and TIN combinations.

**How to get a TIN.** If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local Social Security Administration office or get this form online at [www.ssa.gov](http://www.ssa.gov). You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at [www.irs.gov/businesses](http://www.irs.gov/businesses) and clicking on Employer Identification Number (EIN) under Starting a Business. You can get Forms W-7 and SS-4 from the IRS by visiting [IRS.gov](http://IRS.gov) or by calling 1-800-TAX-FORM (1-800-829-3676).

If you are asked to complete Form W-9 but do not have a TIN, write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

**Note.** Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

**Caution:** A disregarded domestic entity that has a foreign owner must use the appropriate Form W-8.

**Part II. Certification**

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if item 1, below, and items 4 and 5 on page 4 indicate otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on the "Name" line must sign. Exempt payees, see *Exempt Payee* on page 3.

**Signature requirements.** Complete the certification as indicated in items 1 through 3, below, and items 4 and 5 on page 4.

**1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983.** You must give your correct TIN, but you do not have to sign the certification.

**2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983.** You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

**3. Real estate transactions.** You must sign the certification. You may cross out item 2 of the certification.

**4. Other payments.** You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

**5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions.** You must give your correct TIN, but you do not have to sign the certification.

**Note.** If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

**Secure Your Tax Records from Identity Theft**

Identity theft occurs when someone uses your personal information such as your name, social security number (SSN), or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Publication 4535, Identity Theft Prevention and Victim Assistance.

Victims of identity theft who are experiencing economic harm or a system problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

**Protect yourself from suspicious emails or phishing schemes.**

Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to [phishing@irs.gov](mailto:phishing@irs.gov). You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at: [spam@uce.gov](mailto:spam@uce.gov) or contact them at [www.ftc.gov/idtheft](http://www.ftc.gov/idtheft) or 1-877-IDTHEFT (1-877-438-4338).

Visit [IRS.gov](http://IRS.gov) to learn more about identity theft and how to reduce your risk.

**What Name and Number To Give the Requester**

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account)	The actual owner of the account or, if combined funds, the first individual on the account <sup>1</sup>
3. Custodian account of a minor (Uniform Gift to Minors Act)	The minor <sup>2</sup>
4. a. The usual revocable savings trust (grantor is also trustee) b. So-called trust account that is not a legal or valid trust under state law	The grantor-trustee <sup>1</sup>  The actual owner <sup>1</sup>
5. Sole proprietorship or disregarded entity owned by an individual	The owner <sup>3</sup>
6. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulation section 1.671-4(b)(2)(i)(A))	The grantor <sup>4</sup>
For this type of account:	Give name and EIN of:
7. Disregarded entity not owned by an individual	The owner
8. A valid trust, estate, or pension trust	Legal entity <sup>4</sup>
9. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
10. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
11. Partnership or multi-member LLC	The partnership
12. A broker or registered nominee	The broker or nominee
13. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
14. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulation section 1.671-4(b)(2)(i)(B))	The trust

<sup>1</sup> List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

<sup>2</sup> Circle the minor's name and furnish the minor's SSN.

<sup>3</sup> You must show your individual name and you may also enter your business or "DBA" name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

<sup>4</sup> List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships* on page 1.

\*Note. Grantor also must provide a Form W-9 to trustee of trust.

**Privacy Act Notice**

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

# 2013 Withholding Exemption Certificate

590

This form can only be used to certify exemption from nonresident withholding under California Revenue and Taxation Code (R&TC) Section 18662. Do not use this form for exemption from wage withholding.

File this form with your withholding agent. (Please type or print)

Withholding agent's name \_\_\_\_\_

Payee's name \_\_\_\_\_

Payee's  SSN or ITIN  FEIN  
 CA corp. no.  CA SOS file no

Address (number and street, PO Box, or PMB no.) \_\_\_\_\_

Apt. no./ Ste. no. \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

ZIP Code \_\_\_\_\_

Read the following carefully and check the box that applies to the payee.

I certify that for the reasons checked below, the payee named on this form is exempt from the California income tax withholding requirement on payment(s) made to the entity or individual.

**Individuals — Certification of Residency:**

I am a resident of California and I reside at the address shown above. If I become a nonresident at any time, I will promptly notify the withholding agent. See instructions for General Information D, Who is a Resident, for the definition of a resident.

**Corporations:**

The above-named corporation has a permanent place of business in California at the address shown above or is qualified through the California Secretary of State (SOS) to do business in California. The corporation will file a California tax return and withhold on payments of California source income to nonresidents when required. If this corporation ceases to have a permanent place of business in California or ceases to do any of the above, I will promptly notify the withholding agent. See instructions for General Information F, What is a Permanent Place of Business, for the definition of permanent place of business.

**Partnerships or limited liability companies (LLC):**

The above-named partnership or LLC has a permanent place of business in California at the address shown above or is registered with the California SOS, and is subject to the laws of California. The partnership or LLC will file a California tax return and will withhold on foreign and domestic nonresident partners or members when required. If the partnership or LLC ceases to do any of the above, I will promptly inform the withholding agent. For withholding purposes, a limited liability partnership (LLP) is treated like any other partnership.

**Tax-Exempt Entities:**

The above-named entity is exempt from tax under California Revenue and Taxation Code (R&TC) Section 23701 \_\_\_\_\_ (insert letter) or Internal Revenue Code Section 501(c) \_\_\_\_\_ (insert number). The tax-exempt entity will withhold on payments of California source income to nonresidents when required. If this entity ceases to be exempt from tax, I will promptly notify the withholding agent. Individuals cannot be tax-exempt entities.

**Insurance Companies, Individual Retirement Arrangements (IRAs), or Qualified Pension/Profit Sharing Plans:**

The above-named entity is an insurance company, IRA, or a federally qualified pension or profit-sharing plan.

**California Trusts:**

At least one trustee and one noncontingent beneficiary of the above-named trust is a California resident. The trust will file a California fiduciary tax return and will withhold on foreign and domestic nonresident beneficiaries when required. If the trustee becomes a nonresident at any time, I will promptly notify the withholding agent.

**Estates — Certification of Residency of Deceased Person:**

I am the executor of the above-named person's estate. The decedent was a California resident at the time of death. The estate will file a California fiduciary tax return and will withhold on foreign and domestic nonresident beneficiaries when required.

**Nonmilitary Spouse of a Military Servicemember:**

I am a nonmilitary spouse of a military servicemember and I meet the Military Spouse Residency Relief Act (MSRRA) requirements. See instructions for General Information E, MSRRA.

**CERTIFICATE:** Please complete and sign below.

Under penalties of perjury, I hereby certify that the information provided in this document is, to the best of my knowledge, true and correct. If conditions change, I will promptly notify the withholding agent.

Payee's name and title (type or print) \_\_\_\_\_ Daytime telephone no. \_\_\_\_\_

Payee's signature  \_\_\_\_\_ Date \_\_\_\_\_

# Instructions for Form 590

## Withholding Exemption Certificate

References in these instructions are to the California Revenue and Taxation Code (R&TC).

### General Information

For purposes of California income tax, references to a spouse, husband, or wife also refer to a Registered Domestic Partner (RDP) unless otherwise specified. For more information on RDPs, get FTB Pub. 737, Tax Information for Registered Domestic Partners.

**Private Mail Box (PMB)** – Include the PMB in the address field. Write “PMB” first, then the box number. Example: 111 Main Street PMB 123.

**Foreign Address** – Enter the information in the following order: City, Country, Province/Region, and Postal Code. Follow the country’s practice for entering the postal code. Do not abbreviate the country’s name.

### A Purpose

Use Form 590, Withholding Exemption Certificate, to certify an exemption from nonresident withholding. California residents or entities should complete and present Form 590 to the withholding agent. The withholding agent is then relieved of the withholding requirements if the agent relies in good faith on a completed and signed Form 590 unless told by the Franchise Tax Board (FTB) that the form should not be relied upon.

**Important** – This form cannot be used for exemption from wage and real estate withholding.

- If you are an employee, any wage withholding questions should be directed to the FTB General Information number, 800.852.5711. Employers should call 888.745.3886 or go to [edd.ca.gov](http://edd.ca.gov).
- Sellers of California real estate use Form 593-C, Real Estate Withholding Certificate, to claim an exemption from real estate withholding.

### B Requirement

R&TC Section 18662 requires withholding of income or franchise tax on payments of California source income made to nonresidents of California.

Withholding is required on the following, but is not limited to:

- Payments to nonresidents for services rendered in California.
- Distributions of California source income made to domestic nonresident S corporation shareholders, partners and members and allocations of California source income made to foreign partners and members.
- Payments to nonresidents for rents if the payments are made in the course of the withholding agent’s business.
- Payments to nonresidents for royalties with activities in California.

- Distributions of California source income to nonresident beneficiaries from an estate or trust.
- Prizes and winnings received by nonresidents for contests in California.

However, withholding is optional if the total payments of California source income are \$1,500 or less during the calendar year.

For more information on withholding get FTB Pub. 1017, Resident and Nonresident Withholding Guidelines. To get a withholding publication see General Information H, Publications, Forms, and Additional Information.

**Backup Withholding** – Beginning on or after January 1, 2010, with certain limited exceptions, payers that are required to withhold and remit backup withholding to the Internal Revenue Service (IRS) are also required to withhold and remit to the FTB. The California backup withholding rate is 7% of the payment. For California purposes, dividends, interests, and any financial institutions release of loan funds made in the normal course of business are exempt from backup withholding. For additional information on California backup withholding, go to [ftb.ca.gov](http://ftb.ca.gov) and search for **backup withholding**.

If a payee has backup withholding, the payee must contact the FTB to provide a valid Taxpayer Identification Number (TIN) before filing a tax return. The following are acceptable TINs: social security number (SSN); individual taxpayer identification number (ITIN); federal employer identification number (FEIN); California corporation number (CA Corp No.); or California Secretary of State (SOS) file number. Failure to provide a valid TIN will result in the denial of the backup withholding credit. For more information go to [ftb.ca.gov](http://ftb.ca.gov) and search for **backup withholding**.

**Who is Excluded from Withholding** – The following are excluded from withholding and completing this form:

- The United States and any of its agencies or instrumentalities
- A state, a possession of the United States, the District of Columbia, or any of its political subdivisions or instrumentalities
- A foreign government or any of its political subdivisions, agencies, or instrumentalities

### C Who Certifies this Form

Form 590 is certified by the payee. An incomplete certificate is invalid and the withholding agent should not accept it. If the withholding agent receives an incomplete certificate, the withholding agent is required to withhold tax on payments made to the payee until a valid certificate is received. In lieu of a completed certificate on the preprinted form, the

withholding agent may accept as a substitute certificate a letter from the payee explaining why the payee is not subject to withholding. The letter must contain all the information required on the certificate in similar language, including the under penalty of perjury statement and the payee’s taxpayer identification number. The withholding agent must retain a copy of the certificate or substitute for at least four years after the last payment to which the certificate applies, and provide it upon request to the FTB.

For example, if an entertainer (or the entertainer’s business entity) is paid for a performance, the entertainer’s information must be provided. Do not submit the entertainer’s agent or promoter information.

The grantor of a grantor trust shall be treated as the payee for withholding purposes.

Therefore, if the payee is a grantor trust and one or more of the grantors is a nonresident, withholding is required. If all of the grantors on the trust are residents, no withholding is required. Resident grantors can check the box on Form 590 labeled “Individuals — Certification of Residency.”

### D Who is a Resident

A California resident is any individual who is in California for other than a temporary or transitory purpose or any individual domiciled in California who is absent for a temporary or transitory purpose.

An individual domiciled in California who is absent from California for an uninterrupted period of at least 546 consecutive days under an employment-related contract is considered outside California for other than a temporary or transitory purpose.

An individual is still considered outside California for other than a temporary or transitory purpose if return visits to California do not total more than 45 days during any taxable year covered by an employment contract.

This provision does not apply if an individual has income from stocks, bonds, notes, or other intangible personal property in excess of \$200,000 in any taxable year in which the employment-related contract is in effect.

A spouse/RDP absent from California for an uninterrupted period of at least 546 days to accompany a spouse/RDP under an employment-related contract is considered outside of California for other than a temporary or transitory purpose.

Generally, an individual who comes to California for a purpose which will extend over a long or indefinite period will be considered a resident. However, an individual who comes to perform a particular contract of short duration will be considered a nonresident.

For assistance in determining resident status, get FTB Pub. 1031, Guidelines for Determining Resident Status, and FTB Pub. 1032, Tax Information for Military Personnel, or call the FTB at 800.852.5711 or 916.845.6500.

## E Military Spouse Residency Relief Act (MSRRA)

Generally, for tax purposes you are considered to maintain your existing residence or domicile. If a military servicemember and nonmilitary spouse have the same state of domicile, the MSRRA provides:

- A spouse shall not be deemed to have lost a residence or domicile in any state solely by reason of being absent to be with the servicemember serving in compliance with military orders.
- A spouse shall not be deemed to have acquired a residence or domicile in any other state solely by reason of being there to be with the servicemember serving in compliance with military orders.

Domicile is defined as the one place:

- Where you maintain a true, fixed, and permanent home
- To which you intend to return whenever you are absent

A military servicemember's nonmilitary spouse is considered a nonresident for tax purposes if the servicemember and spouse have the same domicile outside of California and the spouse is in California solely to be with the servicemember who is serving in compliance with Permanent Change of Station orders.

Note: California may require nonmilitary spouses of military servicemembers to provide proof that they meet the criteria for California personal income tax exemption as set forth in the MSRRA.

Income of a military servicemember's nonmilitary spouse for services performed in California is not California source income subject to state tax if the spouse is in California to be with the servicemember serving in compliance with military orders, and the servicemember and spouse have the same domicile in a state other than California.

For additional information or assistance in determining whether the applicant meets the MSRRA requirements, get FTB Pub. 1032.

## F What is a Permanent Place of Business

A corporation has a permanent place of business in California if it is organized and existing under the laws of California or if it is a foreign corporation qualified to transact intrastate business by the California SOS. A corporation that has not qualified to transact intrastate business (e.g., a corporation engaged exclusively in interstate commerce) will be considered as having a permanent place of business in California only if it maintains a permanent office in California that is permanently staffed by its employees.

## G Withholding Agent

Keep Form 590 for your records. Do not send this form to the FTB unless it has been specifically requested.

For more information, contact Withholding Services and Compliance, see General Information H.

The payee must notify the withholding agent if any of the following situations occur:

- The individual payee becomes a nonresident.
- The corporation ceases to have a permanent place of business in California or ceases to be qualified to do business in California.
- The partnership ceases to have a permanent place of business in California.
- The LLC ceases to have a permanent place of business in California.
- The tax-exempt entity loses its tax-exempt status.

The withholding agent must then withhold and report the withholding using Form 592, Resident and Nonresident Withholding Statement, and remit the withholding using Form 592-V, Payment Voucher for Resident and Nonresident Withholding. Form 592-B, Resident and Nonresident Withholding Tax Statement, is retained by the withholding agent and a copy is given to the payee.

## H Additional Information

To get additional nonresident withholding information, contact the Withholding Services and Compliance.

WITHHOLDING SERVICES AND COMPLIANCE MS F182  
FRANCHISE TAX BOARD  
PO BOX 942867  
SACRAMENTO CA 94267-0651

Telephone: 888.792.4900  
916.845.4900  
Fax: 916.845.9512

You can download, view, and print California tax forms and publications at [ftb.ca.gov](http://ftb.ca.gov).

OR to get forms by mail write to:

TAX FORMS REQUEST UNIT MS F284  
FRANCHISE TAX BOARD  
PO BOX 307  
RANCHO CORDOVA CA 95741-0307

For all other questions unrelated to withholding or to access the TTY/TDD numbers, see the information below.

Internet and Telephone Assistance

Website: [ftb.ca.gov](http://ftb.ca.gov)

Telephone: 800.852.5711 from within the United States  
916.845.6500 from outside the United States

TTY/TDD: 800.822.6268 for persons with hearing or speech impairments

Asistencia Por Internet y Teléfono

Sitio web: [ftb.ca.gov](http://ftb.ca.gov)

Teléfono: 800.852.5711 dentro de los Estados Unidos  
916.845.6500 fuera de los Estados Unidos

TTY/TDD: 800.822.6268 personas con discapacidades auditivas y del habla



United State Environmental Protection Agency  
Washington, DC 20460

## **Certification Regarding Debarment, Suspension, and Other Responsibility Matters**

The prospective participant certifies to the best of its knowledge and belief that it and the principals:

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- (b) Have not within a three year period preceding this proposal been convicted of or had a civil judgement rendered against them or commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction: violation of Federal or State antitrust statute or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (c) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (b) of this certification; and
- (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

I understand that a false statement on this certification may be grounds for rejection of this proposal or termination of the award. In addition, under 18 USC Sec. 1001, a false statement may result in a fine of up to \$10,000 or imprisonment for up to 5 years, or both.

---

Typed Name & Title of Authorized Representative

---

Signature of Authorized Representative Date

I am unable to certify to the above statements. My explanation is attached.



## CAMPAIGN CONTRIBUTIONS DISCLOSURE

In accordance with California law, bidders and contracting parties are required to disclose, at the time the application is filed, information relating to any campaign contributions made to South Coast Air Quality Management District (SCAQMD) Board Members or members/alternates of the MSRC, including: the name of the party making the contribution (which includes any parent, subsidiary or otherwise related business entity, as defined below), the amount of the contribution, and the date the contribution was made. 2 C.C.R. §18438.8(b).

California law prohibits a party, or an agent, from making campaign contributions to SCAQMD Governing Board Members or members/alternates of the Mobile Source Air Pollution Reduction Review Committee (MSRC) of more than \$250 while their contract or permit is pending before the SCAQMD; and further prohibits a campaign contribution from being made for three (3) months following the date of the final decision by the Governing Board or the MSRC on a donor's contract or permit. Gov't Code §84308(d). For purposes of reaching the \$250 limit, the campaign contributions of the bidder or contractor plus contributions by its parents, affiliates, and related companies of the contractor or bidder are added together. 2 C.C.R. §18438.5.

In addition, SCAQMD Board Members or members/alternates of the MSRC must abstain from voting on a contract or permit if they have received a campaign contribution from a party or participant to the proceeding, or agent, totaling more than \$250 in the 12-month period prior to the consideration of the item by the Governing Board or the MSRC. Gov't Code §84308(c).

The list of current SCAQMD Governing Board Members can be found at the SCAQMD website ([www.aqmd.gov](http://www.aqmd.gov)). The list of current MSRC members/alternates can be found at the MSRC website (<http://www.cleantransportationfunding.org>).

### **SECTION I.**

**Contractor (Legal Name):** \_\_\_\_\_

<input type="checkbox"/> DBA, Name _____, County Filed in _____ <input type="checkbox"/> Corporation, ID No. _____ <input type="checkbox"/> LLC/LLP, ID No. _____
---

**List any parent, subsidiaries, or otherwise affiliated business entities of Contractor:**  
(See definition below).

\_\_\_\_\_  
\_\_\_\_\_

### **SECTION II.**

Has Contractor and/or any parent, subsidiary, or affiliated company, or agent thereof, made a campaign contribution(s) totaling \$250 or more in the aggregate to a current member of the South Coast Air Quality Management Governing Board or member/alternate of the MSRC in the 12 months preceding the date of execution of this disclosure?

Yes     No    **If YES, complete Section II below and then sign and date the form. If NO, sign and date below. Include this form with your submittal.**

**Campaign Contributions Disclosure, *continued*:**

Name of Contributor \_\_\_\_\_

Governing Board Member or MSRC Member/Alternate	Amount of Contribution	Date of Contribution
---	------------------------	----------------------

Name of Contributor \_\_\_\_\_

Governing Board Member or MSRC Member/Alternate	Amount of Contribution	Date of Contribution
---	------------------------	----------------------

Name of Contributor \_\_\_\_\_

Governing Board Member or MSRC Member/Alternate	Amount of Contribution	Date of Contribution
---	------------------------	----------------------

Name of Contributor \_\_\_\_\_

Governing Board Member or MSRC Member/Alternate	Amount of Contribution	Date of Contribution
---	------------------------	----------------------

**I declare the foregoing disclosures to be true and correct.**

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**DEFINITIONS**

Parent, Subsidiary, or Otherwise Related Business Entity (2 Cal. Code of Regs., §18703.1(d).)

- (1) Parent subsidiary. A parent subsidiary relationship exists when one corporation directly or indirectly owns shares possessing more than 50 percent of the voting power of another corporation.
- (2) Otherwise related business entity. Business entities, including corporations, partnerships, joint ventures and any other organizations and enterprises operated for profit, which do not have a parent subsidiary relationship are otherwise related if any one of the following three tests is met:
  - (A) One business entity has a controlling ownership interest in the other business entity.
  - (B) There is shared management and control between the entities. In determining whether there is shared management and control, consideration should be given to the following factors:
    - (i) The same person or substantially the same person owns and manages the two entities;
    - (ii) There are common or commingled funds or assets;
    - (iii) The business entities share the use of the same offices or employees, or otherwise share activities, resources or personnel on a regular basis;
    - (iv) There is otherwise a regular and close working relationship between the entities; or
  - (C) A controlling owner (50% or greater interest as a shareholder or as a general partner) in one entity also is a controlling owner in the other entity.





South Coast  
 AIR QUALITY MANAGEMENT DISTRICT  
 21865 Copley Dr., Diamond Bar, CA 91765  
 www.aqmd.gov

### Direct Deposit Authorization

**STEP 1: Please check all the appropriate boxes**

- |  |  |
|--|--|
| <input type="checkbox"/> Individual (Employee, Governing Board Member) | <input type="checkbox"/> New Request           |
| <input type="checkbox"/> Vendor/Contractor                             | <input type="checkbox"/> Cancel Direct Deposit |
| <input type="checkbox"/> Changed Information                           |  |

**STEP 2: Payee Information**

Last Name		First Name		Middle Initial	Title
Vendor/Contractor Business Name (if applicable)					
Address				Apartment or P.O. Box Number	
City		State	Zip	Country	
Taxpayer ID Number		Telephone Number		Email Address	

**Authorization**

- I authorize South Coast Air Quality Management District (SCAQMD) to direct deposit funds to my account in the financial institution as indicated below. I understand that the authorization may be rejected or discontinued by SCAQMD at any time. If any of the above information changes, I will promptly complete a new authorization agreement. If the direct deposit is not stopped before closing an account, funds payable to me will be returned to SCAQMD for distribution. This will delay my payment.
- This authorization remains in effect until SCAQMD receives written notification of changes or cancellation from you.
- I hereby release and hold harmless SCAQMD for any claims or liability to pay for any losses or costs related to insufficient fund transactions that result from failure within the Automated Clearing House network to correctly and timely deposit monies into my account.

**STEP 3:**

You must verify that your bank is a member of an Automated Clearing House (ACH). Failure to do so could delay the processing of your payment. You must attach a voided check or have your bank complete the bank information and the account holder must sign below.

**To be Completed by your Bank**

<b>Staple Voided Check Here</b>	Name of Bank/Institution				
	Account Holder Name(s)				
	<input type="checkbox"/> Saving <input type="checkbox"/> Checking		Account Number	Routing Number	
	Bank Representative Printed Name		Bank Representative Signature		Date
	ACCOUNT HOLDER SIGNATURE:				Date

For SCAQMD Use  
Only

Input By \_\_\_\_\_

Date \_\_\_\_\_

# **SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

## **REQUEST FOR PROPOSALS**

**RFP #P2015-05**

### **Commercial-Grade Cordless Electric Hand-Held Lawn and Garden Equipment Demonstration Leaf Blowers, String Trimmers, Hedge Trimmers, and Chainsaws**

The South Coast Air Quality Management District (SCAQMD) requests proposals for the following purpose according to terms and conditions attached. In the preparation of this Request for Proposals (RFP) the words "Proposer," "Contractor," "Contractor Team," "Bidder," and "Proponent" are used interchangeably.

#### **PURPOSE**

The purpose of this RFP is to solicit proposals from qualified manufacturers and vendors to identify and procure commercial-grade cordless hand-held electric lawn and garden equipment and necessary technical support for a two-year demonstration program. This program would loan electric hand-held lawn and garden equipment to professional landscape services as well as local municipalities, courts, universities and other eligible entities (Participants) for demonstration to accelerate market penetration of these technologies in the South Coast Air Basin (Basin). Eligible equipment for this RFP include, but may not be limited to, commercial-grade cordless leaf blowers, string trimmers, hedge trimmers and chainsaws. Prototype equipment are eligible for the program.

#### **INDEX**

The following are contained in this RFP:

Section I	Background/Information
Section II	Contact Person
Section III	Schedule of Events
Section IV	Participation in the Procurement Process
Section V	Statement of Work/Deliverables
Section VI	Proposal Submittal Requirements
Section VII	Proposal Submission
Section VIII	Proposal Evaluation/Contractor Selection Criteria
Section IX	Funding/Award
Section X	Draft Contract

Attachment A - Certifications and Representations

#### **SECTION I: BACKGROUND/INFORMATION**

The SCAQMD is a regional governmental agency responsible for meeting air quality health standards in Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties encompassing 10,743 square miles with close to 17 million residents.

Despite a remarkable improvement since the 1970's, the air quality in Southern California is still among the worst in the nation. In fact, the region is facing a serious challenge to reduce substantial NOx emissions in order to meet the stringent federal 8-hr ozone standards by 2023 and 2032.

Since its inception in 2003, the SCAQMD's Lawn Mower Exchange Program has been a great success having replaced approximately 50,000 gasoline-fueled residential lawn mowers with zero-emission electric lawn mowers in the Basin. However, with a significant portion of NOx and PM emissions from lawn and garden equipment attributed to the commercial sector, a program to promote the use of zero-emission equipment in commercial landscape operations is much needed to have a significant impact on these emissions. The SCAQMD has been demonstrating four commercial electric lawn mowers – two 60" riding mowers and two 33" walk-behind mowers - with local professional landscape services in the Basin. Building on this experience, SCAQMD has developed the Commercial-Grade Electric Lawn and Garden Equipment Demonstration Program to demonstrate a variety of equipment including additional commercial-grade lawn mowers and other cordless electric hand-held lawn and garden equipment such as leaf blowers and string trimmers to accelerate market acceptance and deployment of these technologies.

This RFP is to identify and procure eligible commercial-grade cordless hand-held electric lawn and garden equipment from qualified manufacturers and vendors to implement a two-year demonstration program. Eligible demonstration equipment will include, but may not be limited to, commercial-grade cordless electric leaf blowers, string trimmers, hedge trimmers and chainsaws. Prototype equipment are also eligible for this RFP. If selected, vendors will provide up to five of each proposed electric lawn and garden equipment and supporting accessories like batteries and chargers sufficient to complete multiple gardening tasks over an eight-hour workday. Vendors are not required to be physically located within the Basin but must have the resources to provide necessary technical and logistics support in a timely manner during the demonstration period. As part of the demonstration, Participants will each try out the demonstration units for 60-90 days on a rotating basis and provide a user survey on the performance and durability of the equipment.

## **SECTION II: CONTACT PERSON**

Questions regarding the content or intent of this RFP, or on procedural matters should be addressed to:

Brian Choe  
Air Quality Specialist  
Science and Technology Advancement  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765  
Tel: (909) 396-2617  
Fax: (909) 396-3252  
E-mail: [bchoe@aqmd.gov](mailto:bchoe@aqmd.gov)

### **SECTION III: SCHEDULE OF EVENTS**

July 11, 2014	RFP Released
July 23, 2014	Bidders Conference*
August 14, 2014	Proposals Due – <b>No Later than 1:00 pm</b>
August 15 – 29, 2014	Proposal Evaluations
October 3, 2014	Governing Board Approval
November 7, 2014	Anticipated Contract Execution

\*Participation in the bidder's conference is optional. Such participation would assist in notifying potential bidders of any updates or amendments. The Bidders Conference will be held in Room CC-7 at the SCAQMD Headquarters in Diamond Bar, California at 10:00 a.m. on Wednesday, July 23, 2014. If necessary, SCAQMD may provide a conference call line for the meeting. Bidders planning to participate in the conference should notify Brian Choe by email at [bchoe@aqmd.gov](mailto:bchoe@aqmd.gov) or by phone at (909) 396-2617 by the close of business on Friday, July 18, 2014.

### **SECTION IV: PARTICIPATION IN THE PROCUREMENT PROCESS**

A. It is the policy of the South Coast Air Quality Management District to ensure that all businesses including minority business enterprises, women business enterprises, disabled veteran business enterprises and small businesses have a fair and equitable opportunity to compete for and participate in SCAQMD contracts.

B. Definitions:

The definition of minority, women or disadvantaged business enterprises set forth below is included for purposes of determining compliance with the affirmative steps requirement described in Paragraph G below on procurements funded in whole or in part with federal grant funds which involve the use of subcontractors. The definition provided for disabled veteran business enterprise, local business, small business enterprise, low-emission vehicle business and off-peak hours delivery business are provided for purposes of determining eligibility for point or cost considerations in the evaluation process.

1. "Women business enterprise" (WBE) as used in this policy means a business enterprise that meets all of the following criteria:
  - a. a business that is at least 51 percent owned by one or more women, or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more women.
  - b. a business whose management and daily business operations are controlled by one or more women.
  - c. a business which is a sole proprietorship, corporation, or partnership with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, foreign firm, or other foreign-based business.
2. "Disabled veteran" as used in this policy is a United States military, naval, or air service veteran with at least 10 percent service-connected disability who is a resident of California.

3. "Disabled veteran business enterprise" (DVBE) as used in this policy means a business enterprise that meets all of the following criteria:
  - a. is a sole proprietorship or partnership of which at least 51 percent is owned by one or more disabled veterans or, in the case of a publicly owned business, at least 51 percent of its stock is owned by one or more disabled veterans; a subsidiary which is wholly owned by a parent corporation but only if at least 51 percent of the voting stock of the parent corporation is owned by one or more disabled veterans; or a joint venture in which at least 51 percent of the joint venture's management and control and earnings are held by one or more disabled veterans.
  - b. the management and control of the daily business operations are by one or more disabled veterans. The disabled veterans who exercise management and control are not required to be the same disabled veterans as the owners of the business.
  - c. is a sole proprietorship, corporation, or partnership with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, firm, or other foreign-based business.
4. "Local business" as used in this policy means a company that has an ongoing business within the SCAQMD at the time of bid or proposal submittal and performs 90% of the work related to the contract within the SCAQMD and satisfies the requirements of subparagraph H below.
5. "Small business" as used in this policy means a business that meets the following criteria:
  - a. 1) an independently owned and operated business; 2) not dominant in its field of operation; 3) together with affiliates is either:
    - A service, construction, or non-manufacturer with 100 or fewer employees, and average annual gross receipts of ten million dollars (\$10,000,000) or less over the previous three years, or
    - A manufacturer with 100 or fewer employees.
  - b. Manufacturer means a business that is both of the following:
    - 1) Primarily engaged in the chemical or mechanical transformation of raw materials or processed substances into new products.
    - 2) Classified between Codes 311000 and 339000, inclusive, of the North American Industrial Classification System (NAICS) Manual published by the United States Office of Management and Budget, 2007 edition.
6. "Joint ventures" as defined in this policy pertaining to certification means that one party to the joint venture is a DVBE or small business and owns at least 51 percent of the joint venture.

7. "Low-Emission Vehicle Business" as used in this policy means a company or contractor that uses low-emission vehicles in conducting deliveries to the SCAQMD. Low-emission vehicles include vehicles powered by electric, compressed natural gas (CNG), liquefied natural gas (LNG), liquefied petroleum gas (LPG), ethanol, methanol, hydrogen and diesel retrofitted with particulate matter (PM) traps.
8. "Off-Peak Hours Delivery Business" as used in this policy means a company or contractor that commits to conducting deliveries to the SCAQMD during off-peak traffic hours defined as between 10:00 a.m. and 3:00 p.m.
9. "Benefits Incentive Business" as used in this policy means a company or contractor that provides janitorial, security guard or landscaping services to the SCAQMD and commits to providing employee health benefits (as defined below in Section VIII.D.2.d) for full time workers with affordable deductible and co-payment terms.
10. "Minority Business Enterprise" as used in this policy means a business that is at least 51 percent owned by one or more minority person(s), or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more or minority persons.
  - a. a business whose management and daily business operations are controlled by one or more minority persons.
  - b. a business which is a sole proprietorship, corporation, or partnership with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, foreign firm, or other foreign-based business.
  - c. "Minority person" for purposes of this policy, means a Black American, Hispanic American, Native-American (including American Indian, Eskimo, Aleut, and Native Hawaiian), Asian-Indian (including a person whose origins are from India, Pakistan, and Bangladesh), Asian-Pacific-American (including a person whose origins are from Japan, China, the Philippines, Vietnam, Korea, Samoa, Guam, the United States Trust Territories of the Pacific, Northern Marianas, Laos, Cambodia, and Taiwan).
11. "Disadvantaged Business Enterprise" as used in this policy means a business that is an entity owned and/or controlled by a socially and economically disadvantaged individual(s) as described by Title X of the Clean Air Act Amendments of 1990 (42 U.S.C. 7601 note) (10% statute), and Public Law 102-389 (42 U.S.C. 4370d)(8% statute), respectively;
  - a Small Business Enterprise (SBE);
  - a Small Business in a Rural Area (SBRA);
  - a Labor Surplus Area Firm (LSAF); or
  - a Historically Underutilized Business (HUB) Zone Small Business Concern, or a concern under a successor program.

C. Under Request for Quotations (RFQ), DVBEs, DVBE business joint ventures, small businesses, and small business joint ventures shall be granted a preference in an amount equal to 5% of the lowest cost responsive bid. Low-Emission Vehicle Businesses shall be granted a preference in an amount equal to 5 percent of the lowest cost responsive bid. Off-Peak Hours Delivery Businesses shall be granted a preference in an amount equal to

2 percent of the lowest cost responsive bid. Local businesses (if the procurement is not funded in whole or in part by federal grant funds) shall be granted a preference in an amount equal to 2% of the lowest cost responsive bid.

- D. Under Request for Proposals, DVBEs, DVBE joint ventures, small businesses, and small business joint ventures shall be awarded ten (10) points in the evaluation process. A non-DVBE or large business shall receive seven (7) points for subcontracting at least twenty-five (25%) of the total contract value to a DVBE and/or small business. Low-Emission Vehicle Businesses shall be awarded five (5) points in the evaluation process. On procurements which are not funded in whole or in part by federal grant funds local businesses shall receive five (5) points. Off-Peak Hours Delivery Businesses shall be awarded two (2) points in the evaluation process.
- E. SCAQMD will ensure that discrimination in the award and performance of contracts does not occur on the basis of race, color, sex, national origin, marital status, sexual preference, creed, ancestry, medical condition, or retaliation for having filed a discrimination complaint in the performance of SCAQMD contractual obligations.
- F. SCAQMD requires Contractor to be in compliance with all state and federal laws and regulations with respect to its employees throughout the term of any awarded contract, including state minimum wage laws and OSHA requirements.
- G. When contracts are funded in whole or in part by federal funds, and if subcontracts are to be let, the Contractor must comply with the following, evidencing a good faith effort to solicit disadvantaged businesses. Contractor shall submit a certification signed by an authorized official affirming its status as a MBE or WBE, as applicable, at the time of contract execution. The SCAQMD reserves the right to request documentation demonstrating compliance with the following good faith efforts prior to contract execution.
  - 1. Ensure Disadvantaged Business Enterprises (DBEs) are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities. For Indian Tribal, State and Local Government recipients, this will include placing DBEs on solicitation lists and soliciting them whenever they are potential sources.
  - 2. Make information on forthcoming opportunities available to DBEs and arrange time frames for contracts and establish delivery schedules, where the requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process. This includes, whenever possible, posting solicitations for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date.
  - 3. Consider in the contracting process whether firms competing for large contracts could subcontract with DBEs. For Indian Tribal, State and Local Government recipients, this will include dividing total requirements when economically feasible into smaller tasks or quantities to permit maximum participation by DBEs in the competitive process.
  - 4. Encourage contracting with a consortium of DBEs when a contract is too large for one of these firms to handle individually.
  - 5. Using the services and assistance of the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.

6. If the prime contractor awards subcontracts, require the prime contractor to take the above steps.
- H. To the extent that any conflict exists between this policy and any requirements imposed by federal and state law relating to participation in a contract by a certified MBE/WBE/DVBE as a condition of receipt of federal or state funds, the federal or state requirements shall prevail.
- I. When contracts are not funded in whole or in part by federal grant funds, a local business preference will be awarded. For such contracts that involve the purchase of commercial off-the-shelf products, local business preference will be given to suppliers or distributors of commercial off-the-shelf products who maintain an ongoing business within the geographical boundaries of the SCAQMD. However, if the subject matter of the RFP or RFQ calls for the fabrication or manufacture of custom products, only companies performing 90% of the manufacturing or fabrication effort within the geographical boundaries of the SCAQMD shall be entitled to the local business preference.
- J. In compliance with federal fair share requirements set forth in 40 CFR Part 33, the SCAQMD shall establish a fair share goal annually for expenditures with federal funds covered by its procurement policy.

## **SECTION V: STATEMENT OF WORK/DELIVERABLES**

As part of the contract execution, a statement of work will be provided to all contractors that include tasks and deliverables demonstrating compliance with the requirements of the program. Detailed requirements will be provided in the contract to be executed but below is a summary of the requirements:

1. Contractor shall provide up to five of each selected commercial-grade hand-held cordless electric lawn and garden equipment and supporting accessories like batteries and chargers for a two-year demonstration in commercial gardening and landscape operations in the Basin.
2. Demonstration equipment must be of commercial grade capable of completing multiple gardening tasks over an eight hour workday. Additional batteries and opportunity charging may be utilized to meet this requirement. Prototype equipment are eligible for the program, subject to SCAQMD approval.
3. Demonstration equipment will be loaned to Participants for 60-90 days per rotation and Contractor shall be responsible to provide logistics support to transfer the equipment between Participants.
4. Contractor shall provide training to Participants on safe and proper operation and maintenance of the equipment.
5. Participants may include professional gardening and landscape services, municipalities, courts, universities and other entities deemed eligible by SCAQMD. Contractor may recommend potential Participants to SCAQMD for an approval.
6. Contractor shall provide necessary technical support in a timely manner during the demonstration period.



7. Contractor shall provide a minimum of two-year warranty for the demonstration equipment.

## **SECTION VI: PROPOSAL SUBMITTAL REQUIREMENTS**

Submitted proposals must follow the format outlined below and all requested information must be supplied. Failure to submit proposals in the required format will result in elimination from proposal evaluation.

### Cover Letter

A separate cover letter, including the name, address, telephone number, and e-mail address of the contractor, and signed by the person or persons authorized to represent the firm, should accompany the proposal submission. Firm contact information as follows should also be included in the cover letter:

- Address and telephone number of office in, or nearest to, Diamond Bar, California.
- Name and title of firm's representative designated as contact.

### Summary

An overview on the project approach to meet the program objectives and satisfy the scope of work as specified in Section V – Statement of Work/Deliverables, including a brief discussion of the proposer's organization and staff resources to demonstrate its capability to provide necessary technical and logistics support for the program.

### Equipment Description

A detailed description of eligible cordless electric lawn and garden equipment and accessories including, but not limited to, the following technical and performance specifications:

#### A. Leaf Blowers

1. Make and model
2. Blower weight
3. Battery weight
4. Air velocity
5. Air volume
6. Peak power
7. Noise rating in dB(A)
8. Run time per charge
9. Charging time (from zero charge)
10. Battery type (chemistry, voltage and Ah capacity)
11. Battery life (charge cycles)
12. Swappable batteries
13. Warranty information

#### B. String Trimmers, Hedge Trimmers and Chainsaws

1. Make and model
2. Equipment weight
3. Cutting radius/blade length/guide bar length

4. Peak power
5. Run time per charge
6. Charging time (from zero charge)
7. Battery type (chemistry, voltage and Ah capacity)
8. Battery life (charge cycles)
9. Swappable batteries
10. Warranty information

**Eligible electric lawn and garden equipment for this RFP includes, but may not be limited to, leaf blowers, string trimmers, hedge trimmers and chainsaws.**

Please note that SCAQMD considers information submitted in response to this RFP in the public domain. Any trade secret information may be submitted to the SCAQMD in a separate document in which the trade secret information is specifically identified. SCAQMD agrees to treat such trade secret information in accordance with its Public Records Act guidelines relating to trade secret information.

#### Equipment and Service Cost

The cost of proposed equipment and services including, but not limited to:

1. Cordless electric hand-held lawn and garden equipment
2. Battery
3. Charger
4. Other accessories
5. Equipment warranty
6. Technical support including training
7. Logistics support and delivery

The price quote should provide equipment/service description, unit cost, quantity and total cost including tax and other fees, if applicable.

#### Qualifications/Experience

Provide relevant experience and expertise with cordless electric lawn and garden equipment including description of other similar projects your organization was involved in during the past two years. Include contact name, title, and telephone number for any references listed.

#### Additional Data

Provide other essential data that may assist in the evaluation of this proposal.

#### **Certifications and Representations** (see Attachment A to this RFP)

### **SECTION VII: PROPOSAL SUBMISSION**

All proposals must be submitted according to specifications set forth in the section above. Failure to adhere to these specifications may be cause for rejection of proposal.

Signature - All proposals must be signed by an authorized representative of the Proposer.

Due Date - The Proposer shall submit four (4) complete copies of the proposal in a sealed envelope, plainly marked in the upper left-hand corner with the name and address of the

Proposer and the words "Request for Proposals #P2015-05." **All proposals are due no later than 1:00 p.m., August 14, 2014, and should be directed to:**

Procurement Unit  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765-4178  
(909) 396-3520

**Late bids/proposals will not be accepted under any circumstances.**

Grounds for Rejection – A proposal may be immediately rejected if:

- It is not prepared in the format described, or
- It is signed by an individual not authorized to represent the firm.

Modification or Withdrawal - Once submitted, proposals cannot be altered without the prior written consent of SCAQMD. All proposals shall constitute firm offers and may not be withdrawn for a period of ninety (90) days following the last day to accept proposals.

### **SECTION VIII: PROPOSAL EVALUATION/CONTRACTOR SELECTION CRITERIA**

- A. Proposals will be evaluated by a panel of three to five SCAQMD staff members familiar with the subject matter of the project. The panel shall be appointed by the Executive Officer or his designee. In addition, the evaluation panel may include outside public sector or academic community expertise as deemed desirable by the Executive Officer. The panel will make a recommendation to the Executive Officer and/or the Governing Board of the SCAQMD for final selection of contractor(s) and negotiation of contract(s).
- B. Each member of the evaluation panel shall be accorded equal weight in his or her rating of proposals. The evaluation panel members shall evaluate the proposals according to the specified criteria and numerical weightings set forth below.

<u>1. Project Evaluation Criteria</u>	<u>Points</u>
Understanding of Requirements	30
Contractor Qualifications	20
Past Experience	10
Project Cost	40
<b>Total</b>	<b>100</b>
<u>Additional Points</u>	
Small Business or Small Business Joint Venture	10
DVBE or DVBE Joint Venture	10
Use of DVBE or Small Business Subcontractors	7
Low-Emission Vehicle Business	5

Local Business (Non-Federally Funded Projects Only)	5
Off-Peak Hours Delivery Business	2

**The cumulative points awarded for small business, DVBE, use of small business or DVBE subcontractors, low-emission vehicle business, local business, and off-peak hours delivery business shall not exceed 15 points.**

**Note: The award of these additional points shall be contingent upon Proposer completing the Self-Certification section of Attachment A – Certifications and Representations and/or inclusion of a statement in the proposal self-certifying that Proposer qualifies for additional points as detailed above.**

2. To receive additional points in the evaluation process for the categories of Small Business or Small Business Joint Venture, DVBE or DVBE Joint Venture or Local Business (for non-EPA funded projects), the proposer must submit a self-certification or certification from the State of California Office of Small Business Certification and Resources at the time of proposal submission certifying that the proposer meets the requirements set forth in Section III. To receive points for the use of DVBE and/or Small Business subcontractors, at least 25 percent of the total contract value must be subcontracted to DVBEs and/or Small Businesses. To receive points as a Low-Emission Vehicle Business, the proposer must demonstrate to the Executive Officer, or designee, that supplies and materials delivered to the SCAQMD are delivered in vehicles that operate on either clean-fuels or if powered by diesel fuel, that the vehicles have particulate traps installed. To receive points as an Off-Peak Hours Delivery Business, the proposer must submit, at proposal submission, certification of its commitment to delivering supplies and materials to SCAQMD between the hours of 10:00 a.m. and 3:00 p.m. The cumulative points awarded for small business, DVBE, use of Small Business or DVBE Subcontractors, Local Business, Low-Emission Vehicle Business and Off-Peak Hour Delivery Business shall not exceed 15 points.

The Procurement Section will be responsible for monitoring compliance of suppliers awarded purchase orders based upon use of low-emission vehicles or off-peak traffic hour delivery commitments through the use of vendor logs which will identify the contractor awarded the incentive. The purchase order shall incorporate terms which obligate the supplier to deliver materials in low-emission vehicles or deliver during off-peak traffic hours. The Receiving department will monitor those qualified supplier deliveries to ensure compliance to the purchase order requirements. Suppliers in non-compliance will be subject to a two percent of total purchase order value penalty. The Procurement Manager will adjudicate any disputes regarding either low-emission vehicle or off-peak hour deliveries.

3. The lowest cost proposal will be awarded the maximum cost points available and all other cost proposals will receive points on a prorated basis. For example if the lowest cost proposal is \$1,000 and the maximum points available are 30 points, this proposal would receive the full 30 points. If the next lowest cost proposal is \$1,100, it would receive 27 points reflecting the fact that it is 10% higher than the lowest cost (90% of 30 points = 27 points).

- C. During the selection process, the evaluation panel may wish to interview some proposers for clarification purposes only. No new material will be permitted at this time. Additional information provided during the bid review process is limited to clarification by the Proposer of information presented in his/her proposal, upon request by SCAQMD.
- D. The Executive Officer or Governing Board may award the contract to a proposer other than the proposer receiving the highest rating in the event the Governing Board determines that another Proposer from among those technically qualified would provide the best value to SCAQMD considering cost and technical factors. The determination shall be based solely on the Evaluation Criteria contained in the Request for Proposal (RFP), on evidence provided in the proposal and on any other evidence provided during the bid review process.
- E. Selection will be made based on the above-described criteria and rating factors. The selection will be made by and is subject to Executive Officer or Governing Board approval. Proposers may be notified of the results by letter.
- F. The Governing Board has approved a Bid Protest Procedure which provides a process for a bidder or prospective bidder to submit a written protest to the SCAQMD Procurement Manager in recognition of two types of protests: Protest Regarding Solicitation and Protest Regarding Award of a Contract. Copies of the Bid Protest Policy can be secured through a request to the SCAQMD Procurement Department.
- G. The Executive Officer or Governing Board may award contracts to more than one proposer if in (his or their) sole judgment the purposes of the (contract or award) would best be served by selecting multiple proposers.
- H. If additional funds become available, the Executive Officer or Governing Board may increase the amount awarded. The Executive Officer or Governing Board may also select additional proposers for a grant or contract if additional funds become available.
- I. Disposition of Proposals – Pursuant to the District’s Procurement Policy and Procedure, SCAQMD reserves the right to reject any or all proposals. All proposals become the property of SCAQMD, and are subject to the California Public Records Act. One copy of the proposal shall be retained for SCAQMD files. Additional copies and materials will be returned only if requested and at the proposer’s expense.

**SECTION IX: FUNDING/AWARD**

Funding amounts will be determined based on the evaluation of proposals submitted.

**SECTION X: DRAFT CONTRACT (Provided as a sample only)**



**South Coast  
Air Quality Management District**

This Contract consists of \*\*\* pages.

1. PARTIES - The parties to this Contract are the South Coast Air Quality Management District (referred to here as "SCAQMD") whose address is 21865 Copley Drive, Diamond Bar, California 91765-4178, and \*\*\* (referred to here as "CONTRACTOR") whose address is \*\*\*.
  
2. RECITALS
  - A. SCAQMD is the local agency with primary responsibility for regulating stationary source air pollution within the geographical boundaries of the South Coast Air Quality Management District in the State of California. SCAQMD is authorized to enter into this Contract under California Health and Safety Code Section 40489. SCAQMD desires to contract with CONTRACTOR for services described in Attachment 1 - Statement of Work, attached here and made a part here by this reference. CONTRACTOR warrants that it is well-qualified and has the experience to provide such services on the terms set forth here.
  - B. CONTRACTOR is authorized to do business in the State of California and attests that it is in good tax standing with the California Franchise Tax Board.
  - C. All parties to this Contract have had the opportunity to have this Contract reviewed by their attorney.
  
3. PERFORMANCE REQUIREMENTS
  - A. CONTRACTOR agrees to obtain and maintain the required licenses, permits, and all other appropriate legal authorizations from all applicable federal, state and local jurisdictions and pay all applicable fees. CONTRACTOR further agrees to immediately notify SCAQMD in writing of any change in its licensing status which has a material impact on the CONTRACTOR's performance under this Contract.
  - B. CONTRACTOR shall submit reports to SCAQMD as outlined in Attachment 1 - Statement of Work. All reports shall be submitted in an environmentally friendly format: recycled paper; stapled, not bound; black and white, double-sided print; and no three-ring, spiral, or plastic binders or cardstock covers. SCAQMD reserves the right to review, comment, and request changes to any report produced as a result of this Contract.
  - C. CONTRACTOR shall perform all tasks set forth in Attachment 1 - Statement of Work, and shall not engage, during the term of this Contract, in any performance of work that is in direct or indirect conflict with duties and responsibilities set forth in Attachment 1 - Statement of Work.
  - D. CONTRACTOR shall be responsible for exercising the degree of skill and care customarily required by accepted professional practices and procedures subject to SCAQMD's final approval which SCAQMD will not unreasonably withhold. Any costs incurred due to the failure to meet the foregoing standards, or otherwise defective services which require re-performance, as directed by SCAQMD, shall be the responsibility of CONTRACTOR. CONTRACTOR's failure to achieve the performance goals and objectives stated in Attachment 1- Statement of Work, is not a basis for requesting re-performance unless work conducted by CONTRACTOR is deemed by SCAQMD to have failed the foregoing standards of performance.
  - E. CONTRACTOR shall post a performance bond in the amount of \*\*\* Dollars (\$\*\*\*) from a surety authorized to issue such bonds within the State.

- F. SCAQMD has the right to review the terms and conditions of the performance bond and to request modifications thereto which will ensure that SCAQMD will be compensated in the event CONTRACTOR fails to perform and also provides SCAQMD with the opportunity to review the qualifications of the entity designated by the issuer of the performance bond to perform in CONTRACTOR's absence and, if necessary, the right to reject such entity.
- G. CONTRACTOR shall require its subcontractors to abide by the requirements set forth in this Contract.

4. TERM - The term of this Contract is from the date of execution by both parties (or insert date) to \*\*\*, unless further extended by amendment of this Contract in writing. No work shall commence until this Contract is fully executed by all parties.

5. TERMINATION

- A. In the event any party fails to comply with any term or condition of this Contract, or fails to provide services in the manner agreed upon by the parties, including, but not limited to, the requirements of Attachment 1 – Statement of Work, this failure shall constitute a breach of this Contract. The non-breaching party shall notify the breaching party that it must cure this breach or provide written notification of its intention to terminate this contract. Notification shall be provided in the manner set forth in Clause 11. The non-breaching party reserves all rights under law and equity to enforce this contract and recover damages.
- B. SCAQMD reserves the right to terminate this Contract, in whole or in part, without cause, upon thirty (30) days' written notice. Once such notice has been given, CONTRACTOR shall, except as and to the extent or directed otherwise by SCAQMD, discontinue any Work being performed under this Contract and cancel any of CONTRACTOR's orders for materials, facilities, and supplies in connection with such Work, and shall use its best efforts to procure termination of existing subcontracts upon terms satisfactory to SCAQMD. Thereafter, CONTRACTOR shall perform only such services as may be necessary to preserve and protect any Work already in progress and to dispose of any property as requested by SCAQMD.
- C. CONTRACTOR shall be paid in accordance with this Contract for all Work performed before the effective date of termination under Clause 5.B. Before expiration of the thirty (30) days' written notice, CONTRACTOR shall promptly deliver to SCAQMD all copies of documents and other information and data prepared or developed by CONTRACTOR under this Contract with the exception of a record copy of such materials, which may be retained by CONTRACTOR.

6. STOP WORK – SCAQMD may, at any time, by written notice to CONTRACTOR, require CONTRACTOR to stop all or any part of the work tasks in this Contract. A stop work order may be issued for reasons including, but not limited to, the project exceeding the budget, out of scope work, delay in project schedule, or misrepresentations. Upon receipt of the stop work order, CONTRACTOR shall immediately take all necessary steps to comply with the order. CONTRACTOR shall resume the work only upon receipt of written instructions from SCAQMD cancelling the stop work order. CONTRACTOR agrees and understands that CONTRACTOR will not be paid for performing work while the stop work order is in effect, unless SCAQMD agrees to do so in its written cancellation of the stop work order.

7. INSURANCE

- A. CONTRACTOR shall furnish evidence to SCAQMD of workers' compensation insurance for each of its employees, in accordance with either California or other states' applicable statutory requirements prior to commencement of any work on this Contract.

- B. CONTRACTOR shall furnish evidence to SCAQMD of general liability insurance with a limit of at least \$1,000,000 per occurrence, and \$2,000,000 in a general aggregate prior to commencement of any work on this Contract. SCAQMD shall be named as an additional insured on any such liability policy, and thirty (30) days written notice prior to cancellation of any such insurance shall be given by CONTRACTOR to SCAQMD.
- C. CONTRACTOR shall furnish evidence to SCAQMD of automobile liability insurance with limits of at least \$100,000 per person and \$300,000 per accident for bodily injuries, and \$50,000 in property damage, or \$1,000,000 combined single limit for bodily injury or property damage, prior to commencement of any work on this Contract. SCAQMD shall be named as an additional insured on any such liability policy, and thirty (30) days written notice prior to cancellation of any such insurance shall be given by CONTRACTOR to SCAQMD.
- D. CONTRACTOR shall furnish evidence to SCAQMD of Professional Liability Insurance with an aggregate limit of not less than \$5,000,000. **[OPTIONAL FOR PROFESSIONAL SERVICES – USE FOR LAW FIRMS AND SOFTWARE RELATED CONTRACTS]**
- E. If CONTRACTOR fails to maintain the required insurance coverage set forth above, SCAQMD reserves the right either to purchase such additional insurance and to deduct the cost thereof from any payments owed to CONTRACTOR or terminate this Contract for breach.
- F. All insurance certificates should be mailed to: SCAQMD Risk Management, 21865 Copley Drive, Diamond Bar, CA 91765-4178. **The SCAQMD Contract Number must be included on the face of the certificate.**
- G. CONTRACTOR must provide updates on the insurance coverage throughout the term of the Contract to ensure that there is no break in coverage during the period of contract performance. Failure to provide evidence of current coverage shall be grounds for termination for breach of Contract.

8. INDEMNIFICATION - CONTRACTOR agrees to hold harmless, defend and indemnify SCAQMD, its officers, employees, agents, representatives, and successors-in-interest against any and all loss, damage, costs, lawsuits, claims, demands, causes of action judgments, attorney's fees, or any other expenses arising from or related to any third party claim against SCAQMD, its officers, employees, agents, representatives, or successors in interest that arise or result in whole or in part, from any actual or alleged act or omission of CONTRACTOR, its employees, subcontractors, agents or representatives in the performance of this Contract.

9. CO-FUNDING **[USE IF REQUIRED]**

- A. CONTRACTOR shall obtain co-funding as follows: **\*\*\*, \*\*\* Dollars (\$\*\*\*); \*\*\*, \*\*\* Dollars (\$\*\*\*); \*\*\*, \*\*\* Dollars (\$\*\*\*); \*\*\*, \*\*\* Dollars (\$\*\*\*); and \*\*\*, \*\*\* Dollars (\$\*\*\*).**
- B. If CONTRACTOR fails to obtain co-funding in the amount(s) referenced above, then SCAQMD reserves the right to renegotiate or terminate this Contract.
- C. CONTRACTOR shall provide co-funding in the amount of **\*\*\* Dollars (\$\*\*\*)** for this project. If CONTRACTOR fails to provide this co-funding, then SCAQMD reserves the right to renegotiate or terminate this Contract.

10. PAYMENT

**[FIXED PRICE]-use this one or the T&M one below.**

- A. SCAQMD shall pay CONTRACTOR a fixed price of **\*\*\* Dollars (\$\*\*\*)** for work performed under this Contract in accordance with Attachment 2 - Payment Schedule, attached here and included here by reference. Payment shall be made by SCAQMD to CONTRACTOR within thirty (30) days after approval by SCAQMD of an invoice prepared and furnished by CONTRACTOR showing services performed and



referencing tasks and deliverables as shown in Attachment 1 - Statement of Work, and the amount of charge claimed. Each invoice must be prepared in duplicate, on company letterhead, and list SCAQMD's Contract number, period covered by invoice, and CONTRACTOR's social security number or Employer Identification Number and submitted to: South Coast Air Quality Management District, Attn:

\*\*\*

- B. An amount equal to ten percent (10%) shall be withheld from all charges paid until satisfactory completion and final acceptance of work by SCAQMD. **[OPTIONAL]**
- C. SCAQMD reserves the right to disallow charges when the invoiced services are not performed satisfactorily in SCAQMD's sole judgment.

**[T & M]-use this one or the Fixed Price one above.**

- A. SCAQMD shall pay CONTRACTOR a total not to exceed amount of \*\*\* Dollars (\$\*\*\*), including any authorized travel-related expenses, for time and materials at rates in accordance with Attachment 2 – Cost Schedule, attached here and included here by this reference. Payment of charges shall be made by SCAQMD to CONTRACTOR within thirty (30) days after approval by SCAQMD of an itemized invoice prepared and furnished by CONTRACTOR referencing line item expenditures as listed in Attachment 2 and the amount of charge claimed. Each invoice must be prepared in duplicate, on company letterhead, and list SCAQMD's Contract number, period covered by invoice, and CONTRACTOR's social security number or Employer Identification Number and submitted to: South Coast Air Quality Management District, Attn: \*\*\*.
- B. CONTRACTOR shall adhere to total tasks and/or cost elements (cost category) expenditures as listed in Attachment 2. Reallocation of costs between tasks and/or cost category expenditures is permitted up to One Thousand Dollars (\$1,000) upon prior written approval from SCAQMD. Reallocation of costs in excess of One Thousand Dollars (\$1,000) between tasks and/or cost category expenditures requires an amendment to this Contract.
- C. SCAQMD's payment of invoices shall be subject to the following limitations and requirements:
  - i) Charges for equipment, material, and supply costs, travel expenses, subcontractors, and other charges, as applicable, must be itemized by CONTRACTOR. Reimbursement for equipment, material, supplies, subcontractors, and other charges shall be made at actual cost. Supporting documentation must be provided for all individual charges (with the exception of direct labor charges provided by CONTRACTOR). SCAQMD's reimbursement of travel expenses and requirements for supporting documentation are listed below.
  - ii) CONTRACTOR's failure to provide receipts shall be grounds for SCAQMD's non-reimbursement of such charges. SCAQMD may reduce payments on invoices by those charges for which receipts were not provided.
  - iii) SCAQMD shall not pay interest, fees, handling charges, or cost of money on Contract.
- D. SCAQMD shall reimburse CONTRACTOR for travel-related expenses only if such travel is expressly set forth in Attachment 2 – Cost Schedule of this Contract or pre-authorized by SCAQMD in writing.
  - i) SCAQMD's reimbursement of travel-related expenses shall cover lodging, meals, other incidental expenses, and costs of transportation subject to the following limitations:
    - Air Transportation - Coach class rate for all flights. If coach is not available, business class rate is permissible.
    - Car Rental - A compact car rental. A mid-size car rental is permissible if car rental is shared by three or more individuals.
    - Lodging - Up to One Hundred Fifty Dollars (\$150) per night. A higher amount of reimbursement is permissible if pre-approved by SCAQMD.
    - Meals - Daily allowance is Fifty Dollars (\$50.00).
  - ii) Supporting documentation shall be provided for travel-related expenses in accordance with the following requirements:

Lodging, Airfare, Car Rentals - Bill(s) for actual expenses incurred.

Meals - Meals billed in excess of \$50.00 each day require receipts or other supporting documentation for the total amount of the bill and must be approved by SCAQMD.

Mileage - Beginning each January 1, the rate shall be adjusted effective February 1 by the Chief Financial Officer based on the Internal Revenue Service Standard Mileage Rate

Other travel-related expenses - Receipts are required for all individual items.

E. SCAQMD reserves the right to disallow charges when the invoiced services are not performed satisfactorily in SCAQMD's sole judgment.

11. INTELLECTUAL PROPERTY RIGHTS - Title and full ownership rights to any software, documents, or reports developed under this Contract shall at all times remain with SCAQMD. Such material is agreed to be SCAQMD proprietary information.

A. Rights of Technical Data - SCAQMD shall have the unlimited right to use technical data, including material designated as a trade secret, resulting from the performance of services by CONTRACTOR under this Contract. CONTRACTOR shall have the right to use technical data for its own benefit.

B. Copyright - CONTRACTOR agrees to grant SCAQMD a royalty-free, nonexclusive, irrevocable license to produce, translate, publish, use, and dispose of all copyrightable material first produced or composed in the performance of this Contract.

12. NOTICES - Any notices from either party to the other shall be given in writing to the attention of the persons listed below, or to other such addresses or addressees as may hereafter be designated in writing for notices by either party to the other. Notice shall be given by certified, express, or registered mail, return receipt requested, and shall be effective as of the date of receipt indicated on the return receipt card.

SCAQMD: South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765-4178  
Attn: \*\*\*

CONTRACTOR: \*\*\*  
\*\*\*  
\*\*\*  
Attn: \*\*\*

13. INDEPENDENT CONTRACTOR - CONTRACTOR is an independent contractor. CONTRACTOR, its officers, employees, agents, representatives, or subcontractors shall in no sense be considered employees or agents of SCAQMD, nor shall CONTRACTOR, its officers, employees, agents, representatives, or subcontractors be entitled to or eligible to participate in any benefits, privileges, or plans, given or extended by SCAQMD to its employees. SCAQMD will not supervise, direct, or have control over, or be responsible for, CONTRACTOR's or subcontractor's means, methods, techniques, work sequences or procedures or for the safety precautions and programs incident thereto, or for any failure by them to comply with any local, state, or federal laws, or rules or regulations, including state minimum wage laws and OSHA requirements. CONTRACTOR shall promptly notify SCAQMD of any material changes to subcontracts that affect the Contract's scope of work, deliverable schedule, and/or payment/cost schedule.

14. CONFIDENTIALITY - It is expressly understood and agreed that SCAQMD may designate in a conspicuous manner the information which CONTRACTOR obtains from SCAQMD as confidential. CONTRACTOR agrees to:
- A. Observe complete confidentiality with respect to such information, including without limitation, agreeing not to disclose or otherwise permit access to such information by any other person or entity in any manner whatsoever, except that such disclosure or access shall be permitted to employees or subcontractors of CONTRACTOR requiring access in fulfillment of the services provided under this Contract.
  - B. Ensure that CONTRACTOR's officers, employees, agents, representatives, and independent contractors are informed of the confidential nature of such information and to assure by agreement or otherwise that they are prohibited from copying or revealing, for any purpose whatsoever, the contents of such information or any part thereof, or from taking any action otherwise prohibited under this clause.
  - C. Not use such information or any part thereof in the performance of services to others or for the benefit of others in any form whatsoever whether gratuitously or for valuable consideration, except as permitted under this Contract.
  - D. Notify SCAQMD promptly and in writing of the circumstances surrounding any possession, use, or knowledge of such information or any part thereof by any person or entity other than those authorized by this clause.
  - E. Take at CONTRACTOR expense, but at SCAQMD's option and in any event under SCAQMD's control, any legal action necessary to prevent unauthorized use of such information by any third party or entity which has gained access to such information at least in part due to the fault of CONTRACTOR.
  - F. Take any and all other actions necessary or desirable to assure such continued confidentiality and protection of such information.
  - G. Prevent access to such information by any person or entity not authorized under this Contract.
  - H. Establish specific procedures in order to fulfill the obligations of this clause.
  - I. Notwithstanding the above, nothing herein is intended to abrogate or modify the provisions of Government Code Section 6250 et.seq. (Public Records Act).
15. PUBLICATION
- A. SCAQMD shall have the right of prior written approval of any document which shall be disseminated to the public by CONTRACTOR in which CONTRACTOR utilized information obtained from SCAQMD in connection with performance under this Contract.
  - B. Information, data, documents, or reports developed by CONTRACTOR for SCAQMD, pursuant to this Contract, shall be part of SCAQMD public record unless otherwise indicated. CONTRACTOR may use or publish, at its own expense, such information provided to SCAQMD. The following acknowledgment of support and disclaimer must appear in each publication of materials, whether copyrighted or not, based upon or developed under this Contract.

"This report was prepared as a result of work sponsored, paid for, in whole or in part, by the South Coast Air Quality Management District (SCAQMD). The opinions, findings, conclusions, and recommendations are those of the author and do not necessarily represent the views of SCAQMD. SCAQMD, its officers, employees, contractors, and subcontractors make no warranty, expressed or implied, and assume no legal liability for the information in this report. SCAQMD has not approved or disapproved this report, nor has SCAQMD passed upon the accuracy or adequacy of the information contained herein."
  - C. CONTRACTOR shall inform its officers, employees, and subcontractors involved in the performance of this Contract of the restrictions contained herein and require compliance with the above.

16. NON-DISCRIMINATION - In the performance of this Contract, CONTRACTOR shall not discriminate in recruiting, hiring, promotion, demotion, or termination practices on the basis of race, religious creed, color, national origin, ancestry, sex, age, or physical or mental disability and shall comply with the provisions of the California Fair Employment & Housing Act (Government Code Section 12900 et seq.), the Federal Civil Rights Act of 1964 (P.L. 88-352) and all amendments thereto, Executive Order No. 11246 (30 Federal Register 12319), and all administrative rules and regulations issued pursuant to said Acts and Order.
17. SOLICITATION OF EMPLOYEES - CONTRACTOR expressly agrees that CONTRACTOR shall not, during the term of this Contract, nor for a period of six months after termination, solicit for employment, whether as an employee or independent contractor, any person who is or has been employed by SCAQMD during the term of this Contract without the consent of SCAQMD.
18. PROPERTY AND SECURITY - Without limiting CONTRACTOR obligations with regard to security, CONTRACTOR shall comply with all the rules and regulations established by SCAQMD for access to and activity in and around SCAQMD premises.
19. ASSIGNMENT - The rights granted hereby may not be assigned, sold, licensed, or otherwise transferred by either party without the prior written consent of the other, and any attempt by either party to do so shall be void upon inception.
20. NON-EFFECT OF WAIVER - The failure of CONTRACTOR or SCAQMD to insist upon the performance of any or all of the terms, covenants, or conditions of this Contract, or failure to exercise any rights or remedies hereunder, shall not be construed as a waiver or relinquishment of the future performance of any such terms, covenants, or conditions, or of the future exercise of such rights or remedies, unless otherwise provided for herein.
21. ATTORNEYS' FEES - In the event any action is filed in connection with the enforcement or interpretation of this Contract, each party shall bear its own attorneys' fees and costs.
22. FORCE MAJEURE - Neither SCAQMD nor CONTRACTOR shall be liable or deemed to be in default for any delay or failure in performance under this Contract or interruption of services resulting, directly or indirectly, from acts of God, civil or military authority, acts of public enemy, war, strikes, labor disputes, shortages of suitable parts, materials, labor or transportation, or any similar cause beyond the reasonable control of SCAQMD or CONTRACTOR.
23. SEVERABILITY - In the event that any one or more of the provisions contained in this Contract shall for any reason be held to be unenforceable in any respect by a court of competent jurisdiction, such holding shall not affect any other provisions of this Contract, and the Contract shall then be construed as if such unenforceable provisions are not a part hereof.
24. HEADINGS - Headings on the clauses of this Contract are for convenience and reference only, and the words contained therein shall in no way be held to explain, modify, amplify, or aid in the interpretation, construction, or meaning of the provisions of this Contract.
25. DUPLICATE EXECUTION - This Contract is executed in duplicate. Each signed copy shall have the force and effect of an original.

26. GOVERNING LAW - This Contract shall be construed and interpreted and the legal relations created thereby shall be determined in accordance with the laws of the State of California. Venue for resolution of any disputes under this Contract shall be Los Angeles County, California.
27. PRE-CONTRACT COSTS - Any costs incurred by CONTRACTOR prior to CONTRACTOR receipt of a fully executed Contract shall be incurred solely at the risk of the CONTRACTOR. In the event that a formal Contract is not executed, the SCAQMD shall not be liable for any amounts expended in anticipation of a formal Contract. If a formal Contract does result, pre-contract cost expenditures authorized by the Contract will be reimbursed in accordance with the cost schedule and payment provision of the Contract.
28. CITIZENSHIP AND ALIEN STATUS
- A. CONTRACTOR warrants that it fully complies with all laws regarding the employment of aliens and others, and that its employees performing services hereunder meet the citizenship or alien status requirements contained in federal and state statutes and regulations including, but not limited to, the Immigration Reform and Control Act of 1986 (P.L. 99-603). CONTRACTOR shall obtain from all covered employees performing services hereunder all verification and other documentation of employees' eligibility status required by federal statutes and regulations as they currently exist and as they may be hereafter amended. CONTRACTOR shall have a continuing obligation to verify and document the continuing employment authorization and authorized alien status of employees performing services under this Contract to insure continued compliance with all federal statutes and regulations. Notwithstanding the above, CONTRACTOR, in the performance of this Contract, shall not discriminate against any person in violation of 8 USC Section 1324b.
- B. CONTRACTOR shall retain such documentation for all covered employees for the period described by law. CONTRACTOR shall indemnify, defend, and hold harmless SCAQMD, its officers and employees from employer sanctions and other liability which may be assessed against CONTRACTOR or SCAQMD, or both in connection with any alleged violation of federal statutes or regulations pertaining to the eligibility for employment of persons performing services under this Contract.
29. REQUIREMENT FOR FILING STATEMENT OF ECONOMIC INTERESTS - In accordance with the Political Reform Act of 1974 (Government Code Sec. 81000 et seq.) and regulations issued by the Fair Political Practices Commission (FPPC), SCAQMD has determined that the nature of the work to be performed under this Contract requires CONTRACTOR to submit a Form 700, Statement of Economic Interests for Designated Officials and Employees, for each of its employees assigned to work on this Contract. These forms may be obtained from SCAQMD's District Counsels' office. **[REMOVE IF NOT REQUESTED ON CRAM]**
- In addition, the Act requires a contractor to disqualify himself or herself from participating in, making or influencing a decision, which would have a foreseeable material effect on his or her financial interests.
30. COMPLIANCE WITH SINGLE AUDIT ACT REQUIREMENTS **[OPTIONAL - TO BE INCLUDED IN CONTRACTS WITH FOR-PROFIT CONTRACTORS WHICH HAVE FEDERAL PASS-THROUGH FUNDING]** - During the term of the Contract, and for a period of three (3) years from the date of Contract expiration, and if requested in writing by the SCAQMD, CONTRACTOR shall allow the SCAQMD, its designated representatives and/or the cognizant Federal Audit Agency, access during normal business hours to all records and reports related to the work performed under this Contract. CONTRACTOR assumes sole responsibility for reimbursement to the Federal Agency funding the prime grant or contract, a sum of money equivalent to the amount of any expenditures disallowed should the SCAQMD, its designated

representatives and/or the cognizant Federal Audit Agency rule through audit exception or some other appropriate means that expenditures from funds allocated to the CONTRACTOR were not made in compliance with the applicable cost principles, regulations of the funding agency, or the provisions of this Contract.

**[OPTIONAL - TO BE INCLUDED IN CONTRACTS WITH NON-PROFIT CONTRACTORS WHICH HAVE FEDERAL PASS-THROUGH FUNDING]**

- Beginning with CONTRACTOR's current fiscal year and continuing through the term of this Contract, CONTRACTOR shall have a single or program-specific audit conducted in accordance with the requirements of the Office of Management and Budget (OMB) Circular A-133 (Audits of States, Local Governments and Non-Profit Organizations), if CONTRACTOR expended Five Hundred Thousand Dollars (\$500,000) or more in a year in Federal Awards. Such audit shall be conducted by a firm of independent accountants in accordance with Generally Accepted Government Audit Standards (GAGAS). Within thirty (30) days of Contract execution, CONTRACTOR shall forward to SCAQMD the most recent A-133 Audit Report issued by its independent auditors. Subsequent A-133 Audit Reports shall be submitted to the SCAQMD within thirty (30) days of issuance.

CONTRACTOR shall allow the SCAQMD, its designated representatives and/or the cognizant Federal Audit Agency, access during normal business hours to all records and reports related to the work performed under this Contract. CONTRACTOR assumes sole responsibility for reimbursement to the Federal Agency funding the prime grant or contract, a sum of money equivalent to the amount of any expenditures disallowed should the SCAQMD, its designated representatives and/or the cognizant Federal Audit Agency rule through audit exception or some other appropriate means that expenditures from funds allocated to the CONTRACTOR were not made in compliance with the applicable cost principles, regulations of the funding agency, or the provisions of this Contract.

31. **[OPTION TO EXTEND THE TERM OF THE CONTRACT]** - SCAQMD reserves the right to extend the contract for a one-year period commencing **\*\*\*\*\***(enter date) at the **[option price or Not-to-Exceed Amount]** set forth in Attachment 2. In the event that SCAQMD elects to extend the contract, a written notice of its intent to extend the contract shall be provided to CONTRACTOR no later than thirty (30) days prior to Contract expiration. **[REMOVE IF NOT REQUESTED ON CRAM]**
32. **[PROPOSAL INCORPORATION]** – CONTRACTOR's proposal dated **\*\*\*** submitted in response to Request for Proposal (RFP) #**\*\*\***, is expressly incorporated herein by this reference and made a part hereof of this Contract. **[REMOVE IF NOT REQUESTED ON CRAM]**
33. **[KEY PERSONNEL]** - **[insert person's name]** is deemed critical to the successful performance of this Contract. Any changes in key personnel by CONTRACTOR must be approved by SCAQMD. All substitute personnel must possess qualifications/experience equal to the original named key personnel and must be approved by SCAQMD. SCAQMD reserves the right to interview proposed substitute key personnel. **[REMOVE IF NOT REQUESTED ON CRAM]**
34. **[PREVAILING WAGES]** – **[USE FOR INFRASTRUCTURE PROJECTS]** CONTRACTOR is alerted to the prevailing wage requirements of California Labor Code section 1770 et seq. Copies of the prevailing rate of per diem wages are on file at the SCAQMD's headquarters, of which shall be made available to any interested party on request. Notwithstanding the preceding sentence, CONTRACTOR shall be responsible for determining the applicability of the provisions of California Labor Code and complying with the same, including, without limitation, obtaining from the Director of the Department of Industrial Relations the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work, making the

same available to any interested party upon request, paying any applicable prevailing rates, posting copies thereof at the job site and flowing all applicable prevailing wage rate requirements to its subcontractors. CONTRACTOR shall indemnify, defend and hold harmless the South Coast Air Quality Management District against any and all claims, demands, damages, defense costs or liabilities based on failure to adhere to the above referenced statutes.

35. SUBCONTRACTOR APPROVAL – If CONTRACTOR intends to subcontract all or a portion of the work under this Contract, then CONTRACTOR must first obtain written approval from SCAQMD’s Executive Officer or designee prior to subcontracting any work. Any material changes to the subcontract(s) that affect the scope of work, deliverable schedule, and/or payment/cost schedule shall also require the prior written approval of the Executive Officer or designee. No subcontract charges will be reimbursed unless the required approvals have been obtained from SCAQMD.

36. ENTIRE CONTRACT - This Contract represents the entire agreement between the parties hereto related to CONTRACTOR providing services to SCAQMD and there are no understandings, representations, or warranties of any kind except as expressly set forth herein. No waiver, alteration, or modification of any of the provisions herein shall be binding on any party unless in writing and signed by the party against whom enforcement of such waiver, alteration, or modification is sought.

IN WITNESS WHEREOF, the parties to this Contract have caused this Contract to be duly executed on their behalf by their authorized representatives.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

\*\*\*

\_\_\_\_\_  
Barry R. Wallerstein, D.Env., Executive Officer  
Dr. William A. Burke, Chairman, Governing Board

\_\_\_\_\_  
Name:  
Title:

Date: \_\_\_\_\_

Date: \_\_\_\_\_

ATTEST:  
Saundra McDaniel, Clerk of the Board

By: \_\_\_\_\_

APPROVED AS TO FORM:  
Kurt R. Wiese, General Counsel

By: \_\_\_\_\_

//Standard Boilerplate  
Revised: April 3, 2013

# **ATTACHMENT A**

## **CERTIFICATIONS AND REPRESENTATIONS**





# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • [www.aqmd.gov](http://www.aqmd.gov)

## **Business Information Request**

Dear SCAQMD Contractor/Supplier:

The South Coast Air Quality Management District (SCAQMD) is committed to ensuring that our contractor/supplier records are current and accurate. If your firm is selected for award of a purchase order or contract, it is imperative that the information requested herein be supplied in a timely manner to facilitate payment of invoices. In order to process your payments, we need the enclosed information regarding your account. **Please review and complete the information identified on the following pages, complete the enclosed W-9 form, remember to sign both documents for our files, and return them as soon as possible to the address below:**

**Attention: Accounts Payable, Accounting Department  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765-4178**

If you do not return this information, we will not be able to establish you as a vendor. This will delay any payments and would still necessitate your submittal of the enclosed information to our Accounting department before payment could be initiated. Completion of this document and enclosed forms would ensure that your payments are processed timely and accurately.

If you have any questions or need assistance in completing this information, please contact Accounting at (909) 396-3777. We appreciate your cooperation in completing this necessary information.

Sincerely,

Michael B. O'Kelly  
Chief Financial Officer

DH:tm

Enclosures: Business Information Request  
Disadvantaged Business Certification  
W-9  
Form 590 Withholding Exemption Certificate  
Federal Contract Debarment Certification  
Campaign Contributions Disclosure  
Direct Deposit Authorization

REV 3/13



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178

(909) 396-2000 • [www.aqmd.gov](http://www.aqmd.gov)

## BUSINESS INFORMATION REQUEST

Business Name	
Division of	
Subsidiary of	
Website Address	
Type of Business <i>Check One:</i>	<input type="checkbox"/> Individual <input type="checkbox"/> DBA, Name _____, County Filed in _____ <input type="checkbox"/> Corporation, ID No. _____ <input type="checkbox"/> LLC/LLP, ID No. _____ <input type="checkbox"/> Other _____

## REMITTING ADDRESS INFORMATION

Address			
City/Town			
State/Province		Zip	
Phone	(    )    -    Ext	Fax	(    )    -
Contact		Title	
E-mail Address			
Payment Name if Different			

All invoices must reference the corresponding Purchase Order Number(s)/Contract Number(s) if applicable and mailed to:

**Attention: Accounts Payable, Accounting Department  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765-4178**

**DISADVANTAGED BUSINESS CERTIFICATION**

Federal guidance for utilization of disadvantaged business enterprises allows a vendor to be deemed a small business enterprise (SBE), minority business enterprise (MBE) or women business enterprise (WBE) if it meets the criteria below.

- is certified by the Small Business Administration or
- is certified by a state or federal agency or
- is an independent MBE(s) or WBE(s) business concern which is at least 51 percent owned and controlled by minority group member(s) who are citizens of the United States.

Statements of certification:

As a prime contractor to the SCAQMD, \_\_\_\_\_ (name of business) will engage in good faith efforts to achieve the fair share in accordance with 40 CFR Section 33.301, and will follow the six affirmative steps listed below **for contracts or purchase orders funded in whole or in part by federal grants and contracts.**

1. Place qualified SBEs, MBEs, and WBEs on solicitation lists.
2. Assure that SBEs, MBEs, and WBEs are solicited whenever possible.
3. When economically feasible, divide total requirements into small tasks or quantities to permit greater participation by SBEs, MBEs, and WBEs.
4. Establish delivery schedules, if possible, to encourage participation by SBEs, MBEs, and WBEs.
5. Use services of Small Business Administration, Minority Business Development Agency of the Department of Commerce, and/or any agency authorized as a clearinghouse for SBEs, MBEs, and WBEs.
6. If subcontracts are to be let, take the above affirmative steps.

Self-Certification Verification: Also for use in awarding additional points, as applicable, in accordance with SCAQMD Procurement Policy and Procedure:

Check all that apply:

- |   |  |
|---|--|
| <input type="checkbox"/> Small Business Enterprise/Small Business Joint Venture | <input type="checkbox"/> Women-owned Business Enterprise                               |
| <input type="checkbox"/> Local business   | <input type="checkbox"/> Disabled Veteran-owned Business Enterprise/DVBE Joint Venture |
| <input type="checkbox"/> Minority-owned Business Enterprise                     |  |

Percent of ownership: \_\_\_\_\_ %

Name of Qualifying Owner(s): \_\_\_\_\_

I, the undersigned, hereby declare that to the best of my knowledge the above information is accurate. Upon penalty of perjury, I certify information submitted is factual.

\_\_\_\_\_  
NAME

\_\_\_\_\_  
TITLE

\_\_\_\_\_  
TELEPHONE NUMBER

\_\_\_\_\_  
DATE

## Definitions

**Disabled Veteran-Owned Business Enterprise** means a business that meets all of the following criteria:

- is a sole proprietorship or partnership of which is at least 51 percent owned by one or more disabled veterans, or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more disabled veterans; a subsidiary which is wholly owned by a parent corporation but only if at least 51 percent of the voting stock of the parent corporation is owned by one or more disabled veterans; or a joint venture in which at least 51 percent of the joint venture's management and control and earnings are held by one or more disabled veterans.
- the management and control of the daily business operations are by one or more disabled veterans. The disabled veterans who exercise management and control are not required to be the same disabled veterans as the owners of the business.
- is a sole proprietorship, corporation, partnership, or joint venture with its primary headquarters office located in the United States and which is not a branch or subsidiary of a foreign corporation, firm, or other foreign-based business.

**Joint Venture** means that one party to the joint venture is a DVBE and owns at least 51 percent of the joint venture. In the case of a joint venture formed for a single project this means that DVBE will receive at least 51 percent of the project dollars.

**Local Business** means a business that meets all of the following criteria:

- has an ongoing business within the boundary of the SCAQMD at the time of bid application.
- performs 90 percent of the work within SCAQMD's jurisdiction.

**Minority-Owned Business Enterprise** means a business that meets all of the following criteria:

- is at least 51 percent owned by one or more minority persons or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more minority persons.
- is a business whose management and daily business operations are controlled or owned by one or more minority person.
- is a business which is a sole proprietorship, corporation, partnership, joint venture, an association, or a cooperative with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, foreign firm, or other foreign business.

"Minority" person means a Black American, Hispanic American, Native American (including American Indian, Eskimo, Aleut, and Native Hawaiian), Asian-Indian American (including a person whose origins are from India, Pakistan, or Bangladesh), Asian-Pacific American (including a person whose origins are from Japan, China, the Philippines, Vietnam, Korea, Samoa, Guam, the United States Trust Territories of the Pacific, Northern Marianas, Laos, Cambodia, or Taiwan).

**Small Business Enterprise** means a business that meets the following criteria:

- a. 1) an independently owned and operated business; 2) not dominant in its field of operation; 3) together with affiliates is either:
  - **A service, construction, or non-manufacturer with 100 or fewer employees, and average annual gross receipts of ten million dollars (\$10,000,000) or less over the previous three years, or**
  - A manufacturer with 100 or fewer employees.
- b. Manufacturer means a business that is both of the following:
  - 1) Primarily engaged in the chemical or mechanical transformation of raw materials or processed substances into new products.
  - 2) Classified between Codes 311000 to 339000, inclusive, of the North American Industrial Classification System (NAICS) Manual published by the United States Office of Management and Budget, 2007 edition.

**Small Business Joint Venture** means that one party to the joint venture is a Small Business and owns at least 51 percent of the joint venture. In the case of a joint venture formed for a single project this means that the Small Business will receive at least 51 percent of the project dollars.

**Women-Owned Business Enterprise** means a business that meets all of the following criteria:

- is at least 51 percent owned by one or more women or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more women.
- is a business whose management and daily business operations are controlled or owned by one or more women.
- is a business which is a sole proprietorship, corporation, partnership, or a joint venture, with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, foreign firm, or other foreign business.

## Request for Taxpayer Identification Number and Certification

Give Form to the  
requester. Do not  
send to the IRS.

Print or type See Specific Instructions on page 2.	Name (as shown on your income tax return)	
	Business name/disregarded entity name, if different from above	
	Check appropriate box for federal tax classification: <input type="checkbox"/> Individual/sole proprietor <input type="checkbox"/> C Corporation <input type="checkbox"/> S Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust/estate  <input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶ _____  <input type="checkbox"/> Other (see instructions) ▶ _____	
	<input type="checkbox"/> Exempt payee	
	Address (number, street, and apt. or suite no.)	Requester's name and address (optional)
City, state, and ZIP code		
List account number(s) here (optional)		

### Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on the "Name" line to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Social security number									

**Note.** If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Employer identification number									

### Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. citizen or other U.S. person (defined below).

**Certification instructions.** You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 4.

<b>Sign Here</b>	Signature of U.S. person ▶	Date ▶
------------------	----------------------------	--------

### General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

#### Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

**Note.** If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

**Definition of a U.S. person.** For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

**Special rules for partnerships.** Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases:

- The U.S. owner of a disregarded entity and not the entity,
- The U.S. grantor or other owner of a grantor trust and not the trust, and
- The U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

**Foreign person.** If you are a foreign person, do not use Form W-9. Instead, use the appropriate Form W-8 (see Publication 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

**Nonresident alien who becomes a resident alien.** Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a “saving clause.” Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items:

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
2. The treaty article addressing the income.
3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
4. The type and amount of income that qualifies for the exemption from tax.
5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

**Example.** Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity not subject to backup withholding, give the requester the appropriate completed Form W-8.

**What is backup withholding?** Persons making certain payments to you must under certain conditions withhold and pay to the IRS a percentage of such payments. This is called “backup withholding.” Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

#### Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester,
2. You do not certify your TIN when required (see the Part II instructions on page 3 for details),
3. The IRS tells the requester that you furnished an incorrect TIN,
4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or
5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See the instructions below and the separate Instructions for the Requester of Form W-9.

Also see *Special rules for partnerships* on page 1.

### Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account, for example, if the grantor of a grantor trust dies.

### Penalties

**Failure to furnish TIN.** If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

**Civil penalty for false information with respect to withholding.** If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

**Criminal penalty for falsifying information.** Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

**Misuse of TINs.** If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

### Specific Instructions

#### Name

If you are an individual, you must generally enter the name shown on your income tax return. However, if you have changed your last name, for instance, due to marriage without informing the Social Security Administration of the name change, enter your first name, the last name shown on your social security card, and your new last name.

If the account is in joint names, list first, and then circle, the name of the person or entity whose number you entered in Part I of the form.

**Sole proprietor.** Enter your individual name as shown on your income tax return on the “Name” line. You may enter your business, trade, or “doing business as (DBA)” name on the “Business name/disregarded entity name” line.

**Partnership, C Corporation, or S Corporation.** Enter the entity’s name on the “Name” line and any business, trade, or “doing business as (DBA) name” on the “Business name/disregarded entity name” line.

**Disregarded entity.** Enter the owner’s name on the “Name” line. The name of the entity entered on the “Name” line should never be a disregarded entity. The name on the “Name” line must be the name shown on the income tax return on which the income will be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a domestic owner, the domestic owner’s name is required to be provided on the “Name” line. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity’s name on the “Business name/disregarded entity name” line. If the owner of the disregarded entity is a foreign person, you must complete an appropriate Form W-8.

**Note.** Check the appropriate box for the federal tax classification of the person whose name is entered on the “Name” line (Individual/sole proprietor, Partnership, C Corporation, S Corporation, Trust/estate).

**Limited Liability Company (LLC).** If the person identified on the “Name” line is an LLC, check the “Limited liability company” box only and enter the appropriate code for the tax classification in the space provided. If you are an LLC that is treated as a partnership for federal tax purposes, enter “P” for partnership. If you are an LLC that has filed a Form 8832 or a Form 2553 to be taxed as a corporation, enter “C” for C corporation or “S” for S corporation. If you are an LLC that is disregarded as an entity separate from its owner under Regulation section 301.7701-3 (except for employment and excise tax), do not check the LLC box unless the owner of the LLC (required to be identified on the “Name” line) is another LLC that is not disregarded for federal tax purposes. If the LLC is disregarded as an entity separate from its owner, enter the appropriate tax classification of the owner identified on the “Name” line.

**Other entities.** Enter your business name as shown on required federal tax documents on the "Name" line. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on the "Business name/disregarded entity name" line.

**Exempt Payee**

If you are exempt from backup withholding, enter your name as described above and check the appropriate box for your status, then check the "Exempt payee" box in the line following the "Business name/disregarded entity name," sign and date the form.

Generally, individuals (including sole proprietors) are not exempt from backup withholding. Corporations are exempt from backup withholding for certain payments, such as interest and dividends.

**Note.** If you are exempt from backup withholding, you should still complete this form to avoid possible erroneous backup withholding.

The following payees are exempt from backup withholding:

1. An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2),
2. The United States or any of its agencies or instrumentalities,
3. A state, the District of Columbia, a possession of the United States, or any of their political subdivisions or instrumentalities,
4. A foreign government or any of its political subdivisions, agencies, or instrumentalities, or
5. An international organization or any of its agencies or instrumentalities.

Other payees that may be exempt from backup withholding include:

6. A corporation,
7. A foreign central bank of issue,
8. A dealer in securities or commodities required to register in the United States, the District of Columbia, or a possession of the United States,
9. A futures commission merchant registered with the Commodity Futures Trading Commission,
10. A real estate investment trust,
11. An entity registered at all times during the tax year under the Investment Company Act of 1940,
12. A common trust fund operated by a bank under section 584(a),
13. A financial institution,
14. A middleman known in the investment community as a nominee or custodian, or
15. A trust exempt from tax under section 664 or described in section 4947.

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 15.

IF the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt payees except for 9
Broker transactions	Exempt payees 1 through 5 and 7 through 13. Also, C corporations.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 5
Payments over \$600 required to be reported and direct sales over \$5,000 <sup>1</sup>	Generally, exempt payees 1 through 7 <sup>2</sup>

<sup>1</sup> See Form 1099-MISC, Miscellaneous Income, and its instructions.

<sup>2</sup> However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney, and payments for services paid by a federal executive agency.

**Part I. Taxpayer Identification Number (TIN)**

**Enter your TIN in the appropriate box.** If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN. However, the IRS prefers that you use your SSN.

If you are a single-member LLC that is disregarded as an entity separate from its owner (see *Limited Liability Company (LLC)* on page 2), enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

**Note.** See the chart on page 4 for further clarification of name and TIN combinations.

**How to get a TIN.** If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local Social Security Administration office or get this form online at [www.ssa.gov](http://www.ssa.gov). You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at [www.irs.gov/businesses](http://www.irs.gov/businesses) and clicking on Employer Identification Number (EIN) under Starting a Business. You can get Forms W-7 and SS-4 from the IRS by visiting [IRS.gov](http://IRS.gov) or by calling 1-800-TAX-FORM (1-800-829-3676).

If you are asked to complete Form W-9 but do not have a TIN, write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

**Note.** Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

**Caution:** A disregarded domestic entity that has a foreign owner must use the appropriate Form W-8.

**Part II. Certification**

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if item 1, below, and items 4 and 5 on page 4 indicate otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on the "Name" line must sign. Exempt payees, see *Exempt Payee* on page 3.

**Signature requirements.** Complete the certification as indicated in items 1 through 3, below, and items 4 and 5 on page 4.

**1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983.** You must give your correct TIN, but you do not have to sign the certification.

**2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983.** You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

**3. Real estate transactions.** You must sign the certification. You may cross out item 2 of the certification.



**4. Other payments.** You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

**5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions.** You must give your correct TIN, but you do not have to sign the certification.

**Note.** If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

**Secure Your Tax Records from Identity Theft**

Identity theft occurs when someone uses your personal information such as your name, social security number (SSN), or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Publication 4535, Identity Theft Prevention and Victim Assistance.

Victims of identity theft who are experiencing economic harm or a system problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

**Protect yourself from suspicious emails or phishing schemes.**

Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to [phishing@irs.gov](mailto:phishing@irs.gov). You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at: [spam@uce.gov](mailto:spam@uce.gov) or contact them at [www.ftc.gov/idtheft](http://www.ftc.gov/idtheft) or 1-877-IDTHEFT (1-877-438-4338).

Visit [IRS.gov](http://IRS.gov) to learn more about identity theft and how to reduce your risk.

**What Name and Number To Give the Requester**

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account)	The actual owner of the account or, if combined funds, the first individual on the account <sup>1</sup>
3. Custodian account of a minor (Uniform Gift to Minors Act)	The minor <sup>2</sup>
4. a. The usual revocable savings trust (grantor is also trustee) b. So-called trust account that is not a legal or valid trust under state law	The grantor-trustee <sup>1</sup>  The actual owner <sup>1</sup>
5. Sole proprietorship or disregarded entity owned by an individual	The owner <sup>3</sup>
6. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulation section 1.671-4(b)(2)(i)(A))	The grantor <sup>4</sup>
For this type of account:	Give name and EIN of:
7. Disregarded entity not owned by an individual	The owner
8. A valid trust, estate, or pension trust	Legal entity <sup>4</sup>
9. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
10. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
11. Partnership or multi-member LLC	The partnership
12. A broker or registered nominee	The broker or nominee
13. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
14. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulation section 1.671-4(b)(2)(i)(B))	The trust

<sup>1</sup> List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

<sup>2</sup> Circle the minor's name and furnish the minor's SSN.

<sup>3</sup> You must show your individual name and you may also enter your business or "DBA" name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

<sup>4</sup> List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships* on page 1.

\*Note. Grantor also must provide a Form W-9 to trustee of trust.

**Privacy Act Notice**

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

# 2013 Withholding Exemption Certificate

590

This form can only be used to certify exemption from nonresident withholding under California Revenue and Taxation Code (R&TC) Section 18662. Do not use this form for exemption from wage withholding.

File this form with your withholding agent. (Please type or print)

Withholding agent's name \_\_\_\_\_

Payee's name \_\_\_\_\_

Payee's  SSN or ITIN  FEIN  
 CA corp. no.  CA SOS file no

Address (number and street, PO Box, or PMB no.) \_\_\_\_\_

Apt. no./ Ste. no. \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

ZIP Code \_\_\_\_\_

Read the following carefully and check the box that applies to the payee.

I certify that for the reasons checked below, the payee named on this form is exempt from the California income tax withholding requirement on payment(s) made to the entity or individual.

**Individuals — Certification of Residency:**

I am a resident of California and I reside at the address shown above. If I become a nonresident at any time, I will promptly notify the withholding agent. See instructions for General Information D, Who is a Resident, for the definition of a resident.

**Corporations:**

The above-named corporation has a permanent place of business in California at the address shown above or is qualified through the California Secretary of State (SOS) to do business in California. The corporation will file a California tax return and withhold on payments of California source income to nonresidents when required. If this corporation ceases to have a permanent place of business in California or ceases to do any of the above, I will promptly notify the withholding agent. See instructions for General Information F, What is a Permanent Place of Business, for the definition of permanent place of business.

**Partnerships or limited liability companies (LLC):**

The above-named partnership or LLC has a permanent place of business in California at the address shown above or is registered with the California SOS, and is subject to the laws of California. The partnership or LLC will file a California tax return and will withhold on foreign and domestic nonresident partners or members when required. If the partnership or LLC ceases to do any of the above, I will promptly inform the withholding agent. For withholding purposes, a limited liability partnership (LLP) is treated like any other partnership.

**Tax-Exempt Entities:**

The above-named entity is exempt from tax under California Revenue and Taxation Code (R&TC) Section 23701 \_\_\_\_\_ (insert letter) or Internal Revenue Code Section 501(c) \_\_\_\_\_ (insert number). The tax-exempt entity will withhold on payments of California source income to nonresidents when required. If this entity ceases to be exempt from tax, I will promptly notify the withholding agent. Individuals cannot be tax-exempt entities.

**Insurance Companies, Individual Retirement Arrangements (IRAs), or Qualified Pension/Profit Sharing Plans:**

The above-named entity is an insurance company, IRA, or a federally qualified pension or profit-sharing plan.

**California Trusts:**

At least one trustee and one noncontingent beneficiary of the above-named trust is a California resident. The trust will file a California fiduciary tax return and will withhold on foreign and domestic nonresident beneficiaries when required. If the trustee becomes a nonresident at any time, I will promptly notify the withholding agent.

**Estates — Certification of Residency of Deceased Person:**

I am the executor of the above-named person's estate. The decedent was a California resident at the time of death. The estate will file a California fiduciary tax return and will withhold on foreign and domestic nonresident beneficiaries when required.

**Nonmilitary Spouse of a Military Servicemember:**

I am a nonmilitary spouse of a military servicemember and I meet the Military Spouse Residency Relief Act (MSRRA) requirements. See instructions for General Information E, MSRRA.

**CERTIFICATE:** Please complete and sign below.

Under penalties of perjury, I hereby certify that the information provided in this document is, to the best of my knowledge, true and correct. If conditions change, I will promptly notify the withholding agent.

Payee's name and title (type or print) \_\_\_\_\_ Daytime telephone no. \_\_\_\_\_

Payee's signature  \_\_\_\_\_ Date \_\_\_\_\_

# Instructions for Form 590

## Withholding Exemption Certificate

References in these instructions are to the California Revenue and Taxation Code (R&TC).

### General Information

For purposes of California income tax, references to a spouse, husband, or wife also refer to a Registered Domestic Partner (RDP) unless otherwise specified. For more information on RDPs, get FTB Pub. 737, Tax Information for Registered Domestic Partners.

**Private Mail Box (PMB)** – Include the PMB in the address field. Write “PMB” first, then the box number. Example: 111 Main Street PMB 123.

**Foreign Address** – Enter the information in the following order: City, Country, Province/Region, and Postal Code. Follow the country’s practice for entering the postal code. Do not abbreviate the country’s name.

### A Purpose

Use Form 590, Withholding Exemption Certificate, to certify an exemption from nonresident withholding. California residents or entities should complete and present Form 590 to the withholding agent. The withholding agent is then relieved of the withholding requirements if the agent relies in good faith on a completed and signed Form 590 unless told by the Franchise Tax Board (FTB) that the form should not be relied upon.

**Important** – This form cannot be used for exemption from wage and real estate withholding.

- If you are an employee, any wage withholding questions should be directed to the FTB General Information number, 800.852.5711. Employers should call 888.745.3886 or go to [edd.ca.gov](http://edd.ca.gov).
- Sellers of California real estate use Form 593-C, Real Estate Withholding Certificate, to claim an exemption from real estate withholding.

### B Requirement

R&TC Section 18662 requires withholding of income or franchise tax on payments of California source income made to nonresidents of California.

Withholding is required on the following, but is not limited to:

- Payments to nonresidents for services rendered in California.
- Distributions of California source income made to domestic nonresident S corporation shareholders, partners and members and allocations of California source income made to foreign partners and members.
- Payments to nonresidents for rents if the payments are made in the course of the withholding agent’s business.
- Payments to nonresidents for royalties with activities in California.

- Distributions of California source income to nonresident beneficiaries from an estate or trust.
- Prizes and winnings received by nonresidents for contests in California.

However, withholding is optional if the total payments of California source income are \$1,500 or less during the calendar year.

For more information on withholding get FTB Pub. 1017, Resident and Nonresident Withholding Guidelines. To get a withholding publication see General Information H, Publications, Forms, and Additional Information.

**Backup Withholding** – Beginning on or after January 1, 2010, with certain limited exceptions, payers that are required to withhold and remit backup withholding to the Internal Revenue Service (IRS) are also required to withhold and remit to the FTB. The California backup withholding rate is 7% of the payment. For California purposes, dividends, interests, and any financial institutions release of loan funds made in the normal course of business are exempt from backup withholding. For additional information on California backup withholding, go to [ftb.ca.gov](http://ftb.ca.gov) and search for **backup withholding**.

If a payee has backup withholding, the payee must contact the FTB to provide a valid Taxpayer Identification Number (TIN) before filing a tax return. The following are acceptable TINs: social security number (SSN); individual taxpayer identification number (ITIN); federal employer identification number (FEIN); California corporation number (CA Corp No.); or California Secretary of State (SOS) file number. Failure to provide a valid TIN will result in the denial of the backup withholding credit. For more information go to [ftb.ca.gov](http://ftb.ca.gov) and search for **backup withholding**.

**Who is Excluded from Withholding** – The following are excluded from withholding and completing this form:

- The United States and any of its agencies or instrumentalities
- A state, a possession of the United States, the District of Columbia, or any of its political subdivisions or instrumentalities
- A foreign government or any of its political subdivisions, agencies, or instrumentalities

### C Who Certifies this Form

Form 590 is certified by the payee. An incomplete certificate is invalid and the withholding agent should not accept it. If the withholding agent receives an incomplete certificate, the withholding agent is required to withhold tax on payments made to the payee until a valid certificate is received. In lieu of a completed certificate on the preprinted form, the

withholding agent may accept as a substitute certificate a letter from the payee explaining why the payee is not subject to withholding. The letter must contain all the information required on the certificate in similar language, including the under penalty of perjury statement and the payee’s taxpayer identification number. The withholding agent must retain a copy of the certificate or substitute for at least four years after the last payment to which the certificate applies, and provide it upon request to the FTB.

For example, if an entertainer (or the entertainer’s business entity) is paid for a performance, the entertainer’s information must be provided. Do not submit the entertainer’s agent or promoter information.

The grantor of a grantor trust shall be treated as the payee for withholding purposes.

Therefore, if the payee is a grantor trust and one or more of the grantors is a nonresident, withholding is required. If all of the grantors on the trust are residents, no withholding is required. Resident grantors can check the box on Form 590 labeled “Individuals — Certification of Residency.”

### D Who is a Resident

A California resident is any individual who is in California for other than a temporary or transitory purpose or any individual domiciled in California who is absent for a temporary or transitory purpose.

An individual domiciled in California who is absent from California for an uninterrupted period of at least 546 consecutive days under an employment-related contract is considered outside California for other than a temporary or transitory purpose.

An individual is still considered outside California for other than a temporary or transitory purpose if return visits to California do not total more than 45 days during any taxable year covered by an employment contract.

This provision does not apply if an individual has income from stocks, bonds, notes, or other intangible personal property in excess of \$200,000 in any taxable year in which the employment-related contract is in effect.

A spouse/RDP absent from California for an uninterrupted period of at least 546 days to accompany a spouse/RDP under an employment-related contract is considered outside of California for other than a temporary or transitory purpose.

Generally, an individual who comes to California for a purpose which will extend over a long or indefinite period will be considered a resident. However, an individual who comes to perform a particular contract of short duration will be considered a nonresident.

For assistance in determining resident status, get FTB Pub. 1031, Guidelines for Determining Resident Status, and FTB Pub. 1032, Tax Information for Military Personnel, or call the FTB at 800.852.5711 or 916.845.6500.

## E Military Spouse Residency Relief Act (MSRRA)

Generally, for tax purposes you are considered to maintain your existing residence or domicile. If a military servicemember and nonmilitary spouse have the same state of domicile, the MSRRA provides:

- A spouse shall not be deemed to have lost a residence or domicile in any state solely by reason of being absent to be with the servicemember serving in compliance with military orders.
- A spouse shall not be deemed to have acquired a residence or domicile in any other state solely by reason of being there to be with the servicemember serving in compliance with military orders.

Domicile is defined as the one place:

- Where you maintain a true, fixed, and permanent home
- To which you intend to return whenever you are absent

A military servicemember's nonmilitary spouse is considered a nonresident for tax purposes if the servicemember and spouse have the same domicile outside of California and the spouse is in California solely to be with the servicemember who is serving in compliance with Permanent Change of Station orders.

Note: California may require nonmilitary spouses of military servicemembers to provide proof that they meet the criteria for California personal income tax exemption as set forth in the MSRRA.

Income of a military servicemember's nonmilitary spouse for services performed in California is not California source income subject to state tax if the spouse is in California to be with the servicemember serving in compliance with military orders, and the servicemember and spouse have the same domicile in a state other than California.

For additional information or assistance in determining whether the applicant meets the MSRRA requirements, get FTB Pub. 1032.

## F What is a Permanent Place of Business

A corporation has a permanent place of business in California if it is organized and existing under the laws of California or if it is a foreign corporation qualified to transact intrastate business by the California SOS. A corporation that has not qualified to transact intrastate business (e.g., a corporation engaged exclusively in interstate commerce) will be considered as having a permanent place of business in California only if it maintains a permanent office in California that is permanently staffed by its employees.

## G Withholding Agent

Keep Form 590 for your records. Do not send this form to the FTB unless it has been specifically requested.

For more information, contact Withholding Services and Compliance, see General Information H.

The payee must notify the withholding agent if any of the following situations occur:

- The individual payee becomes a nonresident.
- The corporation ceases to have a permanent place of business in California or ceases to be qualified to do business in California.
- The partnership ceases to have a permanent place of business in California.
- The LLC ceases to have a permanent place of business in California.
- The tax-exempt entity loses its tax-exempt status.

The withholding agent must then withhold and report the withholding using Form 592, Resident and Nonresident Withholding Statement, and remit the withholding using Form 592-V, Payment Voucher for Resident and Nonresident Withholding. Form 592-B, Resident and Nonresident Withholding Tax Statement, is retained by the withholding agent and a copy is given to the payee.

## H Additional Information

To get additional nonresident withholding information, contact the Withholding Services and Compliance.

WITHHOLDING SERVICES AND COMPLIANCE MS F182  
FRANCHISE TAX BOARD  
PO BOX 942867  
SACRAMENTO CA 94267-0651

Telephone: 888.792.4900  
916.845.4900  
Fax: 916.845.9512

You can download, view, and print California tax forms and publications at [ftb.ca.gov](http://ftb.ca.gov).

OR to get forms by mail write to:

TAX FORMS REQUEST UNIT MS F284  
FRANCHISE TAX BOARD  
PO BOX 307  
RANCHO CORDOVA CA 95741-0307

For all other questions unrelated to withholding or to access the TTY/TDD numbers, see the information below.

Internet and Telephone Assistance

Website: [ftb.ca.gov](http://ftb.ca.gov)

Telephone: 800.852.5711 from within the United States  
916.845.6500 from outside the United States

TTY/TDD: 800.822.6268 for persons with hearing or speech impairments

Asistencia Por Internet y Teléfono

Sitio web: [ftb.ca.gov](http://ftb.ca.gov)

Teléfono: 800.852.5711 dentro de los Estados Unidos  
916.845.6500 fuera de los Estados Unidos

TTY/TDD: 800.822.6268 personas con discapacidades auditivas y del habla



United State Environmental Protection Agency  
Washington, DC 20460

## **Certification Regarding Debarment, Suspension, and Other Responsibility Matters**

The prospective participant certifies to the best of its knowledge and belief that it and the principals:

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- (b) Have not within a three year period preceding this proposal been convicted of or had a civil judgement rendered against them or commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction: violation of Federal or State antitrust statute or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (c) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (b) of this certification; and
- (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

I understand that a false statement on this certification may be grounds for rejection of this proposal or termination of the award. In addition, under 18 USC Sec. 1001, a false statement may result in a fine of up to \$10,000 or imprisonment for up to 5 years, or both.

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Typed Name & Title of Authorized Representative

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Signature of Authorized Representative Date

I am unable to certify to the above statements. My explanation is attached.



## CAMPAIGN CONTRIBUTIONS DISCLOSURE

In accordance with California law, bidders and contracting parties are required to disclose, at the time the application is filed, information relating to any campaign contributions made to South Coast Air Quality Management District (SCAQMD) Board Members or members/alternates of the MSRC, including: the name of the party making the contribution (which includes any parent, subsidiary or otherwise related business entity, as defined below), the amount of the contribution, and the date the contribution was made. 2 C.C.R. §18438.8(b).

California law prohibits a party, or an agent, from making campaign contributions to SCAQMD Governing Board Members or members/alternates of the Mobile Source Air Pollution Reduction Review Committee (MSRC) of more than \$250 while their contract or permit is pending before the SCAQMD; and further prohibits a campaign contribution from being made for three (3) months following the date of the final decision by the Governing Board or the MSRC on a donor's contract or permit. Gov't Code §84308(d). For purposes of reaching the \$250 limit, the campaign contributions of the bidder or contractor plus contributions by its parents, affiliates, and related companies of the contractor or bidder are added together. 2 C.C.R. §18438.5.

In addition, SCAQMD Board Members or members/alternates of the MSRC must abstain from voting on a contract or permit if they have received a campaign contribution from a party or participant to the proceeding, or agent, totaling more than \$250 in the 12-month period prior to the consideration of the item by the Governing Board or the MSRC. Gov't Code §84308(c).

The list of current SCAQMD Governing Board Members can be found at the SCAQMD website ([www.aqmd.gov](http://www.aqmd.gov)). The list of current MSRC members/alternates can be found at the MSRC website (<http://www.cleantransportationfunding.org>).

### **SECTION I.**

**Contractor (Legal Name):** \_\_\_\_\_

<input type="checkbox"/> DBA, Name _____, County Filed in _____ <input type="checkbox"/> Corporation, ID No. _____ <input type="checkbox"/> LLC/LLP, ID No. _____
---

**List any parent, subsidiaries, or otherwise affiliated business entities of Contractor:**  
(See definition below).

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### **SECTION II.**

Has Contractor and/or any parent, subsidiary, or affiliated company, or agent thereof, made a campaign contribution(s) totaling \$250 or more in the aggregate to a current member of the South Coast Air Quality Management Governing Board or member/alternate of the MSRC in the 12 months preceding the date of execution of this disclosure?

Yes     No    **If YES, complete Section II below and then sign and date the form. If NO, sign and date below. Include this form with your submittal.**

**Campaign Contributions Disclosure, *continued*:**

Name of Contributor \_\_\_\_\_

Governing Board Member or MSRC Member/Alternate	Amount of Contribution	Date of Contribution
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Name of Contributor \_\_\_\_\_

Governing Board Member or MSRC Member/Alternate	Amount of Contribution	Date of Contribution
---	------------------------	----------------------

Name of Contributor \_\_\_\_\_

Governing Board Member or MSRC Member/Alternate	Amount of Contribution	Date of Contribution
---	------------------------	----------------------

Name of Contributor \_\_\_\_\_

Governing Board Member or MSRC Member/Alternate	Amount of Contribution	Date of Contribution
---	------------------------	----------------------

**I declare the foregoing disclosures to be true and correct.**

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**DEFINITIONS**

Parent, Subsidiary, or Otherwise Related Business Entity (2 Cal. Code of Regs., §18703.1(d).)

- (1) Parent subsidiary. A parent subsidiary relationship exists when one corporation directly or indirectly owns shares possessing more than 50 percent of the voting power of another corporation.
- (2) Otherwise related business entity. Business entities, including corporations, partnerships, joint ventures and any other organizations and enterprises operated for profit, which do not have a parent subsidiary relationship are otherwise related if any one of the following three tests is met:
  - (A) One business entity has a controlling ownership interest in the other business entity.
  - (B) There is shared management and control between the entities. In determining whether there is shared management and control, consideration should be given to the following factors:
    - (i) The same person or substantially the same person owns and manages the two entities;
    - (ii) There are common or commingled funds or assets;
    - (iii) The business entities share the use of the same offices or employees, or otherwise share activities, resources or personnel on a regular basis;
    - (iv) There is otherwise a regular and close working relationship between the entities; or
  - (C) A controlling owner (50% or greater interest as a shareholder or as a general partner) in one entity also is a controlling owner in the other entity.



South Coast  
 AIR QUALITY MANAGEMENT DISTRICT  
 21865 Copley Dr., Diamond Bar, CA 91765  
 www.aqmd.gov

### Direct Deposit Authorization

**STEP 1: Please check all the appropriate boxes**

- |  |  |
|--|--|
| <input type="checkbox"/> Individual (Employee, Governing Board Member) | <input type="checkbox"/> New Request           |
| <input type="checkbox"/> Vendor/Contractor                             | <input type="checkbox"/> Cancel Direct Deposit |
| <input type="checkbox"/> Changed Information                           |  |

**STEP 2: Payee Information**

Last Name		First Name		Middle Initial	Title
Vendor/Contractor Business Name (if applicable)					
Address				Apartment or P.O. Box Number	
City		State	Zip	Country	
Taxpayer ID Number		Telephone Number		Email Address	

**Authorization**

- I authorize South Coast Air Quality Management District (SCAQMD) to direct deposit funds to my account in the financial institution as indicated below. I understand that the authorization may be rejected or discontinued by SCAQMD at any time. If any of the above information changes, I will promptly complete a new authorization agreement. If the direct deposit is not stopped before closing an account, funds payable to me will be returned to SCAQMD for distribution. This will delay my payment.
- This authorization remains in effect until SCAQMD receives written notification of changes or cancellation from you.
- I hereby release and hold harmless SCAQMD for any claims or liability to pay for any losses or costs related to insufficient fund transactions that result from failure within the Automated Clearing House network to correctly and timely deposit monies into my account.

**STEP 3:**

You must verify that your bank is a member of an Automated Clearing House (ACH). Failure to do so could delay the processing of your payment. You must attach a voided check or have your bank complete the bank information and the account holder must sign below.

**To be Completed by your Bank**

<b>Staple Voided Check Here</b>	Name of Bank/Institution				
	Account Holder Name(s)				
	<input type="checkbox"/> Saving <input type="checkbox"/> Checking		Account Number	Routing Number	
	Bank Representative Printed Name		Bank Representative Signature		Date
	ACCOUNT HOLDER SIGNATURE:				Date

For SCAQMD Use  
Only

Input By \_\_\_\_\_

Date \_\_\_\_\_



[↑ Back to Agenda](#)

BOARD MEETING DATE: July 11, 2014

AGENDA NO. 10

**PROPOSAL:** Issue Program Announcement for Low-Emission Leaf Blower Vendors

**SYNOPSIS:** To follow up on the successful Leaf Blower Exchange Programs, staff proposes a similar incentive in the fall of 2014 to generate cost-effective emission reductions. This action is to issue a Program Announcement to solicit competitive bids from manufacturers of low-emission leaf blowers in sufficient quantities and at the lowest possible price.

**COMMITTEE:** Mobile Source, June 20, 2014; Recommended for Approval

**RECOMMENDED ACTION:**

Approve issuance of Program Announcement #PA2015-01 to identify potential manufacturers or suppliers of low-emission/low-noise backpack leaf blowers capable of providing up to 1,500 units.

Barry R. Wallerstein, D. Env  
Executive Officer

MMM:FM:SS

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**Background**

Since 2006, the SCAQMD has conducted the Leaf Blower Exchange Program annually to encourage professional gardeners and landscapers operating within the SCAQMD's four-county jurisdiction to turn in their old, polluting backpack leaf blowers and purchase new, low-emission/low-noise leaf blowers at a reduced price. The program has been very successful, resulting in the exchange of over 10,000 leaf blowers. The leaf blower previously offered was the only model certified by CARB to have emission levels below the "Blue Sky Series" voluntary standards. The Blue Sky Series voluntary standards for hydrocarbons and nitrogen oxides are set at a level that is 50 percent lower than the current emission standards for leaf blowers that qualify for sale in California.

**Proposal**

This action is to approve issuance of Program Announcement #PA2015-01 to solicit competitive proposals from qualified manufacturers or suppliers capable of supplying between 1,000 and 1,500 low-emission/low-noise backpack leaf blowers for the SCAQMD's 2014 Leaf Blower Exchange Program. In addition to other criteria, to qualify for consideration, the proposed leaf blower must meet the CARB Blue Sky Series emission standards.

SCAQMD staff will evaluate the proposals based on, but not limited to, criteria including CARB-certified emission levels of the engine, leaf blower noise levels, product specifications, availability, production capacity, lead time, price of the product and the degree to which the supplier will provide additional services for advertising, organizing and conducting the exchange events.

**Outreach**

In accordance with SCAQMD's Procurement Policy and Procedure, a public notice advertising the RFP/RFQ and inviting bids will be published in the Los Angeles Times, the Orange County Register, the San Bernardino Sun, and Riverside County Press Enterprise newspapers to leverage the most cost-effective method of outreach to the South Coast Basin.

Additionally, potential bidders may be notified utilizing SCAQMD's own electronic listing of certified minority vendors. Notice of the RFP/RFQ will be e-mailed to the Black and Latino Legislative Caucuses and various minority chambers of commerce and business associations, and placed on the Internet at SCAQMD's website (<http://www.aqmd.gov>) where it can be viewed by making the selection "Grants & Bids". Information is also available on SCAQMD's bidder's 24-hour telephone message line (909) 396-2724.

**Benefits to SCAQMD**

The Leaf Blower Exchange Program reduces exposure to harmful emissions from the use of gasoline-powered leaf blowers within the South Coast Air Basin. Since 2006, more than 10,000 leaf blowers have been exchanged, reducing carbon monoxide, nitrous oxides, hydrocarbons and particulate matter from the air.

**Resource Impacts**

The amount of funding will be determined after the selection of a contractor from the submitted proposals. Funding will be provided from the Air Quality Investment Fund (27), Rule 2202 AQIP Account.

**Attachment**

Program Announcement #PA2015-01 – Leaf Blower Exchange Program

*Announcing the*  
*South Coast Air Quality Management District*

*Leaf Blower Exchange Program*

*Program Announcement*

*PA # 2015-01*

*July 11, 2014*

**SCAQMD reserves the right to change any criteria such as the schedule, qualifications, and selection criteria outlined in this Program Announcement.**

**DATE:** July 11, 2014

**TO:** All Interested Parties

**FROM:** Barry Wallerstein, Executive Officer, SCAQMD

**SUBJECT:** SCAQMD Backpack Leaf Blower Exchange Program  
Announcement

The South Coast Air Quality Management District (SCAQMD) is pleased to announce a funding opportunity for implementation of a Leaf Blower Exchange Program in the fall of 2014. This program is intended to encourage professional gardeners and landscapers operating within the SCAQMD's 4-county jurisdiction to turn in their old, polluting backpack leaf blowers and purchase new, low-emission/low-noise leaf blowers at a reduced price. Since 2006, 10,365 leaf blowers were exchanged through similar programs.

This Program Announcement is intended to identify potential manufacturers/suppliers of low-emission/low-noise backpack leaf blowers who are willing to provide between 1,000 and 1,500 new blowers at a discounted price to be used for the 2014 Leaf Blower Exchange Program. All interested parties are encouraged to apply. The required product specifications are listed in Section D.

The SCAQMD staff is available to assist applicants during the preparation of their proposals for this program. Points of contact for administrative and technical assistance are included in the attached Program Announcement in Section F.

Should you have any questions regarding this Program Announcement, please contact Mr. Shashi Singeetham, Air Quality Specialist, at (909) 396-3298. The Announcement documents can also be accessed via the internet by visiting SCAQMD's website at [www.aqmd.gov](http://www.aqmd.gov).

Our main objective is to reduce exposure to harmful emissions from the use of gasoline powered leaf blowers within the SCAQMD's 4-county jurisdiction, and we look forward to receiving your proposal.

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**A. LEAF BLOWER EXCHANGE PROGRAM OVERVIEW**

The purpose of this Program Announcement is to solicit competitive proposals from qualified contractors for the production and supply of low-emission/low-noise backpack leaf blowers to be used in the SCAQMD’s Leaf Blower Exchange Program in the fall of 2014. This program is intended to encourage professional gardeners and landscapers operating within the SCAQMD’s 4-county jurisdiction to turn in their old, polluting backpack leaf blowers and purchase new, low-emission/low-noise leaf blowers at a reduced price. Since 2006, 10,365 leaf blowers were exchanged through similar programs.

This Program Announcement is intended to identify potential manufacturers/suppliers of low-emission/low-noise backpack leaf blowers who are willing to provide between 1,000 and 1,500 new blowers and provide the best value including price and other project criteria herein.

The successful bidders should be knowledgeable and experienced in the manufacture and commercial distribution of reliable low-emission/low noise backpack leaf blowers that meet the requirements set forth in Section D of this Program Announcement. They should have an established network of local dealerships providing product sales and service within the SCAQMD’s 4-county jurisdiction.

Total SCAQMD funding to be allocated will depend upon the availability of funds and the amount of the discount per unit offered by the manufacturer at the time of the leaf blower exchange events.

**B. PROGRAM SCHEDULE**

The implementation schedule of this program is illustrated below:

July 11, 2014	Issue the Program Announcement <b>(PA# 2015-01)</b>
September 19, 2014	Proposals due no later than 2:00 PM
October 17, 2014	Proposals approved by Mobile Source Committee
November 7, 2014	Proposals approved by Board
December 12, 2014	Contract Execution
December 11, 2015	Completion of Program

**C. PROPOSAL SUBMITTAL**

There is no specific application form for this Program Announcement, but applicants are expected to submit a proposal that addresses all of the items listed in Section D of the Announcement.

The applicant shall submit **four copies** of the project proposal in a sealed envelope, plainly marked in the upper left-hand corner with the name and address of the applicant and the words **“Program Proposal (PA #2015-01).”** All proposals for the Leaf Blower Exchange Program are due no later than 2:00 PM., September 19, 2014.

Procurement Unit  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA. 91765

The written proposals must be received by SCAQMD by the specified date and time regardless of when they may be postmarked for delivery. E-mail and faxed copies will not be accepted.

**D. PROJECT PROPOSAL GUIDELINES, REQUIREMENTS AND CONDITIONS**

**Proposal Requirements**

There is no specific application form for this Program Announcement, but applicants are expected to submit a proposal that addresses all of the items listed in this section (Section D).

To be considered for this program:

- Bidders must have the capability to produce and supply up to 1,500 low-emission/low-noise backpack leaf blowers by December 12, 2014 that meet the requirements listed below.
- The proposed leaf blower must be a backpack model of sufficient power to be considered suitable for everyday commercial use by professional gardeners and landscapers.
- The proposed leaf blower engine must have been certified by the California Air Resources Board (CARB) for sale in California, and must meet certified emission levels no higher than those identified by CARB as the Blue Sky Series Levels listed below:

Engine Displacement	Hydrocarbon plus Oxides of Nitrogen	Carbon Monoxide	Particulate Matter (PM standard applies only to 2-stroke engines)
<50 cc	25 g/kW-hr	536 g/kW-hr	2.0 g/kW-hr
50-80cc inclusive	36 g/kW-hr	536 g/kW-hr	2.0 g/kW-hr

- The manufacturer must agree not to request emissions credits generated by the sale of leaf blowers through this SCAQMD-subsidized program to comply with any CARB or EPA emissions credit averaging, banking, or trading program.

- Although no specific noise level is required for a leaf blower to qualify for this program, preference will be given to “low-noise” models that are designed to achieve a noise level of 65 dB(A) while operating at a power level that is satisfactory for use by professional gardeners and landscapers.

**Required Product Information**

The contractor must provide all of the following information which will be used to evaluate and compare proposals.

<b>Leaf Blower Specifications</b>	
Blower Model Number	
Engine Displacement (in cc)	
2-Stroke or 4-stroke	
Noise Rating in dB(A)	
Engine Power (in both kW and bhp)	
Air Velocity (mph)	
Air Volume with tubes (cfm)	
Air Volume without tubes (cfm)	
Dry Weight of Blower (pounds)	
Fuel Tank Capacity (ounces and liters)	
Warranty Period for Commercial Users	
Approximate Number of Dealerships/Service Centers within SCAQMD 4-county jurisdiction	
<b>CARB-Certified Emission Level Information for Proposed Leaf Blower</b>	
CARB Executive Order Number and Date	
Certification Level for HC+NOx (in g/kW-hr)	
Certification Level for CO (in g/kW-hr)	
Certification Level for PM (in g/kW-hr) (PM standard applies only to 2-stroke engines)	
Has manufacturer requested that this engine be specifically designated by CARB as a “Blue Sky Series” engine?	
<b>Leaf Blower Cost Information</b>	
Manufacturer’s Suggested Retail Price	
Price per blower to AQMD for 1,000 units	
Price per blower to AQMD for 1,500 units	



## **Additional Contractor Services for Advertising and Conducting Exchange Events**

The SCAQMD will give preference to contractors who, in addition to providing a qualifying product at the lowest possible price, will provide additional services to help advertise the program and organize and conduct the exchange events. For planning purposes, contractors should assume there will be a minimum of seven exchange events on different days at various sites located throughout the SCAQMD's 4-county jurisdiction. The highest scoring proposals will include contractor commitments to:

- Make all the necessary arrangements to secure suitable exchange sites.
- Provide outreach and advertising assistance for promoting the program.
- Provide the necessary staffing to satisfactorily conduct the exchange events.
- Cover the costs of collecting, destroying and properly disposing of the old blowers.

## **Company Contact**

Proposers shall provide the company's contact person's name, address, phone numbers and the e-mail address.

## **Certifications and Representations**

Proposers shall complete and sign all the certification and representation forms provided in Attachment A of this package.

## ***E. PROJECT IMPLEMENTATION***

### **Project Selection Criteria**

A contractor will be selected based on, but not limited to, the following criteria:

- The CARB-certified emission levels of the engine;
- Leaf blower noise level;
- Product specifications;
- Price per unit the manufacturer will charge SCAQMD;
- Lead times necessary to provide the required number of units (assuming a maximum of 1,500 units); and
- Degree to which contractor's additional services will reduce SCAQMD expenses and resource needs for advertising, organizing and conducting the exchange events.
- Cost-effectiveness

### **Scoring Criteria:**

The proposals shall be evaluated according to the criteria set forth below:

	Points
a. HC + NOx Emission Levels (gms/kW-hr)	50
b. Noise Levels (dba)	10
c. Event Support and experience	10
d. Cost-effectiveness (\$/lb)	30
<b>Total Points</b>	<b>100</b>

### Cost-effectiveness

Proposer may use the following steps to calculate the cost-effectiveness.

$$E_r = \frac{(x_1 - x_2) * kW * h * L_f}{454} + \frac{(y_1 - y_2) * kW * h * L_f}{454 * 7}$$

Where,

- $E_r$  = Emission Reductions (lbs/unit/year)
- $x_1$  = CARB Standard for HC+NOx level (gms/kW-hr)
- $x_2$  = CARB Certified for HC+NOx level (gms/kW-hr) for proposed unit
- $y_1$  = CARB Standard for CO level (gms/kW-hr)
- $y_2$  = CARB Certified for CO level (gms/kW-hr) for proposed unit
- kW = kW rating of the proposed unit (in kW)
- h = Annual hours of operation (208)
- $L_f$  = Load Factor (0.7)

$$C_e = \frac{P * CRF}{E_r}$$

Where,

- $C_e$  = Cost-effectiveness (\$\$/lb.)
- P = Price per proposed unit (\$\$)
- CRF = Capital Recovery Factor (0.263, based on 2% discount and 4 year project life)
- $E_r$  = Emission Reductions (lbs/unit/year)

## **Amount of SCAQMD Funding**

Total SCAQMD funding to be allocated will depend upon the availability of funds and the amount of the discount per unit offered by the manufacturer at the time of the leaf blower exchange events

## **Project Completion Deadlines**

- The total number of leaf blowers to be used for the 2014 program (up to a maximum of 1,500 blowers) shall be available no later than December 12, 2014.
- Overall project shall be completed before December 11, 2015

## ***F. IF YOU NEED HELP***

This Program Announcement can be obtained by accessing the SCAQMD web site at [www.aqmd.gov](http://www.aqmd.gov). SCAQMD staff members are available to answer questions during the proposal acceptance period. In order to help expedite assistance, please direct your inquiries to the applicable staff person, as follows:

For **General, Administrative, or Technical Assistance**, please contact:

Shashi Singeetham, Air Quality Specialist  
Phone: 909-396-3298 Fax: 909-396-3608  
E-mail: [ssingeetham@aqmd.gov](mailto:ssingeetham@aqmd.gov)

# **ATTACHMENT A**

## **CERTIFICATIONS AND REPRESENTATIONS**



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178

(909) 396-2000 • [www.aqmd.gov](http://www.aqmd.gov)

## **Business Information Request**

Dear SCAQMD Contractor/Supplier:

The South Coast Air Quality Management District (SCAQMD) is committed to ensuring that our contractor/supplier records are current and accurate. If your firm is selected for award of a purchase order or contract, it is imperative that the information requested herein be supplied in a timely manner to facilitate payment of invoices. In order to process your payments, we need the enclosed information regarding your account. **Please review and complete the information identified on the following pages, complete the enclosed W-9 form, remember to sign both documents for our files, and return them as soon as possible to the address below:**

**Attention: Accounts Payable, Accounting Department  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765-4178**

If you do not return this information, we will not be able to establish you as a vendor. This will delay any payments and would still necessitate your submittal of the enclosed information to our Accounting department before payment could be initiated. Completion of this document and enclosed forms would ensure that your payments are processed timely and accurately.

**If you have any questions or need assistance in completing this information, please contact Accounting at (909) 396-3777. We appreciate your cooperation in completing this necessary information.**

Sincerely,

Michael B. O'Kelly  
Chief Financial Officer

DH:tm

Enclosures: Business Information Request  
Disadvantaged Business Certification  
W-9  
Form 590 Withholding Exemption Certificate  
Federal Contract Debarment Certification  
Campaign Contributions Disclosure  
Direct Deposit Authorization



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178

(909) 396-2000 • [www.aqmd.gov](http://www.aqmd.gov)

## BUSINESS INFORMATION REQUEST

Business Name	
Division of	
Subsidiary of	
Website Address	
Type of Business <i>Check One:</i>	<input type="checkbox"/> Individual <input type="checkbox"/> DBA, Name _____, County Filed in _____ <input type="checkbox"/> Corporation, ID No. _____ <input type="checkbox"/> LLC/LLP, ID No. _____ <input type="checkbox"/> Other _____

## REMITTING ADDRESS INFORMATION

Address			
City/Town			
State/Province		Zip	
Phone	(    )    -    Ext	Fax	(    )    -
Contact		Title	
E-mail Address			
Payment Name if Different			

**All invoices must reference the corresponding Purchase Order Number(s)/Contract Number(s) if applicable and mailed to:**

**Attention: Accounts Payable, Accounting Department**

**South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765-4178**

**DISADVANTAGED BUSINESS CERTIFICATION**

Federal guidance for utilization of disadvantaged business enterprises allows a vendor to be deemed a small business enterprise (SBE), minority business enterprise (MBE) or women business enterprise (WBE) if it meets the criteria below.

- is certified by the Small Business Administration or
- is certified by a state or federal agency or
- is an independent MBE(s) or WBE(s) business concern which is at least 51 percent owned and controlled by minority group member(s) who are citizens of the United States.

Statements of certification:

As a prime contractor to the SCAQMD, \_\_\_\_\_ (name of business) will engage in good faith efforts to achieve the fair share in accordance with 40 CFR Section 33.301, and will follow the six affirmative steps listed below **for contracts or purchase orders funded in whole or in part by federal grants and contracts.**

1. Place qualified SBEs, MBEs, and WBEs on solicitation lists.
2. Assure that SBEs, MBEs, and WBEs are solicited whenever possible.
3. When economically feasible, divide total requirements into small tasks or quantities to permit greater participation by SBEs, MBEs, and WBEs.
4. Establish delivery schedules, if possible, to encourage participation by SBEs, MBEs, and WBEs.
5. Use services of Small Business Administration, Minority Business Development Agency of the Department of Commerce, and/or any agency authorized as a clearinghouse for SBEs, MBEs, and WBEs.
6. If subcontracts are to be let, take the above affirmative steps.

Self-Certification Verification: Also for use in awarding additional points, **as applicable**, in accordance with SCAQMD Procurement Policy and Procedure:

Check all that apply:

- |   |  |
|---|--|
| <input type="checkbox"/> Small Business Enterprise/Small Business Joint Venture | <input type="checkbox"/> Women-owned Business Enterprise                               |
| <input type="checkbox"/> Local business   | <input type="checkbox"/> Disabled Veteran-owned Business Enterprise/DVBE Joint Venture |
| <input type="checkbox"/> Minority-owned Business Enterprise                     |  |

Percent of ownership: \_\_\_\_\_ %

Name of Qualifying Owner(s): \_\_\_\_\_

I, the undersigned, hereby declare that to the best of my knowledge the above information is accurate. Upon penalty of perjury, I certify information submitted is factual.

_____ <i>NAME</i>	_____ <i>TITLE</i>
----------------------	-----------------------

_____ <i>TELEPHONE NUMBER</i>	_____ <i>DATE</i>
----------------------------------	----------------------

# Definitions

**Disabled Veteran-Owned Business Enterprise** means a business that meets all of the following criteria:

- is a sole proprietorship or partnership of which is at least 51 percent owned by one or more disabled veterans, or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more disabled veterans; a subsidiary which is wholly owned by a parent corporation but only if at least 51 percent of the voting stock of the parent corporation is owned by one or more disabled veterans; or a joint venture in which at least 51 percent of the joint venture's management and control and earnings are held by one or more disabled veterans.
- the management and control of the daily business operations are by one or more disabled veterans. The disabled veterans who exercise management and control are not required to be the same disabled veterans as the owners of the business.
- is a sole proprietorship, corporation, partnership, or joint venture with its primary headquarters office located in the United States and which is not a branch or subsidiary of a foreign corporation, firm, or other foreign-based business.

**Joint Venture** means that one party to the joint venture is a DVBE and owns at least 51 percent of the joint venture. In the case of a joint venture formed for a single project this means that DVBE will receive at least 51 percent of the project dollars.

**Local Business** means a business that meets all of the following criteria:

- has an ongoing business within the boundary of the SCAQMD at the time of bid application.
- performs 90 percent of the work within SCAQMD's jurisdiction.

**Minority-Owned Business Enterprise** means a business that meets all of the following criteria:

- is at least 51 percent owned by one or more minority persons or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more minority persons.
- is a business whose management and daily business operations are controlled or owned by one or more minority person.
- is a business which is a sole proprietorship, corporation, partnership, joint venture, an association, or a cooperative with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, foreign firm, or other foreign business.

"Minority" person means a Black American, Hispanic American, Native American (including American Indian, Eskimo, Aleut, and Native Hawaiian), Asian-Indian American (including a person whose origins are from India, Pakistan, or Bangladesh), Asian-Pacific American (including a person whose origins are from Japan, China, the Philippines, Vietnam, Korea, Samoa, Guam, the United States Trust Territories of the Pacific, Northern Marianas, Laos, Cambodia, or Taiwan).

**Small Business Enterprise** means a business that meets the following criteria:

- a. 1) an independently owned and operated business; 2) not dominant in its field of operation; 3) together with affiliates is either:
  - A service, construction, or non-manufacturer with 100 or fewer employees, and average annual gross receipts of ten million dollars (\$10,000,000) or less over the previous three years, or
  - A manufacturer with 100 or fewer employees.
- b. Manufacturer means a business that is both of the following:
  - 1) Primarily engaged in the chemical or mechanical transformation of raw materials or processed substances into new products.
  - 2) Classified between Codes 311000 to 339000, inclusive, of the North American Industrial Classification System (NAICS) Manual published by the United States Office of Management and Budget, 2007 edition.



**Small Business Joint Venture** means that one party to the joint venture is a Small Business and owns at least 51 percent of the joint venture. In the case of a joint venture formed for a single project this means that the Small Business will receive at least 51 percent of the project dollars.

**Women-Owned Business Enterprise** means a business that meets all of the following criteria:

- is at least 51 percent owned by one or more women or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more women.
- is a business whose management and daily business operations are controlled or owned by one or more women.
- is a business which is a sole proprietorship, corporation, partnership, or a joint venture, with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, foreign firm, or other foreign business.

## Request for Taxpayer Identification Number and Certification

**Give Form to the  
 requester. Do not  
 send to the IRS.**

<b>Print or type See Specific Instructions on page 2.</b>	Name (as shown on your income tax return)	
	Business name/disregarded entity name, if different from above	
	Check appropriate box for federal tax classification: <input type="checkbox"/> Individual/sole proprietor <input type="checkbox"/> C Corporation <input type="checkbox"/> S Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust/estate  <input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶ _____  <input type="checkbox"/> Other (see instructions) ▶ _____	
	<input type="checkbox"/> Exempt payee	
	Address (number, street, and apt. or suite no.)	Requester's name and address (optional)
City, state, and ZIP code		
List account number(s) here (optional)		

### Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on the "Name" line to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

<b>Social security number</b>									

**Note.** If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

<b>Employer identification number</b>									

### Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. citizen or other U.S. person (defined below).

**Certification instructions.** You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 4.

<b>Sign Here</b>	Signature of U.S. person ▶	Date ▶
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### General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

#### Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

**Note.** If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

**Definition of a U.S. person.** For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

**Special rules for partnerships.** Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases:

- The U.S. owner of a disregarded entity and not the entity,
- The U.S. grantor or other owner of a grantor trust and not the trust, and
- The U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

**Foreign person.** If you are a foreign person, do not use Form W-9. Instead, use the appropriate Form W-8 (see Publication 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

**Nonresident alien who becomes a resident alien.** Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a “saving clause.” Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items:

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
2. The treaty article addressing the income.
3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
4. The type and amount of income that qualifies for the exemption from tax.
5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

**Example.** Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity not subject to backup withholding, give the requester the appropriate completed Form W-8.

**What is backup withholding?** Persons making certain payments to you must under certain conditions withhold and pay to the IRS a percentage of such payments. This is called “backup withholding.” Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

### Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester,
2. You do not certify your TIN when required (see the Part II instructions on page 3 for details),
3. The IRS tells the requester that you furnished an incorrect TIN,
4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or
5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See the instructions below and the separate Instructions for the Requester of Form W-9.

Also see *Special rules for partnerships* on page 1.

### Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account, for example, if the grantor of a grantor trust dies.

### Penalties

**Failure to furnish TIN.** If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

**Civil penalty for false information with respect to withholding.** If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

**Criminal penalty for falsifying information.** Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

**Misuse of TINs.** If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

### Specific Instructions

#### Name

If you are an individual, you must generally enter the name shown on your income tax return. However, if you have changed your last name, for instance, due to marriage without informing the Social Security Administration of the name change, enter your first name, the last name shown on your social security card, and your new last name.

If the account is in joint names, list first, and then circle, the name of the person or entity whose number you entered in Part I of the form.

**Sole proprietor.** Enter your individual name as shown on your income tax return on the “Name” line. You may enter your business, trade, or “doing business as (DBA)” name on the “Business name/disregarded entity name” line.

**Partnership, C Corporation, or S Corporation.** Enter the entity’s name on the “Name” line and any business, trade, or “doing business as (DBA) name” on the “Business name/disregarded entity name” line.

**Disregarded entity.** Enter the owner’s name on the “Name” line. The name of the entity entered on the “Name” line should never be a disregarded entity. The name on the “Name” line must be the name shown on the income tax return on which the income will be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a domestic owner, the domestic owner’s name is required to be provided on the “Name” line. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity’s name on the “Business name/disregarded entity name” line. If the owner of the disregarded entity is a foreign person, you must complete an appropriate Form W-8.

**Note.** Check the appropriate box for the federal tax classification of the person whose name is entered on the “Name” line (Individual/sole proprietor, Partnership, C Corporation, S Corporation, Trust/estate).

**Limited Liability Company (LLC).** If the person identified on the “Name” line is an LLC, check the “Limited liability company” box only and enter the appropriate code for the tax classification in the space provided. If you are an LLC that is treated as a partnership for federal tax purposes, enter “P” for partnership. If you are an LLC that has filed a Form 8832 or a Form 2553 to be taxed as a corporation, enter “C” for C corporation or “S” for S corporation. If you are an LLC that is disregarded as an entity separate from its owner under Regulation section 301.7701-3 (except for employment and excise tax), do not check the LLC box unless the owner of the LLC (required to be identified on the “Name” line) is another LLC that is not disregarded for federal tax purposes. If the LLC is disregarded as an entity separate from its owner, enter the appropriate tax classification of the owner identified on the “Name” line.

**Other entities.** Enter your business name as shown on required federal tax documents on the "Name" line. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on the "Business name/disregarded entity name" line.

**Exempt Payee**

If you are exempt from backup withholding, enter your name as described above and check the appropriate box for your status, then check the "Exempt payee" box in the line following the "Business name/disregarded entity name," sign and date the form.

Generally, individuals (including sole proprietors) are not exempt from backup withholding. Corporations are exempt from backup withholding for certain payments, such as interest and dividends.

**Note.** If you are exempt from backup withholding, you should still complete this form to avoid possible erroneous backup withholding.

The following payees are exempt from backup withholding:

1. An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2),
  2. The United States or any of its agencies or instrumentalities,
  3. A state, the District of Columbia, a possession of the United States, or any of their political subdivisions or instrumentalities,
  4. A foreign government or any of its political subdivisions, agencies, or instrumentalities, or
  5. An international organization or any of its agencies or instrumentalities.
- Other payees that may be exempt from backup withholding include:
6. A corporation,
  7. A foreign central bank of issue,
  8. A dealer in securities or commodities required to register in the United States, the District of Columbia, or a possession of the United States,
  9. A futures commission merchant registered with the Commodity Futures Trading Commission,
  10. A real estate investment trust,
  11. An entity registered at all times during the tax year under the Investment Company Act of 1940,
  12. A common trust fund operated by a bank under section 584(a),
  13. A financial institution,
  14. A middleman known in the investment community as a nominee or custodian, or
  15. A trust exempt from tax under section 664 or described in section 4947.

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 15.

<b>IF the payment is for . . .</b>	<b>THEN the payment is exempt for . . .</b>
Interest and dividend payments	All exempt payees except for 9
Broker transactions	Exempt payees 1 through 5 and 7 through 13. Also, C corporations.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 5
Payments over \$600 required to be reported and direct sales over \$5,000 <sup>1</sup>	Generally, exempt payees 1 through 7 <sup>2</sup>

<sup>1</sup> See Form 1099-MISC, Miscellaneous Income, and its instructions.

<sup>2</sup> However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney, and payments for services paid by a federal executive agency.

**Part I. Taxpayer Identification Number (TIN)**

**Enter your TIN in the appropriate box.** If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN. However, the IRS prefers that you use your SSN.

If you are a single-member LLC that is disregarded as an entity separate from its owner (see *Limited Liability Company (LLC)* on page 2), enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

**Note.** See the chart on page 4 for further clarification of name and TIN combinations.

**How to get a TIN.** If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local Social Security Administration office or get this form online at [www.ssa.gov](http://www.ssa.gov). You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at [www.irs.gov/businesses](http://www.irs.gov/businesses) and clicking on Employer Identification Number (EIN) under Starting a Business. You can get Forms W-7 and SS-4 from the IRS by visiting [IRS.gov](http://IRS.gov) or by calling 1-800-TAX-FORM (1-800-829-3676).

If you are asked to complete Form W-9 but do not have a TIN, write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

**Note.** Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

**Caution:** A disregarded domestic entity that has a foreign owner must use the appropriate Form W-8.

**Part II. Certification**

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if item 1, below, and items 4 and 5 on page 4 indicate otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on the "Name" line must sign. Exempt payees, see *Exempt Payee* on page 3.

**Signature requirements.** Complete the certification as indicated in items 1 through 3, below, and items 4 and 5 on page 4.

**1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983.** You must give your correct TIN, but you do not have to sign the certification.

**2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983.** You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

**3. Real estate transactions.** You must sign the certification. You may cross out item 2 of the certification.

**4. Other payments.** You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

**5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions.** You must give your correct TIN, but you do not have to sign the certification.

**Note.** If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

**Secure Your Tax Records from Identity Theft**

Identity theft occurs when someone uses your personal information such as your name, social security number (SSN), or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Publication 4535, Identity Theft Prevention and Victim Assistance.

Victims of identity theft who are experiencing economic harm or a system problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

**Protect yourself from suspicious emails or phishing schemes.**

Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to [phishing@irs.gov](mailto:phishing@irs.gov). You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at: [spam@uce.gov](mailto:spam@uce.gov) or contact them at [www.ftc.gov/idtheft](http://www.ftc.gov/idtheft) or 1-877-IDTHEFT (1-877-438-4338).

Visit [IRS.gov](http://IRS.gov) to learn more about identity theft and how to reduce your risk.

**What Name and Number To Give the Requester**

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account)	The actual owner of the account or, if combined funds, the first individual on the account <sup>1</sup>
3. Custodian account of a minor (Uniform Gift to Minors Act)	The minor <sup>2</sup>
4. a. The usual revocable savings trust (grantor is also trustee) b. So-called trust account that is not a legal or valid trust under state law	The grantor-trustee <sup>1</sup>  The actual owner <sup>1</sup>
5. Sole proprietorship or disregarded entity owned by an individual	The owner <sup>3</sup>
6. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulation section 1.671-4(b)(2)(i)(A))	The grantor <sup>*</sup>
For this type of account:	Give name and EIN of:
7. Disregarded entity not owned by an individual	The owner
8. A valid trust, estate, or pension trust	Legal entity <sup>4</sup>
9. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
10. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
11. Partnership or multi-member LLC	The partnership
12. A broker or registered nominee	The broker or nominee
13. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
14. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulation section 1.671-4(b)(2)(i)(B))	The trust

<sup>1</sup> List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

<sup>2</sup> Circle the minor's name and furnish the minor's SSN.

<sup>3</sup> You must show your individual name and you may also enter your business or "DBA" name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

<sup>4</sup> List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships* on page 1.

\*Note. Grantor also must provide a Form W-9 to trustee of trust.

**Privacy Act Notice**

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

# 2013 Withholding Exemption Certificate

590

This form can only be used to certify exemption from nonresident withholding under California Revenue and Taxation Code (R&TC) Section 18662. Do not use this form for exemption from wage withholding.

File this form with your withholding agent. (Please type or print)

Withholding agent's name \_\_\_\_\_

Payee's name \_\_\_\_\_

Payee's  SSN or ITIN  FEIN  
 CA corp. no.  CA SOS file no

Address (number and street, PO Box, or PMB no.) \_\_\_\_\_

Apt. no./ Ste. no. \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ ZIP Code \_\_\_\_\_

Read the following carefully and check the box that applies to the payee.

I certify that for the reasons checked below, the payee named on this form is exempt from the California income tax withholding requirement on payment(s) made to the entity or individual.

**Individuals — Certification of Residency:**

I am a resident of California and I reside at the address shown above. If I become a nonresident at any time, I will promptly notify the withholding agent. See instructions for General Information D, Who is a Resident, for the definition of a resident.

**Corporations:**

The above-named corporation has a permanent place of business in California at the address shown above or is qualified through the California Secretary of State (SOS) to do business in California. The corporation will file a California tax return and withhold on payments of California source income to nonresidents when required. If this corporation ceases to have a permanent place of business in California or ceases to do any of the above, I will promptly notify the withholding agent. See instructions for General Information F, What is a Permanent Place of Business, for the definition of permanent place of business.

**Partnerships or limited liability companies (LLC):**

The above-named partnership or LLC has a permanent place of business in California at the address shown above or is registered with the California SOS, and is subject to the laws of California. The partnership or LLC will file a California tax return and will withhold on foreign and domestic nonresident partners or members when required. If the partnership or LLC ceases to do any of the above, I will promptly inform the withholding agent. For withholding purposes, a limited liability partnership (LLP) is treated like any other partnership.

**Tax-Exempt Entities:**

The above-named entity is exempt from tax under California Revenue and Taxation Code (R&TC) Section 23701 \_\_\_\_\_ (insert letter) or Internal Revenue Code Section 501(c) \_\_\_\_\_ (insert number). The tax-exempt entity will withhold on payments of California source income to nonresidents when required. If this entity ceases to be exempt from tax, I will promptly notify the withholding agent. Individuals cannot be tax-exempt entities.

**Insurance Companies, Individual Retirement Arrangements (IRAs), or Qualified Pension/Profit Sharing Plans:**

The above-named entity is an insurance company, IRA, or a federally qualified pension or profit-sharing plan.

**California Trusts:**

At least one trustee and one noncontingent beneficiary of the above-named trust is a California resident. The trust will file a California fiduciary tax return and will withhold on foreign and domestic nonresident beneficiaries when required. If the trustee becomes a nonresident at any time, I will promptly notify the withholding agent.

**Estates — Certification of Residency of Deceased Person:**

I am the executor of the above-named person's estate. The decedent was a California resident at the time of death. The estate will file a California fiduciary tax return and will withhold on foreign and domestic nonresident beneficiaries when required.

**Nonmilitary Spouse of a Military Servicemember:**

I am a nonmilitary spouse of a military servicemember and I meet the Military Spouse Residency Relief Act (MSRRA) requirements. See instructions for General Information E, MSRRA.

**CERTIFICATE:** Please complete and sign below.

Under penalties of perjury, I hereby certify that the information provided in this document is, to the best of my knowledge, true and correct. If conditions change, I will promptly notify the withholding agent.

Payee's name and title (type or print) \_\_\_\_\_ Daytime telephone no. \_\_\_\_\_

Payee's signature  \_\_\_\_\_ Date \_\_\_\_\_

# Instructions for Form 590

## Withholding Exemption Certificate

References in these instructions are to the California Revenue and Taxation Code (R&TC).

### General Information

For purposes of California income tax, references to a spouse, husband, or wife also refer to a Registered Domestic Partner (RDP) unless otherwise specified. For more information on RDPs, get FTB Pub. 737, Tax Information for Registered Domestic Partners. **Private Mail Box (PMB)** – Include the PMB in the address field. Write “PMB” first, then the box number. Example: 111 Main Street PMB 123.

**Foreign Address** – Enter the information in the following order: City, Country, Province/Region, and Postal Code. Follow the country’s practice for entering the postal code. Do not abbreviate the country’s name.

### A Purpose

Use Form 590, Withholding Exemption Certificate, to certify an exemption from nonresident withholding. California residents or entities should complete and present Form 590 to the withholding agent. The withholding agent is then relieved of the withholding requirements if the agent relies in good faith on a completed and signed Form 590 unless told by the Franchise Tax Board (FTB) that the form should not be relied upon.

**Important** – This form cannot be used for exemption from wage and real estate withholding.

- If you are an employee, any wage withholding questions should be directed to the FTB General Information number, 800.852.5711. Employers should call 888.745.3886 or go to [edd.ca.gov](http://edd.ca.gov).
- Sellers of California real estate use Form 593-C, Real Estate Withholding Certificate, to claim an exemption from real estate withholding.

### B Requirement

R&TC Section 18662 requires withholding of income or franchise tax on payments of California source income made to nonresidents of California.

Withholding is required on the following, but is not limited to:

- Payments to nonresidents for services rendered in California.
- Distributions of California source income made to domestic nonresident S corporation shareholders, partners and members and allocations of California source income made to foreign partners and members.
- Payments to nonresidents for rents if the payments are made in the course of the withholding agent’s business.
- Payments to nonresidents for royalties with activities in California.

- Distributions of California source income to nonresident beneficiaries from an estate or trust.
- Prizes and winnings received by nonresidents for contests in California.

However, withholding is optional if the total payments of California source income are \$1,500 or less during the calendar year.

For more information on withholding get FTB Pub. 1017, Resident and Nonresident Withholding Guidelines. To get a withholding publication see General Information H, Publications, Forms, and Additional Information.

**Backup Withholding** – Beginning on or after January 1, 2010, with certain limited exceptions, payers that are required to withhold and remit backup withholding to the Internal Revenue Service (IRS) are also required to withhold and remit to the FTB. The California backup withholding rate is 7% of the payment. For California purposes, dividends, interests, and any financial institutions release of loan funds made in the normal course of business are exempt from backup withholding. For additional information on California backup withholding, go to [ftb.ca.gov](http://ftb.ca.gov) and search for **backup withholding**.

If a payee has backup withholding, the payee must contact the FTB to provide a valid Taxpayer Identification Number (TIN) before filing a tax return. The following are acceptable TINs: social security number (SSN); individual taxpayer identification number (ITIN); federal employer identification number (FEIN); California corporation number (CA Corp No.); or California Secretary of State (SOS) file number. Failure to provide a valid TIN will result in the denial of the backup withholding credit. For more information go to [ftb.ca.gov](http://ftb.ca.gov) and search for **backup withholding**.

**Who is Excluded from Withholding** – The following are excluded from withholding and completing this form:

- The United States and any of its agencies or instrumentalities
- A state, a possession of the United States, the District of Columbia, or any of its political subdivisions or instrumentalities
- A foreign government or any of its political subdivisions, agencies, or instrumentalities

### C Who Certifies this Form

Form 590 is certified by the payee. An incomplete certificate is invalid and the withholding agent should not accept it. If the withholding agent receives an incomplete certificate, the withholding agent is required to withhold tax on payments made to the payee until a valid certificate is received. In lieu of a completed certificate on the preprinted form, the

withholding agent may accept as a substitute certificate a letter from the payee explaining why the payee is not subject to withholding. The letter must contain all the information required on the certificate in similar language, including the under penalty of perjury statement and the payee’s taxpayer identification number. The withholding agent must retain a copy of the certificate or substitute for at least four years after the last payment to which the certificate applies, and provide it upon request to the FTB.

For example, if an entertainer (or the entertainer’s business entity) is paid for a performance, the entertainer’s information must be provided. Do not submit the entertainer’s agent or promoter information.

The grantor of a grantor trust shall be treated as the payee for withholding purposes.

Therefore, if the payee is a grantor trust and one or more of the grantors is a nonresident, withholding is required. If all of the grantors on the trust are residents, no withholding is required. Resident grantors can check the box on Form 590 labeled “Individuals — Certification of Residency.”

### D Who is a Resident

A California resident is any individual who is in California for other than a temporary or transitory purpose or any individual domiciled in California who is absent for a temporary or transitory purpose.

An individual domiciled in California who is absent from California for an uninterrupted period of at least 546 consecutive days under an employment-related contract is considered outside California for other than a temporary or transitory purpose.

An individual is still considered outside California for other than a temporary or transitory purpose if return visits to California do not total more than 45 days during any taxable year covered by an employment contract.

This provision does not apply if an individual has income from stocks, bonds, notes, or other intangible personal property in excess of \$200,000 in any taxable year in which the employment-related contract is in effect.

A spouse/RDP absent from California for an uninterrupted period of at least 546 days to accompany a spouse/RDP under an employment-related contract is considered outside of California for other than a temporary or transitory purpose.

Generally, an individual who comes to California for a purpose which will extend over a long or indefinite period will be considered a resident. However, an individual who comes to perform a particular contract of short duration will be considered a nonresident.

For assistance in determining resident status, get FTB Pub. 1031, Guidelines for Determining Resident Status, and FTB Pub. 1032, Tax Information for Military Personnel, or call the FTB at 800.852.5711 or 916.845.6500.

## E Military Spouse Residency Relief Act (MSRRA)

Generally, for tax purposes you are considered to maintain your existing residence or domicile. If a military servicemember and nonmilitary spouse have the same state of domicile, the MSRRA provides:

- A spouse shall not be deemed to have lost a residence or domicile in any state solely by reason of being absent to be with the servicemember serving in compliance with military orders.
- A spouse shall not be deemed to have acquired a residence or domicile in any other state solely by reason of being there to be with the servicemember serving in compliance with military orders.

Domicile is defined as the one place:

- Where you maintain a true, fixed, and permanent home
- To which you intend to return whenever you are absent

A military servicemember's nonmilitary spouse is considered a nonresident for tax purposes if the servicemember and spouse have the same domicile outside of California and the spouse is in California solely to be with the servicemember who is serving in compliance with Permanent Change of Station orders. Note: California may require nonmilitary spouses of military servicemembers to provide proof that they meet the criteria for California personal income tax exemption as set forth in the MSRRA.

Income of a military servicemember's nonmilitary spouse for services performed in California is not California source income subject to state tax if the spouse is in California to be with the servicemember serving in compliance with military orders, and the servicemember and spouse have the same domicile in a state other than California.

For additional information or assistance in determining whether the applicant meets the MSRRA requirements, get FTB Pub. 1032.

## F What is a Permanent Place of Business

A corporation has a permanent place of business in California if it is organized and existing under the laws of California or if it is a foreign corporation qualified to transact intrastate business by the California SOS. A corporation that has not qualified to transact intrastate business (e.g., a corporation engaged exclusively in interstate commerce) will be considered as having a permanent place of business in California only if it maintains a permanent office in California that is permanently staffed by its employees.

## G Withholding Agent

Keep Form 590 for your records. Do not send this form to the FTB unless it has been specifically requested.

For more information, contact Withholding Services and Compliance, see General Information H.

The payee must notify the withholding agent if any of the following situations occur:

- The individual payee becomes a nonresident.
- The corporation ceases to have a permanent place of business in California or ceases to be qualified to do business in California.
- The partnership ceases to have a permanent place of business in California.
- The LLC ceases to have a permanent place of business in California.
- The tax-exempt entity loses its tax-exempt status.

The withholding agent must then withhold and report the withholding using Form 592, Resident and Nonresident Withholding Statement, and remit the withholding using Form 592-V, Payment Voucher for Resident and Nonresident Withholding. Form 592-B, Resident and Nonresident Withholding Tax Statement, is retained by the withholding agent and a copy is given to the payee.

## H Additional Information

To get additional nonresident withholding information, contact the Withholding Services and Compliance.

WITHHOLDING SERVICES AND  
COMPLIANCE MS F182  
FRANCHISE TAX BOARD  
PO BOX 942867  
SACRAMENTO CA 94267-0651

Telephone: 888.792.4900  
916.845.4900

Fax: 916.845.9512

You can download, view, and print California tax forms and publications at [ftb.ca.gov](http://ftb.ca.gov).

OR to get forms by mail write to:

TAX FORMS REQUEST UNIT MS F284  
FRANCHISE TAX BOARD  
PO BOX 307  
RANCHO CORDOVA CA 95741-0307

For all other questions unrelated to withholding or to access the TTY/TDD numbers, see the information below.

Internet and Telephone Assistance

Website: [ftb.ca.gov](http://ftb.ca.gov)

Telephone: 800.852.5711 from within the  
United States  
916.845.6500 from outside the  
United States

TTY/TDD: 800.822.6268 for persons with  
hearing or speech impairments

Asistencia Por Internet y Teléfono

Sitio web: [ftb.ca.gov](http://ftb.ca.gov)

Teléfono: 800.852.5711 dentro de los  
Estados Unidos  
916.845.6500 fuera de los Estados  
Unidos

TTY/TDD: 800.822.6268 personas con  
discapacidades auditivas  
y del habla





United State Environmental Protection Agency  
Washington, DC 20460

## **Certification Regarding Debarment, Suspension, and Other Responsibility Matters**

The prospective participant certifies to the best of its knowledge and belief that it and the principals:

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- (b) Have not within a three year period preceding this proposal been convicted of or had a civil judgement rendered against them or commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction: violation of Federal or State antitrust statute or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (c) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (b) of this certification; and
- (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

I understand that a false statement on this certification may be grounds for rejection of this proposal or termination of the award. In addition, under 18 USC Sec. 1001, a false statement may result in a fine of up to \$10,000 or imprisonment for up to 5 years, or both.

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Typed Name & Title of Authorized Representative

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Signature of Authorized Representative Date

I am unable to certify to the above statements. My explanation is attached.



## CAMPAIGN CONTRIBUTIONS DISCLOSURE

In accordance with California law, bidders and contracting parties are required to disclose, at the time the application is filed, information relating to any campaign contributions made to South Coast Air Quality Management District (SCAQMD) Board Members or members/alternates of the MSRC, including: the name of the party making the contribution (which includes any parent, subsidiary or otherwise related business entity, as defined below), the amount of the contribution, and the date the contribution was made. 2 C.C.R. §18438.8(b).

California law prohibits a party, or an agent, from making campaign contributions to SCAQMD Governing Board Members or members/alternates of the Mobile Source Air Pollution Reduction Review Committee (MSRC) of more than \$250 while their contract or permit is pending before the SCAQMD; and further prohibits a campaign contribution from being made for three (3) months following the date of the final decision by the Governing Board or the MSRC on a donor's contract or permit. Gov't Code §84308(d). For purposes of reaching the \$250 limit, the campaign contributions of the bidder or contractor plus contributions by its parents, affiliates, and related companies of the contractor or bidder are added together. 2 C.C.R. §18438.5.

In addition, SCAQMD Board Members or members/alternates of the MSRC must abstain from voting on a contract or permit if they have received a campaign contribution from a party or participant to the proceeding, or agent, totaling more than \$250 in the 12-month period prior to the consideration of the item by the Governing Board or the MSRC. Gov't Code §84308(c).

The list of current SCAQMD Governing Board Members can be found at the SCAQMD website ([www.aqmd.gov](http://www.aqmd.gov)). The list of current MSRC members/alternates can be found at the MSRC website (<http://www.cleantransportationfunding.org>).

### **SECTION I.**

**Contractor (Legal Name):** \_\_\_\_\_

<input type="checkbox"/> DBA, Name _____, County Filed in _____ <input type="checkbox"/> Corporation, ID No. _____ <input type="checkbox"/> LLC/LLP, ID No. _____
---

**List any parent, subsidiaries, or otherwise affiliated business entities of Contractor:**  
*(See definition below).*

\_\_\_\_\_  
\_\_\_\_\_

### **SECTION II.**

Has Contractor and/or any parent, subsidiary, or affiliated company, or agent thereof, made a campaign contribution(s) totaling \$250 or more in the aggregate to a current member of the South Coast Air Quality Management Governing Board or member/alternate of the MSRC in the 12 months preceding the date of execution of this disclosure?

Yes     No    **If YES, complete Section II below and then sign and date the form. If NO, sign and date below. Include this form with your submittal.**

**Campaign Contributions Disclosure, *continued*:**

Name of Contributor \_\_\_\_\_

_____	_____	_____
Governing Board Member or MSRC Member/Alternate	Amount of Contribution	Date of Contribution

Name of Contributor \_\_\_\_\_

_____	_____	_____
Governing Board Member or MSRC Member/Alternate	Amount of Contribution	Date of Contribution

Name of Contributor \_\_\_\_\_

_____	_____	_____
Governing Board Member or MSRC Member/Alternate	Amount of Contribution	Date of Contribution

Name of Contributor \_\_\_\_\_

_____	_____	_____
Governing Board Member or MSRC Member/Alternate	Amount of Contribution	Date of Contribution

**I declare the foregoing disclosures to be true and correct.**

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**DEFINITIONS**

Parent, Subsidiary, or Otherwise Related Business Entity (2 Cal. Code of Regs., §18703.1(d).)

- (1) Parent subsidiary. A parent subsidiary relationship exists when one corporation directly or indirectly owns shares possessing more than 50 percent of the voting power of another corporation.
- (2) Otherwise related business entity. Business entities, including corporations, partnerships, joint ventures and any other organizations and enterprises operated for profit, which do not have a parent subsidiary relationship are otherwise related if any one of the following three tests is met:
  - (A) One business entity has a controlling ownership interest in the other business entity.
  - (B) There is shared management and control between the entities. In determining whether there is shared management and control, consideration should be given to the following factors:
    - (i) The same person or substantially the same person owns and manages the two entities;
    - (ii) There are common or commingled funds or assets;
    - (iii) The business entities share the use of the same offices or employees, or otherwise share activities, resources or personnel on a regular basis;
    - (iv) There is otherwise a regular and close working relationship between the entities; or
  - (C) A controlling owner (50% or greater interest as a shareholder or as a general partner) in one entity also is a controlling owner in the other entity.



**Direct Deposit Authorization**

**STEP 1: Please check all the appropriate boxes**

- Individual (Employee, Governing Board Member)       New Request  
 Vendor/Contractor       Cancel Direct Deposit  
 Changed Information

**STEP 2: Payee Information**

Last Name		First Name		Middle Initial	Title
Vendor/Contractor Business Name (if applicable)					
Address				Apartment or P.O. Box Number	
City		State	Zip	Country	
Taxpayer ID Number		Telephone Number		Email Address	

**Authorization**

- I authorize South Coast Air Quality Management District (SCAQMD) to direct deposit funds to my account in the financial institution as indicated below. I understand that the authorization may be rejected or discontinued by SCAQMD at any time. If any of the above information changes, I will promptly complete a new authorization agreement. If the direct deposit is not stopped before closing an account, funds payable to me will be returned to SCAQMD for distribution. This will delay my payment.
- This authorization remains in effect until SCAQMD receives written notification of changes or cancellation from you.
- I hereby release and hold harmless SCAQMD for any claims or liability to pay for any losses or costs related to insufficient fund transactions that result from failure within the Automated Clearing House network to correctly and timely deposit monies into my account.

**STEP 3:**

You must verify that your bank is a member of an Automated Clearing House (ACH). Failure to do so could delay the processing of your payment. You must attach a voided check or have your bank complete the bank information and the account holder must sign below.

**To be Completed by your Bank**

<b>Staple Voided Check Here</b>	Name of Bank/Institution				
	Account Holder Name(s)				
	<input type="checkbox"/> Saving <input type="checkbox"/> Checking		Account Number		Routing Number
	Bank Representative Printed Name		Bank Representative Signature		Date
	ACCOUNT HOLDER SIGNATURE:				Date

Only

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BOARD MEETING DATE: July 11, 2014

AGENDA NO. 11

**PROPOSAL:** Recognize Revenue and Appropriate Funds for Enhanced Particulate Monitoring Program, NATTS, PAMS, PM<sub>2.5</sub> and Near-Road NO<sub>2</sub> Programs; and Solicit Competitive Bids and Issue Purchase Orders for Air Monitoring Equipment

**SYNOPSIS:** The U.S. Government has allocated \$2,968,841 for the Enhanced Particulate Monitoring Program for FY 2014-15. In addition, the U.S. EPA has allocated \$293,716 for the NATTS Program for FY 2014-15. These actions are to: 1) recognize revenue and appropriate funds for the Enhanced Particulate Monitoring and NATTS Programs; 2) recognize revenue and appropriate funding for the remaining balance of the NATTS, PAMS, PM<sub>2.5</sub> and Near-Road NO<sub>2</sub> Program funds; and 3) solicit competitive bids and issue purchase orders for air monitoring equipment.

**COMMITTEE:** Administrative, June 13, 2014; Recommended for Approval

**RECOMMENDED ACTIONS:**

1. Recognize revenue of \$794,365 and appropriate, upon receipt, \$632,427 as set forth in Attachment 1 for the U.S. Government Enhanced Particulate Monitoring Program grant in the FY 2014-15 Budget.
2. Recognize revenue and appropriate, upon receipt, \$263,920 as set forth in Attachment 3 for the U.S. EPA NATTS grant in the FY 2014-15 Budget.
3. Recognize revenue and appropriate remaining estimated funds of \$224,684 as set forth in Attachment 5 for the U.S. EPA PAMS program; this amount relates to the remaining project period (July 1, 2014 through September 30, 2014) and was not included in the adopted FY 2014-15 Budget.
4. Recognize revenue and appropriate remaining estimated funds of \$181,315 as set forth in Attachment 7 for the PM<sub>2.5</sub> grant in the FY 2014-15 Budget.
5. Recognize revenue and appropriate remaining estimated funds of \$379,307 as set forth in Attachment 9 for the U.S. EPA Near-Road NO<sub>2</sub> monitoring program.

6. Authorize the Procurement Manager, in accordance with SCAQMD's Procurement Policy and Procedure, to
  - a. Issue a purchase order with Wondries Fleet Group for an amount not to exceed \$38,000 for a CNG vehicle as budgeted in the proposed Government Enhanced Particulate Monitoring Expenditures for FY 2014-15;
  - b. Solicit a competitive bid for and purchase one Centrifuge for an amount not to exceed \$11,000 as budgeted in the proposed NATTS Expenditures for FY 2014-15;
  - c. Issue a purchase order with Elemental Scientific Inc. (ESI) for the purchase of an ICP/MS Autosampler Upgrade for an amount not to exceed \$25,000 as budgeted in the proposed NATTS Expenditures for FY 2014-15;
  - d. Solicit a competitive bid for and purchase two PM<sub>10</sub> Samplers for an amount not to exceed \$21,000 as budgeted in the proposed NATTS Expenditures for FY 2014-15;
  - e. Solicit a competitive bid for and purchase four Polycyclic Aromatic Hydrocarbon (PAH) Samplers for an amount not to exceed \$22,000 as budgeted in the proposed NATTS Expenditures for FY 2014-15;
  - f. Issue purchase order with SCAQMD pre-qualified vendor for Laboratory Information Management System (LIMS) Data Server with the lowest responsive bid price for an amount not to exceed \$35,000 as budgeted in the proposed NATTS Expenditures for FY 2014-15;
  - g. Solicit a competitive bid for and purchase one Replacement Pump for Canister Cleaning for an amount not to exceed \$6,500 as budgeted in the proposed NATTS Expenditures for FY 2014-15;
  - h. Issue a purchase order with Winner Chevrolet from Elk Grove for an amount not to exceed \$86,000 for two CNG vehicles, one for the proposed NATTS Expenditures for FY 2014-15 and one for the proposed 22<sup>nd</sup> Year PAMS Expenditures for FY 2014-15; and
  - i. Solicit a competitive bid for and purchase one Deionized Water System for an amount not to exceed \$13,000 as budgeted in the proposed NATTS Expenditures for FY 2014-15.

Barry R. Wallerstein, D.Env.  
Executive Officer

## **Background**

### U.S. Government Enhanced Particulate Monitoring Program

The SCAQMD has been providing enhanced particulate monitoring support as part of a national monitoring program since 2003. Sample collection began in early February 2003 and will continue for the foreseeable future.

### NATTS Program

There are currently 188 hazardous air pollutants (HAPs), or air toxics, regulated under the Clean Air Act that are associated with a wide variety of adverse health effects, including cancer and neurological effects. The U.S. EPA Government Performance Results Act commitments specify a goal of reducing air toxics emissions by 75% from 1993 levels to significantly reduce health risks. The NATTS Program was developed to fulfill the need for long-term national HAP monitoring data. In Calendar Year 2007, U.S. EPA expanded the NATTS Program and awarded Section 103 funds to conduct monitoring for toxic air contaminants at two existing SCAQMD monitoring sites: Central Los Angeles and Rubidoux. The air toxics data serve as a continuum between past and future air toxics measurements programs, such as MATES, and allow for more accurate evaluation of toxic trends on a regional basis. Since this is a long-term trends monitoring program, it is anticipated that NATTS funding will be granted annually for the next several years.

### PAMS Program

In February 1993, the U.S. EPA promulgated the PAMS regulations for areas classified as serious, severe or extreme non-attainment for ozone. These regulations require SCAQMD to conduct monitoring for ozone precursors with enhanced monitoring equipment at a total of seven sites. The PAMS Program is also funding the meteorological upper air profilers sited at LAX and Ontario airports, Moreno Valley in Riverside County, Irvine in Orange County and Whiteman Airport in the San Fernando Valley. Since the onset of the PAMS Program, U.S. EPA has annually allocated Section 105 supplemental grant funds in support of this requirement.

### PM<sub>2.5</sub> Program

Since 1998, U.S. EPA has provided funds under a Section 103 Grant for a comprehensive PM<sub>2.5</sub> Air Monitoring Program. To date, there are 20 ambient SCAQMD monitoring stations operating 23 PM<sub>2.5</sub> samplers under U.S. EPA funding. In addition, U.S. EPA has supported the expansion of the network to collect continuous PM<sub>2.5</sub> mass and chemical speciation at several sites within the South Coast Air Basin. This augmentation substantially adds to the fine particulate data which will help in the characterization of PM<sub>2.5</sub> sources, current air quality conditions and health impacts.

### Near-Road NO<sub>2</sub> Monitoring Program

On February 9, 2010, U.S. EPA promulgated new monitoring requirements for the Nitrogen Dioxide (NO<sub>2</sub>) monitoring network in support of newly revised 1-hour NO<sub>2</sub>



National Ambient Air Quality Standards (NAAQS) and the retained annual NAAQS. In the new monitoring requirements, state and local air monitoring agencies are required to install near-road NO<sub>2</sub> monitoring stations at locations where peak hourly NO<sub>2</sub> concentrations are expected to occur. State and local air agencies are required to consider traffic volumes, fleet mix, roadway design, traffic congestion patterns, local terrain or topography and meteorology in determining where a required near-road NO<sub>2</sub> monitor should be placed. In addition to those required considerations, there are other factors that impact the selection and implementation of a near-road monitoring station including satisfying siting criteria, site logistics and population exposure.

## **Proposal**

### Enhanced Particulate Monitoring Program

The SCAQMD has received funding from the U.S. Government for the ongoing Enhanced Particulate Monitoring Program for FY 2014-15 in the amount of \$2,968,841. Revenue in the amount of \$2,174,476 for this grant has already been included in the FY 2014-15 Budget. This action is to recognize the additional revenue in the amount of \$794,365 in the FY 2014-15 Budget and appropriate, upon receipt of the award, \$632,427 to the Major Objects in the Science and Technology Advancement FY 2014-15 Budget as set forth in Attachment 1.

### NATTS Program

The U.S. EPA has provided Section 103 Grant funding in the amount of \$293,716 to continue the NATTS Program for the July 1, 2014 to June 30, 2015 time period. Revenue corresponding to Salary and Employee Benefits and Indirect Costs in the amount of \$83,000 for this grant has already been included in the FY 2014-15 Budget. This action is to recognize revenue in the amount of \$263,920, inclusive of \$53,204 in estimated remaining funds from the previous fiscal year, in the FY 2014-15 Budget, and appropriate, upon receipt of the award, \$263,920 to the Major Objects in the Science and Technology Advancement FY 2014-15 Budget as set forth in Attachment 3. The U.S. EPA concurs with staff's proposed allocation.

### PAMS Program

As in previous years, there is a need to reallocate PAMS funding for the final quarter of the federal fiscal year ending September 30, 2014. This action is to recognize the revenue balance of \$224,684, exclusive of \$98,279 already included in the adopted FY 2014-15 Budget for Salary and Employee Benefits, and appropriate \$224,684 to the Major Objects in the Science and Technology Advancement FY 2014-15 Budget as set forth in Attachment 5. The U.S. EPA concurs with staff's proposed reallocation.

### PM<sub>2.5</sub> Program

U.S. EPA provided funding in the amount of \$777,590 in Section 103 Grant funds for the continuation of the PM<sub>2.5</sub> Program through March 31, 2015. Revenue corresponding to the Salary and Employee Benefits portion of this grant has already

been included in the FY 2014-15 Budget. This action is to recognize and appropriate the remaining revenue in the amount of \$181,315 to the Major Objects in the Science and Technology Advancement FY 2014-15 Budget as set forth in Attachment 7. The U.S. EPA concurs with staff's proposed allocation.

#### Near-Road NO<sub>2</sub> Monitoring Program

U.S. EPA has provided funding in Section 103 Grant Funds for the implementation of the Near-Road NO<sub>2</sub> Monitoring Program through May 31, 2015. Revenue corresponding to the Salary and Employee Benefits portion of this grant has already been included in the FY 2014-15 Budget. This action is to recognize and appropriate the remaining revenue in the amount of \$379,307 to the Major Objects in the Science and Technology Advancement FY 2014-15 Budget as set forth in Attachment 9. The U.S. EPA concurs with staff's proposed allocation.

#### Issue Purchase Order for One CNG Vehicle

At the outset of the Enhanced Particulate Monitoring Program over seven years ago, several dedicated-CNG sedans were purchased to meet the mileage-intensive needs of the program. Several of these original vehicles now have over 140,000 miles, and the funding agency, the U.S. Department of Homeland Security, concurs with SCAQMD staff that a multi-year vehicle replacement program is appropriate. Under Section IV.A.5 of the SCAQMD Procurement Policy and Procedure, the Procurement Manager shall pursue cooperative purchasing opportunities whenever possible. Dedicated CNG vehicles are available from one vendor under the State of California, Department of General Services, Procurement Division, Alternative Fueled Vehicles Contract 1-14-23-23E. This action is to authorize the Procurement Manager to issue a purchase order for an amount not to exceed \$38,000 for one CNG vehicle from Wondries Fleet Group, since it is the vendor on the list with the most competitive price, as budgeted in the proposed Government Enhanced Particulate Monitoring Expenditures for FY 2014-15.

#### Initiate a Competitive Bid for and Purchase One Centrifuge

The U.S. EPA NATTS program requires the analysis of air toxic metals which is conducted by Inductively Coupled Plasma Mass Spectrometry (ICP/MS). The analysis method requires a centrifuge as part of the sample preparation process. Currently, the laboratory operates three centrifuges and one additional centrifuge is needed to keep up with sample throughput. The SCAQMD Procurement Policy and Procedure allows for purchases over \$2,500 and under \$25,000 to be purchased using an informal bid process. Therefore, this action is to authorize the Procurement Manager to issue a purchase order for one centrifuge, as a result of an informal bid process, in an amount not to exceed \$11,000, as budgeted in the proposed NATTS Expenditures for FY 2014-15.

Issue Purchase Order for ICP/MS Autosampler Upgrade

The U.S. EPA NATTS program requires the analysis of air toxic metals which is conducted by Inductively Coupled Plasma Mass Spectrometry (ICP/MS). The ICP/MS has an Elemental Scientific Inc. (ESI) auto sampler which needs an upgrade to significantly increase sample throughput and improve quality control. This action is to authorize the Procurement Manager to issue a sole source purchase order with ESI for an amount not to exceed \$25,000 for the purchase of the ICP/MS autosampler upgrade, as budgeted in the proposed NATTS Expenditures for FY 2014-15.

Initiate a Competitive Bid for and Purchase Two PM<sub>10</sub> Samplers

The U.S. EPA NATTS program requires the analysis of air toxics samples collected onto filters from PM<sub>10</sub> samplers. The samplers have been in operation since the inception of the NATTS program and are in need of replacement. The SCAQMD Procurement Policy and Procedure allows for purchases over \$2,500 and under \$25,000 to be purchased using an informal bid process. Therefore, this action is to authorize the Procurement Manager to issue a purchase order for two PM<sub>10</sub> samplers as a result of an informal bid process in an amount not to exceed \$21,000, as budgeted in the proposed NATTS Expenditures for FY 2014-15.

Initiate a Competitive Bid for and Purchase Four PAH Samplers

The U.S. EPA NATTS program requires the analysis of air toxics samples collected onto sampling media from PAH samplers. The samplers have been in operation since the inception of the NATTS program and are in need of replacement. The SCAQMD Procurement Policy and Procedure allows for purchases over \$2,500 and under \$25,000 to be purchased using an informal bid process. Therefore, this action is to authorize the Procurement Manager to issue a purchase order for four PAH samplers as a result of an informal bid process in an amount not to exceed \$22,000, as budgeted in the proposed NATTS Expenditures for FY 2014-15.

Issue Purchase Order for LIMS Data Server

Currently, SCAQMD fulfills U.S. EPA requirements for submittal of preliminary air toxics monitoring data for the NATTS program. Data validation and submittal from the program requires significant computing resources. In anticipation of enhanced laboratory data handling capability and the increased implementation of the laboratory information management system, a lab server hardware upgrade is needed. The increases to data storage and staff access needs necessitate a higher capacity server. The new server will accommodate the current and near future projected computing needs of the laboratory. This action is to authorize the Procurement Manager to award a purchase order for a computer server for LIMS Data Server to an SCAQMD pre-qualified vendor at the lowest responsive bid price at a cost not to exceed \$35,000, as budgeted in the proposed NATTS Expenditures for FY 2014-15.

### Initiate a Competitive Bid for and Purchase One Replacement Pump for Canister Cleaning

The U.S. EPA NATTS program requires the analysis air toxics samples collected onto sampling media from PAH samplers. The samplers have been in operation since the inception of the NATTS program and are in need of replacement. The SCAQMD Procurement Policy and Procedure allows for purchases over \$2,500 and under \$25,000 to be purchased using an informal bid process. Therefore, this action is to authorize the Procurement Manager to issue a purchase order for one replacement pump for canister cleaning as a result of an informal bid process in an amount not to exceed \$6,500, as budgeted in the proposed NATTS Expenditures for FY 2014-15.

### Issue Purchase Order for Two CNG Vehicles

With an aging fleet of calibration and repair vehicles, staff has identified the need to replace the older high-mileage vehicles with new CNG-powered vehicles. Calibration and repair vehicles are essential for staff to perform routine and non-routine calibration, maintenance and repair of air monitoring equipment for air monitoring stations supporting the NATTS program and the PAMS program. Under Section IV.A.5 of the SCAQMD Procurement Policy and Procedure, the Procurement Manager shall pursue cooperative purchasing opportunities whenever possible. Dedicated CNG vehicles are available from vendors under the State of California, Department of General Services, Procurement Division, Alternative Fueled Vehicles Contract 1-14-23-23D. This action is to authorize the Procurement Manager to issue a purchase order with Winner Chevrolet from Elk Grove since it is the vendor on the state contract award list with the most competitive price for an amount not to exceed \$96,000 for the purchase of two CNG vehicles, as budgeted in the proposed NATTS Expenditures for FY 2014-15 and the proposed 22<sup>nd</sup> Year PAMS Expenditures for FY 2014-15.

### Initiate a Competitive Bid for and Purchase One Deionized Water System

The U.S. EPA NATTS program requires the analysis of air toxic metals which is conducted by ICP/MS. The analysis method requires a deionized water system meeting stringent requirements for the sample preparation. Currently, SCAQMD has one deionized water system to support sample preparation for NATTS and other air monitoring programs, but with increased demand, a dedicated deionized water system for NATTS samples is needed. The SCAQMD Procurement Policy and Procedure allows for purchases over \$2,500 and under \$25,000 to be purchased using an informal bid process. Therefore, this action is to authorize the Procurement Manager to issue a purchase order for one deionized water system, as a result of an informal bid process, in an amount not to exceed \$13,000 as budgeted in the proposed NATTS Expenditures for FY 2014-15.

### **Outreach**

In accordance with SCAQMD's Procurement Policy and Procedure, a public notice advertising the RFP/RFQ and inviting bids will be published in the Los Angeles Times,

the Orange County Register, the San Bernardino Sun, and Riverside County Press Enterprise newspapers to leverage the most cost-effective method of outreach to the South Coast Basin.

Additionally, potential bidders may be notified utilizing SCAQMD's own electronic listing of certified minority vendors. Notice of the RFP/RFQ will be e-mailed to the Black and Latino Legislative Caucuses and various minority chambers of commerce and business associations, and placed on the Internet at SCAQMD's website (<http://www.aqmd.gov>) where it can be viewed by making the selection "Grants & Bids." Information is also available on SCAQMD's bidder's 24-hour telephone message line (909) 396-2724.

### **Sole Source Justifications**

Section VIII, B.3 of the Procurement Policy and Procedure identifies four major provisions under which a sole source award may be justified for federally funded procurement and states: For contracts funded in whole or in part with federal funds, written justification for sole source award must be provided documenting that awarding a contract is infeasible under small purchase procedures, sealed bids or competitive proposals and that one of the following circumstances applies: (a) The item is available only from a single source; (b) The public exigency or emergency for the requirement will not permit a delay resulting from competitive solicitation; (c) The awarding federal agency authorizes noncompetitive proposals; or (d) After solicitation of a number of sources, competition is determined inadequate.

The request for sole source purchase of the ICP/MS Autosampler Upgrade is made under Section VIII, B.3.a for which the items are available only from a single source. There is currently only one vendor (ESI) that can provide the compatible upgrade to the existing ESI autosampler for the ICP/MS.

### **Resource Impacts**

U.S. Government funding totaling \$2,968,841 will fully support the Enhanced Particulate Monitoring Program.

U.S. EPA Section 103 Grant funding totaling \$1,280,872 (inclusive of the remaining funds from the previous fiscal year) will support the continuation of the NATTS, PM<sub>2.5</sub>, and Near-Road NO<sub>2</sub> Monitoring Programs, including equipment, contracts, temporary services, and supplies necessary to meet the objectives of the program.

U.S. EPA Section 105 Grant funding totaling \$322,963 (inclusive of the remaining funds from the previous fiscal year) supports the 22nd year operation of the PAMS Program, including equipment, contracts, temporary services, and supplies necessary to meet the objectives of the program.

## **Attachments**

1. Proposed Government Enhanced Particulate Monitoring Program Expenditures FY 2014-15
2. NATTS Budget and Estimated Remaining Balance as of June 30, 2014
3. Proposed NATTS Expenditures FY 2014-15
4. PAMS 22nd Year Budget and Estimated Remaining Balance as of June 30, 2014
5. Proposed 22nd Year PAMS Expenditures FY 2014-15
6. PM<sub>2.5</sub> Budget and Estimated Remaining Balance as of June 30, 2014
7. Proposed PM<sub>2.5</sub> Expenditures FY 2014-15
8. Near-Road Monitoring Budget and Estimated Remaining Balance as of June 30, 2014
9. Proposed Near-Road Monitoring Expenditures FY 2014-15

**ATTACHMENT 1**

**Proposed Government Enhanced Particulate Monitoring Expenditures FY 2014-15**

<b>Account Description</b>	<b>Account Number</b>	<b>Program Code</b>	<b>Estimated Expenditures</b>
<b>Salaries &amp; Employee Benefits Major Object:</b>			
Overtime	52000	47505	\$ 103,360
<b>Contractual</b>			
Professional & Special Services	67450	47505	\$ 105,000
<b>Services &amp; Supplies Major Object:</b>			
Temporary Employee Services	67460	47505	\$ 88,400
Maintenance of Equipment	67600	47505	500
Building Maintenance	67650	47505	106,000
Auto Mileage	67700	47505	114,347
Travel	67800	47505	3,000
Communications	67900	47505	5,500
Office Expense	68100	47505	2,320
Small Tools	68300	47505	45,000
Taxes, License, Fees	69600	47505	21,000
<b>Total Services &amp; Supplies</b>			<b>\$ 386,067</b>
<b>Capital Outlay Major Object:</b>			
CNG Vehicle	77000	47505	\$ 38,000
<b>Total Capital Outlays</b>			<b>\$ 38,000</b>
<b>FY 2014-15 Appropriations</b>			<b>\$ 632,427</b>
Salaries, Benefits and Indirect Costs*	51000	44505	\$ 2,336,414
<b>Total Estimated Expenditures</b>			<b>\$ 2,968,841</b>

\*Salaries, Benefits, and Indirect Costs are already included in the adopted FY 2014-15 Budget

**ATTACHMENT 2**

**NATTS Budget and Estimated Remaining Balance as of June 30, 2014**

Description	Fixed Assets	Contracts	Services & Supplies	Salaries & Employee Benefits	Balance
NATTS Monitoring Budget					\$ 243,716
Expenditures 7/1/13-5/31/14	\$ (5,999)	\$ (3,100)	\$ (98,413)	\$ (83,000)	\$ (190,512)
Estimated Expenditures 6/1/14-6/30/14	\$ -	\$ -	\$ -	\$ -	\$ -
NATTS Amount to be Carried Over to FY 2014-15 Budget					\$ 53,204



**ATTACHMENT 3**  
**Proposed NATTS Expenditures FY 2014-15**  
**(Inclusive of \$53,204 Remaining Balance from Previous Fiscal Year)**

<b>Account Description</b>	<b>Account Number</b>	<b>Program Code</b>	<b>Estimated Expenditures</b>
<b>Services &amp; Supplies Major Object:</b>			
Professional and Specialized Services	67450	47468	\$ 1,000
Maintenance of Equipment	67600	47468	40,000
Travel	67800	47468	2,000
Laboratory Supplies	68050	47468	15,000
Office Expense	68100	47468	1,220
Small Tools	68300	47468	28,200
<b>Total Services &amp; Supplies</b>			<b>\$ 87,420</b>
<b>Capital Outlay Major Object:</b>			
Centrifuge	77000	47468	\$ 11,000
ICP/MS autosampler upgrade	77000	47468	25,000
PM10 Sampler (2)	77000	47468	21,000
PAH Sampler (4)	77000	47468	22,000
LIMS Data Server	77000	47468	35,000
Replacement Pump for Canister Cleaning	77000	47468	6,500
CNG Vehicle	77000	47468	43,000
Deionized Water System	77000	47468	13,000
<b>Total Capital Outlay Major Object:</b>			<b>\$ 176,500</b>
<b>FY 2014-15 Appropriations</b>			
			<b>\$ 263,920</b>
Salaries, Benefits and Indirect Costs*	51000	44468	\$ 83,000
<b>Total Estimated Expenditures</b>			<b>\$ 346,920</b>

\*Salaries, Benefits, and Indirect Costs are already included in the adopted FY 2014-15 Budget

**ATTACHMENT 4**

**PAMS 22nd Year Budget and Estimated Remaining Balance as of June 30, 2014**

Description	Fixed Assets	Contracts	Services & Supplies	Salaries & Employee Benefits	Balance
PAMS Budget					\$ 1,217,270
Expenditures 7/1/13-5/31/14	\$ (73,279)	\$ (242,203)	\$ (252,103)	\$ (294,134)	\$ (861,719)
Estimated Expenditures 6/1/14-6/30/14	\$ -	\$ (32,588)	\$ -	\$ -	\$ (32,588)
PAMS Amount to be Carried Over to FY 2014-15 Budget					\$ 322,963

**ATTACHMENT 5**  
**Proposed 22nd Year PAMS Expenditures FY 2014-15**

<b>Account Description</b>	<b>Account Number</b>	<b>Program Code</b>	<b>Estimated Expenditures</b>
<b>Services &amp; Supplies Major Object:</b>			
Rents & Leases Structures	67350	26530	\$ 18,050
Professional and Specialized Services	67450	47530	12,500
Temporary Employee Services	67460	47530	75,000
Maintenance of Equipment	67600	26530	25,000
Maintenance of Equipment	67600	47530	15,071
Building Maintenance	67650	26530	1,000
Building Maintenance	67650	47530	8,000
Communications	67900	26530	5,000
Laboratory Supplies	68050	47530	8,000
Office Expense	68100	26530	3,000
Office Expense	68100	47530	1,450
Small Tools	68300	26530	500
Small Tools	68300	47530	9,113
Miscellaneous	69500	26530	3,000
<b>Total Services &amp; Supplies</b>			<b>\$ 181,684</b>
<b>Capital Outlay Major Object:</b>			
CNG Vehicle	77000	47530	\$ 43,000
<b>Total Capital Outlays</b>			<b>\$ 43,000</b>
<b>FY 2014-15 Appropriations</b>			
			<b>\$ 224,684</b>
Salaries and Benefits*	51000	44530 and 26530	\$ 98,279
<b>Total Estimated Expenditures</b>			<b>\$ 322,963</b>

\*Salaries and Benefits are already included in the adopted FY 2014-15 Budget

**ATTACHMENT 6**

**PM2.5 Budget and Estimated Remaining Balance as of June 30, 2014**

Description	Fixed Assets	Contracts	Services & Supplies	Salaries & Employee Benefits	Balance
PM2.5 Budget					\$ 1,557,795
Expenditures 7/1/13-5/31/14	\$ (87,640)	\$ (44,005)	\$ (192,492)	\$ (576,250)	\$ (900,387)
Estimated Expenditures 6/1/14-6/30/14	\$ (130,343)	\$ -	\$ -	\$ -	\$ (130,343)
PM2.5 Amount to be Carried Over to FY 2014-15 Budget					\$ 527,065

**ATTACHMENT 7**  
**Proposed PM2.5 Expenditures FY 2014-15**

<b>Account Description</b>	<b>Account Number</b>	<b>Program Code</b>	<b>Estimated Expenditures</b>
<b>Services &amp; Supplies Major Object:</b>			
Travel	67800	47500	\$ 4,000
Laboratory Supplies	68050	47500	19,000
Office Expense	68100	47500	10,643
Small Tools	68300	47500	25,000
Professional and Specialized Services	67450	47500	43,172
Maintenance of Equipment	67600	47500	55,000
Rents and Leases Structure	67350	47500	4,500
Building Maintenance	67650	47500	20,000
<b>FY 2014-15 Appropriations</b>			<b>\$ 181,315</b>
Salaries and Benefits*		44500	\$ 345,750
<b>Total Estimated Expenditures</b>			<b>\$ 527,065</b>

\*Salaries and Benefits are already included in the adopted FY 2014-15 Budget

**ATTACHMENT 8**

**Near-Road Monitoring Budget and Estimated Remaining Balance as of June 30, 2014**

Description	Fixed Assets	Contracts	Services & Supplies	Salaries & Employee Benefits	Balance
Near-Road Monitoring Budget					\$ 662,211
Expenditures 7/1/13-5/31/14	\$ (149,398)	\$ (32,762)	\$ (14,229)	\$ (17,919)	\$ (214,308)
Estimated Expenditures 6/1/14-6/30/14	\$ (37,472)	\$ -	\$ -	\$ (3,544)	\$ (41,016)
Near-Road Monitoring Amount to be Carried Over to FY 2014-15 Budget					\$ 406,887

**ATTACHMENT 9**  
**Proposed Near-Road Monitoring Expenditures FY 2014-15**

<b>Account Description</b>	<b>Account Number</b>	<b>Program Code</b>	<b>Estimated Expenditures</b>
<b>Services &amp; Supplies Major Object:</b>			
Professional and Specialized Services	67450	47469	\$ 88,000
Communications	67900	47469	10,000
Office Expense	68100	47469	6,000
Small Tools	68300	47469	22,307
Utilities	67850	47469	25,000
<b>Total Services &amp; Supplies</b>			<b>\$ 151,307</b>
<b>Capital Outlay Major Object:</b>			
PM2.5 Continuous FEM Monitor (2)	77000	47469	\$ 58,000
Air Monitoring Platform (2)	77000	47469	50,000
Traffic Counters (4)	77000	47469	30,000
Data Acquisition System	77000	47469	90,000
<b>Total Capital Outlay</b>			<b>\$ 228,000</b>
<b>FY 2014-15 Appropriations</b>			<b>\$ 379,307</b>
Salaries, Benefits and Indirect Costs*	51000	44469	\$ 27,580
<b>Total Estimated Expenditures</b>			<b>\$ 406,887</b>

\* Salaries and Benefits are already included in the adopted FY 2014-15 Budget

BOARD MEETING DATE: July 11, 2014

AGENDA NO. 12

**PROPOSAL:** Execute Contract for Media, Advertising and Public Outreach for Check Before You Burn Program

**SYNOPSIS:** On September 6, 2013, the Board awarded a contract to Sensis for \$493,000 to plan and implement a Media, Advertising and Public Outreach Campaign for the FY 2013-14 Check Before You Burn program. The existing contract with the firm will expire on September 30, 2014. This action is to execute a contract with Sensis for one additional year.

**COMMITTEE:** Stationary Source, June 20, 2014, Recommended for Approval

**RECOMMENDED ACTION:**

Authorize the Executive Officer to execute a contract for Media, Advertising and Public Outreach for the Check Before You Burn program with Sensis, for one year in an amount not to exceed \$493,000, and appropriate \$493,000 from the Rule 1309.1 Priority Reserve Funds (Fund 36) to implement the FY 2014-15 Check Before You Burn outreach campaign.

Barry R. Wallerstein, D.Env.  
Executive Officer

SA/TC

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**Background**

SCAQMD's Check Before You Burn program and its regulatory framework, Rule 445, are key measures in the agency's 2012 Air Quality Management Plan to achieve the federal health-based air quality standard for PM2.5. Check Before You Burn and Rule 445 seek to reduce PM2.5 emissions from wood burning in residential fireplaces during late fall and winter when unhealthy air quality is forecast.

On June 7, 2013, the Board approved release of an RFP to solicit proposals from advertising agencies, media/public relations firms or other organizations with the necessary expertise to plan and execute a comprehensive media, advertising and public outreach campaign to promote awareness of and compliance with the Check Before You Burn program during the FY 2013-14 fall/winter season. The Board approved funding



for this outreach effort from the Rule 1309.1 Priority Reserve Funds in an amount not to exceed \$500,000.

Based on the overall quality of their proposed campaign and their presentation to the Administrative Committee, the committee recommended awarding a contract to Sensis. The Governing Board approved the contract on September 6, 2013 in an amount not to exceed \$493,000, with an option to amend the contract for two additional one-year contracts.

### **Proposal**

For the 2013-14 Check Before You Burn program, Sensis developed and implemented a comprehensive media, advertising and public outreach campaign to:

- Increase awareness of and support for SCAQMD's Check Before You Burn program;
- Promote awareness of and compliance with no-burn days; and
- Promote awareness of and participation in cleaner alternatives to wood burning in home fireplaces, such as natural-gas log sets.

The campaign achieved a total of 62,630,499 impressions through paid advertisements on TV, radio, Internet, electronic billboards and social media. In addition, AirAlerts subscriptions increased by 2,700 during the campaign.

A key component of the campaign included a TV commercial that aired on local stations and featured Juliette Larson, an 11-year old asthma sufferer. In addition, the firm developed digital ads using Juliette as the spokesperson, secured an interview with Juliette on KTLA's Good Day LA morning show and worked directly with TV weather anchors to have them report real-time information on no-burn days. Real-time alerts also aired on radio, billboards, and social media.

The Southland experienced 16 no-burn days during the FY 2013-14 Check Before You Burn season, the highest number of no-burn days since the program started in 2011. Looking ahead to the FY 2014-15 season, there is a strong need to continue to increase awareness of the agency's Check Before You Burn program and build on the momentum gained during the FY 2013-14 outreach campaign.

Based on the overall quality and comprehensive design of the campaign developed and implemented by Sensis, and to ensure an outreach campaign is in place before the FY 2014-15 Check Before You Burn season begins, it is recommended that a contract with Sensis be executed for one year in an amount not to exceed \$493,000.

**Resource Impacts**

Funding for this contract extension will be provided from Rule 1309.1 Priority Reserve Funds (Fund 36) to implement the FY 2014-15 Check Before You Burn outreach program.

BOARD MEETING DATE: July 11, 2014

AGENDA NO. 13

**PROPOSAL:** Issue RFP for Management Firm to Operate SCAQMD's Diamond Bar Headquarters Cafeteria

**SYNOPSIS:** The current contract to manage and operate SCAQMD's headquarters cafeteria expires December 31, 2014. This action is to issue an RFP to solicit proposals from qualified food service management firms interested in providing this service for the next three-year period.

**COMMITTEE:** Administrative, June 13, 2014; Recommended for Approval

**RECOMMENDED ACTION:**

Issue RFP for Management Firm to Operate SCAQMD's Diamond Bar Headquarters Cafeteria

Barry R. Wallerstein, D.Env.  
Executive Officer

WJJ:SO

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**Background**

SCAQMD contracts with a cafeteria management firm to provide quality food service at a reasonable price to meet agency needs. Cafeteria services are used by employees, those doing business or attending meetings at SCAQMD, staff of tenant agencies, those who work in the Gateway Business Park, and members of the public. Additionally, the firm operating the cafeteria provides catering services for SCAQMD meetings and other events. The current three-year contract with California Dining Services expires December 31, 2014.

**Proposal**

This action is to authorize staff to issue RFP #P2015-02 to solicit proposals from food service management firms interested in contracting with SCAQMD to operate the cafeteria for a three-year period beginning January 1, 2015. The RFP includes environmental sustainability and "green building" requirements.

**Outreach**

In accordance with SCAQMD's Procurement Policy and Procedure, a public notice advertising the RFP/RFQ and inviting bids will be published in the Los Angeles Times, the Orange County Register, the San Bernardino Sun, and Riverside County Press Enterprise newspapers to leverage the most cost-effective method of outreach to the South Coast Basin.

Additionally, potential bidders may be notified utilizing SCAQMD's own electronic listing of certified minority vendors. Notice of the RFP/RFQ will be e-mailed to the Black and Latino Legislative Caucuses and various minority chambers of commerce and business associations, and placed on the Internet at SCAQMD's website (<http://www.aqmd.gov>) where it can be viewed by making the selection "Grants & Bids." Information is also available on SCAQMD's bidder's 24-hour telephone message line (909) 396-2724.

**Bid Evaluation**

Proposals received will be evaluated by a diverse, technically qualified panel in accordance with criteria contained in the attached RFP.

**Resource Impacts**

The contract for operation of SCAQMD's Diamond Bar Headquarters cafeteria will be a no-cost contract.

**Attachment**

RFP #2015-02 – Issue RFP for Management Firm to Operate SCAQMD's Diamond Bar Headquarters Cafeteria

## **SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

### **REQUEST FOR PROPOSALS FOR A MANAGEMENT FIRM TO OPERATE SCAQMD'S DIAMOND BAR HEADQUARTERS CAFETERIA**

#### **RFP #P2015-02**

South Coast Air Quality Management District (SCAQMD) requests proposals for the following purpose according to terms and conditions attached. In the preparation of this Request for Proposals (RFP) the words "Proposer," "Contractor," and "Consultant" are used interchangeably.

#### **PURPOSE**

The purpose of this RFP is to solicit proposals from food service management firms interested in operating SCAQMD's on-site cafeteria and providing related food services for a three-year period, beginning January 1, 2015. The full-service, "turn-key" cafeteria is located at SCAQMD's headquarters building at 21865 Copley Drive, Diamond Bar, CA 91765.

The selected provider will enter into a contractual agreement to operate a cafeteria that is open to employees and the public and to provide catering and other food services for on-site meetings and special events. SCAQMD shall review and approve the cafeteria and catering programs to insure agency needs are met. The selected contractor will be responsible for providing quality food and service that meets the needs of the agency and its diverse workforce.

**INDEX** - The following are contained in this RFP:

Section I	Background/Information/Schedule of Events
Section II	Participation in the Procurement Process
Section III	Work Statement
Section IV	Required Qualifications
Section V	Proposal Submittal Requirements
Section VI	Proposal Evaluation/Contractor Selection Criteria
Section VII	Draft Contract
Attachment A	Certifications and Representations

#### **SECTION I: BACKGROUND INFORMATION AND SCHEDULE OF EVENTS**

SCAQMD is a regional governmental agency responsible for meeting air quality health standards in Orange County, and the urban portions of Los Angeles, Riverside and San Bernardino Counties. SCAQMD's Fiscal Year 2013-14 budget is \$129.2 million and the agency employs over 700 scientific, technical, and administrative support staff. An on-site childcare center is open to the public.

SCAQMD's regular operating hours are 7:00 a.m. – 5:30 p.m., Tuesday through Friday. The cafeteria, which has a seating capacity of approximately 300, is located in the main building of SCAQMD headquarters and is currently open from 6:45 a.m. to 3:00 p.m., Tuesday through Friday. In addition to SCAQMD employees, about 50 additional employees of building tenants and contractors may use the cafeteria, along with those who work in the Gateway Business Park and members of the public. SCAQMD also hosts numerous public meetings during regular operating hours that may attract up to 300. On an infrequent basis, special occasion after-hours food services may be needed.

**CONTACT PERSON:**

Questions regarding the content or intent of this RFP, or on procedural matters, should be addressed to:

Sylvia Oroz, Business Services Manager  
Administrative & Human Resources  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765  
(909) 396-2054  
[soroz@aqmd.gov](mailto:soroz@aqmd.gov)

**SCHEDULE OF EVENTS**

July 11, 2014	RFP Released
<b>July 24, 2014</b>	<b>Mandatory Bidders Conference</b>
<b>August 13, 2014, 2:00 p.m.</b>	<b>Proposals Due</b>
August 14 - September 12, 2014	Proposal Evaluations and Site Visits
November 7, 2014	Recommendation to Board
January 1, 2015	Contractor Begins Operating Cafeteria

**MANDATORY BIDDERS CONFERENCE**

A mandatory Bidders Conference will be held to present additional information and ask/answer questions. A tour of the cafeteria will be provided only at this time. ONLY THOSE PROPOSERS WHO ATTEND OR SEND REPRESENTATIVES TO THE BIDDERS CONFERENCE WILL BE PERMITTED TO SUBMIT PROPOSALS.

Date: Thursday, July 24, 2014  
Time: 3:00 p.m.  
Location: South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765  
Conference Room: CC-2

Firms/individuals planning to attend the Bidders Conference should confirm their attendance by close of business on Wednesday, July 23, 2014, by calling (909) 396-2281 or send an email to [jambriz@aqmd.gov](mailto:jambriz@aqmd.gov).

**SECTION II: PARTICIPATION IN THE PROCUREMENT PROCESS**

A. It is the policy of SCAQMD to ensure that all businesses including minority business enterprises, women business enterprises, disabled veteran business enterprises and small businesses have a fair and equitable opportunity to compete for and participate in SCAQMD contracts.

B. Definitions:

The definition of minority, women or disadvantaged business enterprises set forth below is included for purposes of determining compliance with the affirmative steps requirement described in Paragraph G below on procurements funded in whole or in part with federal grant funds which involve the use of subcontractors. The definition provided for disabled veteran business

enterprise, local business, small business enterprise, low-emission vehicle business and off-peak hours delivery business are provided for purposes of determining eligibility for point or cost considerations in the evaluation process.

1. "Women business enterprise" (WBE) as used in this policy means a business enterprise that meets all of the following criteria:
  - a. a business that is at least 51 percent owned by one or more women, or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more women.
  - b. a business whose management and daily business operations are controlled by one or more women.
  - c. a business which is a sole proprietorship, corporation, or partnership with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, foreign firm, or other foreign-based business.
2. "Disabled veteran" as used in this policy is a United States military, naval, or air service veteran with at least 10 percent service-connected disability who is a resident of California.
3. "Disabled veteran business enterprise" (DVBE) as used in this policy means a business enterprise that meets all of the following criteria:
  - a. is a sole proprietorship or partnership of which at least 51 percent is owned by one or more disabled veterans or, in the case of a publicly owned business, at least 51 percent of its stock is owned by one or more disabled veterans; a subsidiary which is wholly owned by a parent corporation but only if at least 51 percent of the voting stock of the parent corporation is owned by one or more disabled veterans; or a joint venture in which at least 51 percent of the joint venture's management and control and earnings are held by one or more disabled veterans.
  - b. the management and control of the daily business operations are by one or more disabled veterans. The disabled veterans who exercise management and control are not required to be the same disabled veterans as the owners of the business.
  - c. is a sole proprietorship, corporation, or partnership with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, firm, or other foreign-based business.
4. "Local business" as used in this policy means a company that has an ongoing business within geographical boundaries of SCAQMD at the time of bid or proposal submittal and performs 90% of the work related to the contract within the geographical boundaries of SCAQMD and satisfies the requirements of subparagraph H below.
5. "Small business" as used in this policy means a business that meets the following criteria:
  - a. 1) an independently owned and operated business; 2) not dominant in its field of operation; 3) together with affiliates is either:

- **A service, construction, or non-manufacturer with 100 or fewer employees, and average annual gross receipts of ten million dollars (\$10,000,000) or less over the previous three years, or**
  - A manufacturer with 100 or fewer employees.
- b. Manufacturer means a business that is both of the following:
- 1) Primarily engaged in the chemical or mechanical transformation of raw materials or processed substances into new products.
  - 2) Classified between Codes 311000 and 339000, inclusive, of the North American Industrial Classification System (NAICS) Manual published by the United States Office of Management and Budget, 2007 edition.
6. "Joint ventures" as defined in this policy pertaining to certification means that one party to the joint venture is a DVBE or small business and owns at least 51 percent of the joint venture.
7. "Low-Emission Vehicle Business" as used in this policy means a company or contractor that uses low-emission vehicles in conducting deliveries to SCAQMD. Low-emission vehicles include vehicles powered by electric, compressed natural gas (CNG), liquefied natural gas (LNG), liquefied petroleum gas (LPG), ethanol, methanol, hydrogen and diesel retrofitted with particulate matter (PM) traps.
8. "Off-Peak Hours Delivery Business" as used in this policy means a company or contractor that commits to conducting deliveries to SCAQMD during off-peak traffic hours defined as between 10:00 a.m. and 3:00 p.m.
9. "Benefits Incentive Business" as used in this policy means a company or contractor that provides janitorial, security guard or landscaping services to SCAQMD and commits to providing employee health benefits (as defined below in Section VIII.D.2.d) for full-time workers with affordable deductible and co-payment terms.
10. "Minority Business Enterprise" as used in this policy means a business that is at least 51 percent owned by one or more minority person(s), or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more minority persons.
- a. a business whose management and daily business operations are controlled by one or more minority persons.
  - b. a business which is a sole proprietorship, corporation, or partnership with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, foreign firm, or other foreign-based business.
  - c. "Minority person" for purposes of this policy, means a Black American, Hispanic American, Native-American (including American Indian, Eskimo, Aleut, and Native Hawaiian), Asian-Indian (including a person whose origins are from India, Pakistan, and Bangladesh), Asian-Pacific-American (including a person whose origins are from Japan, China, the Philippines, Vietnam, Korea, Samoa, Guam, the United States Trust Territories of the Pacific, Northern Marianas, Laos, Cambodia, and Taiwan).
11. "Disadvantaged Business Enterprise" as used in this policy means a business that is an entity owned and/or controlled by a socially and economically disadvantaged individual(s) as



described by Title X of the Clean Air Act Amendments of 1990 (42 U.S.C. 7601 note) (10% statute), and Public Law 102-389 (42 U.S.C. 4370d)(8% statute), respectively;  
a Small Business Enterprise (SBE);  
a Small Business in a Rural Area (SBRA);  
a Labor Surplus Area Firm (LSAF); or  
a Historically Underutilized Business (HUB) Zone Small Business Concern, or a concern under a successor program.

- C. Under Request for Quotations (RFQ), DVBEs, DVBE business joint ventures, small businesses, and small business joint ventures shall be granted a preference in an amount equal to 5% of the lowest-cost responsive bid. Low-Emission Vehicle Businesses shall be granted a preference in an amount equal to 5 percent of the lowest cost responsive bid. Off-Peak Hours Delivery Businesses shall be granted a preference in an amount equal to 2 percent of the lowest cost responsive bid. Local businesses (if the procurement is not funded in whole or in part by federal grant funds) shall be granted a preference in an amount equal to 2% of the lowest cost responsive bid.
- D. Under Request for Proposals, DVBEs, DVBE joint ventures, small businesses, and small business joint ventures shall be awarded ten (10) points in the evaluation process. A non-DVBE or large business shall receive seven (7) points for subcontracting at least twenty-five (25%) of the total contract value to a DVBE and/or small business. Low-Emission Vehicle Businesses shall be awarded five (5) points in the evaluation process. On procurements which are not funded in whole or in part by federal grant funds local businesses shall receive five (5) points. Off-Peak Hours Delivery Businesses shall be awarded two (2) points in the evaluation process.
- E. SCAQMD will ensure that discrimination in the award and performance of contracts does not occur on the basis of race, color, sex, national origin, marital status, sexual preference, creed, ancestry, medical condition, or retaliation for having filed a discrimination complaint in the performance of SCAQMD contractual obligations.
- F. SCAQMD requires Contractor to be in compliance with all state and federal laws and regulations with respect to its employees throughout the term of any awarded contract, including state minimum wage laws and OSHA requirements.
- G. When contracts are funded in whole or in part by federal funds, and if subcontracts are to be let, the Contractor must comply with the following, evidencing a good faith effort to solicit disadvantaged businesses. Contractor shall submit a certification signed by an authorized official affirming its status as a MBE or WBE, as applicable, at the time of contract execution. SCAQMD reserves the right to request documentation demonstrating compliance with the following good faith efforts prior to contract execution.
  - 1. Ensure Disadvantaged Business Enterprises (DBEs) are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities. For Indian Tribal, State and Local Government recipients, this will include placing DBEs on solicitation lists and soliciting them whenever they are potential sources.
  - 2. Make information on forthcoming opportunities available to DBEs and arrange time frames for contracts and establish delivery schedules, where the requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process. This includes, whenever possible, posting solicitations for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date.
  - 3. Consider in the contracting process whether firms competing for large contracts could subcontract with DBEs. For Indian Tribal, State and Local Government recipients, this

will include dividing total requirements when economically feasible into smaller tasks or quantities to permit maximum participation by DBEs in the competitive process.

4. Encourage contracting with a consortium of DBEs when a contract is too large for one of these firms to handle individually.
  5. Using the services and assistance of the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.
  6. If the prime contractor awards subcontracts, require the prime contractor to take the above steps.
- H. To the extent that any conflict exists between this policy and any requirements imposed by federal and state law relating to participation in a contract by a certified MBE/WBE/DVBE as a condition of receipt of federal or state funds, the federal or state requirements shall prevail.
- I. When contracts are not funded in whole or in part by federal grant funds, a local business preference will be awarded. For such contracts that involve the purchase of commercial off-the-shelf products, local business preference will be given to suppliers or distributors of commercial off-the-shelf products who maintain an ongoing business within the geographical boundaries of SCAQMD. However, if the subject matter of the RFP or RFQ calls for the fabrication or manufacture of custom products, only companies performing 90% of the manufacturing or fabrication effort within the geographical boundaries of the SCAQMD shall be entitled to the local business preference.
- J. In compliance with federal fair share requirements set forth in 40 CFR Part 33, SCAQMD shall establish a fair share goal annually for expenditures with federal funds covered by its procurement policy.

### **SECTION III: WORK STATEMENT (will be incorporated into Contract)**

#### A. Scope of Work

Following are program requirements that your submitted proposal must address:

1. The food service provided by Contractor will be both a benefit and a convenience to employees. The food offered must be high quality, nutritional, properly prepared, attractively presented, and reasonably priced to encourage maximum employee participation. SCAQMD will subsidize the operation only to the extent of providing the facility, utilities, utensils, furniture, and specified equipment.
2. Cafeteria must be operated in a manner that is sensitive to environmental sustainability and must offer customers incentives to make healthy and environmentally sensitive choices. For example, cafeteria could provide discounts for customers who provide their own reusable beverage containers or could offer reduced prices for low-carbon-footprint or healthy menu options. Additionally, contractor must indicate a commitment to working with SCAQMD staff to develop and implement environmental sustainability enhancements during the course of the contract.
3. Contractor is expected to stimulate enthusiasm in cafeteria operations and to attract customers by means of promotional activities and menu specials developed in response to customer demand.

4. Contractor is expected to provide catering services for meetings and special events, when authorized by an SCAQMD representative.

## B. Tasks

### SCAQMD will:

1. Provide contractor with a complete "turn-key" operation, completely equipped and ready to operate, together with such heat, refrigeration, and utilities service as may be reasonably required for the efficient operation of the cafeteria.
2. Provide basic building maintenance services for the premises and make all equipment repairs and replacements as promptly as possible.

**Note: As a result of the in-kind subsidies outlined in points 1 and 2 above, which total approximately \$171,000 per year, SCAQMD expects Contractor to provide reasonably priced food and services, and will pay no additional cost or subsidy for the cafeteria's operation.**

3. Furnish and maintain an adequate initial inventory of service wares (china, glassware, silverware) and small equipment (pots, pans, utensils). All equipment shall remain SCAQMD property.
4. Evaluate periodically the efficiency of and benefit received from the selected contractor.

### Contractor will:

1. Operate the cafeteria, catering services, and vending machines located on SCAQMD's premises to provide nutritious, wholesome food to SCAQMD's employees and visitors. Fifty percent of vending machine items must be healthful and nutritious, e.g., 100% fruit juice, fresh fruit, unsalted raw or dry-roasted nuts, whole grain low-fat snacks, etc.
2. Distribute menus on a weekly basis and provide marketing and promotional concepts that will continually generate interest and excitement. Menus must include low-fat, low-salt, vegetarian, and vegan options. Food items containing trans-fats are not permitted. Coffee and tea must be fair-trade certified and coffee must be shade grown.
3. Purchase food, materials, and supplies necessary for cafeteria and catering operations. Disposable items (cups, carry-out containers, napkins, paper towels, drinking straws, etc.) must be reusable, recyclable or biodegradable/compostable, including biodegradable paper products meeting Green Seal's GS-01 standard for Tissue Paper and GS-09 standard for Paper Towels and Paper Napkins. Expanded polystyrene (Styrofoam) packaging is prohibited.
4. Reduce the environmental and transportation impacts associated with food production and distribution by ensuring at least 25 percent of total combined food and beverage purchases (by cost) are sustainable. Sustainable purchases are those that meet one or both of the following criteria:
  - a) Purchases labeled USDA Certified Organic, Food Alliance Certified, Rainforest Alliance Certified, Protected Harvest Certified, Fair-Trade Certified or Maine Stewardship Council's Blue Eco-Label; or

b) Purchases produced within a 100-mile radius of SCAQMD's headquarters building.

Purchases will receive credit for each sustainable criterion met (i.e. a \$100 purchase of food that is both USDA Certified Organic and is produced locally counts as \$200 worth of sustainable food purchasing). Contractor must provide reports upon request to substantiate attainment.

5. Be responsible for all housekeeping necessary to maintain clean and sanitary conditions of all food service areas, including the floors in the kitchen and cafeteria service areas.
6. Supply and use cleaning products that meet or exceed applicable health and environmental specifications listed below. Contractor is encouraged to partner with manufacturers or distributors to maximize SCAQMD's use of these environmentally friendly materials. To the extent they exist, contractor must use cleaning products that have received SCAQMD's Clean Air Choices cleaner certification. A list of certified materials may be found at SCAQMD website ([www.SCAQMD.gov](http://www.SCAQMD.gov)) under "Certifications," "Clean Air Choices Cleaner Certification Program." Where no products have received SCAQMD certification, contractor must use products that have received Green Seal certification, as available. A list of qualifying materials may be found at Green Seal, Inc. ([www.greenseal.org](http://www.greenseal.org)).

SCAQMD reserves the right to monitor and audit compliance with these purchasing requirements. Demonstration of a commitment to and a strategy for purchasing environmentally sensitive products and addressing environmental sustainability will be included in the evaluation of submitted proposals.

7. Submit quarterly operating statements to SCAQMD.
8. Pay all federal, State, and local taxes which may be assessed against the operation of its business, equipment, or merchandise while in or on SCAQMD premises.
9. Comply with all federal, State, and local laws and regulations governing a) the preparation, handling, and serving of food, and b) sanitation of food service facilities. Procure, display, and keep in effect all necessary licenses, permits, and certificates required by law. All costs associated with such licenses, permits, and certificates shall be considered part of the operating cost of the business.
10. Hire and maintain adequately trained staff to operate SCAQMD's cafeteria and provide catering services in an efficient manner. Upon being hired, contractor's agents and employees will be subject to SCAQMD's rules and regulations while on SCAQMD property.
11. It shall be the responsibility of the contractor to secure liability insurance for all aspects of the food service program, including, but not limited to, commercial general liability and workers' compensation insurance. The physical facility shall be insured by SCAQMD.
  - a) The contractor will furnish evidence to SCAQMD that workers' compensation insurance of one million dollars (\$1,000,000) is provided, in accordance with California statutory requirements, for all employees working at SCAQMD and that such insurance coverage will be maintained in effect at all times when doing business with SCAQMD.
  - b) The contractor will furnish evidence of commercial general liability insurance of one million dollars (\$1,000,000) per occurrence and five million dollars (\$5,000,000) aggregate.

Before providing any services, SCAQMD must receive verification that it has been named as an additional insured on the liability policy.

- c) Certificates of Insurance for the above requirements must be submitted with your proposal.
- d) The contractor will provide 30-days written notice prior to any modification of any of the above insurance policies, and any such modifications will be subject to pre-approval by SCAQMD. Written notification to SCAQMD of any material changes in ownership or control which may result in changes to policy coverage limits or exclusions must be provided at least 15 days prior to the effective date of ownership transfer.

#### **SECTION IV: REQUIRED QUALIFICATIONS**

Persons or firms proposing to bid on this request for proposals must be qualified and experienced in managing large corporate cafeterias and must be operating such a cafeteria currently. Proposers must submit qualifications demonstrating this ability, including, but not limited to, the following:

1. Size and location of all current corporate cafeteria operations
2. Number of years at each operation
3. Client reference contacts for each operation
4. Licenses and Certifications required to provide such services
5. Health department records for each operation (if you currently operate more than five cafeterias, submit records for five operations only)
6. Audited financial statement for the most recent year

#### **SECTION V: PROPOSAL SUBMITTAL REQUIREMENTS**

Submitted proposals must follow the format outlined below and all requested information must be supplied. Failure to submit proposals in the required format will result in elimination from proposal evaluation.

Each proposal must be submitted in three parts:

- Volume I must relate to the Technical Proposal
- Volume II must relate to the Operating Costs and Other Information
- Volume III must contain the Certifications and Representations, included in Attachment A to this RFP, which have been executed by an authorized official of the Contractor.

A separate cover letter including the name, address, and telephone number of the contractor, and signed by the person or persons authorized to represent the firm should accompany the proposal submission. Firm contact information, as follows, should also be included in the cover letter:

1. Address and telephone number of office in, or nearest to, Diamond Bar, California.
2. Name and title of firm's representative designated as contact.

A separate Table of Contents should be provided for Volumes I and II.

## **VOLUME I - TECHNICAL PROPOSAL**

Section A - Summary - State overall approach to meeting the objectives and satisfying the scope of work to be performed as outlined in the work statement in Section III, the sequence of activities, and a description of methodology or techniques to be used. Include your approach to meeting the environmental aspects of the operation.

Section B - Program Schedule - Provide a schedule for submitting reports within the time allowed.

Section C - Program Management - Describe the proposed management structure (including identifying who would maintain records and prepare and review invoices), program monitoring procedures, and organization of the contracting group.

Section D - Qualifications - Describe the technical capabilities of the firm. Include information as outlined in Section IV. Provide references of other current food service management endeavors similar in scope to that of SCAQMD that demonstrates your ability to successfully manage the project. Include a brief description of the facility, services provided, location, contact name, title, and telephone number for any references listed. Information provided will be used to arrange site visits for the evaluation panel in order to evaluate the quality for food service provided. Provide a statement of your firm's background and experience in managing similar projects for other governmental or private organizations, and describe the transition process your firm follows when assuming responsibility for cafeteria operations.

Section E - Assigned Personnel - Provide the following information on the staff to be assigned to this project:

1. List all key personnel assigned to the project by job title, responsibility, and name. Provide a resume or similar statement of the qualifications of the lead person and all persons assigned to the project. Substitution of project manager or lead personnel will not be permitted without SCAQMD's prior written approval.
2. Provide a statement indicating whether or not 90% of the work will be performed within the geographical boundaries of South Coast Air Basin.
3. Provide a statement of the education and training provided to, or required of, the staff identified for participation in the project.
4. Provide a summary of your firm's general qualifications to meet requirements of this RFP and to fulfill work statement obligations, including a list of additional firm personnel and resources beyond those who may be assigned to the project and their function and responsibility.

### **DO NOT INCLUDE ANY COST INFORMATION IN THE TECHNICAL PROPOSAL VOLUME.**

Section F - References - Provide the business or agency name, address, telephone number, and name of contact person for at least three (3) businesses or agencies for which you have provided similar food services as a contractor.

Section G - Subcontractors - Identify any subcontractors you propose using to perform the required services in this proposal.

Section H - Additional Information - Provide other essential data that may assist in the evaluation of your proposal.

## VOLUME II - OPERATING COSTS AND OTHER INFORMATION

Name and Address – Include a cover sheet listing the name and complete address of the proposer in the upper left-hand corner.

Cost Information – This is a no-fee contract; beyond the approximately \$171,000 in-kind subsidy described above, SCAQMD will provide no monetary subsidy to the selected management company for the operation of the cafeteria. Cost information must be provided as listed below:

Proposed Operating Budget – Provide the following information about the proposed operating budget for the cafeteria (detail must be provided by the categories listed):

1. Labor - List the total number of hours and the hourly billing rate for each level of management and line staff. Rates quoted must include labor, general, administrative, and all overhead costs.
2. Liability Insurance - Include evidence of insurance as outlined in this RFP.
3. Proposed Menu and Price Schedule - Include sample week's menu with prices and your cost for food only, as a percentage of price charged customers. Include any discounts or incentives you will offer SCAQMD employees.
4. Proposed annual budget, including all projected income and expenditures. Note: SCAQMD's in-kind subsidy of approximately \$171,000 per year must be reflected in budget calculations/documents.

## VOLUME III - CERTIFICATIONS AND REPRESENTATIONS (see Attachment A to this RFP)

### PROPOSAL SUBMISSION

All proposals must be submitted according to specifications set forth in the section above. Failure to adhere to these specifications may be cause for rejection of proposal.

Signature - All proposals must be signed by an authorized representative of the proposer.

Due Date - The proposer shall submit five (5) complete copies of the proposal in a sealed envelope, plainly marked in the upper left-hand corner with the name and address of the proposer and the words "Request for Proposals P2015-02." All proposals are due **no later than 2:00 p.m. Wednesday, August 13, 2014.**

**Procurement Section  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765**

**Late proposals will not be accepted.** Any correction or resubmission done by the proposer must be received by SCAQMD by the due date stated above.

**Proposals will not be accepted from any contractor that did not send a representative to the mandatory bidders conference.**

Grounds for Rejection - A proposal may be immediately rejected if:

- It is not prepared in the format described, or
- It is signed by an individual not authorized to represent the Contractor

Disposition of Proposals - SCAQMD reserves the right to reject any or all proposals. All responses become the property of SCAQMD. One copy of the proposal shall be retained for SCAQMD files. Additional copies and materials will be returned only if requested and at the proposer's expense.

Modification or Withdrawal - Once submitted, proposals cannot be altered without the prior written consent of SCAQMD. All proposals shall constitute firm offers and may not be withdrawn for a period of ninety (90) days following the last day to accept proposals.

**SECTION VI: PROPOSAL EVALUATION/CONTRACTOR SELECTION CRITERIA**

- A. Proposals will be evaluated by a panel of three to five SCAQMD staff members familiar with the subject matter of the project. The panel shall be appointed by the Executive Officer or his designee. In addition, the evaluation panel may include such outside public sector or academic community expertise as deemed desirable by the Executive Officer. The panel will make a recommendation to the Executive Officer and SCAQMD's Governing Board. SCAQMD's Governing Board will make the final selection of a contractor, after which a contract will be executed.
- B. Each member of the evaluation panel shall be accorded equal weight in his or her rating of proposals. The evaluation panel members shall evaluate the proposals according to the specified criteria and numerical weightings set forth below.

1. Proposal Evaluation Criteria

	<u>Points</u>
Quality of food service based upon site visit to a contractor-operated facility	40
Management and food service experience of proposed staff	15
Food service management experience on projects similar in nature and scope	15
Financial capacity and fiscal management experience	15
Quality of strategies proposed for operating the cafeteria in a manner that is sensitive to environmental sustainability, proposed incentives for customers to make healthy and environmentally sensitive choices, and stated level of commitment to working with SCAQMD staff to develop and implement environmentally sensitive cafeteria operation enhancements during the term of the contract	15
TOTAL:	<hr/> 100



Additional Points

Small Business or Small Business Joint Venture	10
DVBE or DVBE Joint Venture	10
Use of DVBE or Small Business Subcontractors	7
Low-Emission Vehicle Business	5
Local Business (Non-EPA Funded Projects Only)	5
Off-Peak Hours Delivery Business	2

**The cumulative points awarded for small business, DVBE, use of small business or DVBE subcontractors, low-emission vehicle business, local business, and off-peak hours delivery business shall not exceed 15 points.**

2. To receive additional points in the evaluation process for the categories of Small Business or Small Business Joint Venture, DVBE or DVBE Joint Venture or Local Business (for non-EPA funded projects), the proposer must submit a self-certification or certification from the State of California Office of Small Business Certification and Resources at the time of proposal submission certifying that the proposer meets the requirements set forth in Section III. To receive points for the use of DVBE and/or Small Business subcontractors, at least 25 percent of the total contract value must be subcontracted to DVBEs and/or Small Businesses. To receive points as a Low-Emission Vehicle Business, the proposer must demonstrate to the Executive Officer, or designee, that supplies and materials delivered to SCAQMD are delivered in vehicles that operate on either clean-fuels or if powered by diesel fuel, that the vehicles have particulate traps installed. To receive points as an Off-Peak Hours Delivery Business, the proposer must submit, at proposal submission, certification of its commitment to delivering supplies and materials to SCAQMD between the hours of 10:00 a.m. and 3:00 p.m. The cumulative points awarded for small business, DVBE, use of Small Business or DVBE Subcontractors, Local Business, Low-Emission Vehicle Business and Off-Peak Hour Delivery Business shall not exceed 15 points.

The Procurement Section will be responsible for monitoring compliance of suppliers awarded purchase orders based upon use of low-emission vehicles or off-peak traffic hour delivery commitments through the use of vendor logs which will identify the contractor awarded the incentive. The purchase order shall incorporate terms which obligate the supplier to deliver materials in low-emission vehicles or deliver during off-peak traffic hours. The Receiving department will monitor those qualified supplier deliveries to ensure compliance to the purchase order requirements. Suppliers in non-compliance will be subject to a two percent of total purchase order value penalty. The Procurement Manager will adjudicate any disputes regarding either low-emission vehicle or off-peak hour deliveries.

- C. During the selection process, the evaluation panel may wish to interview some proposers for clarification purposes only. No new material will be permitted at this time.
- D. The Governing Board may award the contract to a proposer other than the proposer receiving the highest rating in the event the Governing Board determines that another proposer from among those technically qualified would provide the best value to SCAQMD considering cost and technical factors. The determination shall be based solely on the Evaluation Criteria contained in the Request for Proposal (RFP), on evidence provided in the proposal, and on any other evidence provided during the bid review process. Evidence provided during the bid review process is limited to clarification by the proposer of information presented in his/her proposal.

- E. Selection will be made based on the above-described criteria and rating factors. The selection will be made by SCAQMD's Governing Board. All proposers will be notified of the results by letter.
- F. The Executive Officer or Governing Board may award contracts to more than one proposer if in (his or their) sole judgment the purposes of the (contract or award) would best be served by selecting multiple proposers.
- G. Upon mutual agreement of the parties of any resultant contract from this RFP, the original contract term may be extended.
- H. The Governing Board has approved a Bid Protest Procedure which provides a process for a bidder or prospective bidder to submit a written protest to SCAQMD's Procurement Manager in recognition of two types of protests: Protest Regarding Solicitation and Protest Regarding Award of a Contract. Copies of the Bid Protest Policy can be secured through a request to SCAQMD's Procurement Department.

**SECTION VII: DRAFT CONTRACT (Provided as example only)**



**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

**CONTRACT**

THIS AGREEMENT, made and entered into by and between the SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT ("SCAQMD") and XXX, hereinafter referred to as CONTRACTOR, having its principal place of business at XXX.

WITNESSETH THAT:

1. AUTHORIZATION: SCAQMD hereby grants to CONTRACTOR the right to sell manually and through automatic vending equipment healthy and nutritious food, snacks, and beverages on SCAQMD's premises located at 21865 Copley Drive, Diamond Bar, California, in accordance with CONTRACTOR's proposal dated XXX. Such services will include the operation of cafeteria, catering, and coffee/refreshment services. SCAQMD's cafeteria facility may only be used to provide catering or other food services for SCAQMD, SCAQMD-hosted, SCAQMD-sponsored, or SCAQMD-authorized events, or, as authorized in writing by SCAQMD, services and events for facility tenants or the on-site child care center,

2. FACILITIES AND EQUIPMENT:

A. Manual: SCAQMD shall provide CONTRACTOR with a complete "turn-key operation," consisting of suitable food service facilities (including adequate sanitary toilet facilities and dressing rooms for CONTRACTOR's employees), completely equipped and ready to operate food preparation and service facilities, together with such heat, refrigeration, and utilities service as may be reasonably required for the complete performance of this Contract. In addition, SCAQMD will provide and furnish CONTRACTOR with appropriate office space and office equipment, including, but not limited to, desks, chairs, tables, filing cabinets and safe, for the use of CONTRACTOR in performance of this Contract. SCAQMD shall have full access to the food service facilities at all times.

SCAQMD shall furnish building maintenance services for the premises, shall promptly make all equipment repairs and replacements, and shall be responsible for compliance with all federal, State, and local health and safety laws and regulations with respect to the equipment and facilities provided by SCAQMD.

CONTRACTOR will comply, as a direct cost of operation, with all federal, State, and local health and safety laws and regulations with respect to sanitation and use of the food service equipment.

SCAQMD shall furnish an initial inventory of service wares (chinaware, glassware, silverware) and small expendable equipment (pots, pans, kitchen utensils). At the commencement of operations hereunder, CONTRACTOR and SCAQMD shall jointly take an opening inventory of such service wares and small expendable equipment, a copy of which shall be attached hereto as Exhibit "A" and incorporated herein by reference.

SCAQMD reserves the right to allow special occasion use of kitchen facilities by outside caterers in a manner that does not disrupt CONTRACTOR's normal cafeteria operations. Caterers that prepare any perishable food using SCAQMD's kitchen facility must have at least one food handler certified by the appropriate government agency present during hours of operation.

- B. Vending: CONTRACTOR will provide all automatic vending and related equipment necessary to provide quality food and refreshment services on SCAQMD's premises at mutually agreeable locations. CONTRACTOR guarantees that all equipment installed will be energy efficient and meet the requirements of all relevant federal, State, and local agencies and associations. CONTRACTOR shall remain the owner of all vending and related equipment or shall subcontract for such equipment and shall be responsible for all necessary repairs to such equipment.

Fifty percent of vending machine items must be healthful and nutritious, e.g., 100% fruit juice, fresh fruit, unsalted raw or dry-roasted nuts, whole grain low-fat snacks, etc.

SCAQMD agrees to provide all utilities, including necessary electrical lines to a point within five (5) feet of each item of automatic vending equipment requiring such lines. Water lines for vending equipment will not be provided.

3. CLEANING RESPONSIBILITIES: CONTRACTOR will maintain, as a direct cost of operation, high standards of sanitation in compliance with all applicable local, State and federal regulations and will be responsible for routine cleaning and housekeeping. Routine cleaning and housekeeping will be defined to include daily cleaning of surface areas of food service equipment, sweeping and mopping of floors, debris removal from open floor drains, cleaning of stainless steel vent hoods and grease filters, and routine in-service bussing and cleaning of cafeteria tables and chairs. In addition, CONTRACTOR will be responsible for daily cleaning of food preparation, serving, and dining areas.

Cleaning products must meet or exceed applicable health and environmental specifications listed below. Contractor is encouraged to partner with manufacturers or distributors to maximize SCAQMD's use of these environmentally friendly materials. To the extent they exist, contractor must use cleaning products that have received SCAQMD's Clean Air Choices cleaner certification. A list of certified materials may be found at the SCAQMD website ([www.SCAQMD.gov](http://www.SCAQMD.gov)) under "Certifications," "Clean Air Choices Cleaner Certification Program." Where no products have received SCAQMD certification, contractors must use products that have received Green Seal, as available. A list of qualifying materials may be found at Green Seal, Inc. ([www.greenseal.org](http://www.greenseal.org)).

SCAQMD will provide regular cleaning service for cafeteria and vending area walls, windows, light fixtures, draperies, and blinds, and periodic waxing and buffing of floors. In addition, SCAQMD will be responsible for quarterly deep cleaning of the floors in the kitchen areas as well as routine cleaning of all duct work, plenum chambers, and roof fans.

CONTRACTOR will be responsible for emptying trash and garbage into appropriate outside receptacles for removal. SCAQMD will be responsible for trash and garbage removal from property and any necessary pest extermination service.

4. FOOD SERVICE AND PRICING: CONTRACTOR will provide a selection of nutritious, wholesome food and related products to the employees and SCAQMD visitors at such hours as SCAQMD and CONTRACTOR mutually determine.

Menus must include low-fat, vegetarian, and vegan options. Food items containing trans-fats are not permitted. Coffee and tea must be fair-trade certified and coffee must be shade grown.

Organic waste, including food matter, will, to the extent practicable, be disposed as green waste or compost to minimize landfill disposal.

CONTRACTOR will operate cafeteria in a manner that is sensitive to environmental sustainability and will offer customers incentives to make environmentally sensitive choices. Contractor will work with SCAQMD staff to develop and implement environmental sustainability enhancements during the course of this contract.

Additionally, CONTRACTOR shall notify SCAQMD thirty (30) days in advance of any price increases; and CONTRACTOR shall post all price increases at least one (1) week in advance of implementation.

5. PERSONNEL:

- A. CONTRACTOR will provide and pay a staff of its employees on duty on SCAQMD's premises for efficient management of the food service operation. Employees of CONTRACTOR will be subject to the rules and regulations of SCAQMD while on SCAQMD's premises.

All personnel costs, including compensation, payroll costs, payroll taxes, and fringe benefits of CONTRACTOR employees assigned to duty in the manual food service operation shall be charged as direct costs of operation.

- B. CONTRACTOR agrees to assign to duty on SCAQMD's premises only employees acceptable to SCAQMD.
- C. CONTRACTOR, its employees, agents, or representatives, shall in no sense be considered employees or agents of SCAQMD, nor shall CONTRACTOR, its employees, agents or representatives, be entitled to or be eligible to participate in any benefits, privileges, or plans given or extended by SCAQMD to its employees.

6. HEALTH EXAMINATIONS: CONTRACTOR will cause all of its employees assigned to duty on SCAQMD's premises to submit to periodic health examinations as required by law, and will submit satisfactory evidence of compliance with all health regulations to SCAQMD upon request. The cost of such examinations shall be a direct cost of operation.

7. PURCHASING: CONTRACTOR will purchase and pay for all food and related supplies, including paper goods, that are utilized in SCAQMD's manual food service operation. Cash discounts or discounts exclusively related to CONTRACTOR'S operation at the SCAQMD's facilities shall be credited to SCAQMD's account.

At least 25 percent of total combined food and beverage purchases (by cost) must be sustainable, i.e., must meet one or both of the following criteria:

- A) Purchases labeled USDA Certified Organic, Food Alliance Certified, Rainforest Alliance Certified, Protected Harvest Certified, Fair-Trade Certified or Maine Stewardship Council's Blue Eco-Label; or
- B) Purchases produced within a 100-mile radius of SCAQMD headquarters building.

Purchases will receive credit for each sustainable criterion met (i.e. a \$100 purchase of food that is both USDA Certified Organic and is produced locally counts as \$200 worth of sustainable food purchasing). Contractor must provide reports upon request to substantiate attainment.

Disposable items (cups, carry-out containers, napkins, paper towels, drinking straws, etc.) must be reusable, recyclable or biodegradable/compostable, including biodegradable paper products meeting Green Seal's GS-01 standard for Tissue Paper and GS-09 standard for Paper Towels and Paper Napkins. **Expanded polystyrene (Styrofoam) packaging is prohibited.**

SCAQMD reserves the right to monitor and audit compliance with these purchasing requirements.

8. LICENSES, PERMITS AND TAXES: CONTRACTOR will obtain and maintain, throughout the term of this Contract, all federal, State and local licenses and permits required for the food service operation. CONTRACTOR shall pay all fees for such licenses as well as collect and pay all sales, use, excise and state and local income taxes

attributable to the food service operation. The cost of all such items applicable to the manual food service operation shall be charged as direct costs of operation.

9. INSURANCE: CONTRACTOR shall secure and maintain, throughout the term of this Contract, liability insurance for all aspects of the cafeteria, including, but not limited to, workers' compensation insurance, comprehensive general liability insurance, and products, contractual, broad form vendors' coverage. The physical facility within which the cafeteria operates shall be insured by SCAQMD. The CONTRACTOR's comprehensive general liability insurance shall not be less than \$5,000,000 aggregate and \$1,000,000 per occurrence. Policies shall name SCAQMD as an additional insured party.

All insurance providers used by CONTRACTOR must be authorized to do business in the state of California and shall have an A.M. Best rating of at least B++.

Such insurance shall be provided by insurer(s) and written evidence of such insurance, including reference to SCAQMD as an "additional insured," shall be delivered on or before the effective date of this Contract to:

Assistant Deputy Executive Officer/Administrative and Human Resources  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765

Such evidence of insurance shall further specify that SCAQMD will receive no less than thirty (30) days written notice by registered mail of any modification of the type of insurance provided, scope of coverage, name of insurance provider, or termination of any insurance relevant to CONTRACTOR'S operation of cafeteria.

Failure by CONTRACTOR to procure or maintain required insurance shall constitute a material breach of this Contract upon which SCAQMD may immediately terminate or suspend this Contract.

10. ACCOUNTING: On a quarterly basis, CONTRACTOR will submit to SCAQMD an operating statement for that period.
11. FORCE MAJEURE: Neither party shall be responsible to the other for any losses resulting from the failure to perform any terms or provisions of this Contract, except for payments of monies owed, if the party's failure to perform is attributable to war, riot, or other disorder; strike or other work stoppage; fire; floods, or any other act not within the control of the party whose performance is interfered with, and which, by reasonable diligence, such party is unable to prevent.

In the event of a work stoppage or strike by SCAQMD's employees, which interferes with the food service operation on SCAQMD's premises, upon request, CONTRACTOR will take all reasonable steps to continue to provide service during the work stoppage or strike.

12. ACCURATE BOOKS AND RECORDS: CONTRACTOR shall maintain, in accordance with generally accepted accounting principles, books and records in connection with the food service operation and shall retain such records for a period of two (2) years. Books and records with respect to the manual operation and records of vending receipts may be audited by SCAQMD at any time during regular business hours, upon reasonable notice. SCAQMD may, at its own expense, retain an independent certified public accounting firm to audit CONTRACTOR's records.
13. NOTICE: Notices required to be provided under this Contract shall be in writing and shall be deemed to have been duly given if mailed certified mail, return receipt requested. Formal notice begins on the date indicated on the return receipt card. The following addresses shall serve as the places to which all notices and other correspondence between the parties shall be sent:

CONTRACTOR: XXXX

Attn: XXXX

SCAQMD: South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765  
Attn: Bill Johnson

14. ENTIRE AGREEMENT AND AMENDMENTS: This Contract represents the entire agreement between the parties and supersedes any and all prior agreements. All prior negotiations have been merged into this Contract and there are no understandings, representations, or agreements, oral or written, expressed or implied other than those set forth herein.

The terms of this Contract may not be changed, modified, or amended except by the written agreement of both parties.

15. WAIVER: The failure of CONTRACTOR and SCAQMD to exercise any right or remedy available under this Contract upon the breach of the terms, covenants and conditions of this Contract or the failure to demand the prompt performance of any obligation under this Contract shall not be deemed a waiver of such right to remedy; or the requirement of punctual performance; or of any subsequent breach or default on the part of the CONTRACTOR.

16. NON-ASSIGNMENT

This Contract is not assignable under any circumstances.

17. TERM AND TERMINATION:

- A. Term: The term of this Contract shall commence on XXX, and shall remain in effect through XXX. SCAQMD shall provide written notice of its intent to renew the Contract at least 120 days before the Contract expires. At SCAQMD's discretion the term of the contract shall be extended for up to two additional years. A written modification to the Contract will be issued to extend the term of the Contract should the SCAQMD elect to renew this Contract.

In the event that either party fails to comply with the terms and conditions of this Contract, or fails to provide the services in the manner agreed upon by the parties, this failure shall constitute breach of the Contract. The non-breaching party shall notify the breaching party that it must cure this breach within fifteen (15) working days of notification. Failure to cure the breach will result in termination of the Contract. Notification will be provided in writing and sent via United States Postal Service first-class certified mail, return receipt requested. Termination notice shall begin on the date indicated on the return receipt card. Termination shall not be effective until 120 days after date of notification and shall be consistent with paragraph 17.B. below. The non-breaching party reserves all rights under law and equity to enforce the Contract and recover any damages.

- B. Termination: In the event of termination of this Contract, CONTRACTOR shall: Be required to submit to SCAQMD a termination report consisting of all non-confidential information, including, but not limited to, reports, files, data, and related documents material to the cafeteria's and/or vending machine operations, in a form capable of assimilation for SCAQMD use.

If necessary, continue the operation of the cafeteria and/or vending machines on a month-to-month basis under the same terms and conditions. SCAQMD shall not unreasonably extend or prolong the time needed to obtain a successor CONTRACTOR.

18. NON-DISCRIMINATION: In the performance of this Contract, CONTRACTOR shall not discriminate in recruiting, hiring, promotion, demotion, or termination practices on the basis of race, religious creed, color, national origin, ancestry, sex, age, or physical handicap and shall comply with the provisions of the California Fair Employment & Housing Act (Government Code Section 12900, et seq.), the Federal Civil Rights Action of 1964 (P.L. 88-352) and all amendments thereto, Executive Order No. 11246 (30 Federal Register 12319), and all other administrative rules and regulations issued pursuant to said Acts and Order.
19. CITIZENSHIP AND ALIEN STATUS:
- A. CONTRACTOR warrants that it fully complies with all laws regarding the employment of aliens and others, and that its employees performing services hereunder meet the citizenship or alien status requirements contained in federal and state statutes and regulations including, but not limited to, the Immigration Reform and Control Act of 1986 (P.L. 99-603). CONTRACTOR shall obtain from all covered employees performing services hereunder all verification and other documentation of employees' eligibility status required by federal statutes and regulations as they currently exist and as they may be hereafter amended. CONTRACTOR shall have a continuing obligation to verify and document the continuing employment authorization and authorized alien status of employees performing services under this Contract to insure continued compliance with all federal statutes and regulations.
  - B. Notwithstanding paragraph 19.A. above, CONTRACTOR, in the performance of this Contract, shall not discriminate against any person in violation of 8 USC Section 1324b.
  - C. CONTRACTOR shall retain such documentation for all covered employees for the period described by law. CONTRACTOR shall indemnify, defend, and hold harmless SCAQMD, its officers and employees from employer sanctions and other liability which may be assessed against CONTRACTOR or SCAQMD, or both in connection with any alleged violation of federal statutes or regulations pertaining to the eligibility for employment persons performing services under this Contract.
20. INDEMNIFICATION: CONTRACTOR agrees to indemnify, defend, and hold harmless SCAQMD, its agents, officers and employees, against all claims for loss or damage, including reasonable attorney's fees, arising out of CONTRACTOR's operations, except for claims for loss or damage caused by the negligent acts or omissions of SCAQMD.
21. SEVERABILITY: If any provision of this Contract is held to be invalid, illegal, or unenforceable, the remaining provisions shall remain in full force and effect.
22. GOVERNING LAW: This Contract shall be construed and governed in accordance with the laws of the State of California. CONTRACTOR and SCAQMD agree that venue for the resolution of any dispute will be Los Angeles County, California.



IN WITNESS WHEREOF, the parties have caused this Contract to be signed by their duly authorized representatives.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

XXXXXX

By: \_\_\_\_\_  
Dr. William A. Burke, Chairman, Governing Board

By: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

ATTEST:  
Saundra McDaniel, Clerk of the Board

By: \_\_\_\_\_

APPROVED AS TO FORM:  
Kurt R. Wiese, General Counsel

By: \_\_\_\_\_

**ATTACHMENT A**

**CERTIFICATIONS AND REPRESENTATIONS**



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 •

## **Business Information Request**

Dear SCAQMD Contractor/Supplier:

The South Coast Air Quality Management District (SCAQMD) is committed to ensuring that our contractor/supplier records are current and accurate. If your firm is selected for award of a purchase order or contract, it is imperative that the information requested herein be supplied in a timely manner to facilitate payment of invoices. In order to process your payments, we need the enclosed information regarding your account. **Please review and complete the information identified on the following pages, complete the enclosed W-9 form, remember to sign both documents for our files, and return them as soon as possible to the address below:**

**Attention: Accounts Payable, Accounting Department  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765-4178**

If you do not return this information, we will not be able to establish you as a vendor. This will delay any payments and would still necessitate your submittal of the enclosed information to our Accounting department before payment could be initiated. Completion of this document and enclosed forms would ensure that your payments are processed timely and accurately.

If you have any questions or need assistance in completing this information, please contact Accounting at (909) 396-3777. We appreciate your cooperation in completing this necessary information.

Sincerely,

Michael B. O'Kelly  
Chief Financial Officer

DH:tm

Enclosures: Business Information Request  
Disadvantaged Business Certification  
W-9  
Form 590 Withholding Exemption Certificate  
Federal Contract Debarment Certification  
Campaign Contributions Disclosure  
Direct Deposit Authorization

REV 3/13



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178

(909) 396-2000 • [www.aqmd.gov](http://www.aqmd.gov)

## BUSINESS INFORMATION REQUEST

Business Name	
Division of	
Subsidiary of	
Website Address	
Type of Business <i>Check One:</i>	<input type="checkbox"/> Individual <input type="checkbox"/> DBA, Name _____, County Filed in _____ <input type="checkbox"/> Corporation, ID No. _____ <input type="checkbox"/> LLC/LLP, ID No. _____ <input type="checkbox"/> Other _____

## REMITTING ADDRESS INFORMATION

Address			
City/Town			
State/Province		Zip	
Phone	(     )     -     Ext	Fax	(     )     -
Contact		Title	
E-mail Address			
Payment Name if Different			

All invoices must reference the corresponding Purchase Order Number(s)/Contract Number(s) if applicable and mailed to:

**Attention: Accounts Payable, Accounting Department**  
**South Coast Air Quality Management District**  
**21865 Copley Drive**  
**Diamond Bar, CA 91765-4178**

## DISADVANTAGED BUSINESS CERTIFICATION

Federal guidance for utilization of disadvantaged business enterprises allows a vendor to be deemed a small business enterprise (SBE), minority business enterprise (MBE) or women business enterprise (WBE) if it meets the criteria below.

- is certified by the Small Business Administration or
- is certified by a state or federal agency or
- is an independent MBE(s) or WBE(s) business concern which is at least 51 percent owned and controlled by minority group member(s) who are citizens of the United States.

Statements of certification:

As a prime contractor to SCAQMD, (name of business) will engage in good faith efforts to achieve the fair share in accordance with 40 CFR Section 33.301, and will follow the six affirmative steps listed below **for contracts or purchase orders funded in whole or in part by federal grants and contracts.**

1. Place qualified SBEs, MBEs, and WBEs on solicitation lists.
2. Assure that SBEs, MBEs, and WBEs are solicited whenever possible.
3. When economically feasible, divide total requirements into small tasks or quantities to permit greater participation by SBEs, MBEs, and WBEs.
4. Establish delivery schedules, if possible, to encourage participation by SBEs, MBEs, and WBEs.
5. Use services of Small Business Administration, Minority Business Development Agency of the Department of Commerce, and/or any agency authorized as a clearinghouse for SBEs, MBEs, and WBEs.
6. If subcontracts are to be let, take the above affirmative steps.

**Self-Certification Verification: Also for use in awarding additional points, as applicable, in accordance with SCAQMD Procurement Policy and Procedure:**

Check all that apply:

- |   |  |
|---|--|
| <input type="checkbox"/> Small Business Enterprise/Small Business Joint Venture | <input type="checkbox"/> Women-owned Business Enterprise                               |
| <input type="checkbox"/> Local business   | <input type="checkbox"/> Disabled Veteran-owned Business Enterprise/DVBE Joint Venture |
| <input type="checkbox"/> Minority-owned Business Enterprise                     |  |

Percent of ownership: \_\_\_\_\_ %

Name of Qualifying Owner(s): \_\_\_\_\_

I, the undersigned, hereby declare that to the best of my knowledge the above information is accurate. Upon penalty of perjury, I certify information submitted is factual.

\_\_\_\_\_  
*NAME*

\_\_\_\_\_  
*TITLE*

\_\_\_\_\_  
*TELEPHONE NUMBER*

\_\_\_\_\_  
*DATE*

## Definitions

**Disabled Veteran-Owned Business Enterprise** means a business that meets all of the following criteria:

- is a sole proprietorship or partnership of which is at least 51 percent owned by one or more disabled veterans, or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more disabled veterans; a subsidiary which is wholly owned by a parent corporation but only if at least 51 percent of the voting stock of the parent corporation is owned by one or more disabled veterans; or a joint venture in which at least 51 percent of the joint venture's management and control and earnings are held by one or more disabled veterans.
- the management and control of the daily business operations are by one or more disabled veterans. The disabled veterans who exercise management and control are not required to be the same disabled veterans as the owners of the business.
- is a sole proprietorship, corporation, partnership, or joint venture with its primary headquarters office located in the United States and which is not a branch or subsidiary of a foreign corporation, firm, or other foreign-based business.

**Joint Venture** means that one party to the joint venture is a DVBE and owns at least 51 percent of the joint venture. In the case of a joint venture formed for a single project this means that DVBE will receive at least 51 percent of the project dollars.

**Local Business** means a business that meets all of the following criteria:

- has an ongoing business within the boundary of SCAQMD at the time of bid application.
- performs 90 percent of the work within SCAQMD's jurisdiction.

**Minority-Owned Business Enterprise** means a business that meets all of the following criteria:

- is at least 51 percent owned by one or more minority persons or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more minority persons.
- is a business whose management and daily business operations are controlled or owned by one or more minority person.
- is a business which is a sole proprietorship, corporation, partnership, joint venture, an association, or a cooperative with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, foreign firm, or other foreign business.

"Minority" person means a Black American, Hispanic American, Native American (including American Indian, Eskimo, Aleut, and Native Hawaiian), Asian-Indian American (including a person whose origins are from India, Pakistan, or Bangladesh), Asian-Pacific American (including a person whose origins are from Japan, China, the Philippines, Vietnam, Korea, Samoa, Guam, the United States Trust Territories of the Pacific, Northern Marianas, Laos, Cambodia, or Taiwan).

**Small Business Enterprise** means a business that meets the following criteria:

- a. 1) an independently owned and operated business; 2) not dominant in its field of operation; 3) together with affiliates is either:
  - A service, construction, or non-manufacturer with 100 or fewer employees, and average annual gross receipts of ten million dollars (\$10,000,000) or less over the previous three years, or
  - A manufacturer with 100 or fewer employees.
- b. Manufacturer means a business that is both of the following:
  - 1) Primarily engaged in the chemical or mechanical transformation of raw materials or processed substances into new products.
  - 2) Classified between Codes 311000 to 339000, inclusive, of the North American Industrial Classification System (NAICS) Manual published by the United States Office of Management and Budget, 2007 edition.

**Small Business Joint Venture** means that one party to the joint venture is a Small Business and owns at least 51 percent of the joint venture. In the case of a joint venture formed for a single project, this means that the Small Business will receive at least 51 percent of the project dollars.

**Women-Owned Business Enterprise** means a business that meets all of the following criteria:

- \* is at least 51 percent owned by one or more women or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more women.
- \* is a business whose management and daily business operations are controlled or owned by one or more women.
- \* is a business which is a sole proprietorship, corporation, partnership, or a joint venture, with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, foreign firm, or other foreign business.

## Request for Taxpayer Identification Number and Certification

**Give Form to the  
 requester. Do not  
 send to the IRS.**

Print or type See Specific Instructions on page 2.	Name (as shown on your income tax return)	
	Business name/disregarded entity name, if different from above	
	Check appropriate box for federal tax classification (required): <input type="checkbox"/> Individual/sole proprietor <input type="checkbox"/> C Corporation <input type="checkbox"/> S Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust/estate	
	<input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶	
	<input type="checkbox"/> Other (see instructions) ▶	
	Address (number, street, and apt. or suite no.)	Requester's name and address (optional)
City, state, and ZIP code		
List account number(s) here (optional)		

<b>Part I Taxpayer Identification Number (TIN)</b>																			
Enter your TIN in the appropriate box. The TIN provided must match the name given on the "Name" line to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see <i>How to get a TIN</i> on page 3.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="9" style="text-align: center; font-size: 8px;">Social security number</td> </tr> <tr> <td style="width: 25px; height: 20px;"> </td> <td style="width: 25px; height: 20px;"> </td> <td style="width: 25px; height: 20px;"> </td> <td style="width: 25px; height: 20px;"> </td> <td style="width: 25px; height: 20px;"> </td> <td style="width: 25px; height: 20px;"> </td> <td style="width: 25px; height: 20px;"> </td> <td style="width: 25px; height: 20px;"> </td> <td style="width: 25px; height: 20px;"> </td> </tr> </table>	Social security number																	
Social security number																			
<b>Note.</b> If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="9" style="text-align: center; font-size: 8px;">Employer identification number</td> </tr> <tr> <td style="width: 25px; height: 20px;"> </td> <td style="width: 25px; height: 20px;"> </td> <td style="width: 25px; height: 20px;"> </td> <td style="width: 25px; height: 20px;"> </td> <td style="width: 25px; height: 20px;"> </td> <td style="width: 25px; height: 20px;"> </td> <td style="width: 25px; height: 20px;"> </td> <td style="width: 25px; height: 20px;"> </td> <td style="width: 25px; height: 20px;"> </td> </tr> </table>	Employer identification number																	
Employer identification number																			

<b>Part II Certification</b>	
Under penalties of perjury, I certify that:	
1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and	
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and	
3. I am a U.S. citizen or other U.S. person (defined below).	
<b>Certification instructions.</b> You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 4.	
<b>Sign Here</b>	Signature of U.S. person ▶
	Date ▶

**General Instructions**

Section references are to the Internal Revenue Code unless otherwise noted.

**Purpose of Form**

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

**Note.** If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

**Definition of a U.S. person.** For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

**Special rules for partnerships.** Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.



The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases:

- The U.S. owner of a disregarded entity and not the entity,
- The U.S. grantor or other owner of a grantor trust and not the trust, and
- The U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

**Foreign person.** If you are a foreign person, do not use Form W-9. Instead, use the appropriate Form W-8 (see Publication 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

**Nonresident alien who becomes a resident alien.** Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items:

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
2. The treaty article addressing the income.
3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
4. The type and amount of income that qualifies for the exemption from tax.
5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

**Example.** Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity not subject to backup withholding, give the requester the appropriate completed Form W-8.

**What is backup withholding?** Persons making certain payments to you must under certain conditions withhold and pay to the IRS a percentage of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

#### Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester,
2. You do not certify your TIN when required (see the Part II instructions on page 3 for details),
3. The IRS tells the requester that you furnished an incorrect TIN,
4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or
5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See the instructions below and the separate instructions for the Requester of Form W-9.

Also see *Special rules for partnerships* on page 1.

#### Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account, for example, if the grantor of a grantor trust dies.

#### Penalties

**Failure to furnish TIN.** If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

**Civil penalty for false information with respect to withholding.** If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

**Criminal penalty for falsifying information.** Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

**Misuse of TINs.** If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

#### Specific Instructions

##### Name

If you are an individual, you must generally enter the name shown on your income tax return. However, if you have changed your last name, for instance, due to marriage without informing the Social Security Administration of the name change, enter your first name, the last name shown on your social security card, and your new last name.

If the account is in joint names, list first, and then circle, the name of the person or entity whose number you entered in Part I of the form.

**Sole proprietor.** Enter your individual name as shown on your income tax return on the "Name" line. You may enter your business, trade, or "doing business as (DBA)" name on the "Business name/disregarded entity name" line.

**Partnership, C Corporation, or S Corporation.** Enter the entity's name on the "Name" line and any business, trade, or "doing business as (DBA) name" on the "Business name/disregarded entity name" line.

**Disregarded entity.** Enter the owner's name on the "Name" line. The name of the entity entered on the "Name" line should never be a disregarded entity. The name on the "Name" line must be the name shown on the income tax return on which the income will be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a domestic owner, the domestic owner's name is required to be provided on the "Name" line. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on the "Business name/disregarded entity name" line. If the owner of the disregarded entity is a foreign person, you must complete an appropriate Form W-8.

**Note.** Check the appropriate box for the federal tax classification of the person whose name is entered on the "Name" line (Individual/sole proprietor, Partnership, C Corporation, S Corporation, Trust/estate).

**Limited Liability Company (LLC).** If the person identified on the "Name" line is an LLC, check the "Limited liability company" box only and enter the appropriate code for the tax classification in the space provided. If you are an LLC that is treated as a partnership for federal tax purposes, enter "P" for partnership. If you are an LLC that has filed a Form 8832 or a Form 2553 to be taxed as a corporation, enter "C" for C corporation or "S" for S corporation. If you are an LLC that is disregarded as an entity separate from its owner under Regulation section 301.7701-3 (except for employment and excise tax), do not check the LLC box unless the owner of the LLC (required to be identified on the "Name" line) is another LLC that is not disregarded for federal tax purposes. If the LLC is disregarded as an entity separate from its owner, enter the appropriate tax classification of the owner identified on the "Name" line.

**Other entities.** Enter your business name as shown on required federal tax documents on the "Name" line. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on the "Business name/disregarded entity name" line.

### Exempt Payee

If you are exempt from backup withholding, enter your name as described above and check the appropriate box for your status, then check the "Exempt payee" box in the line following the "Business name/disregarded entity name," sign and date the form.

Generally, individuals (including sole proprietors) are not exempt from backup withholding. Corporations are exempt from backup withholding for certain payments, such as interest and dividends.

**Note.** If you are exempt from backup withholding, you should still complete this form to avoid possible erroneous backup withholding.

The following payees are exempt from backup withholding:

1. An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2),
  2. The United States or any of its agencies or instrumentalities,
  3. A state, the District of Columbia, a possession of the United States, or any of their political subdivisions or instrumentalities,
  4. A foreign government or any of its political subdivisions, agencies, or instrumentalities, or
  5. An international organization or any of its agencies or instrumentalities.
- Other payees that may be exempt from backup withholding include:
6. A corporation,
  7. A foreign central bank of issue,
  8. A dealer in securities or commodities required to register in the United States, the District of Columbia, or a possession of the United States,
  9. A futures commission merchant registered with the Commodity Futures Trading Commission,
  10. A real estate investment trust,
  11. An entity registered at all times during the tax year under the Investment Company Act of 1940,
  12. A common trust fund operated by a bank under section 584(a),
  13. A financial institution,
  14. A middleman known in the investment community as a nominee or custodian, or
  15. A trust exempt from tax under section 664 or described in section 4947.

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 15.

IF the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt payees except for 9
Broker transactions	Exempt payees 1 through 5 and 7 through 13. Also, C corporations.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 5
Payments over \$600 required to be reported and direct sales over \$5,000 <sup>1</sup>	Generally, exempt payees 1 through 7 <sup>2</sup>

<sup>1</sup> See Form 1099-MISC, Miscellaneous Income, and its instructions.

<sup>2</sup> However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney, and payments for services paid by a federal executive agency.

### Part I. Taxpayer Identification Number (TIN)

**Enter your TIN in the appropriate box.** If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN. However, the IRS prefers that you use your SSN.

If you are a single-member LLC that is disregarded as an entity separate from its owner (see *Limited Liability Company (LLC)* on page 2), enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

**Note.** See the chart on page 4 for further clarification of name and TIN combinations.

**How to get a TIN.** If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local Social Security Administration office or get this form online at [www.ssa.gov](http://www.ssa.gov). You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at [www.irs.gov/businesses](http://www.irs.gov/businesses) and clicking on Employer Identification Number (EIN) under Starting a Business. You can get Forms W-7 and SS-4 from the IRS by visiting [IRS.gov](http://IRS.gov) or by calling 1-800-TAX-FORM (1-800-829-3676).

If you are asked to complete Form W-9 but do not have a TIN, write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

**Note.** Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

**Caution:** A disregarded domestic entity that has a foreign owner must use the appropriate Form W-8.

### Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if item 1, below, and items 4 and 5 on page 4 indicate otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on the "Name" line must sign. Exempt payees, see *Exempt Payee* on page 3.

**Signature requirements.** Complete the certification as indicated in items 1 through 3, below, and items 4 and 5 on page 4.

**1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983.** You must give your correct TIN, but you do not have to sign the certification.

**2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983.** You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

**3. Real estate transactions.** You must sign the certification. You may cross out item 2 of the certification.

**4. Other payments.** You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

**5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions.** You must give your correct TIN, but you do not have to sign the certification.

### What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account)	The actual owner of the account or, if combined funds, the first individual on the account <sup>1</sup>
3. Custodian account of a minor (Uniform Gift to Minors Act)	The minor <sup>2</sup>
4. a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee <sup>3</sup>
b. So-called trust account that is not a legal or valid trust under state law	The actual owner <sup>1</sup>
5. Sole proprietorship or disregarded entity owned by an individual	The owner <sup>3</sup>
6. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulation section 1.671-4(b)(2)(i)(A))	The grantor <sup>*</sup>
For this type of account:	Give name and EIN of:
7. Disregarded entity not owned by an individual	The owner
8. A valid trust, estate, or pension trust	Legal entity <sup>4</sup>
9. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
10. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
11. Partnership or multi-member LLC	The partnership
12. A broker or registered nominee	The broker or nominee
13. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
14. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulation section 1.671-4(b)(2)(i)(B))	The trust

<sup>1</sup> List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

<sup>2</sup> Circle the minor's name and furnish the minor's SSN.

<sup>3</sup> You must show your individual name and you may also enter your business or "DBA" name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

<sup>4</sup> List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships* on page 1.

\***Note.** Grantor also must provide a Form W-9 to trustee of trust.

**Note.** If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

### Secure Your Tax Records from Identity Theft

Identity theft occurs when someone uses your personal information such as your name, social security number (SSN), or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Publication 4535, Identity Theft Prevention and Victim Assistance.

Victims of identity theft who are experiencing economic harm or a system problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

**Protect yourself from suspicious emails or phishing schemes.** Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to [phishing@irs.gov](mailto:phishing@irs.gov). You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at: [spam@uce.gov](mailto:spam@uce.gov) or contact them at [www.ftc.gov/idtheft](http://www.ftc.gov/idtheft) or 1-877-IDTHEFT (1-877-438-4338).

Visit [irs.gov](http://irs.gov) to learn more about identity theft and how to reduce your risk.

### Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

# 2013 Withholding Exemption Certificate

# 590

This form can only be used to certify exemption from nonresident withholding under California Revenue and Taxation Code (R&TC) Section 18662. Do not use this form for exemption from wage withholding.

File this form with your withholding agent. (Please type or print)

Withholding agent's name \_\_\_\_\_

Payee's name \_\_\_\_\_

Payee's  SSN or ITIN  FEIN  
 CA corp. no.  CA SOS file no.

Address (number and street, PO Box, or PMB no.) \_\_\_\_\_

Apt. no./ Ste. no. \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

ZIP Code \_\_\_\_\_

Read the following carefully and check the box that applies to the payee.

I certify that for the reasons checked below, the payee named on this form is exempt from the California income tax withholding requirement on payment(s) made to the entity or individual.

**Individuals — Certification of Residency:**

I am a resident of California and I reside at the address shown above. If I become a nonresident at any time, I will promptly notify the withholding agent. See instructions for General Information D, Who is a Resident, for the definition of a resident.

**Corporations:**

The above-named corporation has a permanent place of business in California at the address shown above or is qualified through the California Secretary of State (SOS) to do business in California. The corporation will file a California tax return and withhold on payments of California source income to nonresidents when required. If this corporation ceases to have a permanent place of business in California or ceases to do any of the above, I will promptly notify the withholding agent. See instructions for General Information F, What is a Permanent Place of Business, for the definition of permanent place of business.

**Partnerships or limited liability companies (LLC):**

The above-named partnership or LLC has a permanent place of business in California at the address shown above or is registered with the California SOS, and is subject to the laws of California. The partnership or LLC will file a California tax return and will withhold on foreign and domestic nonresident partners or members when required. If the partnership or LLC ceases to do any of the above, I will promptly inform the withholding agent. For withholding purposes, a limited liability partnership (LLP) is treated like any other partnership.

**Tax-Exempt Entities:**

The above-named entity is exempt from tax under California Revenue and Taxation Code (R&TC) Section 23701 \_\_\_\_\_ (insert letter) or Internal Revenue Code Section 501(c) \_\_\_\_\_ (insert number). The tax-exempt entity will withhold on payments of California source income to nonresidents when required. If this entity ceases to be exempt from tax, I will promptly notify the withholding agent. Individuals cannot be tax-exempt entities.

**Insurance Companies, Individual Retirement Arrangements (IRAs), or Qualified Pension/Profit Sharing Plans:**

The above-named entity is an insurance company, IRA, or a federally qualified pension or profit-sharing plan.

**California Trusts:**

At least one trustee and one noncontingent beneficiary of the above-named trust is a California resident. The trust will file a California fiduciary tax return and will withhold on foreign and domestic nonresident beneficiaries when required. If the trustee becomes a nonresident at any time, I will promptly notify the withholding agent.

**Estates — Certification of Residency of Deceased Person:**

I am the executor of the above-named person's estate. The decedent was a California resident at the time of death. The estate will file a California fiduciary tax return and will withhold on foreign and domestic nonresident beneficiaries when required.

**Nonmilitary Spouse of a Military Servicemember:**

I am a nonmilitary spouse of a military servicemember and I meet the Military Spouse Residency Relief Act (MSRRA) requirements. See instructions for General Information E, MSRRA.

**CERTIFICATE:** Please complete and sign below.

Under penalties of perjury, I hereby certify that the information provided in this document is, to the best of my knowledge, true and correct. If conditions change, I will promptly notify the withholding agent.

Payee's name and title (type or print) \_\_\_\_\_ Daytime telephone no. \_\_\_\_\_

Payee's signature  \_\_\_\_\_ Date \_\_\_\_\_

# Instructions for Form 590

## Withholding Exemption Certificate

References in these instructions are to the California Revenue and Taxation Code (R&TC).

### General Information

For purposes of California income tax, references to a spouse, husband, or wife also refer to a Registered Domestic Partner (RDP) unless otherwise specified. For more information on RDPs, get FTB Pub. 737, Tax Information for Registered Domestic Partners.

**Private Mail Box (PMB)** – Include the PMB in the address field. Write “PMB” first, then the box number. Example: 111 Main Street PMB 123.

**Foreign Address** – Enter the information in the following order: City, Country, Province/Region, and Postal Code. Follow the country’s practice for entering the postal code. Do not abbreviate the country’s name.

### A Purpose

Use Form 590, Withholding Exemption Certificate, to certify an exemption from nonresident withholding. California residents or entities should complete and present Form 590 to the withholding agent. The withholding agent is then relieved of the withholding requirements if the agent relies in good faith on a completed and signed Form 590 unless told by the Franchise Tax Board (FTB) that the form should not be relied upon.

**Important** – This form cannot be used for exemption from wage and real estate withholding.

- If you are an employee, any wage withholding questions should be directed to the FTB General Information number, 800.852.5711. Employers should call 888.745.3886 or go to [edd.ca.gov](http://edd.ca.gov).
- Sellers of California real estate use Form 593-C, Real Estate Withholding Certificate, to claim an exemption from real estate withholding.

### B Requirement

R&TC Section 18662 requires withholding of income or franchise tax on payments of California source income made to nonresidents of California.

Withholding is required on the following, but is not limited to:

- Payments to nonresidents for services rendered in California.
- Distributions of California source income made to domestic nonresident S corporation shareholders, partners and members and allocations of California source income made to foreign partners and members.
- Payments to nonresidents for rents if the payments are made in the course of the withholding agent’s business.
- Payments to nonresidents for royalties with activities in California.

- Distributions of California source income to nonresident beneficiaries from an estate or trust.
- Prizes and winnings received by nonresidents for contests in California.

However, withholding is optional if the total payments of California source income are \$1,500 or less during the calendar year.

For more information on withholding get FTB Pub. 1017, Resident and Nonresident Withholding Guidelines. To get a withholding publication see General Information H, Publications, Forms, and Additional Information.

**Backup Withholding** – Beginning on or after January 1, 2010, with certain limited exceptions, payers that are required to withhold and remit backup withholding to the Internal Revenue Service (IRS) are also required to withhold and remit to the FTB. The California backup withholding rate is 7% of the payment. For California purposes, dividends, interests, and any financial institutions release of loan funds made in the normal course of business are exempt from backup withholding. For additional information on California backup withholding, go to [ftb.ca.gov](http://ftb.ca.gov) and search for **backup withholding**.

If a payee has backup withholding, the payee must contact the FTB to provide a valid Taxpayer Identification Number (TIN) before filing a tax return. The following are acceptable TINs: social security number (SSN); individual taxpayer identification number (ITIN); federal employer identification number (FEIN); California corporation number (CA Corp No.); or California Secretary of State (SOS) file number. Failure to provide a valid TIN will result in the denial of the backup withholding credit. For more information go to [ftb.ca.gov](http://ftb.ca.gov) and search for **backup withholding**.

**Who is Excluded from Withholding** – The following are excluded from withholding and completing this form:

- The United States and any of its agencies or instrumentalities
- A state, a possession of the United States, the District of Columbia, or any of its political subdivisions or instrumentalities
- A foreign government or any of its political subdivisions, agencies, or instrumentalities

### C Who Certifies this Form

Form 590 is certified by the payee. An incomplete certificate is invalid and the withholding agent should not accept it. If the withholding agent receives an incomplete certificate, the withholding agent is required to withhold tax on payments made to the payee until a valid certificate is received. In lieu of a completed certificate on the preprinted form, the

withholding agent may accept as a substitute certificate a letter from the payee explaining why the payee is not subject to withholding. The letter must contain all the information required on the certificate in similar language, including the under penalty of perjury statement and the payee’s taxpayer identification number. The withholding agent must retain a copy of the certificate or substitute for at least four years after the last payment to which the certificate applies, and provide it upon request to the FTB.

For example, if an entertainer (or the entertainer’s business entity) is paid for a performance, the entertainer’s information must be provided. Do not submit the entertainer’s agent or promoter information.

The grantor of a grantor trust shall be treated as the payee for withholding purposes.

Therefore, if the payee is a grantor trust and one or more of the grantors is a nonresident, withholding is required. If all of the grantors on the trust are residents, no withholding is required. Resident grantors can check the box on Form 590 labeled “Individuals — Certification of Residency.”

### D Who is a Resident

A California resident is any individual who is in California for other than a temporary or transitory purpose or any individual domiciled in California who is absent for a temporary or transitory purpose.

An individual domiciled in California who is absent from California for an uninterrupted period of at least 546 consecutive days under an employment-related contract is considered outside California for other than a temporary or transitory purpose.

An individual is still considered outside California for other than a temporary or transitory purpose if return visits to California do not total more than 45 days during any taxable year covered by an employment contract.

This provision does not apply if an individual has income from stocks, bonds, notes, or other intangible personal property in excess of \$200,000 in any taxable year in which the employment-related contract is in effect.

A spouse/RDP absent from California for an uninterrupted period of at least 546 days to accompany a spouse/RDP under an employment-related contract is considered outside of California for other than a temporary or transitory purpose.

Generally, an individual who comes to California for a purpose which will extend over a long or indefinite period will be considered a resident. However, an individual who comes to perform a particular contract of short duration will be considered a nonresident.

For assistance in determining resident status, get FTB Pub. 1031, Guidelines for Determining Resident Status, and FTB Pub. 1032, Tax Information for Military Personnel, or call the FTB at 800.852.5711 or 916.845.6500.

## E Military Spouse Residency Relief Act (MSRRA)

Generally, for tax purposes you are considered to maintain your existing residence or domicile. If a military servicemember and nonmilitary spouse have the same state of domicile, the MSRRA provides:

- A spouse shall not be deemed to have lost a residence or domicile in any state solely by reason of being absent to be with the servicemember serving in compliance with military orders.
- A spouse shall not be deemed to have acquired a residence or domicile in any other state solely by reason of being there to be with the servicemember serving in compliance with military orders.

Domicile is defined as the one place:

- Where you maintain a true, fixed, and permanent home
- To which you intend to return whenever you are absent

A military servicemember's nonmilitary spouse is considered a nonresident for tax purposes if the servicemember and spouse have the same domicile outside of California and the spouse is in California solely to be with the servicemember who is serving in compliance with Permanent Change of Station orders.

Note: California may require nonmilitary spouses of military servicemembers to provide proof that they meet the criteria for California personal income tax exemption as set forth in the MSRRA.

Income of a military servicemember's nonmilitary spouse for services performed in California is not California source income subject to state tax if the spouse is in California to be with the servicemember serving in compliance with military orders, and the servicemember and spouse have the same domicile in a state other than California.

For additional information or assistance in determining whether the applicant meets the MSRRA requirements, get FTB Pub. 1032.

## F What is a Permanent Place of Business

A corporation has a permanent place of business in California if it is organized and existing under the laws of California or if it is a foreign corporation qualified to transact intrastate business by the California SOS. A corporation that has not qualified to transact intrastate business (e.g., a corporation engaged exclusively in interstate commerce) will be considered as having a permanent place of business in California only if it maintains a permanent office in California that is permanently staffed by its employees.

## G Withholding Agent

Keep Form 590 for your records. Do not send this form to the FTB unless it has been specifically requested.

For more information, contact Withholding Services and Compliance, see General Information H.

The payee must notify the withholding agent if any of the following situations occur:

- The individual payee becomes a nonresident.
- The corporation ceases to have a permanent place of business in California or ceases to be qualified to do business in California.
- The partnership ceases to have a permanent place of business in California.
- The LLC ceases to have a permanent place of business in California.
- The tax-exempt entity loses its tax-exempt status.

The withholding agent must then withhold and report the withholding using Form 592, Resident and Nonresident Withholding Statement, and remit the withholding using Form 592-V, Payment Voucher for Resident and Nonresident Withholding. Form 592-B, Resident and Nonresident Withholding Tax Statement, is retained by the withholding agent and a copy is given to the payee.

## H Additional Information

To get additional nonresident withholding information, contact the Withholding Services and Compliance.

WITHHOLDING SERVICES AND COMPLIANCE MS F182  
FRANCHISE TAX BOARD  
PO BOX 942867  
SACRAMENTO CA 94267-0651

Telephone: 888.792.4900

916.845.4900

Fax: 916.845.9512

You can download, view, and print California tax forms and publications at [ftb.ca.gov](http://ftb.ca.gov).

OR to get forms by mail write to:

TAX FORMS REQUEST UNIT MS F284  
FRANCHISE TAX BOARD  
PO BOX 307  
RANCHO CORDOVA CA 95741-0307

For all other questions unrelated to withholding or to access the TTY/TDD numbers, see the information below.

Internet and Telephone Assistance

Website: [ftb.ca.gov](http://ftb.ca.gov)

Telephone: 800.852.5711 from within the United States  
916.845.6500 from outside the United States

TTY/TDD: 800.822.6268 for persons with hearing or speech impairments

Asistencia Por Internet y Teléfono

Sitio web: [ftb.ca.gov](http://ftb.ca.gov)

Teléfono: 800.852.5711 dentro de los Estados Unidos  
916.845.6500 fuera de los Estados Unidos

TTY/TDD: 800.822.6268 personas con discapacidades auditivas y del habla

## **Certification Regarding Debarment, Suspension, and Other Responsibility Matters**

The prospective participant certifies to the best of its knowledge and belief that it and the principals:

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- (b) Have not within a three year period preceding this proposal been convicted of or had a civil judgment rendered against them or commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction: violation of Federal or State antitrust statute or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (c) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (b) of this certification; and
- (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

I understand that a false statement on this certification may be grounds for rejection of this proposal or termination of the award. In addition, under 18 USC Sec. 1001, a false statement may result in a fine of up to \$10,000 or imprisonment for up to 5 years, or both.

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Typed Name & Title of Authorized Representative

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Signature of Authorized Representative Date

I am unable to certify to the above statements. My explanation is attached.

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EPA Form 5700-49 (11-88)



## CAMPAIGN CONTRIBUTIONS DISCLOSURE

In accordance with California law, bidders and contracting parties are required to disclose, at the time the application is filed, information relating to any campaign contributions made to South Coast Air Quality Management District (SCAQMD) Board Members or members/alternates of the MSRC, including: the name of the party making the contribution (which includes any parent, subsidiary or otherwise related business entity, as defined below), the amount of the contribution, and the date the contribution was made. 2 C.C.R. §18438.8(b).

California law prohibits a party, or an agent, from making campaign contributions to SCAQMD Governing Board Members or members/alternates of the Mobile Source Air Pollution Reduction Review Committee (MSRC) of more than \$250 while their contract or permit is pending before the SCAQMD; and further prohibits a campaign contribution from being made for three (3) months following the date of the final decision by the Governing Board or the MSRC on a donor’s contract or permit. Gov’t Code §84308(d). For purposes of reaching the \$250 limit, the campaign contributions of the bidder or contractor plus contributions by its parents, affiliates, and related companies of the contractor or bidder are added together. 2 C.C.R. §18438.5.

In addition, SCAQMD Board Members or members/alternates of the MSRC must abstain from voting on a contract or permit if they have received a campaign contribution from a party or participant to the proceeding, or agent, totaling more than \$250 in the 12-month period prior to the consideration of the item by the Governing Board or the MSRC. Gov’t Code §84308(c).

The list of current SCAQMD Governing Board Members can be found at the SCAQMD website ([www.aqmd.gov](http://www.aqmd.gov)). The list of current MSRC members/alternates can be found at the MSRC website (<http://www.cleantransportationfunding.org>).

### **SECTION I.**

**Contractor (Legal Name):** \_\_\_\_\_

- DBA, Name _____, County Filed in _____ _____ Corporation, ID No. _____ LLC/LLP, ID No. _____
---

**List any parent, subsidiaries, or otherwise affiliated business entities of Contractor:**  
*(See definition below).*

\_\_\_\_\_  
\_\_\_\_\_



**Campaign Contributions Disclosure, *continued:***

**SECTION II.**

Has Contractor and/or any parent, subsidiary, or affiliated company, or agent thereof, made a campaign contribution(s) totaling \$250 or more in the aggregate to a current member of the South Coast Air Quality Management Governing Board or member/alternate of the MSRC in the 12 months preceding the date of execution of this disclosure?

Yes    No   **If YES, complete Section II below and then sign and date the form. If NO, sign and date below. Include this form with your submittal.**

Name of Contributor \_\_\_\_\_

_____	_____	_____
Governing Board Member or MSRC Member/Alternate	Amount of Contribution	Date of Contribution

Name of Contributor \_\_\_\_\_

_____	_____	_____
Governing Board Member or MSRC Member/Alternate	Amount of Contribution	Date of Contribution

Name of Contributor \_\_\_\_\_

_____	_____	_____
Governing Board Member or MSRC Member/Alternate	Amount of Contribution	Date of Contribution

Name of Contributor \_\_\_\_\_

_____	_____	_____
Governing Board Member or MSRC Member/Alternate	Amount of Contribution	Date of Contribution

**I declare the foregoing disclosures to be true and correct.**

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## DEFINITIONS

### Parent, Subsidiary, or Otherwise Related Business Entity (2 Cal. Code of Regs., §18703.1(d).)

- (1) **Parent subsidiary.** A parent subsidiary relationship exists when one corporation directly or indirectly owns shares possessing more than 50 percent of the voting power of another corporation.
- (2) **Otherwise related business entity.** Business entities, including corporations, partnerships, joint ventures and any other organizations and enterprises operated for profit, which do not have a parent subsidiary relationship are otherwise related if any one of the following three tests is met:
  - (A) **One business entity has a controlling ownership interest in the other business entity.**
  - (B) **There is shared management and control between the entities. In determining whether there is shared management and control, consideration should be given to the following factors:**
    - (i) **The same person or substantially the same person owns and manages the two entities;**
    - (ii) **There are common or commingled funds or assets;**
    - (iii) **The business entities share the use of the same offices or employees, or otherwise share activities, resources or personnel on a regular basis;**
    - (iv) **There is otherwise a regular and close working relationship between the entities; or**
  - (C) **A controlling owner (50% or greater interest as a shareholder or as a general partner) in one entity also is a controlling owner in the other entity.**



South Coast  
 AIR QUALITY MANAGEMENT DISTRICT  
 21865 Copley Dr., Diamond Bar, CA 91765  
 www.aqmd.gov

**Direct Deposit Authorization**

**STEP 1: Please check all the appropriate boxes**

- |  |  |
|--|--|
| <input type="checkbox"/> Individual (Employee, Governing Board Member) | <input type="checkbox"/> New Request           |
| <input type="checkbox"/> Vendor/Contractor                             | <input type="checkbox"/> Cancel Direct Deposit |
| <input type="checkbox"/> Changed Information                           |  |

**STEP 2: Payee Information**

Last Name		First Name		Middle Initial	Title
Vendor/Contractor Business Name (if applicable)					
Address				Apartment or P.O. Box Number	
City		State	Zip	Country	
Taxpayer ID Number		Telephone Number		Email Address	

**Authorization**

- I authorize South Coast Air Quality Management District (SCAQMD) to direct deposit funds to my account in the financial institution as indicated below. I understand that the authorization may be rejected or discontinued by SCAQMD at any time. If any of the above information changes, I will promptly complete a new authorization agreement. If the direct deposit is not stopped before closing an account, funds payable to me will be returned to SCAQMD for distribution. This will delay my payment.
- This authorization remains in effect until SCAQMD receives written notification of changes or cancellation from you.
- I hereby release and hold harmless SCAQMD for any claims or liability to pay for any losses or costs related to insufficient fund transactions that result from failure within the Automated Clearing House network to correctly and timely deposit monies into my account.

**STEP 3:**

You must verify that your bank is a member of an Automated Clearing House (ACH). Failure to do so could delay the processing of your payment. You must attach a voided check or have your bank complete the bank information and the account holder must sign below.

**To be Completed by your Bank**

<b>Staple Voided Check Here</b>	Name of Bank/Institution				
	Account Holder Name(s)				
	<input type="checkbox"/> Saving <input type="checkbox"/> Checking		Account Number	Routing Number	
	Bank Representative Printed Name		Bank Representative Signature		Date
	ACCOUNT HOLDER SIGNATURE:				Date

For SCAQMD Use Only

Input By \_\_\_\_\_

Date \_\_\_\_\_

BOARD MEETING DATE: July 11, 2014

AGENDA NO. 14

PROPOSAL: Authorize Purchase of PeopleSoft and Oracle Software Support

SYNOPSIS: The SCAQMD uses the PeopleSoft Integrated Financial/Human Resources System. The software package provides purchasing, accounting, asset management, financial management, project reporting, payroll, and human resource functionality for the SCAQMD. The PeopleSoft system uses Oracle database software. The maintenance support for this system expires August 13, 2014. This action is to obtain approval for the purchase of PeopleSoft and Oracle software maintenance support for another year. Funds for this expense are included in the FY 2014-15 Budget.

COMMITTEE: Administrative, June 13, 2014; Committee took no action due to lack of campaign contribution disclosure form.

**RECOMMENDED ACTIONS:**

Authorize the Procurement Manager to purchase:

1. One year of PeopleSoft software maintenance support for the integrated Financial/Human Resources System at a cost not to exceed \$208,400.
2. One year of Oracle database software maintenance support for the integrated Financial/Human Resources System at a cost not to exceed \$30,400.

Barry R. Wallerstein, D.Env.  
Executive Officer

CJM:MH:ZT:agg

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**Background**

In April 1998, the SCAQMD purchased the PeopleSoft Financial/Human Resources System to enhance the functionality of the overall finance system. The PeopleSoft system eliminated duplicate effort, where possible, and integrated processes that access the same data. The software package provides purchasing, accounting, asset management, financial management, project reporting, payroll, and human resource functionality for the SCAQMD. Software support includes day-to-day technical

support, software patches and bug fixes, and software upgrades. Software maintenance support for the PeopleSoft system expires August 13, 2014.

The PeopleSoft system also uses Oracle database software. The Oracle database is used to store all of the data used in the PeopleSoft system. The database support includes day-to-day technical support, software patches and bug fixes, and software upgrades. Software maintenance support for Oracle database software expires August 11, 2014.

PeopleSoft maintenance support includes the following services:

Software Maintenance	Licensed product updates, enhancements, and repairs;
Customer Care Business Center	Resolution of business issues and aid in finding assistance within PeopleSoft's customer service;
PeopleSoft Advisor	Business-oriented information needs and advice;
PeopleSoft Plugged In	Electronic distribution of information on new releases, fixes and patches, and software updates;
Customer Connection	On-line access to PeopleSoft information including news, documentation, training, and user groups;
Global Support Center	Assistance in resolving online operating difficulties, system failures, PeopleSoft application-related problems, potential system bugs, and installation and upgrade issues;
Access to PeopleSoft Forum	Access to database documentation and PeopleSoft application problems and fixes.

Oracle maintenance support includes the following services:

Software Maintenance	Licensed product updates, enhancements, and repairs;
Software Support	Assistance in resolving online operating difficulties, system failures, Oracle application-related problems, potential system bugs, and installation and upgrade issues.

**Sole Source Justification**

Section VIII.B.2 of the Procurement Policy and Procedure identifies circumstances under which a sole source purchase award may be justified. These requests for a sole source award are made under provision VIII.B.2.c.(2) and (3). The services are available from only the sole source; involve the use of proprietary technology; and use key contractor-owned assets for project performance.

**Proposal**

Oracle is the sole manufacturer and provider of PeopleSoft and Oracle database software and therefore the only source for software maintenance support licensing agreements. Staff recommends the purchase of one year of PeopleSoft and Oracle database software maintenance support to provide continued annual support for SCAQMD's integrated financial/human resources system, at costs not to exceed \$208,400 and \$30,400, respectively.

**Resource Impacts**

Sufficient funds are included in the FY 2014-15 Budget, under District General Professional and Special Services.

BOARD MEETING DATE: July 11, 2014

AGENDA NO. 15

PROPOSAL: Authorize Purchase of OnBase Software Support

SYNOPSIS: SCAQMD uses the OnBase software for its electronic document management system to manage critical documents and to support the Record Retention Policy. Software subscription and support for OnBase expires on July 31, 2014. This action is to obtain approval for sole source purchase of OnBase software subscription and support for one year. Funds for this purchase (\$120,380) are included in the FY 2014-15 Budget.

COMMITTEE: Administrative, June 13, 2014, Recommended for Approval

**RECOMMENDED ACTION:**

Authorize the Procurement Manager to purchase OnBase software subscription and support from Hyland Software at a cost of \$120,380.

Barry R. Wallerstein, D.Env.  
Executive Officer

CJM:MH:SJ:nm:agg

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**Background**

SCAQMD uses OnBase software as its electronic document management system, which has maintained the SCAQMD's documents and other critical records since 1990. Total storage to date is over three million multi-page documents. OnBase is a Windows-based, menu-driven, document management system designed to store and retrieve critical documents in electronic format. The system provides concurrent information to multiple workstations simultaneously. It has a flexible compound document structure where black and white or color images co-exist with text and data within a single document. It stores various types of documents such as Microsoft Word documents, Outlook emails, and PDFs, videos and data files. The system also includes document routing; and distribution offers ad-hoc, scheduled point-to-point, and broadcast distribution of documents. It contains a complete set of markup and annotation tools that allow users to add notes, comments and drawings to pages without compromising

the original document's integrity. The system has full network support so information can be distributed rapidly within an organization regardless of architecture. Finally, the system has an extensive number of features to allow the secure display of documents on the SCAQMD's internal and external websites. OnBase software subscription and support expires on July 31, 2014.

**Sole Source Justification**

Section VIII.B.2 of the Procurement Policy and Procedure identifies circumstances under which a sole source purchase award may be justified. This request for a sole source award is made under provision VIII.B.2.c.(2) and (3). The products and services are available from only the sole source; involve the use of proprietary technology; and use key contractor-owned assets for project performance.

**Proposal**

Hyland Software is the sole manufacturer and provider of OnBase software and is, therefore, the only source for its maintenance support licensing agreements. Staff recommends the purchase of OnBase software subscription and support from Hyland Software at a cost of \$120,380.

**Resource Impacts**

Sufficient funds are included in the FY 2014-15 Budget under Information Management Professional and Special Services.



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BOARD MEETING DATE: July 11, 2014

AGENDA NO. 16

**PROPOSAL:** Amend Existing Contract with Carmen Group Incorporated for Legislative Representation in Washington, D.C.

**SYNOPSIS:** The current contract with the Carmen Group Incorporated for legislative and regulatory representation in Washington D.C. will expire on July 14, 2014. This contract, as of January 14, 2014, had an option for two one-year extensions. A six-month extension was exercised at that time. To further the agency's policy positions at the federal level, this proposal exercises a second six-month contract extension, through January 14, 2015, for the Carmen Group Incorporated at a cost of \$109,620.

**COMMITTEE:** Legislative, June 13, 2014. Recommended for Approval

**RECOMMENDED ACTION:**

Authorize the Chairman to execute a six-month contract extension with the Carmen Group Incorporated for legislative representation in Washington, D.C. in the amount of \$109,620.

Barry R. Wallerstein, D.Env.  
Executive Officer

LBS:DJA:PC

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**Background**

At its January 2014 meeting, the Governing Board authorized a six-month contract extension for the Carmen Group Incorporated (Carmen Group) and directed staff to evaluate the legislative representation needs in regards with the continuation of the Carmen Group contract. A variety of items are on, or are anticipated to be on, the agenda for SCAQMD in 2014, including: (1) securing the Board's priorities in the next surface transportation reauthorization legislation; (2) finding funding to help Metrolink replace its Tier 0 and Tier II locomotives with Tier IV locomotives; (3) obtaining funding to demonstrate alternative fuel passenger rail locomotives; (4) increasing support for cleaning up goods movement and surface transportation sources; (5) seeking authorization for demonstration and deployment of clean technology and clean energy

resources; and (6) protecting SCAQMD's subvention funding and other federal grants. In addition, the Carmen Group will also advocate, as needed, on legislative and regulatory issues to support new policy initiatives for the approval of the 2012 AQMP and the development of the 2016 AQMP. Given these various items on or anticipated to be on the agenda in 2014, staff recommends the continuation of the Carmen Group contract.

Over the past six months, the Carmen Group has continued to work with the Board and staff to maintain a noticeable presence in Washington, D.C. and to advance the Board's agenda for federal legislative and regulatory issues. They have organized meetings with Congressional members and staff, as well as other officials and representatives in Washington, D.C., that have continued to help cultivate relationships with Congress, the Administration, and other stakeholders. Specifically, the Carmen Group has continued to initiate and cultivate SCAQMD's relationship with federal agency representatives (e.g. the DOT), U.S. House of Representatives' committee members and staff (e.g. the House Transportation & Infrastructure Committee), as well as the offices of prominent California Republican House members, including Congressman Dana Rohrabacher and Congressman Ken Calvert, who currently serves as Chair of the Subcommittee on Interior, Environment, and Related Agencies for the House Appropriations Committee. A six-month extension will enable the Carmen Group to continue cultivating the relationships they have initiated on SCAQMD's behalf to help facilitate efforts to obtain needed federal funding and policy changes.

Further, since the six-month extension was granted, the Carmen Group has been involved with efforts to obtain provisions beneficial to air quality in the House's version of the MAP-21 Surface Transportation Reauthorization Bill, efforts to fully-fund the Diesel Emission Reduction Act (DERA), which had its funding entirely eliminated in the President's annual budget, and efforts to try to secure additional funding for Southern California from either DERA or through the Clean Air Act Section 103/105 State and Tribal Assistance Grants (STAG). Given that each of these projects is currently in process and could take several more months to complete, an additional six month extension of the contract with Carmen Group is warranted.

### **Proposal**

The current six month contract extension for the Carmen Group expires on July 14, 2014. Staff recommends retaining the Carmen Group by amending the current contract to include a second six month extension, through January 14, 2015. Continuity of representation will help build on past relationships and current policy initiatives to increase the successful outcomes of SCAQMD policy objectives in 2014.

### **Resource Impacts**

Funding for this contract is available in the Professional and Special Services account of the Legislative & Public Affairs FY 2014-15 Budget.

BOARD MEETING DATE: July 11, 2014

AGENDA NO. 17

**PROPOSAL:** Establish Lists of Prequalified Counsel to Represent and Advise the SCAQMD on Legal Matters Related to Environmental Law and Represent and Advise the SCAQMD Hearing Board

**SYNOPSIS:** On April 4, 2014, the Board approved issuance of an RFP to pre-qualify outside counsel having expertise in the California Environmental Quality Act, SCAQMD rulemaking and planning procedures, administrative law and related issues for both the SCAQMD and the SCAQMD Hearing Board. The RFP was issued jointly to limit costs. The evaluation of responding firms has been completed. This action is to establish two lists of prequalified counsel—one to represent the SCAQMD and one to represent the SCAQMD Hearing Board in environmental law areas.

**COMMITTEE:** Administrative, June 13, 2014, Recommended for Approval

**RECOMMENDED ACTIONS:**

1. Approve the firms *Shute Mihaly & Weinberger LLP*, *Stumwasser & Wocher LLP*, *Woodruff Spradlin & Smart, Best, Best & Krieger LLP*, and *Perkins Coie LLP*, as prequalified law firms having expertise in the California Environmental Quality Act, SCAQMD rulemaking and planning procedures, issues relating to statute and rule interpretation, air quality laws, administrative law, representation of government agencies, constitutional issues, the Brown Act, and complex environmental litigation, that General Counsel may use to represent the SCAQMD in future litigation and for advice.
2. Authorize the Chairman of the Board or the Executive Officer, depending on whether the amount exceeds \$75,000, to execute contracts with any of the above firms as the need arises for a total not to exceed \$250,000 annually for up to three years.
3. Approve the firm *Atkinson, Andelson, Loya, Ruud & Romo* as a prequalified law firm having expertise in the above-referenced areas to provide representation and advice as required by the SCAQMD Hearing Board.

4. Authorize the Executive Officer to execute contracts with *Atkinson, Andelson, Loya, Ruud & Romo* to provide representation to the Hearing Board as the need arises for a total not to exceed \$15,000 annually for up to three years.

Barry R. Wallerstein, D.Env.  
Executive Officer

KRW:vmr

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### **Background**

On April 4, 2014, the Board approved issuance of an RFP for an amount up to \$250,000 for the SCAQMD General Counsel and \$15,000 for the SCAQMD Hearing Board to solicit proposals from outside litigation counsel having particular expertise and experience in the California Environmental Quality Act, SCAQMD rulemaking and planning procedures, issues relating to statute and rule interpretation, air quality laws, administrative law, representation of government agencies, constitutional issues, the Brown Act, and complex environmental litigation. The RFP was issued jointly to limit costs. General Counsel and the AQMD Hearing Board will utilize different firms to avoid conflicts of interest. In the past, the SCAQMD and the SCAQMD Hearing Board have faced, and likely will face in the future, litigation and other matters requiring such specialized expertise. A rapid response is needed in such situations, and it is not possible to go through the RFP process as new cases arise. Establishing prequalified lists ensures that SCAQMD and SCAQMD Hearing Board can quickly select counsel for representation as needed. It is also important to have a sufficient variety of firms (large as well as small) to be able to handle the variant of types of lawsuits involving SCAQMD.

### **Outreach**

In accordance with SCAQMD's Procurement Policy and Procedure, a public notice advertising the RFP/RFQ and inviting bids was published in the Los Angeles Times, the Orange County Register, the San Bernardino Sun, and Riverside County Press Enterprise newspapers to leverage the most cost-effective method of outreach to the South Coast Basin. Also, potential bidders were notified by sending notification to various individual law firms and minority bar associations.

Additionally, potential bidders may have been notified utilizing SCAQMD's own electronic listing of certified minority vendors. Notice of the RFP/RFQ has been e-mailed to the Black and Latino Legislative Caucuses and various minority chambers of commerce and business associations, and placed on the Internet at SCAQMD's website (<http://www.aqmd.gov>). Information is also available on SCAQMD's bidder's 24-hour telephone message line (909) 396-2724.

## **Evaluation**

Bid responses for the Environmental Law RFP were received from eight (8) law firms. Of the eight bid responses, only one qualified bid response addressed the needs of the Hearing Board. A summary of the responses is provided in Attachment A. An evaluation panel was convened to evaluate proposals for the General Counsel and one to evaluate the proposals for the Hearing Board. The Hearing Board requires different counsel than the firms hired by SCAQMD because its interest may not coincide with SCAQMD's. The SCAQMD panel consisted of three SCAQMD employees: three General Counsel attorneys; two male and one female; one Caucasian and two Asian. The Hearing Board panel consisted of one Hearing Board member—a Caucasian female.

## **Proposal**

Establish two lists, one for the SCAQMD and one for the SCAQMD Hearing Board, valid from July 11, 2014, through July 31, 2017, of prequalified outside counsel for advice and representation in areas related to environmental law, governmental law, and constitutional issues.

### **For the SCAQMD:**

Shute Mihaly & Weinberger LLP  
Stumwasser & Woocher LLP  
Woodruff Spradlin & Smart  
Best, Best & Krieger LLP  
Perkins Coie LLP

### **For the SCAQMD Hearing Board:**

Atkinson, Andelson, Loya, Ruud & Romo

## **Resource Impacts**

The recommended total annual budget for environmental outside counsel is \$250,000 for General Counsel and \$15,000 for the SCAQMD Hearing Board, all of which may be allocated to one or more selected contractors as the need arises based on future litigation, the availability of counsel, and the needs of the SCAQMD and SCAQMD Hearing Board. Selection may also be made for occasional assignments in subject areas of the firms' expertise that do not involve litigation.

## **Attachment**

Summary of Responses to RFP #2014-21

**ATTACHMENT A**

**RFP #2014-21**  
**(Environmental Law)**

BIDDER	LOCAL FIRM	BID AMOUNT per hour	TOTAL POINTS
Shute Mihaly & Weinberger	No	\$350	106*
Strumwasser & Woocher LLP	Yes	\$445	99*
Woodruff Spradlin & Smart	Yes	\$400	95
Best, Best & Krieger LLP	Yes	\$330	93
Perkins Coie LLP	No	\$550	88

\* Includes an additional 10 points for Small Business Certification submitted with Bid Proposal, pursuant to SCAQMD Procurement Policy & Procedure, Section VIII.D.2.b.

**RFP #2014-21**  
**(Hearing Board Issues)**

BIDDER	LOCAL FIRM	BID AMOUNT per hour	TOTAL POINTS
Atkinson, Andelson, Loya, Ruud & Romo	Yes	\$295	84

\* Includes an additional 10 points for Small Business Certification submitted with Bid Proposal, pursuant to SCAQMD Procurement Policy & Procedure, Section VIII.D.2.b.



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BOARD MEETING DATE: July 11, 2014

AGENDA NO. 18

**PROPOSAL:** Approve Contract Award and Fund Transfer for Miscellaneous Costs in FY 2014-15 Approved by MSRC

**SYNOPSIS:** The MSRC approved a final award under the Signal Synchronization Partnership Program as part of their FYs 2012-14 AB 2766 Discretionary Fund Work Program. Additionally, every year the MSRC adopts an Administrative Budget which includes transference of funds to the SCAQMD Budget to cover administrative expenses. At this time the MSRC seeks Board approval of the contract award and the fund transfer.

**COMMITTEE:** Mobile Source Air Pollution Reduction Review, June 19, 2014, Recommended for Approval

**RECOMMENDED ACTIONS:**

1. Approve the award of a sole source contract to Riverside County Transportation Commission, in an amount not to exceed \$310,375, to implement signal coordination and related projects within the Coachella Valley portion of Riverside County under the Signal Synchronization Partnership Program, as part of approval of the FYs 2012-14 AB 2766 Discretionary Fund Work Program, as described in this letter;
2. Recognize \$56,000 revenue in the General Fund from the AB 2766 Discretionary Fund, Special Fund 23, and appropriate \$56,000 to the FY 2014-15 Budget of Science and Technology Advancement, Services and Supplies Major Object, to facilitate the payment of MSRC Miscellaneous Direct and Travel Costs, as provided in Table 1 of this letter;
3. Authorize MSRC the authority to adjust contract awards up to five percent, as necessary and previously granted in prior work programs; and

4. Authorize the Chairman of the Board to execute the new contract under FYs 2012-14 Work Program, as described above and in this letter.

Larry McCallon,  
Vice Chair, MSRC

MM:HH:CR

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### **Background**

In September 1990 Assembly Bill 2766 was signed into law (Health & Safety Code Sections 44220-44247) authorizing the imposition of an annual \$4 motor vehicle registration fee to fund the implementation of programs exclusively to reduce air pollution from motor vehicles. AB 2766 provides that 30 percent of the annual \$4 vehicle registration fee subvended to the SCAQMD be placed into an account to be allocated pursuant to a work program developed and adopted by the MSRC and approved by the Board.

The MSRC completed selecting categories and targeted funding amounts for the FYs 2012-14 Work Program in May 2013. Five solicitation documents have already been developed and released. At its June 19, 2014 meeting, the MSRC considered a recommended award under the Signal Synchronization Partnership Program. Details are provided below in the Proposals section.

### **Proposals**

At its June 19, 2014 meeting, the MSRC considered recommendations from its MSRC-TAC and approved the following:

#### **Signal Synchronization Partnership Program**

As an element of the FYs 2012-14 Work Program, the MSRC allocated \$5.0 million for a program to partner with cities, County Transportation Commissions (CTCs) and others to implement signal synchronization projects. The program is intended to provide a portion of the funding for projects, which when combined with other funding sources would accelerate the projects' implementation. Because CTCs typically solicit and co-fund the majority of signal synchronization projects within their respective jurisdictions, the MSRC determined that the CTCs would have the best overall perspective regarding the state of traffic signal coordination within their respective regions as well as knowledge of where funding could most effectively be applied. Therefore, the MSRC asked CTCs to bring forward work plans proposing projects for funding. Other interested entities would then participate in the projects via separate agreements with the CTCs. To date, the MSRC had awarded a total of \$4,689,625 for four work plans under this Program.



A supplemental work plan has been received from Riverside County Transportation Authority (RCTC). The MSRC-TAC unanimously recommended, and the MSRC unanimously approved, the award of a contract to RCTC, in an amount not to exceed \$310,375, to implement signal coordination and related projects on regionally significant corridors within the Coachella Valley portion of Riverside County under the Signal Synchronization Partnership Program, as part of approval of the FYs 2012-14 AB 2766 Discretionary Fund Work Program. Specific projects include: providing a regional Traffic Management Center that will monitor and control all traffic signals along the Highway 111 corridor from Racquet Club Road in the City of Palm Springs to Indio Boulevard in the City of Indio, and along Harrison Street between Park Lane and Avenue 52 in the City of Coachella; and upgrading existing infrastructure that is not compatible with the proposed monitoring system.

At this time the MSRC requests the SCAQMD Board to approve the contract award as part of approval of the FYs 2012-14 AB 2766 Discretionary Fund Work Program as outlined above. The MSRC also requests the Board to authorize the SCAQMD Chairman of the Board the authority to execute all agreements described in this letter. The MSRC further requests authority to adjust the funds allocated to each project specified in this Board letter by up to five percent of the project's recommended funding. The Board has granted this authority to the MSRC for all past Work Programs.

#### **FY 2014-15 Administrative Budget**

Every year the MSRC adopts an Administrative Budget for the upcoming fiscal year to ensure costs remain within the five percent limitation. For FY 2014-15, the MSRC adopted an Administrative Budget in the amount of \$682,719, which is more than \$72,000 below the five percent cap. Administrative expenditures are not directly drawn, however, from the MSRC fund account, but instead from the SCAQMD's budget. To cover these expenses, the MSRC approved a fund transfer (see Table 1 for further details).

Table 1. Estimated FY 2014-15 MSRC Miscellaneous and Direct Expenditures Proposed to be Allocated to SCAQMD Science and Technology Advancement FY 2014-15 Budget

	<b>Work Program Code</b>	<b>Account</b>	<b>Amount</b>
Professional & Special Services	44003	67450	\$9,000
Public Notice	44003	67500	\$8,000
Communications	44003	67900	\$5,000
Postage	44003	68060	\$7,500
Office Expense/Supplies	44003	68100	\$12,000
Miscellaneous Expense	44003	69700	\$7,000
Conference- Related Expense	44003	69700	\$5,000
Travel Costs	44003	67800	\$2,500
<b>Total</b>			<b>\$56,000</b>

### **Sole-Source Justification**

As an element of its FYs 2012-14 Work Program, the MSRC allocated \$5 million for a program to partner on traffic signal synchronization and related projects. As discussed in Proposals above, this program will be implemented by initiating sole-source contracts with CTCs. While the MSRC and SCAQMD strive to retain technical services on a competitive basis, the SCAQMD Procurement Policy and Procedure recognizes that, at times, the required services are available from only one source, making the pursuit of a competitive procurement futile. RCTC solicits and co-funds traffic signal coordination projects within its sub-region of the SCAQMD jurisdiction. Thus, RCTC has a unique perspective regarding the state of traffic signal coordination within its region, as well as knowledge of where funding can most effectively be applied.

This request for a sole source award to RCTC is made under provision VIII.B.2.c.(1): The desired services are available from only the sole source due to the unique experience and capabilities of the proposed contractor or contractor team.

### **Resource Impacts**

This proposed action is to recognize \$56,000 in revenue in the General Fund from the AB 2766 Discretionary Fund, Special Fund 23. Additionally, this action will appropriate \$56,000 to the FY 2014-15 Science and Technology Advancement Budget, as indicated in Table 1 above.

The SCAQMD acts as fiscal administrator for the AB 2766 Discretionary Fund Program (Health & Safety Code Section 44243). Money received for this program is recorded in a special revenue fund (Fund 23) and the contracts specified herein, as well as any contracts awarded in response to the solicitation, will be drawn from this fund.

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BOARD MEETING DATE: July 11, 2014

AGENDA NO. 19

PROPOSAL: Legislative and Public Affairs Report

SYNOPSIS: This report highlights the May 2014 outreach activities of Legislative and Public Affairs, which include: Environmental Justice Update, Community Events/Public Meetings, Business Assistance, and Outreach to Business and Federal, State, and Local Government.

COMMITTEE: No Committee Review

RECOMMENDED ACTION:  
Receive and file.

Barry R. Wallerstein, D.Env.  
Executive Officer

LBS:DJA:MC:DM

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## **BACKGROUND**

This report summarizes the activities of Legislative and Public Affairs for May 2014. The report includes four major areas: Environmental Justice Update; Community Events/Public Meetings (including the Speakers Bureau/Visitor Services, Communications Center, and Public Information Center); Business Assistance; and Outreach to Business and Federal, State, and Local Governments.

## **ENVIRONMENTAL JUSTICE UPDATE**

The following are key environmental justice-related activities in which staff participated during the month of May. These events involve communities that may suffer disproportionately from adverse air quality impacts.

### May 8

- Staff hosted a commercial electric lawn mower demonstration for organizations and local municipalities in San Bernardino as part of the Clean Communities Plan program and garnered interest from participating organizations for demonstration projects.

### May 13

- Staff represented SCAQMD at the American Lung Association's Lung Force, Fight Against Cancer meeting in San Bernardino and provided information on the Clean Air Awards, Lawn Mower Exchange, and SCAQMD's Smartphone and iPad apps.

### May 15

- Staff represented SCAQMD at the Inland Empire Asthma Coalition meeting in Colton and provided information on the Clean Air Awards, Lawn Mower Exchange, and the Clean Communities Plan, Commercial Electric Lawn Mower demonstration.

### May 21

- Staff represented SCAQMD at the Riverside County Health Coalition's Healthy City Resolutions Working Group meeting and provided information on the Lawn Mower Exchange and Clean Air Awards.

### May 23

- Staff represented SCAQMD at the Inland Empire Asthma Coalition-Asthma Awareness Conference meeting in Riverside and provided information on health effects of air pollution, The Right to Breathe film, social media sites and apps, Clean Air Awards, and Lawn Mower Exchange.

### May 24

- Staff participated in the Coachella Valley, Environmental Health Leadership Summit in Thermal and presented information on air quality monitoring in the Coachella Valley as well as provided information on SCAQMD.

## **COMMUNITY EVENTS/PUBLIC MEETINGS**

Each year, thousands of residents engage in valuable information exchanges through events and meetings that SCAQMD sponsors either alone or in partnership with others. Attendees typically receive the following information:

- Tips on reducing their exposure to smog and its health effects;
- Clean air technologies and their deployment;
- Invitations or notices of conferences, seminars, workshops and other public events;
- Ways to participate in SCAQMD's rule and policy development; and
- Assistance in resolving air pollution-related problems.

SCAQMD staff attended and/or provided information and updates at the following events:

May 1-2

- Southern California Association of Government's (SCAG's) Regional Conference and General Assembly, Indian Wells Resort and Spa.

May 3

- Los Angeles County Metropolitan Transportation Authority (Metro), Celebrate Union Station at 75 Event, Union Station, Los Angeles.
- Alhambra Eco Fair, Alhambra Park Bandshell.

May 6-8

- Alternative Clean Transportation (ACT) Expo, Long Beach Convention Center.

May 7

- Hydrogen Fueling Station Ribbon Cutting Ceremony, California State University, Los Angeles.

May 10

- 13<sup>th</sup> Annual Party for the Planet Event, Santa Ana Zoo.

May 16

- 16<sup>th</sup> Annual Discovery Ball, California Science Center, Los Angeles.

May 17

- 5<sup>th</sup> Annual Long Beach Asthma Resource Fair, Admiral Kidd Park.
- Compton Jr. Posse 7<sup>th</sup> Annual Gala, Los Angeles Equestrian Center, Burbank.
- STEM Youth Leadership Conference, Marriott, Manhattan Beach.
- 9<sup>th</sup> Annual Cucamonga Challenge Bike Ride/Walk Event, Central Park, Rancho Cucamonga.
- 5<sup>th</sup> Annual City of Hawthorne Service Provider Fair & Earth Day Event, Hawthorne Memorial Park.

May 20

- Diamond Bar High School Science Fair.

May 24

- 2<sup>nd</sup> Annual Environmental Health Leadership Summit, Desert Mirage High School, Thermal.

May 28

- Forest Community Forum; Discover the Angeles, Angeles National Forest, Arcadia.

#### May 29

- Act of Awareness Fair, Sonia Sotomayor Learning Academies, Los Angeles.
- Healthy African American Families Phase II “Just 2 Away” – Beating Obesity Symposium, Holman United Methodist Church, Los Angeles.

#### May 30

- Green Festival at Port of Los Angeles High School, San Pedro.

### **SPEAKERS BUREAU/VISITOR SERVICES**

SCAQMD regularly receives requests for staff to speak on air quality-related issues from a wide variety of organizations, such as trade associations, chambers of commerce, community-based groups, schools, hospitals and health-based organizations. SCAQMD also hosts visitors from around the world who meet with staff on a wide range of air quality issues.

#### May 7

- Staff presented an overview of SCAQMD and air quality to 15 high school students from Coachella High School and displayed an alternative fuel vehicle at the Esperanza Youth and Family Center in Coachella.

#### May 19

- Staff presented an overview of SCAQMD and air quality to 40 students at Los Angeles Valley College in Los Angeles.

#### May 22

- Staff presented an overview of SCAQMD, air quality and other related air pollution topics to 50 employees at Southern California Gas Company in Downey.

#### May 30

- Staff presented an overview of SCAQMD, air quality, gave a tour of the Diamond Bar headquarters, laboratory, and demonstrated an alternative fuel vehicle during the SCAQMD Take a Tour Day.

## COMMUNICATION CENTER STATISTICS

The Communication Center handles calls on the SCAQMD main line, 1-800-CUT-SMOG<sup>®</sup> line and Spanish line. Calls received in the month of May 2014 are summarized below:

Main Line Calls	2,872
1-800-CUT-SMOG <sup>®</sup> Line	1,555
After Hours Calls*	520
Spanish Line Calls	<u>91</u>
<i>Total Calls</i>	5,038

\* Saturdays, Sundays, holidays, and after 7:00 p.m. Monday through Friday.

## PUBLIC INFORMATION CENTER STATISTICS

The Public Information Center (PIC) handles phone calls and walk-in requests for general information. Information for the month of May 2014 is summarized below:

Calls Received by PIC Staff	37
Calls to Automated System	<u>1,482</u>
<i>Total Calls</i>	1,519

Visitor Transactions	192
E-Mail Advisories Sent	20,779

## BUSINESS ASSISTANCE

SCAQMD notifies local businesses of proposed regulations so they can participate in the agency's rule development process. SCAQMD also works with other agencies and governments to identify efficient, cost-effective ways to reduce air pollution and shares that information broadly. Staff provides personalized assistance to small businesses both over the telephone and via on-site consultation. The information is summarized below.

Conducted four free on-site consultations  
Provided assistance for two requests for a variance  
Provided permit application assistance to 87 companies  
Issued 25 clearance letters

### Types of business assisted:

Restaurants	Dry Cleaners	Communications Centers
Gas Stations	Printing Facility	Construction & Architecture
Auto Body Shops	General Contractors	Cabinet/Furniture Manufacturers
Food Manufacturer	Auto Repair Shops	Metal Finishing & Recycling Facilities

## **OUTREACH TO COMMUNITY GROUPS AND FEDERAL, STATE, AND LOCAL GOVERNMENTS**

Field visits and communications were conducted with elected officials or staff from the following cities:

Anaheim	Duarte	Laguna Niguel	Seal Beach
Azusa	Fountain Valley	Los Alamitos	Stanton
Beaumont	Garden Grove	Mission Viejo	Temple City
Buena Park	Hermosa Beach	Monrovia	Torrance
Claremont	Huntington Beach	Newport Beach	West Covina
Coachella	Industry	San Bernardino	Yorba Linda
Corona	Irvine	San Clemente	Yucaipa
Costa Mesa	Irwindale	San Gabriel	
Culver City	La Habra	San Juan Capistrano	
Cypress	Laguna Hills	Santa Ana	

Visits and/or communications were conducted with elected officials or staff from the following state and federal offices:

- U.S. Congressman Ken Calvert
- U.S. Congressman Mark Takano
- State Senator Ellen Corbett
- State Senator Kevin de León
- State Senator Mark DeSaulnier
- State Senator Ed Hernandez
- State Senator Mike Morrell
- Assembly Member Ian Calderon
- Assembly Member Ed Chau
- Assembly Member Connie Conway
- Assembly Member Susan Talamantes Eggman
- Assembly Member Mike Gatto
- Assembly Member Curt Hagman
- Assembly Member Chris Holden
- Assembly Member Brian Jones
- Assembly Member Eric Linder
- Assembly Member Jose Medina
- Assembly Member Melissa Melendez
- Assembly Member Brian Nestande
- Assembly Member Donald Wagner
- Assembly Member Marie Waldron

Staff represented SCAQMD, met with staff, provided information and/or a presentation to the following groups:

Albert A. Chatigny Senior Community Recreation Center, Beaumont



American Cancer Association  
 Asian Youth Center Community Partners, San Gabriel  
 Big Bear Chamber of Commerce  
 California Institute of Technology, Pasadena  
 California League of Cities, Riverside County Division  
 California State University, Fullerton  
 California State University, San Bernardino  
 California Regional Environmental Education Community, Los Angeles  
 Chino Valley Chamber of Commerce  
 Coachella Valley High School  
 Corona Chamber of Commerce  
 Corona Senior Citizens Center  
 Environmental Charter High School, Lawndale  
 Esparanza Youth and Family Center, Coachella  
 Green Energy and Technology Academy, Desert Mirage High School  
 Garden Grove Regional Library  
 Greater Riverside Chambers of Commerce  
 Healthy African American Families, Los Angeles  
 Hemet/San Jacinto Chamber of Commerce  
 Independent Cities Association, Manhattan Beach  
 Irwindale Chamber of Commerce  
 Laguna Niguel Library  
 League of California Cities, Los Angeles County Division  
 Los Angeles Area Chamber of Commerce  
 Los Angeles Valley College  
 Loma Linda University  
 Neighborhood Connections, City of Pasadena  
 Norco Area Chamber of Commerce and Visitors Center  
 OmniTrans Public Transit Agency, San Bernardino  
 Orange County Business Council  
 Orange County City Managers Association  
 Orange County Council of Governments

· *Membership Cities Include:*

Aliso Viejo	Huntington	Los Alamitos	Santa Ana
Anaheim	Beach	Mission Viejo	Seal Beach
Brea	Irvine	Newport Beach	Stanton
Buena Park	La Habra	Orange	Tustin
Costa Mesa	La Palma	Placentia	Villa Park
Cypress	Laguna Beach	Rancho Santa	Westminster
Dana Point	Laguna Hills	Margarita	Yorba Linda
Fountain Valley	Laguna Niguel	San Clemente	
Fullerton	Laguna Woods	San Juan	
Garden Grove	Lake Forest	Capistrano	

Orange County Transportation Authority  
 Ralph's Distribution Center, Compton  
 Riverside County Transportation Department  
 San Bernardino International Airport  
 San Bernardino County Department of Public Health  
 San Bernardino Associated Governments

· *Membership Cities Include:*

Big Bear Lake	Grand Terrace	Rancho	Upland
Chino	Highland	Cucamonga	Yucaipa
Chino Hills	Loma Linda	Redlands	
Colton	Montclair	Rialto	
Fontana	Ontario	San Bernardino	

San Bernardino Unified School District  
 San Gabriel Valley Council of Governments

· *Membership Cities Include:*

<i>Alhambra</i>	<i>Duarte</i>	<i>Monterey Park</i>	<i>South El Monte</i>
<i>Arcadia</i>	<i>El Monte</i>	<i>Pasadena</i>	<i>South Pasadena</i>
<i>Azusa</i>	<i>Glendora</i>	<i>Pomona</i>	<i>Temple City</i>
<i>Baldwin Park</i>	<i>Industry</i>	<i>Rosemead</i>	<i>Walnut</i>
<i>Bradbury</i>	<i>Irwindale</i>	<i>San Dimas</i>	<i>West Covina</i>
<i>Claremont</i>	<i>La Puente</i>	<i>San Gabriel</i>	
<i>Covina</i>	<i>La Verne</i>	<i>San Marino</i>	
<i>Diamond Bar</i>	<i>Monrovia</i>	<i>Sierra Madre</i>	

San Gabriel Valley Economic Partnership  
 Southwest California Legislative Council  
 Santa Clarita Valley Chamber of Commerce  
 Salon Success Academy, Corona  
 Southern California Association of Government  
 Southern California Gas Company, Los Angeles  
 South Orange County Economic Coalition  
 South Pasadena Chamber of Commerce  
 Urban Conservation Corps of the Inland Empire, San Bernardino  
 Sierra Club's My Generation, University of California, Riverside  
 U.S. Forest Service, San Bernardino National Forest  
 Valley Alliance of Neighborhood Councils, Los Angeles  
 Western Riverside County Council of Governments

· *Membership Cities Include:*

Banning	Eastvale	Moreno Valley	San Jacinto
Beaumont	Hemet	Murrieta	Temecula
Calimesa	Jurupa	Norco	Wildomar
Canyon Lake	Lake Elsinore	Perris	
Corona	Menifee	Riverside	

Western Riverside County Transportation NOW (RTA)

- Greater Riverside Chapter, Riverside
- Hemet/San Jacinto Chapter, Hemet
- Moreno Valley/Perris Chapter, Moreno Valley
- Northwest Chapter, Norco
- San Gorgonio Pass Chapter, Beaumont
- Southwest Chapter, Lake Elsinore

Yucaipa Chamber of Commerce

 [Back to Agenda](#)

BOARD MEETING DATE: July 11, 2014

AGENDA NO. 20

REPORT: Report to Legislature and CARB on SCAQMD's Regulatory Activities for Calendar Year 2013

SYNOPSIS: The SCAQMD is required by law to submit a report to the Legislature on its regulatory activities for the preceding calendar year. The report is to include a summary of each rule and rule amendment adopted by SCAQMD, number of permits issued, denied, or cancelled, emission offset transactions, budget and forecast, and an update on the Clean Fuels program. Also included is the Annual RECLAIM Audit Report, as required by RECLAIM Rule 2015: Backstop Provisions.

COMMITTEE: No Committee Review

RECOMMENDED ACTIONS:

Receive and file the attached report, and direct staff to forward the final report to the Legislature and the California Air Resources Board.

Barry R. Wallerstein, D.Env.  
Executive Officer

LBS:DA:WS:EH:jf

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**Background**

SCAQMD is subject to several internal and external reviews of its air quality programs. These include an annual review of SCAQMD's proposed operating budget for the upcoming fiscal year and compliance program audits.

In 1990, the Legislature directed SCAQMD to provide an annual review of its regulatory activities (SB 1928, Presley), and specified the type of information required

(Health and Safety Code §40452). Many of the required elements overlap with other requirements of separate legislation. For example, information on SCAQMD's Clean Fuels Program is a requirement of this report, but is now also a separate requirement under legislation passed in 1999 (SB 98, Alarcón). The purpose of this report is to fill in pieces of additional data needed to compile a comprehensive regulatory overview. Most of the information included in this report is not new, but simply a compilation of information previously seen by the Board. For example, Chapter I lists all the rules and rule amendments adopted by the Board during 2013. The Annual RECLAIM Audit Report is required to be submitted to the Legislature by RECLAIM Rule 2015: Backstop Provisions.

The specific requirements of this report include:

- A summary of each major rule and rule amendment adopted by the Board;
- The number of permits to operate or construct that were issued, denied, cancelled or not renewed;
- Data on emission offset transactions and applications during the previous year;
- The budget and forecast of staff increases or decreases for the following fiscal year;
- An identification of the source of all revenues used to finance the SCAQMD's activities;
- An update on the results of the SCAQMD's Clean Fuels program; and
- The annual RECLAIM Audit Report.

### **Attachments**

Report to the Legislature on the Regulatory Activities of the SCAQMD (for Calendar Year 2013)

**REPORT TO THE LEGISLATURE ON THE  
REGULATORY ACTIVITIES OF THE  
SOUTH COAST  
AIR QUALITY MANAGEMENT DISTRICT**

**Pursuant to  
Chapter 1702, Statutes of 1990 (SB 1928)**



**JULY 2014**

Cleaning the Air that We Breathe...

**REPORT TO THE LEGISLATURE ON THE  
REGULATORY ACTIVITIES OF THE  
SOUTH COAST  
AIR QUALITY MANAGEMENT DISTRICT**

**PURSUANT TO  
CHAPTER 1702, STATUTES OF 1990 (SB 1928)**

**JULY 2014**

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
GOVERNING BOARD**

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Senate Rules Committee Appointee

Miguel A. Pulido  
Mayor, City of Santa Ana  
Cities Representative, Orange County

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Barry R. Wallerstein, D.Env.  
Executive Officer



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## **EXECUTIVE SUMMARY**

The South Coast Air Quality Management District (SCAQMD) is subject to internal and external reviews of its air quality programs. These include annual reviews of the District's budget, forecast and proposed operating budget for the upcoming fiscal year, and compliance program audits. In addition, the SCAQMD is required to submit to the California Air Resources Board (CARB) and State Legislature an annual review of its regulatory activities for the preceding calendar year. The attached report satisfies this latter requirement which is mandated pursuant to Chapter 1702, Statutes of 1990 (SB 1928, Presley), Section 40452 of the California Health and Safety Code.

Required elements of this report include:

- Summary of each major rule and rule amendment adopted by the District Board in the preceding calendar year, with detailed information about their costs, emission reduction benefits and other alternatives considered;
- Number of permits to operate or construct issued, denied or not renewed, segregated by industry type;
- Emission offset transactions and applications during the previous fiscal year;
- Forecast of budget and staff increases proposed for the following fiscal year;
- Identification of all sources of revenue used or proposed to finance SCAQMD activities; and
- Results of the SCAQMD's Clean Fuels Program.

Chapter I summarizes last year's rulemaking and permitting activity, including offset transactions. Chapter II references the District's draft budget and three-year forecast and existing revenue sources.

Information on the SCAQMD's Clean Fuels Program is also a requirement of this report. Legislation enacted in 1999 now also requires an independent report to the Legislature on the Clean Fuels Program by March 31 of each year [Health and Safety Code 40448.5.1]. The Clean Fuels Program Annual Report and Plan Update is included in this document as Chapter III. Chapter IV is the Annual Regional Clean Air Incentives Market (RECLAIM) Audit Report for the 2012 Compliance Year (inclusion in this report to the Legislature is required by SCAQMD Rule 2015). The report assesses emission reductions, average annual price and availability of RECLAIM Trading Credits, job impacts, compliance issues, and other measures of performance for the fifth year of this program.

In addition to the requirements of this report, various outreach activities are carried out by the SCAQMD Legislative & Public Affairs Office. Information on these activities is included in a monthly report to the SCAQMD's Governing Board and is available by contacting the SCAQMD at 909-396-3242 or visiting the website at [www.aqmd.gov](http://www.aqmd.gov).

**CHAPTER I**  
**RULE DEVELOPMENT AND PERMIT ACTIVITIES**

## **RULE ADOPTIONS AND AMENDMENTS FOR 2013**

### **Rule 102 – Definition of Terms**

Rule 102 was amended to add 1,1,1,2,3,3,3,-heptafluoropropane (commonly known as HFC-227ea) and trans-1,3,3,3-tetrafluoropropene (also known as HFO-1234ze) to the list of exempt compounds in the rule. *Estimated Emission Reductions:* None. *Alternatives:* None. *Cost Effectiveness:* None. *Socioeconomic Impact:* Refer to Socioeconomic Impact Analysis section. *Source of Funding:* Emission Fees.

*[Amended March 1, 2013]*

### **Rule 1148.2 – Notification and Reporting Requirements for Oil and Gas Wells and Chemical Suppliers**

The purpose of Rule 1148.2 is to gather air quality-related information on oil and gas well drilling, well completion, and well rework activities in order to identify the magnitude, type, and frequency of emissions associated with these operations. Based on information gathered under Rule 1148.2, the SCAQMD staff will report to the Governing Board on findings and recommendations regarding further data collection, emissions controls, and regulatory needs, if any. Rule 1148.2 impacts owners and operators of onshore oil and gas wells within SCAQMD's jurisdiction by establishing requirements to notify the Executive Officer when conducting well drilling, well completion, and well reworking activities that involve production stimulation activities such as hydraulic fracturing, gravel packing and/or acidizing. The adopted rule additionally establishes emissions and chemical reporting requirements and also impacts suppliers of chemicals and additives used in drilling, rework, and well completion fluids. *Estimated Emission Reductions:* None. This rule adoption only establishes notification and reporting requirements and therefore does not result in any emission reductions. *Alternatives:* None. *Cost Effectiveness:* N/A. This rule adoption only establishes notification and reporting requirements and does not result in emission reductions; thus, cost effectiveness cannot be calculated. *Socioeconomic Impact:* Refer to Socioeconomic Impact Analysis section. *Source of Funding:* Emission Fees, CARB Subvention, Annual Operating Fees, and Permit Fees.

*[Adopted April 5, 2013]*

**Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II; and Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation I**

Rule 219 was amended to expand the list of equipment with de minimis emissions from the requirement to obtain written permits. The amendments also facilitate the streamlining of the SCAQMD's permitting system. Rule 222 was amended to include additional categories to the streamlined filing/registration program of Rule 222 and to clarify and enhance the enforceability and to provide for the opportunity to appeal operating conditions issued pursuant to the provisions of the rule. *Estimated Emissions Reductions:* 139 lbs/day of NOx emissions foregone. *Alternatives:* Three feasible alternatives analyzed: Alternative A - no project; Alternative B - reduction in equipment size for asphalt day tankers and tar pots; and Alternative C - exclude power pressure washers and food ovens. *Cost Effectiveness:* N/A. *Socioeconomic Impact:* Refer to Socioeconomic Impact Analysis section. *Source of funding:* Permit Fees, Emission Fees.

[Amended May 3, 2013]

**Rule 445 – Wood Burning Devices and Rule 444 - Open Burning (with the exception of amendments related to beach fire rings)**

Amendments to Rule 445 and Rule 444 implemented 2012 Air Quality Management Plan (AQMP) control measures BCM-01 and BCM-02, respectively: actions to reduce PM emissions from biomass burning. Rule 445 amendments lowered the PM<sub>2.5</sub> threshold used to declare a subregional wood burning curtailment day from 35 to 30 µg/m<sup>3</sup> and established procedures for regional wood burning curtailments if the threshold was forecast to be exceeded in peak PM<sub>2.5</sub> areas. Rule 445 amendments also established a labeling program for packaged and bulk firewood sellers to help inform the public of the wood burning curtailment program. Amendments to Rule 444 aligned open burning curtailments with Rule 445 provisions during winter months (November – February). The rule amendments were submitted into the State Implementation Plan (SIP). *Estimated Emission Reductions:* Rule 445 amendments could reduce wood burning emissions by up to 7.1 tons per winter day (presuming 75% rule effectiveness). Rule 444 amendments will reduce emissions during PM<sub>2.5</sub> episodes; however, annual emissions reductions were not estimated as open burning would likely be shifted to other times of the year. *Alternatives:* None. *Cost-effectiveness:* N/A. *Socioeconomic Impact:* Refer to Socioeconomic Impact Analysis section. *Source of Funding:* CARB Subvention.

[Amended May 3, 2013]

### **Rule 1114 – Petroleum Refinery Coking Operations**

Rule 1114 will reduce volatile organic compounds, particulate matter, hazardous air pollutants, sulfur compounds and methane emissions released during the delayed coking process at petroleum refineries. The rule will establish a depressurization limit of less than two pounds per square inch gauge (psig) pressure prior to venting a coke drum to atmosphere and includes options for alternative compliance schedules and interim limits for facilities not able to meet the less than two psig compliance deadline within six months of rule adoption, depending on the number of delayed coking units they operate. The rule also includes deadlines for permit applications, installation of monitoring equipment and exemptions from certain Regulation IV requirements. *Estimated Emissions Reduction:* 129 tons per year (tpy) VOC, 547 tpy CH<sub>4</sub> and 26 tpy HAPs. *Alternatives:* None. *Cost-effectiveness:* Average cost effectiveness is \$8,700 per ton of VOCs reduced. *Socioeconomic Impact:* Refer to Socioeconomic Impact Analysis section. *Source of Funding:* Emission Fees, Annual Operating Fees.

*[Adopted May 3, 2013]*

### **Rule 1309 - Emission Reduction Credits and Short Term Credits**

Rule 1309 was amended to allow the reissuance of unused ERCs provided the request is made within two years of issuance of the Permit to Construct and construction has not commenced. *Estimated Emissions Reductions:* None. *Alternatives:* None. *Cost Effectiveness:* N/A. *Socioeconomic Impact:* Refer to Socioeconomic Impact Analysis section. *Source of funding:* Emission Fees.

*[Amended July 5, 2013]*

### **Rule 444 – Open Burning (Beach Fire Ring provisions)**

Amendments to Rule 444 established spacing or buffer area requirements for beach fire rings near residential areas and clarified local government authority to identify such devices as a public nuisance. The amendments were intended to reduce localized exposure to beach goers and nearby residents from wood smoke generated by beach burning activities. *Estimated Emission Reductions:* Rule 444 PM<sub>2.5</sub> emissions reductions from the beach burning requirements were estimated to be up to 0.25 ton per day if a no burn day was called during peak use periods; however, the reductions were not quantified for Air Quality Management Plan purposes and the requirements were not submitted into the SIP. *Alternatives:* None. *Cost-effectiveness:* Not calculated. *Socioeconomic Impact:* Refer to Socioeconomic Impact Analysis section. *Source of Funding:* CARB Subvention.

*[Amended July 5, 2013]*

### **Rule 314 – Fees for Architectural Coating**

Rule 314 was amended to clarify certain reporting requirements. The amendment included exempting small manufacturers and certain coatings from fees provided the reports are submitted on time, removing the ability to use “grouping” in the reporting, clarifying existing definitions and reporting requirements, and removing outdated phased-in fee rates. There were no VOC reductions associated with this amendment. *Estimated Emissions Reductions:* None. *Alternatives:* None. *Cost Effectiveness:* N/A. *Socioeconomic Impact:* Refer to Socioeconomic Impact Analysis section. *Source of funding:* Area Source Fees.  
[Amended September 6, 2013]

### **Rule 1113 – Architectural Coating**

Rule 1113 was amended to provide relief to coating manufacturers from the labeling requirements for 2 fluid ounces or smaller containers, which was to go into effect on January 1, 2014. There were no VOC reductions associated with this administrative amendment. *Estimated Emissions Reductions:* None. *Alternatives:* None. *Cost Effectiveness:* N/A. *Socioeconomic Impact:* Refer to Socioeconomic Impact Analysis section. *Source of funding:* Rule 314 Fees.  
[Amended September 6, 2013]

### **Rule 1304.1 – Electrical Generating Facility Fee for Use of Offset Exemption**

Rule 1304.1 sets a fee for Electric Generating Facilities (EGFs) electing to meet their emissions offset obligations for boiler replacement projects by using offsets provided by the SCAQMD pursuant to Rule 1304(a)(2). *Estimated Emissions Reductions:* The fee proceeds will be invested in air pollution improvement strategies consistent with the Air Quality Management Plan goals. *Alternatives:* Four feasible alternatives analyzed: Alternative A - no project; Alternative B – higher fee than proposed rule; Alternative C – higher fee for EGFs that are relocating electrical generation capacity from another facility for new equipment; and Alternative D - lower fee than proposed rule. *Cost Effectiveness:* N/A. *Socioeconomic Impact:* Refer to Socioeconomic Impact Analysis section. *Source of funding:* Emission Fees.  
[Adopted September 6, 2013]

### **Rule 1146 – Emissions of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters; and, Rule 1146.1 – Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters**

Amendments to Rules 1146 and 1146.1 addressed a SIP approvability issue related to rule enforceability raised by U.S. EPA. As requested by U.S. EPA, the amended rules clarify that source test results showing emissions in excess of rule limits are considered a rule violation. The amended rules also allow diagnostic emission checks for boiler maintenance purposes. *Estimated Emissions Reduction:* None. *Alternatives:* None. *Cost-effectiveness:* N/A. *Socioeconomic Impact:* Refer to Socioeconomic Impact Analysis section. *Source of Funding:* Emission Fees.  
[Amended November 1, 2013]

## ALTERNATIVES TO RULES AND RULE AMENDMENTS

Projects undertaken by public agencies are subject to the California Environmental Quality Act (CEQA); thus, rules and regulations promulgated by the SCAQMD must be reviewed to determine if they are considered to be a “project” as defined by CEQA. If they are not a “project” or they are specifically exempt from CEQA, no further action is necessary. If the project has the potential to create significant adverse effects on the environment, then an environmental analysis is necessary.

The SCAQMD operates under a regulatory program certified by the Secretary for Resources pursuant to Public Resources Code (PRC) §21080.5. Certification means that the SCAQMD can incorporate its environmental analyses into documents other than environmental impact reports (EIRs), negative declarations (NDs), or mitigated NDs (MNDs). In addition, certified CEQA programs are not subject to a limited number of specific CEQA requirements identified in PRC §21080.5. All documents prepared by the SCAQMD under its certified regulatory program are called Environmental Assessments (EAs). SCAQMD rules and regulations are subject to the SCAQMD’s certified CEQA program, while plans (e.g., AQMP).

New rules or existing rules being amended often require a comprehensive environmental impact analysis. The environmental analyses in EAs include:

- \* identification of significant adverse environmental impacts evaluated based on environmental checklist topics;
- \* identification, if necessary, of measures to mitigate adverse environmental impacts to the greatest extent feasible;
- \* if necessary, a discussion and comparison of the relative merits of feasible project alternatives that generally achieve the goals of the project, but may generate fewer or less severe adverse environmental impacts;
- \* identification of environmental topics not adversely affected by the project, etc.

Supplemental EAs, Addenda, and EAs for projects determined not to have significant environmental impacts often contain a more focused analysis of potential environmental impacts. If it is concluded in these documents that no significant adverse environmental impacts would be generated by the proposed project, an analysis of project alternatives is not required. If significant adverse environmental impacts are identified, alternatives must be identified and an analysis of the relative merits of each alternative is required.

Listed below are all new and amended rules adopted by the Governing Board in 2013 by month. The type of CEQA document (including projects exempt from CEQA) is described for each new rule or rule amendment project. Alternatives are summarized for those projects requiring an alternatives analysis.



## **JANUARY 4, 2013**

No rules were adopted or amended in January.

## **FEBRUARY 1, 2013**

- 1. Approve Control Measure IND-01, Backstop Measure for Indirect Sources of Emissions from Ports and Port-Related Facilities, for Inclusion in Final 2012 Air Quality Management Plan:** The purpose of IND-01 is to ensure projected emissions reductions from the Ports' emission control efforts are achieved. These emission reductions were included in the baseline inventory in the 2012 Air Quality Management Plan (AQMP) such that any changes to these emissions reductions could affect the attainment demonstration. A Program Environmental Impact Report (EIR) for the 2012 AQMP, which includes IND-01, was previously prepared and certified by the SCAQMD Governing Board as being completed in compliance with CEQA on December 7, 2012; therefore no further action on the Program EIR was required. The alternative analysis for the 2012 AQMP was included in the December 2012 report for SB1928.

## **MARCH 1, 2013**

- 1. Proposed Amended Rule 102 – Definition of Terms: Notice of Exemption:** The amendment added 1,1,1,2,3,3,3,-heptafluoropropane (commonly known as HFC-227ea) and trans-1,3,3,3-tetrafluoropropene (also known as HFO-1234ze) to the list of compounds exempt from the definition of volatile organic compound (VOC) as Group I compounds in Rule 102. U.S. EPA previously excluded HFC-227ea and HFO-1234ze from the federal definition of VOC on the basis that these compounds have negligible contribution to the formation of tropospheric ozone. These compounds have low or minimal toxicity, are not listed as hazardous air pollutants under the federal Clean Air Act, have a flammability rating equal to or less than comparable VOC compounds, have an ozone depleting potential (ODP) less than or equal to comparable compounds, and have a lower global warming potential (GWP) than comparable compounds. A notice of exemption was prepared for the proposed project. Since the proposed project was exempt from CEQA, no alternatives analysis was required.

## **APRIL 5, 2013**

- 1. Proposed Rule 1148.2 – Notification and Reporting Requirements for Oil and Gas Wells and Chemical Suppliers: Notice of Exemption:** The proposed rule established notification and reporting requirements for all oil and gas well preproduction operations where air quality-related emissions may occur. Specifically, PR 1148.2 requires owners or operators of oil and gas wells to notify the SCAQMD when and where any well drilling, redrilling, reworking, hydraulic fracturing, or other well stimulation activities will occur. Following completion of the pre-production activities, PR 1148.2 would require that information be submitted that identifies the names and quantities of chemicals and other process operation parameters in order for SCAQMD to assess the air pollution emission potential of each well pre-production activity. A notice of exemption was prepared for the proposed project. Since the proposed project was exempt from CEQA, no alternatives analysis was required.

MAY 3, 2013

- 1. Amend Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II; and Amend Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation I: Environmental Assessment (Environmental Impact Report equivalent document):** The proposed amendments added categories to the streamlined filing/registration program of Rule 222 and clarified and enhanced the enforceability and the ability to appeal operating conditions issued pursuant to the provisions of that rule. Rule 219 was expanded to exclude several categories of equipment with de minimis emissions from the requirement to obtain written permits. The proposed amendments further facilitated the streamlining of the SCAQMD permitting system. An Environmental Assessment was prepared that concluded the proposed amendments could generate significant adverse operational air quality impacts from NOx emission reductions foregone, therefore, an alternatives analysis was required.

The only environmental topic areas identified that could be adversely affected by the proposed project was air quality (during operation). The analysis concluded that project-specific and cumulative operational air quality impacts, specifically 139 lbs per day of NOx emission reductions foregone, would exceed the applicable regional operational significance threshold of 55 lbs per day for NOx emissions. Because of the potential for significant adverse NOx air quality impacts, an alternative analysis was prepared that included the following alternatives.

**Alternative A (No Project)** – Alternative A or ‘no project’ means that the proposed project would not be adopted and the current universe of equipment would continue to be subject to permitting requirements and equipment currently subject to Rules 1110.2 or 1147 would continue to be subject to the NOx emission limits according to the current compliance schedules for each rule. By continuing to subject equipment regulated by Rules 1110.2 or 1147 to NOx emission control requirements pursuant to the currently compliance schedule for certain in-use equipment categories, some equipment owners/operators would continue to experience compliance challenges with the NOx control requirements and certain compliance dates in the rules. In some cases, the effective dates may have already passed. Thus, under Alternative A, owners/operators of equipment not able to meet the applicable NOx emission limits under Rule 1110.2 or Rule 1147 would likely need to shut down the affected equipment. No significant adverse operational NOx air quality impacts would occur from shutting down non-compliant equipment under Alternative A because the NOx emission reductions would occur according to the original schedule in Rule 1147.

**Alternative B (Reduction in Size)** – Alternative B would result in the lowering of the affected equipment size for asphalt day tankers and tar pots. SCAQMD staff evaluated all equipment currently subject to Rules 1110.2 or 1147 proposed to be included in PARs 219 and 222 and that contribute to significant adverse operational NOx emission reductions foregone to determine if equipment size could be reduced thereby reducing the amount of NOx emission reductions foregone. The evaluation results identified only asphalt day tankers and tar pots as equipment where the size could be reduced. Therefore, Alternative B would exempt asphalt day tankers with a holding capacity of less than 4,000 gallons and tar pots with a holding capacity of less than 800 gallons per day from written permit requirements. Like the proposed project, Alternative B would continue to include filing requirements under Rule 222 for asphalt day tankers and tar pots exempted from written permit.

**Alternative C (Excluded Equipment)** – Alternative C would result in not including power pressure washers and food ovens in PARs 219 and 222. SCAQMD staff evaluated all equipment currently subject to Rules 1110.2 or 1147 proposed to be included in PARs 219 and 222 and that contribute to significant adverse operational NOx emission reductions foregone to determine if any equipment could be excluded from the proposed project because of the potential availability of replacement equipment powered by clean fuels, including electricity. It was concluded in the review of equipment that could be eliminated from the proposed project that only power pressure washers and small food ovens could be feasibly excluded because of the availability of potential replacements that would be operated on electricity. Therefore, Alternative C would exclude power pressure washers and food ovens from PARs 219 and 222.

The staff proposal was adopted by the Governing Board.

- 2. Proposed Amended Rule 445 – Wood Burning Devices and Proposed Amended Rule 444 - Open Burning with the exception of amendments related to beach fire rings: Notice of Exemption:** Amended Rule 445 clarified rule applicability to solid fuel cooking devices, required commercial firewood facilities to label solid fuel products for sale to inform the public of the Check Before You Burn program, lowered the PM<sub>2.5</sub> concentration threshold used for the mandatory winter burning curtailment program from 35 to 30 µg/m<sup>3</sup>, and established a mechanism whereby the mandatory winter burning curtailment program would apply Basin-wide if a no burn day is forecast for a source receptor area that exceeds the 24-hour PM<sub>2.5</sub> concentration threshold. Amended Rule 444 added a definition for product testing, established an exemption from Rule 444 for product testing and established winter season burn restrictions consistent with PAR 445. A notice of exemption was prepared for the proposed project. Since the proposed project was exempt from CEQA, no alternatives analysis was required.

- 3. Adopt Rule 1114 – Petroleum Refinery Coking Operations: Environmental Assessment (Negative Declaration equivalent document):** The proposed rule reduced volatile organic compounds, particulate matter, hazardous air pollutants, sulfur compounds and methane emissions released during the delayed coking process at petroleum refineries. The proposed rule established a depressurization limit of less than two pounds per square inch gauge (psig) pressure prior to venting a coke drum to atmosphere and included options for alternative compliance schedules and interim limits for facilities not able to meet the less than two psig compliance deadline within six months of rule adoption, depending on the number of delayed coking units they operate. The proposed rule also included deadlines for permit applications, installation of monitoring equipment and exemptions from certain Regulation IV requirements. An Environmental Assessment with no significant adverse impacts was prepared for this proposed project. Since no significant adverse impacts were identified from implementing the proposed project, an alternatives analysis was not required.

The staff proposal was adopted by the Governing Board.

### **JUNE 7, 2013**

No rules were adopted or amended in June.

### **JULY 5, 2013**

- 1. Amend Rule 1309 - Emission Reduction Credits and Short Term Credits:** The proposal allowed the reissuance of unused emission reduction credits (ERCs) provided the request is made within two years of issuance of the Permit to Construct and construction has not commenced. Staff concluded that the amendment is not a “project” within the meaning of CEQA, because it does not constitute a binding commitment to construct any project, and is essentially a fiscal activity not committing the lead agency to any course of action having environmental impacts.

### **JULY 12, 2013 (Special Board Meeting)**

- 1. Amend Rule 444 – Open Burning: Notice of Exemption:** The proposed amendments to Rule 444 addressing beach burning. These provisions include paragraphs (b)(11) and (c)(7), subparagraphs (d)(3)(G) and paragraphs (d)(4), (h)(5) h(6) and (h)(7), which established buffer zones to the nearest residence; increased the distance between fire rings; established no-burn days during unfavorable meteorology or air quality conditions; empowered local jurisdictions to invoke a provision of Rule 444 to prohibit beach burning that has been declared a nuisance due to wood smoke; reduced the burning of inappropriate materials; and provided an exemption for devices made available to comply with the Americans with Disabilities Act. A notice of exemption was prepared for the proposed project. Since the proposed project was exempt from CEQA, no alternatives analysis was required.

### **AUGUST 2013**

There was no Board meeting in August; therefore, no rules were adopted or amended.

**SEPTEMBER 6, 2013**

- 1. Proposed Amended Rule 314 – Fees for Architectural Coating: Notice of Exemption:** Proposed amended Rule (PAR) 314 added, removed, and amended definitions; included private labelers in the applicability section; removed the requirement allowing the reporting of product lines in lieu of individual products in annual reports; required Big Box retailers to submit annual reports to the SCAQMD; removed outdated phases in fee rate; clarified that manufactures pay current fee rate for past reporting; clarified report requirements; required fees for exempt coatings if reported late; exempted small manufactures from fees if reported on time; and exempted from fees architectural coatings offered for sale as a dry mix, containing no polymer, that are only mixed with water prior to use. In summary, the amendments to Rule 314 affected only fee and reporting requirements. A notice of exemption was prepared for the proposed project. Since the proposed project was exempt from CEQA, no alternatives analysis was required.
- 2. Proposed Amended Rule 1113 – Architectural Coating: Notice of Exemption:** PAR 1113 provided an exception from labeling requirements for containers two ounces or less, and added and amended definitions to clarify the rule. PAR 1113 clarified that open container requirements and Group II exemption prohibitions apply to colorants in addition to architectural coatings. PAR 1113 also included minor changes to improve clarity, but did not change the intent of existing requirements. A notice of exemption was prepared for the proposed project. Since the proposed project was exempt from CEQA, no alternatives analysis was required.
- 3. Proposed Rule (PR) 1304.1 – Electrical Generating Facility Fee for Use of Offset Exemption: Environmental Assessment (Environmental Impact Report equivalent document):** The purpose of PR 1304.1 – Electrical Generating Facility (EGF) Fee for Use of Offset Exemption, is to require any EGF that elects to use a specific offset exemption (Rule 1304 (a)(2)) to pay annual fees or a single, up-front fee for the amount of offsets provided by the SCAQMD. Offsets in SCAQMD internal accounts are valuable public goods. The purpose of this rule is to recoup the fair market value of offsets procured by eligible EGFs electing to use such offsets to comply with Rule 1304 (a)(2). The fee proceeds will be invested in air pollution improvement projects that further the goals of the 2012 Air Quality Management Plan (AQMP). The proposed rule affected all EGFs that elect to use the offset exemptions described in Rule 1304 (a)(2), but not those facilities that meet their emissions obligations through privately held/procured emission reduction credits (ERCs). Based on a “worst-case” analysis, the potential adverse operational air quality/GHG impacts from the adoption and implementation of the proposed project were considered significant and unavoidable. Because of the potential for significant adverse air quality/GHG impacts, an alternatives analysis was prepared that included the following alternatives.

**Alternative A (No Project)** – Alternative A or “no project” means that the current requirements and conditions to obtain offsets from the SCAQMD internal accounts pursuant to Rule 1304 (a)(2) would be maintained. As such, EGFs that use the specific offset exemption under Rule 1304 (a)(2) will continue to not pay for the amount of offsets provided from the SCAQMD internal accounts. The value of the offsets will not be recouped and there will be no investment in air pollution improvement projects.

**Alternative B (Higher Fee)** – Alternative B required EGFs that elect to use the specific offset exemption under Rule 1304 (a)(2) to pay a higher fee than listed in the proposed project for the amount of offsets provided from the SCAQMD internal accounts. While the fee rates will be modified with this alternative, the fee structure (e.g., up front lump sum or annual payment, MW size applicability, etc.) will remain the same as the proposed project. Therefore, those facilities generating less than 100 MW will pay a higher fee than currently proposed in PR1304.1 and those facilities generating greater than 100 MW will pay an even higher fee if electing to use the specific offset exemption under Rule 1304 (a)(2). The intent of this alternative is to ensure the value of the offset is reasonably recouped in order to appropriately compensate investment in air pollution improvement projects to further the goals of the AQMP. Such projects could include mobile source implementation measures such as accelerating zero and near-zero emission vehicles into the market and accelerated retirement of older vehicles. All other requirements and conditions in the proposed project would be applicable.

**Alternative C (Higher Fee for Capacity Relocation)** – Alternative C would require EGFs that are relocating electrical generation capacity from another facility for new equipment be subject to a higher fee than listed in the proposed project for the amount of offsets provided from the SCAQMD internal accounts. The reason for this alternative is to provide more funding for emission reduction projects since the capacity relocation projects expose people near the new location to EGF emissions that were not being emitting from that location previously. All other requirements and conditions, such as the different fee structure based on MW generation, in the proposed project would be applicable.

**Alternative D (Lower Fee)** – Alternative D required EGFs that use the specific offset exemption under Rule 1304 (a)(2) to pay a lower fee than listed in the proposed project for the amount of offsets provided from the SCAQMD internal accounts. The intent of this alternative is to reduce the charge to the applicable EGFs for the proposed repower projects while still recouping the partial cost of the offset in order to help provide investment in air pollution improvement projects to further the goals of the AQMP. Such projects could include mobile source implementation measures such as accelerating zero and near-zero emission vehicles into the market and accelerated retirement of older vehicles.

The staff proposal was adopted by the Governing Board.

## **OCTOBER 4, 2013**

No rules were adopted or amended in October.

## **NOVEMBER 1, 2013**

- 1. Proposed Amended Rule 1146 – Emissions of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters; and, Proposed Amended Rule 1146.1 – Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters: Notice of Exemption:** Amendments to Rules 1146 and 1146.1 are proposed to primarily address a State Implementation Plan (SIP) approvability issue that was raised by the United States Environmental Protection Agency (EPA) regarding the use of source test data and portable analyzers test results to prove a violation of the emission standard. Also included in the proposed amendments are the following minor changes: 1) clarification that Rules 1146 and 1146.1 do not apply to NO<sub>x</sub> sources subject to the SCAQMD's Regulation XX – Regional Clean Air Incentives Market (RECLAIM); 2) identification of certain equipment that are not included under boiler or steam generator category; 3) enhanced description pertaining to the types of operations that would be subject to Rules 1146 and 1146.1; 4) clarification that low fuel usage equipment are only subject to periodic tune-up requirements; and, 5) prohibition from derating equipment to a level at or below two million British Thermal Units per hour (BTU/hr). A notice of exemption was prepared for the proposed project. Since the proposed project was exempt from CEQA, no alternatives analysis was required.

## **DECEMBER 6, 2013**

No rules were adopted or amended in December.

## **CEQA LEAD AGENCY PROJECTS**

The SCAQMD also acts as the Lead Agency under CEQA for non-SCAQMD projects where the SCAQMD typically has primary approval, i.e., discretionary permitting, authority. Under CEQA, the Lead Agency is responsible for determining whether an Environmental Impact Report (EIR), Negative Declaration or other type of CEQA document is necessary for any proposal considered to be a “project” as defined by CEQA. Further, the Lead Agency is responsible for preparing the environmental analysis, complying with all procedural requirements of CEQA, and approving the environmental documents. All documents prepared by the SCAQMD for permit projects are subject to the standard CEQA requirements.

Since January 2013, SCAQMD staff has been responsible for preparing or having prepared CEQA documents for stationary source permit projects. The lead agency projects certified by the SCAQMD in 2013 are identified below.

### **JANUARY, 2013**

No projects were certified in January.

### **FEBRUARY 2013**

No projects were certified in February.

### **MARCH 2013**

No projects were certified in March.

### **APRIL, 2013**

No projects were certified in April.

### **MAY 2013**

No projects were certified in May.

### **JUNE 2013**

No projects were certified in June.



## **JULY 24, 2013**

- 1. Addendum to the Final EIR for the Chevron Products Company, El Segundo Refinery, Product Reliability and Optimization (PRO) Project:** Chevron proposed modifications to a previously approved project analyzed in the 2008 EIR for the PRO project. Changes included eliminating a previously proposed safety flame and knock-out drum determined to now not be necessary, and some minor modifications to the No. 2 Crude Unit Pressure Relief Devices (PRD) component of the 2008 PRO Project. The May 2008 Final EIR identified significant adverse air quality impacts and transportation and traffic impacts during construction. Impacts to energy, hazard and hazardous materials, hydrology and water quality, noise, and transportation and traffic during operation were analyzed and concluded to be less than significant. The proposed modifications did not change these conclusions: significant adverse air quality impacts during construction and operations and transportation and traffic impacts during construction of the PRO Project would still occur under the proposed modifications to the project, since the peak construction period has already occurred. The proposed modifications would not cause new significant adverse air quality impacts or increase the severity of significant adverse air quality impacts, or result in new significant adverse air quality impacts beyond those previously identified in the May 2008 Final EIR. Under the proposed modifications, air quality impacts during construction would be less than peak daily emissions and traffic impacts would be less because construction activities associated with the No. 2 Crude Unit PRD project component did not occur concurrently with the other PRO Project components. As a result, the proposed construction schedule resulted in fewer or less significant construction impacts. Based on the analysis of potential environmental impacts from the proposed modifications, it was concluded that the proposed modifications would not create new significant adverse impacts or increase the severity of significant impacts previously identified in the May 2008 Final EIR.

The project proponent's proposal was adopted by the by the SCAQMD's decision-making body.

## **AUGUST 2013**

No projects were certified in August.

## **SEPTEMBER 2013**

No projects were certified in September.

## **OCTOBER 2013**

No projects were certified in October.

## **NOVEMBER 2013**

No projects were certified in November.

## **DECEMBER 2013**

No projects were certified in December.

## SOCIOECONOMIC IMPACT ANALYSES

California Health and Safety Code Section 40440.8 requires that SCAQMD perform socioeconomic impact assessments for its rules and regulations that will significantly affect air quality or emissions. Prior to the requirements of Section 40440.8, SCAQMD staff had been evaluating the socioeconomic impacts of its actions pursuant to a 1989 resolution of its Governing Board. Additionally, SCAQMD staff assesses socioeconomic impacts of CEQA (California Environmental Quality Act) alternatives to those rules with significant cost and emission reduction impacts.

The elements of socioeconomic impact assessments include direct effects on various types of affected industries in terms of control costs and cost-effectiveness as well as public health benefits. Additionally, SCAQMD staff uses an economic model developed by Regional Economic Models, Inc. (REMI) to analyze the potential direct and indirect socioeconomic impacts of SCAQMD rules on Los Angeles, Riverside, Orange, and San Bernardino Counties. These impacts include, but are not limited to, employment, competitiveness, and ethnic and income distributions.

In 2013, ten rules were amended and three new rules were adopted. All ten amended rules had no significant socioeconomic impacts.

### **Newly-Adopted Rules**

**Rule 1114 – Petroleum Refinery Coking Operation** - would require petroleum refineries with delayed coking units to reduce pressure in coke drums to less than two pounds per pressure inch gauge prior to venting coke drums to atmosphere. In addition, Rule 1114 would require the affected facilities to continuously monitor and record the internal pressure of coke drums, and maintain records for a period of five years.

The total annual cost of Rule 1114 is estimated to be \$1.79 million. The overall cost effectiveness of the rule is estimated to be \$8,700 per ton of VOC, which is well below the cost-effectiveness of recently adopted VOC rules. Rule 1114 is projected to create five jobs annually, on average, between 2013 and 2035. Rule 1114 is expected to reduce 129 tons of VOC, 547 tons of CH<sub>4</sub>, and 26 tons of HAPs per year.

**Rule 1148.2 – Notification and Reporting Requirements for Oil and Gas Wells and Chemical Suppliers** - would require owners/operators of an onshore oil or gas well and their chemical suppliers to report air quality-related information on oil and gas well drilling, well working, and well completion activities. In addition, Rule 1148.2 would require chemical suppliers to report the chemical compounds contained in the drilling fluids, well completion fluids, and rework operations.

The annual compliance cost is estimated to be \$7,524 to \$83,042 for notifications, and \$60,192 to \$498,250 for equipment reporting, and another \$60,192 to \$498,250 for chemical reporting requirements, respectively. The total annual compliance cost of PR 1148.2 is estimated to be \$127,908 to \$1,079,452.

**Rule 1304.1 – Electrical Generating Facility Fee for Use of Offset Exemption** - would charge a fee on electrical utility steam boiler replacements for the use of the SCAQMD offsets. The fee would apply to all permits issued to electrical generating facilities (EGFs) that elect to use the offset exemptions and receive the applicable permit to construct on or after the date of adoption. The fee rates would vary by pollutant. The total fee payment would depend on the amount of offsets needed and be adjusted for annual capacity factor. Proceeds from fee payment would be invested in air pollution improvement strategies consistent with the 2012 Air Quality Management Plan (AQMP). This will partially fulfill emission reduction commitment in the ozone State Implementation Plan and help achieve the new 2012 PM<sub>2.5</sub> standard.

The socioeconomic analysis evaluated the cost of the Rule 1304.1 to both EGFs and ratepayers, in addition to jobs and other socioeconomic impacts as the fees from the Rule are invested in air quality projects.

Two scenarios are proposed for the socioeconomic assessments. Both include lost generation - 1,600 megawatts (MW) - from the permanent shutdown of the San Onofre Nuclear Generating System (SONGS). Scenario 1 - Reasonable Case - is based on the upper estimate that the California Public Utilities Commission (CPUC) has authorized for new conventional gas-fired resources (2,800 MW) in the Southern California Edison (SCE) territory. Scenario 2 - ore Conservative Case - is based on the conservative projection (5,400 MW) from the California Independent System Operator (Cal ISO) for new generation needs in the SCE territory. Furthermore, it is assumed that 828 MW new generation would take place within the LADWP territory, which does not vary by scenario. The entire generation capacity for Scenarios 1 and 2 is 3,628 and 6,228 MW, respectively.

For each scenario, revenue estimates from 2015 to 2029 are provided for the single and annual payment options, respectively. It is assumed that all the generation in 2015-16 would occur in Los Angeles County and fee payments from all years are passed on to ratepayers in the form of increases in electricity rates. Revenues from boiler replacements after 2016 would be divided among Los Angeles, Orange, and San Bernardino Counties according to the ratio of 60:30:10, respectively, based on the current location of utility steam boilers and potential downwind impacts.

All the proceeds from the PR 1304.1 fee payment would be invested in projects consistent with the goal in the 2012 AQMP. Investments would take place with fees collected from the previous year due to the time required for preparation of requests for proposals and contracts. It is assumed that 20 percent of the revenue would be invested in the photovoltaic projects that are evenly split between commercial and residential properties and the remaining 80 percent would be invested in projects (cleaner trucks and industrial and construction equipment) similar to the mobile source control measures in the 2012 AQMP. The 20:80 split is based on contribution of stationary and mobile sources, respectively, to emission inventory. It is assumed that all the projects in 2016 and 2017 and zero-emission drayage truck projects would be in Los Angeles County. The rest of project money is allocated to the counties of Los Angeles, Orange, and San Bernardino based on a ratio of 60:30:10, based on the current location of utility steam boilers and potential downwind impacts.

It is estimated that Scenario 1 would generate annual proceeds from \$1.59 to \$12.05 million under the annual payment option and from \$8.3 million to \$39.69 million under the single payment option, respectively, based on new generation needs of 3,628 MW. Based on new generation needs of 6,228 megawatts, proceeds from Scenario 2 would range from \$2.67 to \$20.69 million under the annual payment option and from \$8.3 to \$66.68 million under the single payment option, respectively. It should be noted that the single payment option was added at the request of EGF stakeholders. Furthermore, the compliance cost will be invested in projects to achieve emission reductions consistent with the 2012 AQMP, and thus to partially fulfill emission reduction commitment in the ozone State Implementation Plan and help achieve the new 2012 PM<sub>2.5</sub> standard.

Scenario 1 is forecast to have 104 to 141 jobs forgone annually, on average, from 2015 to 2035 while Scenario 2 would have 181 to 238 jobs forgone. In comparison these impacts are similar to past regulatory actions taken by the Governing Board. There were 8.92 million jobs in the four-county area in 2010. The average annual job impacts of PR 1304.1 are between 0.001 and 0.003 percent of the 2010 total baseline jobs.

Under both scenarios, the annual payment option has a smoother trend of job impacts while the single payment option has a wide swing of job impacts from year to year. This is because the single payment option has a front loaded fee payment schedule and the annual fee payment option shows a gradual increase in fee payments from year to year. Since the single payment option is requested by the regulated community, it is assumed that an EGF would only choose this option if it is financially beneficial to do so.

Four alternatives to the proposed amendments have been identified in the Program Environmental Assessment prepared pursuant to the California Environmental Quality Act (CEQA). Alternative A is the No Project Alternative, which would not implement the proposed rule. Alternative B - Higher Fee - would require that EGFs that use Rule 1304 (a) (2) exemption pay a higher fee which, for the purpose of this analysis, is assumed to be equivalent to two times the amount under PR 1304.1. Alternative C - Higher Fee for Capacity Relocation - would require that EGFs that relocate generation facility from one facility to another pay a higher fee which, for the purpose of this analysis is assumed to be twice the amount under PR 1304.1. Alternative D - Lower Fee - would require that EGFs that use Rule 1304 (a) (2) exemption pay a lower fee which, for the purposes of this analysis, is assumed to be equivalent to one-half the amount under PR 1304.1.

Table 1 shows average annual job impacts by CEQA alternative. Alternative A would have no job impacts because Alternative A would not implement PR 1304.1. Alternative B would have twice more jobs forgone than PR 1304.1 because fees under Alternative B are twice those under PR 1304.1. Conversely, compared to PR 1304.1, the lower job impacts of Alternative D are due to the lower fees imposed under Alternative D. Job impacts of Alternative C are lower than those of Alternative B but higher than those of Alternative D since the total fee payment under Alternative C is between the amounts for Alternative B and D. Among all the alternatives, Alternative B has highest number of jobs forgone.

**TABLE 1**  
Average Annual Job Impact by CEQA Alternative (2015 to 2035)

Scenario/Case	PR 1304.1	Alternative A	Alternative B	Alternative C	Alternative D
Scenario 1--Reasonable Case					
Single	-141	0	-282	-211	-69
Annual	-104	0	-207	-156	-51
Scenario 2--More Conservative Case					
Single	-238	0	-482	-359	-118
Annual	-181	0	-369	-274	-89

Rule 1304.1 does not require emission reductions and is not a control measure; therefore, pursuant to Health & Safety Code section 40922, a cost-effectiveness assessment is not required.

#### **Rule Amendments**

The ten rule amendments that had no significant socioeconomic impacts were those to Rule 102 (Definition of Terms), Rule 219 (Equipment Not Requiring a Written Permit Pursuant to Regulation II and Rule 222 (Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation I); Rule 445 (Wood Burning Devices), Rule 444 (Open Burning), Rule 1309 (Emission Reduction Credits and short term Credits), Rule 314 (Fees for Architectural Coatings), Rule 1113 (Architectural Coatings), Rule 1146 – Emissions of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters, and Rule 1146.1 – Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters.

**Rule 102 – Definition of Terms** - would add HFO-1233zd to the definition of Group I VOC-exempt compounds in Rule 102. HFO-1233zd is not considered as an ozone depleting substance; thus, this compound is suited for inclusion under Group I exempt compounds. The amendments would result in savings to affected facilities due to lower emission fees and would have no adverse socioeconomic impacts.

**Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II and Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation I** - would replace both the one-time and annual fees for permitted equipment with a reduced Rule 222 initial filing fee and annual renewal fee. There are approximately 241 facilities in a wide variety of industries affected by the proposed amendments. The proposed amendments to Rules 219 and 222 will provide a net benefit to industry, since they will be able to continue business as usual, operate their equipment in the current manner, while paying significantly lower fees. Of the total \$144,462 annual reduction in costs, the largest would occur in the nondurable manufacturing (35%), construction (19%), information (13%), and services (11%) sectors.

Three alternatives to the proposed amendments were identified in the California Environmental Quality Act (CEQA) analysis. Alternative A—No Project—maintains existing permitting requirements for affected equipment and maintains all other aspects of existing rule language. Alternative B—Reduction in Rating—reduces the maximum capacity of asphalt day tankers subject to the proposed amendments from 5,000 gallons to less than 4,000 gallons. Alternative C—Excluded Equipment— would exclude affected power pressure washers and food ovens from the proposed amendments. Table 2 compares the annual and one-time fee reductions associated with the proposed amendments and CEQA alternatives. Alternative A would have no impact relative to the proposed amendments. Alternative B would remove the proposed permit exemption for eight affected large capacity (less than 4,000 gallons) asphalt day tankers. The forgone annual fee reduction from Alternative B relative to the proposed amendments would be approximately \$1,100. Alternative C would result in forgone revenue reductions of approximately \$88,000 relative to the proposed amendments. The proposed amendments would result in the greatest savings among all the CEQA alternatives.

**TABLE 2**  
Fee Impact of Proposed Amendments and CEQA Alternatives

CEQA Alternatives	One-Time	Annual
Proposed Amendments	-\$911,073	-\$144,462
Alternative A	0	0
Alternative B	-\$901,544	-\$143,363
Alternative C	-\$420,546	-\$56,941

**Rule 445 – Wood Burning Devices; and Rule 444 - Open Burning (with the exception of amendments related to beach fire rings)** - The amendments to Rule 445 would lower the PM<sub>2.5</sub> threshold used to declare a mandatory winter burning curtailment from 35 µg/m<sup>3</sup> to 30 µg/m<sup>3</sup>. In addition, the amendments would establish a Basin-wide winter burning curtailment whenever a PM<sub>2.5</sub> level of greater than 30 µg/m<sup>3</sup> is forecasted for source receptor areas that contain monitors that have recorded violations of federal PM<sub>2.5</sub> standard. The amendments to Rule 445 would also require commercial facilities that sell firewood or other wood-based fuel to notify the public of the SCAQMD’s Check Before You Burn program through a labeling program.

The cost impacts of Basin-wide curtailment on firewood sellers are expected to be minimal because the number of no-burn days is expected to be very small. The majority of packaged firewood sellers are expected to comply with the labeling requirement of the proposed amendments without significant costs. Bulk firewood sellers are expected to incur a minimal cost of preparing a one-page outreach flyer with the SCAQMD’s Check Before You Burn statement. Cost impacts to the general public are also expected to be minimal as wood burning in the SCAQMD is done mainly for aesthetic purposes and there are cost-effective alternatives to burning wood for heating.

**Rule 444 – Open Burning (Beach Fire Ring provisions)** - would limit open burning whenever a mandatory winter burning curtailment is called under Rule 445. Any prohibition of beach burning may result in loss of revenues to the cities and entities which charge beach parking fees. State parks and local businesses could also lose revenues due to reductions in the number of visitors. Beach cities and local municipalities would lose sales tax revenues associated with the beach fire activities.

**Rule 1309 – Emission Reduction Credits and Short Term Credits** - allows the reissuance of unused emission reduction credits (ERCs) provided the request is made within two years of issuance of the Permit to Construct and construction has not commenced. No socioeconomic impact assessment is required because the proposed amendments do not “significantly affect air quality or emissions limitations” (Health & Safety Code Section 40440.8(a)). Nevertheless, any socioeconomic impacts would be beneficial to proposed sources as they would have the potential of recouping some of their lost investment for a source or modification that is never operated by obtaining re-issuance of the ERCs and potentially selling those ERCs to someone else.

**Rule 314 – Fees for Architectural Coating** - exempts smaller manufacturers from paying fees and are not expected to result in any adverse socioeconomic impacts.

**Rule 1113 – Architectural Coating** - would result in a cost saving to the affected manufacturers as the labels of coatings sold in two ounce or smaller containers will not have to be altered.

**Rule 1146 – Emissions of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters; Rule 1146.1-Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters** - The amendments to Rule 1146 and Rule 1146.1 clarify that source test results showing emissions in excess of rule limits are considered a rule violation, and allow diagnostic emission checks for boiler maintenance purposes. The amendments to these rules are consistent with existing federal requirements as currently implemented, and no additional control costs are anticipated due to these rule amendments.

### **Regulation III – Fees**

Amendments to Regulation III included inflationary cost recovery of various programs and clarification of existing rule language. The across-the-board 1.6 percent (CPI) increase in fee rates is projected to increase revenue for the FY 2013-2014 year by \$1.4 million, relative to the estimated fiscal year (FY) 2012-2013 revenue. There were few revenue implications of amendments pursuant to rule language clarifications.

### **Special Projects**

At the 2012 AQMP hearing in December 2012, the SCAQMD Governing Board passed a resolution that would commit SCAQMD to another review of its socioeconomic analysis methods that has been performing for air quality related policies and regulations. The socioeconomic assessments were last reviewed by the Massachusetts Institute of Technology (MIT) and since then, SCAQMD staff has implemented recommendations made by MIT and worked with the regulated community and socioeconomic experts to continue refining the assessments.

During 2013, the SCAQMD staff issued a Request for Proposal (RFP) to review the socioeconomic analyses. SCAQMD has directed the selected contractor to conduct the following tasks: 1) Review socioeconomic assessments of other agencies at the federal, state and local levels, 2) Review the SCAQMD socioeconomic assessments for its strengths and weaknesses, 3) Conduct interviews of stakeholders who are regulated and affected by the SCAQMD rules and policies, and 4) Recommend future actions.



## PERMITTING & COMPLIANCE

SB 1928 REPORT	
Permit Applications Processed During CY 2013	
Application Type	Count
Permits to Construct Issued	629
Permits to Operate Issued	3,909
Plans	499
Denied	36
Cancelled*	965
Change of ownership	2,431
Area Sources & Certification/Registration	4,317
<b>Total</b>	<b>12,786</b>
<i>Permits Not Renewed*</i>	955

*\*Permit holders elected not to pay for the renewal fees; therefore the permits were not renewed.*

SIC Code	SIC Description	PC Count	PO Count	Plans	Deny Count	Cancel Count	Area Sources	Cert Reg	Change Owner	Not Renewed
0111	WHEAT	0	1	0	0	0	0	0	0	3
0119	CASH GRAINS, NEC	0	1	0	0	0	1	0	0	0
0211	BEEF CATTLE FEEDLOTS	0	0	1	0	0	0	0	0	0
0742	VET SERV, SPECIALISTS	0	2	0	0	0	0	0	0	0
0751	LIVESTOCK SERV, EXC SPECIALIST	0	1	0	0	0	0	0	0	0
0782	LAWN AND GARDEN SERVICES	0	1	0	0	0	0	0	0	0
1311	CRUDE PETRO AND NATURAL GAS	10	31	4	0	17	34	0	21	0
1422	CRUSHED AND BROKEN LIMESTONE	0	0	0	0	1	0	0	0	0
1442	CONSTRUCTION SAND AND GRAVEL	0	4	0	0	1	0	0	0	0
1446	INDUSTRIAL SAND	0	0	0	0	0	0	0	12	0
1522	RESIDENTIAL CONSTRUCTION, NEC	0	0	2	0	0	0	0	0	0
1531	OPERATIVE BUILDERS	0	0	0	0	0	2	0	0	0
1541	INDUSTRIAL BUILDINGS/WAREHOUSE	0	0	0	0	0	1	0	0	0
1611	HIGHWAY & STREET CONSTRUCTION	0	0	0	0	0	2	0	0	0
1622	BRIDGE/TUNNEL/ELEVATED HIGHWAY	0	0	1	0	0	0	0	0	0
1623	WATER, SEWER, AND UTILITY LINE	0	0	1	0	0	0	0	0	8
1629	HEAVY CONSTRUCTION, NEC	0	0	1	0	0	0	0	0	4
1711	PLUMB, HEAT, AIR CONDITION	0	0	2	0	0	0	0	1	0
1721	PAINT, PAPER HANGING, DECORAT	1	6	0	1	0	0	0	0	0
1731	ELECTRICAL WORK	0	8	0	0	0	2	0	0	0
1761	ROOFING AND SHEET METAL WORK	0	1	0	0	4	1	0	0	5
1794	EXCAVATING AND FOUNDATION WORK	21	79	126	3	25	9	0	2	2
1795	WRECKING AND DEMOLITION WORK	0	0	0	0	1	10	0	0	0
1799	SPECIAL TRADE CONTRACTORS, NEC	4	12	28	0	2	25	1	2	28
2011	MEAT PACKING PLANTS	0	3	0	0	0	0	0	1	0
2013	SAUSAGES & OTHER PREPARED MEAT	0	0	0	0	0	1	0	0	0
2015	POULTRY SLAUGHTERING & PROCSG	0	0	0	0	0	1	0	0	0
2021	CREAMERY BUTTER	0	1	0	0	0	1	0	0	0
2022	CHEESE, NATURAL AND PROCESSED	0	0	0	0	0	2	0	0	0

SIC Code	SIC Description	PC Count	PO Count	Plans	Deny Count	Cancel Count	Area Sources	Cert Reg	Change Owner	Not Renewed
2024	ICE CREAM AND FROZEN DESSERTS	0	0	0	0	0	1	0	0	0
2026	FLUID MILK	0	7	0	0	0	1	0	0	0
2033	CANNED FRUITS AND VEGETABLES	1	5	0	0	0	1	0	1	0
2034	DEHYDRATED FRUITS/VEGTLB/SOUP	0	3	0	0	3	1	0	0	0
2047	DOG AND CAT FOOD	6	8	0	0	0	0	0	0	0
2048	PREPARED FEEDS, NEC	3	2	0	0	2	0	0	0	1
2051	BREAD, CAKE, & RELATED PROD	0	4	0	0	3	7	0	4	0
2077	ANIMAL & MARINE FATS AND OILS	0	2	0	0	0	0	0	0	0
2086	BOTTLED & CANNED SOFT DRINKS	3	0	0	0	0	1	0	0	0
2087	FLAVORING EXTRACTS/SIRUPS, NEC	1	1	0	0	0	2	0	0	0
2091	CANNED & CURED FISH & SEAFOODS	0	2	0	0	2	0	0	0	0
2095	ROASTED COFFEE	4	0	0	0	3	0	0	0	0
2096	POTATO CHIPS & SIMILAR SNACKS	2	7	1	0	2	0	0	0	0
2099	FOOD PREPARATIONS, NEC	1	26	1	0	3	8	1	0	2
2257	CIRCULAR KNIT FABRIC MILLS	0	1	0	0	0	0	0	0	0
2262	FINISHING PLANTS, SYNTHETICS	0	1	0	0	0	0	0	0	0
2269	FINISHING PLANTS, NEC	0	4	0	0	0	0	0	0	0
2272	TUFTED CARPETS AND RUGS	0	3	0	0	0	0	0	0	0
2273	CARPETS AND RUGS	0	0	0	0	2	0	0	0	0
2281	YARN SPINNING MILLS	0	0	0	0	0	2	0	0	0
2295	COATED FABRICS, NOT RUBBERIZED	4	2	1	0	0	0	0	0	0
2299	TEXTILE GOODS, NEC	3	0	0	0	0	1	0	4	1
2361	CHILDREN'S DRESSES AND BLOUSES	0	0	0	0	7	0	0	17	0
2389	APPAREL AND ACCESSORIES, NEC	0	2	0	0	0	0	0	0	0
2399	FABRICATED TEXTILE PROD, NEC	0	0	0	0	0	0	0	2	0
2431	MILLWORK	0	0	0	0	1	0	0	0	0
2434	WOOD KITCHEN CABINETS	0	3	0	0	1	0	0	3	19
2491	WOOD PRESERVING	0	0	0	1	0	0	0	0	0
2499	WOOD PRODUCTS, NEC	1	15	1	0	2	0	0	0	8

SIC Code	SIC Description	PC Count	PO Count	Plans	Deny Count	Cancel Count	Area Sources	Cert Reg	Change Owner	Not Renewed
2511	WOOD HOUSEHOLD FURNITURE	0	8	0	0	2	0	0	3	19
2512	UPHOLSTERED HOUSEHLD FURNITURE	0	4	0	0	0	0	0	0	0
2514	METAL HOUSEHOLD FURNITURE	0	1	0	0	0	0	0	0	0
2521	WOOD OFFICE FURNITURE	0	1	0	0	0	0	0	0	1
2522	OFFICE FURNITURE, EXCEPT WOOD	1	0	0	0	2	0	0	0	0
2540	PARTICIANS & FIXTURES	0	1	0	0	0	0	0	0	0
2541	WOOD PARTITIONS AND FIXTURES	0	1	0	0	0	0	0	0	3
2542	PARTITIONS & FIXTURES, EX WOOD	0	0	0	0	1	0	0	0	4
2591	DRAPERY HARDWARE/BLINDS/SHADES	4	0	0	0	0	0	0	0	0
2599	FURNITURE AND FIXTURES, NEC	1	1	0	0	0	0	0	1	4
2621	PAPER MILLS	1	0	0	0	0	0	0	0	0
2631	PAPERBOARD MILLS	0	1	0	0	0	0	0	0	0
2653	CORRUGATED & SOLID FIBER BOXES	2	8	0	0	4	0	0	18	1
2656	SANITARY FOOD CONTAINERS	0	1	0	0	0	0	0	0	0
2657	FOLDING PAPERBOARD BOXES	1	1	0	0	0	0	0	0	0
2672	PAPER COATED & LAMINATED, NEC	3	1	0	0	1	3	0	0	0
2673	BAGS:PLASTICS,LAMNTD & COATED	0	0	0	0	0	1	0	0	2
2679	CONVERTED PAPER PRODUCTS, NEC	0	1	0	0	0	0	0	0	0
2711	NEWSPAPERS	4	2	0	0	2	1	0	2	1
2732	BOOK PRINTING	1	1	0	0	0	0	0	0	0
2741	MISC PUBLISHING	0	1	0	0	0	0	0	0	0
2751	COMMERCIAL PRINT/LETTERPRESS	2	4	0	0	0	0	0	0	0
2752	COMMERCIAL PRINT/LITHOGRAPH	17	18	0	0	9	1	0	14	34
2759	COMMERCIAL PRINTING, NEC	5	14	1	0	2	0	0	0	2
2813	INDUSTRIAL GASES	0	2	0	0	2	2	0	1	0
2819	INDUSTRIAL INORGANIC CHMLS,NEC	14	12	0	0	2	0	0	0	1
2821	PLASTICS MATERIALS AND RESINS	0	28	2	0	0	4	0	0	1

SIC Code	SIC Description	PC Count	PO Count	Plans	Deny Count	Cancel Count	Area Sources	Cert Reg	Change Owner	Not Renewed
2823	CELLULOSIC MAN-MADE FIBERS	0	0	0	0	0	0	0	0	0
2831	BIOLOGICAL PRODUCTS	0	0	0	0	0	1	0	0	0
2833	MEDICINALS AND BOTANICALS	0	14	0	0	0	0	0	0	0
2834	PHARMACEUTICAL PREPARATIONS	1	46	1	0	2	14	3	0	3
2835	DIAGNOSTIC SUBSTANCES	0	0	0	0	0	0	1	0	0
2836	BIOLOGICAL PRDTS EXC DIAGNOSTIC	0	0	1	0	2	2	0	0	0
2841	SOAPS AND OTHER DETERGENTS	0	0	0	0	0	1	0	0	0
2844	TOILET PREPARATIONS	0	10	0	0	4	2	0	6	0
2851	PAINTS AND ALLIED PRODUCTS	1	26	0	0	3	0	1	33	2
2869	INDUSTRIAL ORGANIC CHMLS, NEC	4	30	0	0	6	0	0	22	0
2875	FERTILIZERS, MIXING ONLY	0	1	0	0	2	0	0	0	0
2891	ADHESIVES AND SEALANTS	4	1	0	0	2	1	0	0	0
2899	CHEMICAL PREPARATIONS, NEC	4	5	0	0	2	0	0	0	0
2911	PETROLEUM REFINING	43	320	51	2	200	3	0	376	11
2951	PAVING MIXTURES AND BLOCKS	2	39	1	0	7	0	0	0	0
2952	ASPHALT FELTS AND COATINGS	1	24	0	0	1	1	0	0	0
2992	LUBRICATING OILS AND GREASES	4	6	0	0	5	0	0	0	0
2999	PETROLEUM & COAL PRODUCTS, NEC	0	5	1	0	1	2	0	3	0
3021	RUBBER AND PLASTICS FOOTWEAR	0	1	0	0	0	0	0	0	0
3053	GASKETS, PACKING/SEALING DVCS	0	1	0	0	0	0	0	0	0
3061	MECHANICAL RUBBER GOODS	0	7	0	0	1	0	0	0	0
3069	FABRICATED RUBBER PRODUCTS, NEC	1	17	0	0	0	3	0	3	3
3081	UNSUPPORTED PLSTCS FILM/SHEET	6	3	0	0	0	2	0	0	4
3082	UNSUPPORTD PLSTCS PROFL SHAPES	0	1	1	0	2	0	0	0	0
3083	LAMINATED PLSTCS PLATE & SHEET	0	0	0	0	1	0	0	0	1
3084	PLASTICS PIPE	0	0	0	0	0	1	0	0	0
3085	PLASTICS BOTTLES	0	0	0	0	0	1	0	0	0
3086	PLASTICS FOAM PRODUCTS	1	8	0	0	1	0	0	0	0
3087	CUSTOM COMPOUND PRCHSD RESINS	0	12	1	0	0	2	0	0	0

SIC Code	SIC Description	PC Count	PO Count	Plans	Deny Count	Cancel Count	Area Sources	Cert Reg	Change Owner	Not Renewed
3088	PLASTICS PLUMBING FIXTURES	0	0	0	0	0	0	0	0	0
3089	PLASTICS PRODUCTS, NEC	8	21	0	1	6	0	1	0	18
3211	FLAT GLASS	0	4	0	0	0	0	0	0	0
3229	PRESSED AND BLOWN GLASS, NEC	0	1	0	0	0	0	0	0	0
3231	PRODUCTS OF PURCHASED GLASS	0	0	0	0	0	0	0	0	0
3241	CEMENT, HYDRAULIC	0	6	0	0	0	0	0	0	0
3251	BRICK AND STRUCTURAL CLAY TILE	0	0	0	0	3	0	0	0	0
3259	STRUCTURAL CLAY PRODUCTS, NEC	0	1	0	0	0	0	0	0	5
3261	VITREOUS PLUMBING FIXTURES	0	1	0	0	0	0	0	0	0
3269	POTTERY PRODUCTS, NEC	0	5	0	0	6	0	0	10	0
3271	CONCRETE BLOCK AND BRICK	0	1	0	0	0	0	0	0	0
3272	CONCRETE PRODUCTS, NEC	1	9	0	0	1	0	0	2	1
3273	READY-MIXED CONCRETE	6	26	0	0	6	0	0	44	5
3275	GYP SUM PRODUCTS	0	0	0	0	0	0	0	0	0
3291	ABRASIVE PRODUCTS	0	2	0	0	0	0	0	0	0
3295	MINERALS, GROUND OR TREATED	4	1	0	1	0	0	0	0	0
3299	NONMETALLIC MIN. PRODUCTS, NEC	0	0	0	0	0	0	0	5	0
3312	BLAST FURNACES AND STEEL MILLS	8	19	0	0	5	0	0	0	2
3315	STEEL WIRE & RELATED PRODUCTS	0	1	0	0	0	0	0	0	0
3321	GRAY IRON FOUNDRIES	0	2	0	0	0	0	0	0	0
3324	STEEL INVESTMENT FOUNDRIES	0	3	0	0	0	1	0	0	0
3339	PRIMARY NONFERROUS METALS, NEC	0	3	0	0	1	0	0	0	0
3341	SECONDARY NONFERROUS METALS	5	22	1	0	8	0	0	0	0
3354	ALUMINUM EXTRUDED PRODUCTS	0	2	0	0	0	0	0	0	0
3363	ALUMINUM DIE-CASTINGS	0	2	0	0	0	0	0	0	0
3365	ALUMINUM FOUNDRIES	0	2	0	0	0	1	0	0	4
3366	COPPER FOUNDRIES	2	0	0	0	0	0	0	0	0
3369	NONFERROUS FOUNDRIES, NEC	0	3	0	0	0	4	0	0	3
3398	METAL HEAT TREATING	4	6	0	0	7	1	0	0	0

SIC Code	SIC Description	PC Count	PO Count	Plans	Deny Count	Cancel Count	Area Sources	Cert Reg	Change Owner	Not Renewed
3411	METAL CANS	0	3	0	0	2	0	0	0	0
3412	METAL BARRELS, DRUMS, & PAILS	0	2	0	0	1	0	0	0	0
3433	HEATING EQPMT, EXC ELECTRIC	0	0	0	0	0	0	0	24	0
3441	FABRICATED STRUCTURAL METAL	0	1	0	0	0	0	0	0	1
3443	FABRICATE PLATE WK-BOILER SHOP	1	2	0	0	0	0	0	0	0
3444	SHEET METALWORK	8	11	0	0	1	0	0	29	0
3446	ARCHITECTURAL METAL WORK	0	2	0	0	0	0	0	0	0
3449	MISCELLANEOUS METAL WORK	1	11	0	0	0	0	0	2	3
3451	SCREW MACHINE PRODUCTS	14	0	0	0	0	0	0	0	0
3452	BOLTS, NUTS, RIVETS, & WASHERS	0	7	0	0	1	0	0	0	0
3462	IRON AND STEEL FORGINGS	0	0	0	1	0	0	0	0	0
3463	NONFERROUS FORGINGS	0	31	0	0	0	4	0	30	0
3471	PLATING AND POLISHING	26	98	0	1	25	9	0	75	20
3479	METAL COATING/ALLIED SERVICES	15	70	1	0	6	2	0	7	13
3483	AMMUNITION EXC SMALL ARMS, NEC	1	0	0	0	0	0	0	0	0
3489	ORDNANCE AND ACCESSORIES, NEC	0	1	0	0	0	0	1	0	0
3491	INDUSTRIAL VALVES	0	0	0	0	0	1	0	0	0
3492	FLUID PWR VLVS/HOSE FITTINGS	0	0	0	0	0	0	0	8	0
3493	STEEL SPRINGS, EXC WIRE	0	0	0	0	0	1	0	0	0
3494	VALVES AND PIPE FITTINGS, NEC	0	1	0	0	0	0	0	0	2
3496	MISC FABRICATED WIRE PRODUCTS	1	5	0	0	1	1	0	0	0
3497	METAL FOIL AND LEAF	0	1	0	0	0	0	0	0	0
3499	FABRICATED METAL PRODUCTS, NEC	1	10	0	0	0	1	0	0	0
3523	FARM MACHINERY AND EQUIPMENT	0	1	0	0	0	0	0	0	0
3531	CONSTRUCTION MACHINERY	0	0	0	4	0	0	0	0	0
3537	INDUSTRIAL TRUCKS AND TRACTORS	0	2	0	0	0	0	0	0	0
3541	MACHINE TOOLS METAL CUT TYPES	0	0	0	0	1	0	0	0	0
3542	MACHINE TOOLS, METAL FORM TYPE	0	2	0	0	0	0	0	0	0
3544	SPEC DIES/TOOLS/JIGS/FIXTURES	2	0	0	0	0	0	0	0	0

SIC Code	SIC Description	PC Count	PO Count	Plans	Deny Count	Cancel Count	Area Sources	Cert Reg	Change Owner	Not Renewed
3549	METALWORKING MACHINERY, NEC	0	1	0	0	0	0	0	0	0
3559	SPECIAL INDUSTRY MACHINERY, NEC	0	4	0	0	1	1	0	0	0
3562	BALL AND ROLLER BEARINGS	0	3	0	0	0	0	0	0	0
3565	PACKAGING MACHINERY	0	3	0	0	0	0	0	0	0
3569	GENERAL INDSTRL MACHINERY, NEC	0	0	0	0	0	0	0	4	0
3577	COMPUTER PERIPHERAL EQPMT, NEC	0	2	0	0	0	0	0	0	0
3579	OFFICE MACHINES, NEC	0	0	0	0	0	2	0	0	0
3589	SERVICE INDUSTRY MACHINERY, NEC	0	0	0	0	0	1	0	0	0
3594	FLUID POWER PUMPS AND MOTORS	0	0	0	0	0	0	0	1	0
3599	INDUSTRIAL MACHINERY, NEC	0	13	0	0	3	0	0	1	0
3613	SWITCHGEAR & SWTCHBRD APARATUS	0	0	0	0	0	1	0	0	0
3621	MOTORS AND GENERATORS	0	0	0	0	1	0	0	0	0
3625	RELAYS AND INDUSTRIAL CONTROLS	1	3	0	0	0	0	0	0	0
3629	ELECTRICAL IND APPARATUS, NEC	0	3	1	0	0	0	0	0	0
3632	HOUSEHOLD REFRIG AND FREEZERS	0	1	0	0	0	0	0	0	0
3645	RESIDENTIAL LIGHTING FIXTURES	3	0	1	0	0	0	0	0	0
3646	COMMERCIAL LIGHTING FIXTURES	0	2	0	0	0	0	0	0	0
3651	RADIO AND TV RECEIVING SETS	0	0	0	0	0	9	0	3	0
3652	PHONOGRAPH RECORDS	0	0	0	0	0	1	0	0	2
3662	RADIO & TV COMMUNICATION EQUIP	0	0	0	0	0	1	0	0	0
3663	RADIO/TV COMMUNICATIONS EQPMT	0	0	1	0	0	3	0	0	0
3669	COMMUNICATIONS EQUIPMENT, NEC	0	3	0	0	0	1	0	0	0
3671	ELECTRON TUBES	0	0	0	0	1	0	0	0	0
3672	PRINTED CIRCUIT BOARDS	0	12	0	0	0	0	0	0	3
3674	SEMICONDUCTORS/RELATED DEVICES	0	20	0	0	1	2	0	0	0
3678	ELECTRONIC CONNECTORS	0	0	0	0	0	2	0	0	0
3679	ELECTRONIC COMPONENTS, NEC	26	19	0	0	28	1	0	0	0
3691	STORAGE BATTERIES	0	4	0	0	0	2	0	25	0



SIC Code	SIC Description	PC Count	PO Count	Plans	Deny Count	Cancel Count	Area Sources	Cert Reg	Change Owner	Not Renewed
3693	X-RAY APPARATUS AND TUBES	0	0	0	0	0	0	0	1	0
3694	ENGINE ELECTRICAL EQUIPMENT	0	2	0	0	0	0	0	0	0
3713	TRUCK AND BUS BODIES	1	2	0	0	3	1	0	0	0
3714	MOTOR VEHICLE PARTS/ACCESORIES	0	7	0	0	1	0	0	0	2
3721	AIRCRAFT	17	20	1	0	4	11	0	0	0
3724	AIRCRAFT ENGINES/ENGINE PARTS	0	1	0	0	0	1	0	0	0
3728	AIRCRAFT PARTS/EQUIPMENT, NEC	21	59	0	0	7	8	0	3	0
3731	SHIP BUILDING AND REPAIRING	0	1	0	0	0	0	0	0	0
3761	GUIDED MISSILES AND SPACE VEH	7	6	0	0	0	4	0	0	0
3764	SPACE PROPULSION UNITS & PARTS	0	15	0	0	2	0	0	0	0
3769	SPACE VEHICLE EQUIPMENT, NEC	2	4	1	0	0	2	0	2	0
3812	SEARCH & NAVIGATION EQUIPMENT	0	3	0	0	2	0	0	0	0
3823	PROCESS CONTROL INSTRUMENTS	0	2	1	0	0	0	1	0	0
3826	ANALYTICAL INSTRUMENTS	0	0	1	0	0	0	1	0	0
3827	OPTICAL INSTRUMENTS AND LENSES	0	8	0	0	0	0	0	0	0
3829	MEASURING/CONTROLLING DVCS,NEC	0	2	0	0	0	0	0	0	0
3841	SURGICAL & MEDICAL INSTRUMENTS	0	0	0	0	0	3	0	0	0
3842	SURGICAL APPLIANCES & SUPPLIES	0	0	0	0	4	1	0	0	0
3843	DENTAL EQUIPMENT AND SUPPLIES	0	5	0	0	0	2	0	0	0
3845	ELECTROMEDICAL EQUIPMENT	0	0	0	0	0	1	0	0	0
3861	PHOTOGRAPHIC EQUIPMENT/SUPPLY	0	3	0	0	1	1	0	0	1
3911	JEWELRY, PRECIOUS METAL	0	3	0	0	0	0	0	0	0
3931	MUSICAL INSTRUMENTS	1	0	0	0	0	0	0	0	0
3944	GAMES, TOYS, & CHILDRENS VEH	0	0	0	0	0	1	0	0	0
3961	COSTUME JEWELRY	0	1	0	0	0	0	0	0	0
3993	SIGNS & ADVERTISING DISPLAYS	1	5	0	0	0	0	0	0	0
3995	BURIAL CASKETS	0	2	0	0	0	0	0	0	0
3996	HARD SURFACE FLOOR COVERINGS	0	0	0	0	0	1	0	0	0
3999	MANUFACTURING INDUSTRIES, NEC	0	6	0	0	0	0	0	0	1

SIC Code	SIC Description	PC Count	PO Count	Plans	Deny Count	Cancel Count	Area Sources	Cert Reg	Change Owner	Not Renewed
4011	RAILROAD, LINE-HAUL OPERATING	0	0	1	0	0	1	0	0	0
4013	SWITCHING & TERMINAL SERVICES	0	1	0	0	1	0	0	0	0
4111	LOCAL & SUBURBAN TRANSIT	0	0	1	0	0	0	0	0	0
4212	LOCAL TRUCKING,WITHOUT STORAGE	0	2	2	0	0	0	0	1	34
4213	TRUCKING, EXCEPT LOCAL	0	0	0	0	0	2	0	0	0
4221	FARM PRODUCT WAREHOUSE/STORAGE	0	0	0	0	0	4	0	0	0
4225	GEN WAREHOUSINGE & STORAGE	0	0	0	0	0	1	1	4	0
4226	SPECIAL WAREHOUSING/STRGE ,NEC	1	25	3	0	11	1	0	0	0
4311	U.S. POSTAL SERVICE	0	0	0	0	0	11	0	0	0
4411	DEEP SEA FOREIGN TRANS	0	0	1	0	0	0	0	0	0
4412	DEEP SEA FRGN TRANS OF FRGHT	0	0	1	0	0	0	0	0	0
4491	MARINE CARGO HANDLING	1	9	0	0	2	0	0	0	0
4512	AIR TRANSPORTATION, SCHDL	0	0	0	0	0	2	0	0	0
4513	AIR COURIER SERVICES	0	0	1	0	0	0	0	0	0
4581	AIRPORTS/FLYING FIELDS/SVCS	2	13	2	0	22	1	2	0	4
4613	REFINED PETROLEUM PIPE LINES	0	0	1	0	0	0	0	31	0
4729	PASSENGER TRANS ARRNGMNT, NEC	0	0	0	0	0	0	0	1	0
4731	FREIGHT TRANS ARRANGEMENT	0	2	0	0	0	0	0	0	0
4789	TRANSPORTATION SERVICES, NEC	0	0	0	0	6	0	0	0	0
4811	TELEPHONE COMMUNICATION	0	0	0	0	0	0	1	10	0
4812	RADIOTELEPHONE COMMUNICATIONS	0	2	0	0	0	0	0	0	0
4813	TELEPHONE COMMS, EXC RADIO	0	14	1	0	0	4	1	1	0
4833	TV BROADCASTING STATIONS	0	0	0	0	0	1	0	0	0
4841	CABLE & OTHER PAY TV SERVICES	0	1	0	0	0	0	0	0	0
4899	COMMUNICATION SERVICES, NEC	0	1	0	0	0	0	0	0	1
4911	ELECTRIC SERVICES	13	75	5	0	53	27	0	4	1
4922	NATURAL GAS TRANSMISSION	0	0	1	0	0	0	0	0	0
4923	GAS TRANSMISSION/DISTRIBUTION	0	6	0	0	0	1	0	0	0

SIC Code	SIC Description	PC Count	PO Count	Plans	Deny Count	Cancel Count	Area Sources	Cert Reg	Change Owner	Not Renewed
4924	NATURAL GAS DISTRIBUTION	0	0	0	0	0	0	1	0	0
4925	GAS PRODUCTION AND/OR DISTRIB	0	0	0	0	0	1	1	0	0
4931	ELECTRIC & OTHER SERVICES COMB	0	1	0	0	1	0	0	0	0
4932	GAS & OTHER SERVICES COMBINED	0	5	0	0	0	0	0	0	0
4939	COMBINATION UTILITY SERV, NEC	2	1	0	0	3	0	0	0	0
4941	WATER SUPPLY	3	52	14	2	10	28	1	0	0
4952	SEWERAGE SYSTEMS	13	52	4	0	28	1	1	0	1
4953	REFUSE SYSTEMS	12	25	11	0	7	50	0	14	3
4959	SANITARY SERVICES, NEC	0	1	0	0	6	0	0	0	0
4961	STEAM SUPPLY	0	0	0	0	0	1	0	0	0
5012	AUTO & OTHER MOTOR VEHICLES	0	2	0	0	0	0	0	0	0
5014	TIRES AND TUBES	0	0	0	0	0	1	0	0	0
5031	LUMBER, PLYWOOD & MILLWORK	1	1	0	0	1	0	0	0	0
5032	BRICK, STONE, & RELATED MATLS	0	1	0	0	0	0	0	0	0
5033	ROOFING, SIDING, & INSULATION	0	0	0	0	0	0	0	0	0
5039	CONSTRUCTION MATERIALS, NEC	0	8	0	0	0	0	0	0	0
5041	SPORTING & RECREATIONAL GOODS	0	0	0	0	0	0	0	1	0
5045	COMPUTERS, PERIPHERALS & SFTWR	0	0	0	0	0	1	0	0	0
5047	MEDICAL AND HOSPITAL EQUIPMENT	0	1	0	0	0	1	0	1	0
5082	CONSTRUCTION/MINING MACHINERY	0	5	0	0	0	0	1	0	0
5084	INDUSTRIAL MACHINERY AND EQPMT	1	3	0	0	0	0	0	0	0
5085	INDUSTRIAL SUPPLIES	0	2	1	0	0	1	0	0	0
5087	SERVICE ESTABLISHMENT EQUIP	0	1	0	0	0	0	0	0	0
5088	TRANSPORTATION EQUIP/SUPPLIES	0	4	0	0	0	0	0	0	4
5092	TOYS & HOBBY GOODS & SUPPLIES	0	0	0	0	0	0	0	2	0
5093	SCRAP & WASTE MATERIALS	2	7	0	0	0	1	0	0	0
5099	DURABLE GOODS, NEC	0	0	0	0	0	1	0	0	0
5141	GROCERIES, GENERAL LINE	0	0	1	0	0	9	0	9	0
5142	FROZEN FOODS	0	0	0	0	2	0	0	0	0

SIC Code	SIC Description	PC Count	PO Count	Plans	Deny Count	Cancel Count	Area Sources	Cert Reg	Change Owner	Not Renewed
5149	GROCERIES/RELATED PRODUCTS,NEC	0	1	0	0	0	67	0	52	0
5169	CHEMICALS & ALLIED PRDCTS, NEC	0	2	0	0	0	1	0	2	0
5171	PETRO BULK STATIONS/TERMINALS	10	67	14	0	42	0	1	186	1
5199	NONDURABLE GOODS, NEC	0	0	0	0	0	1	0	0	0
5211	LUMBER & OTHER BLDG MATERIALS	1	0	0	0	0	0	0	0	4
5311	DEPARTMENT STORES	0	1	0	0	0	28	1	1	0
5399	MISC GNRL MERCHANDISE STORES	0	1	1	0	0	8	0	0	0
5411	GROCERY STORES	0	3	0	0	1	284	0	22	0
5511	NEW AND USED CAR DEALERS	1	0	0	0	0	2	0	11	0
5531	AUTO & HOME SUPPLY STORES	0	1	0	0	0	0	0	0	0
5541	GASOLINE SERVICE STATIONS	0	103	1	0	7	8	0	325	16
5611	MEN'S & BOYS' CLOTHING & FURN	1	12	0	0	12	1	0	0	0
5621	WOMEN'S READY-TO-WEAR STORES	0	0	0	0	0	1	0	0	0
5641	CHILRESN'S/INFANTS' WEAR STORE	0	1	0	0	0	0	0	0	0
5699	MISC APPAREL & ACCESSORIES	0	0	0	0	0	1	0	0	0
5712	FURNITURE STORES	1	0	0	0	0	0	0	0	0
5734	COMPUTER AND SOFTWARE STORES	0	0	0	0	0	0	0	2	0
5812	EATING PLACES	0	1	0	0	0	11	0	0	24
5912	DRUG STORES/PROPRIETARY STORES	0	0	0	0	0	3	0	0	0
5941	SPORTING GOODS & BICYCLE SHOPS	0	1	0	0	0	1	0	0	0
5946	CAMERA/PHOTOGRAPH SUPPLY STORE	0	1	0	0	0	0	0	0	0
5961	MAIL ORDER HOUSES	0	0	0	0	0	1	0	0	0
5983	FUEL OIL DEALERS	3	0	0	0	0	0	0	0	0
5984	LIQUEFIED PETROLEUM GAS DEALER	0	1	0	0	0	0	0	0	0
5999	MISCELLANEOUS RETAIL STORE,NEC	0	0	0	1	0	7	0	0	0
6021	NATIONAL COMMERCIAL BANKS	0	0	2	0	0	1	0	3	1
6035	FEDERAL SAVINGS INSTITUTIONS	0	0	0	0	0	1	0	0	0

SIC Code	SIC Description	PC Count	PO Count	Plans	Deny Count	Cancel Count	Area Sources	Cert Reg	Change Owner	Not Renewed
6162	MORTGAGE BANKERS & CORRESPOND	0	0	0	0	0	3	0	0	0
6211	SECURITY BROKERS AND DEALERS	0	0	0	0	0	1	0	0	0
6311	LIFE INSURANCE	0	0	0	0	0	2	0	0	0
6321	ACCIDENT AND HEALTH INSURANCE	0	0	1	0	0	0	0	0	0
6371	PENSION/HEALTH/WELFARE FUNDS	0	0	0	0	0	1	0	2	0
6411	INSURANCE AGENTS/BROKERS/SVCS	0	0	1	0	0	1	1	0	0
6512	NONRESIDENTIAL BLDG OPERATORS	0	1	2	0	2	38	0	23	1
6513	APARTMENT BLDG OPERATORS	0	0	0	0	0	3	0	1	0
6519	REAL PROPERTY LESSORS, NEC	0	0	0	0	0	1	0	0	0
6531	REAL ESTATE AGENTS/MANAGERS	0	1	0	0	0	2	0	2	0
6552	SUBDIVIDERS & DEVELOPERS, NEC	0	0	1	1	0	3	1	1	0
6711	HOLDING OFFICES	0	0	0	0	0	1	0	0	0
6719	HOLDING COMPANIES, NEC	0	0	0	0	0	1	0	1	0
7011	HOTELS, MOTELS & TOURIST COURT	3	4	1	0	0	46	1	20	2
7213	LINEN SUPPLY	0	3	0	0	0	0	0	0	1
7216	DRY CLEANING PLANTS, EXC RUG	0	59	0	0	1	4	0	60	51
7218	INDUSTRIAL LAUNDRETERS	0	3	0	0	0	4	0	1	0
7219	LAUNDRY AND GARMENT SVCS, NEC	0	2	0	0	0	8	0	1	2
7261	FUNERAL SERVICE & CREMATORIES	5	15	0	0	0	0	0	0	0
7299	MISCELLANEOUS PERSONAL SVCS, NEC	0	0	0	0	0	0	0	2	0
7311	ADVERTISING AGENCIES	0	2	0	0	1	3	0	2	0
7323	CREDIT REPORTING SERVICES	0	1	0	0	0	0	0	1	0
7349	BUILDING MAINTENANCE SVCS, NEC	1	5	0	0	4	8	0	2	0
7353	HEAVY CONSTRUCTION EQPMT RENTL	0	0	0	0	1	0	0	0	0
7359	EQUIPMENT RENTAL & LEASING, NEC	0	2	1	0	0	6	0	6	0
7389	BUSINESS SERVICES, NEC	2	0	1	0	0	3	0	8	0
7399	BUSINESS SERVICES, NEC	0	0	1	0	0	0	0	0	0
7512	PASSENGER CAR RENTAL & LEASING	0	1	0	0	0	0	0	0	0

SIC Code	SIC Description	PC Count	PO Count	Plans	Deny Count	Cancel Count	Area Sources	Cert Reg	Change Owner	Not Renewed
7514	PASSENGER CAR RENTAL	0	1	0	0	0	0	0	0	0
7521	AUTOMOBILE PARKING	0	1	0	0	0	0	0	0	0
7523	PARKING LOTS	0	0	0	0	0	0	0	1	0
7531	TOP & BODY REPAIR SHOPS	8	11	0	0	0	0	1	1	1
7532	TOP & BODY REPAIR/PAINT SHOPS	19	117	0	2	8	0	0	95	53
7533	AUTO EXHAUST SYST REPAIR SHOPS	0	0	0	0	0	0	0	1	0
7534	TIRE RETREADING & REPAIR SHOPS	0	1	0	0	0	0	0	0	0
7535	PAINT SHOPS	1	4	0	0	0	0	0	2	4
7537	AUTO TRANSMISSION REPAIR SHOPS	0	1	0	0	0	0	0	0	0
7538	GENERAL AUTO REPAIR SHOPS	1	17	0	0	0	0	0	24	20
7539	AUTO REPAIR SHOPS, NEC	0	5	0	0	0	1	0	11	5
7542	CAR WASHES	0	0	0	0	0	0	0	2	1
7549	AUTOMOTIVE SERVICES, NEC	0	1	0	0	0	1	0	4	2
7629	ELECTRICAL REPAIR SHOPS, NEC	0	0	0	0	0	0	0	6	0
7641	REUPHOLSTERY/FURNITURE REPAIR	0	0	0	0	0	0	0	4	1
7812	MOTION PICTURE & VIDEO PRDNTN	1	16	1	0	5	5	0	0	1
7819	SERV ALLIED TO MOTION PICTURES	2	1	1	0	1	0	0	2	2
7832	MOTION PIC THEATER EX DRIVE-IN	0	1	0	0	0	0	0	0	0
7992	PUBLIC GOLF COURSES	0	0	0	0	0	0	0	2	0
7996	AMUSEMENT PARKS	0	0	0	0	1	67	0	0	0
7997	MEMBERSHIP SPORTS/REC CLUBS	0	1	0	0	0	1	1	4	1
7999	AMUSEMENT AND RECREATION, NEC	0	6	1	0	0	4	1	0	0
8011	OFFICE/CLINICS OF MDCL DOCTORS	0	3	1	0	0	12	0	0	0
8049	OFFICES OF HLTH PRACTNRS, NEC	0	1	0	0	0	0	0	0	0
8051	SKILLED NURSING CARE FACILITY	0	0	0	0	0	0	0	1	0
8052	INTERMEDIATE CARE FACILITIES	0	1	0	0	0	1	0	0	0
8059	NURSING AND PERSONAL CARE, NEC	0	0	0	0	0	1	0	0	0
8062	GENERAL MED/SURGICAL HOSPITALS	1	41	2	0	7	31	3	5	4
8063	PSYCHIATRIC HOSPITALS	0	0	0	0	0	1	0	0	0

SIC Code	SIC Description	PC Count	PO Count	Plans	Deny Count	Cancel Count	Area Sources	Cert Reg	Change Owner	Not Renewed
8069	SPEC HOSPITAL, EXC PSYCHIATRIC	0	4	0	0	0	3	0	0	0
8071	MEDICAL LABORATORIES	0	0	0	0	0	3	0	0	0
8081	OUTPATIENT CARE FACILITIES	0	0	0	0	0	1	0	0	0
8211	ELEMENTARY & SECONDARY SCHOOLS	0	9	0	0	1	52	2	0	9
8221	COLLEGES & UNIVERSITIES, NEC	0	42	4	0	3	41	4	0	0
8222	JUNIOR COLLEGES	0	5	0	0	0	22	1	0	1
8249	VOCATIONAL SCHOOLS, NEC	0	1	0	0	0	0	0	0	0
8299	SCHOOLS/EDUCATIONAL SVCS,NEC	0	0	0	0	0	4	0	0	0
8322	INDIVIDUAL AND FAMILY SERVICES	0	0	0	0	0	1	0	0	0
8331	JOB TRAINING & RELATED SERVICE	0	1	0	0	0	0	0	0	0
8412	MUSEUMS AND ART GALLERIES	0	0	0	0	0	3	0	0	0
8611	BUSINESS ASSOCIATIONS	0	0	0	0	0	1	0	0	0
8621	PROFESSIONAL ORGANIZATIONS	0	0	0	0	0	1	0	0	0
8641	CIVIC & SOCIAL ASSOCIATIONS	0	1	0	0	0	10	0	1	0
8699	MEMBERSHIP ORGANIZATIONS, NEC	0	0	0	0	0	1	0	0	0
8711	ENGINEERING SERVICES	0	18	2	0	10	0	0	0	1
8712	ARCHITECTURAL SERVICES	0	0	0	0	0	1	0	0	0
8731	COMMERCIAL PHYSICAL RESEARCH	0	8	0	0	0	2	0	1	0
8734	TESTING LABORATORIES	0	0	0	0	0	0	0	0	0
8742	MANAGEMENT CONSULTING SERVICES	0	0	0	0	0	3	0	6	0
8744	FACILITIES SUPPORT SERVICES	0	2	1	0	0	0	0	0	0
9111	EXECUTIVE OFFICES	0	2	0	0	0	3	0	0	0
9131	EXECUTIVE & LEGISLATIVE COMB	0	1	0	0	0	0	0	0	0
9199	GENERAL GOVERNMENT, NEC	0	24	7	0	4	21	2	3	1
9211	COURTS	0	0	0	0	0	1	0	1	0
9221	PUBLIC PROTECTION	0	7	1	1	1	2	2	0	0
9223	CORRECTIONAL INSTITUTIONS	0	9	0	0	2	1	1	0	0

SIC Code	SIC Description	PC Count	PO Count	Plans	Deny Count	Cancel Count	Area Sources	Cert Reg	Change Owner	Not Renewed
9224	FIRE PROTECTION	0	4	0	0	0	0	2	3	1
9411	ADMIN. OF EDUCATIONAL PROGRAMS	0	1	0	0	0	4	0	0	0
9431	ADMIN OF PUBLIC HEALTH PROGRAM	0	2	0	0	0	1	0	0	0
9511	AIR WATER & SOLID WASTE MANAG	2	7	2	0	0	1	0	0	0
9532	URBAN & COMMUNITY DEVELOPMENT	0	0	0	0	0	0	0	4	0
9611	ADMIN OF GEN ECONOMIC PROGRAMS	0	1	0	0	0	0	0	0	0
9621	REG, ADMIN OF TRANSPORTATION	0	0	1	0	0	8	0	0	0
9631	REG, ADMIN OF UTILITIES	5	17	0	0	6	2	0	0	0
9661	SPACE RESEARCH & TECHNOLOGY	1	1	0	0	0	0	0	0	0
9711	NATIONAL SECURITY	6	6	0	0	1	4	0	0	0
9721	INTERNATIONAL AFFAIRS	0	1	0	0	0	0	0	0	0
9999	UNKNOWN	122	1295	158	14	200	2810	166	603	432
	<b>Total</b>	<b>629</b>	<b>3909</b>	<b>499</b>	<b>36</b>	<b>965</b>	<b>4105</b>	<b>212</b>	<b>2431</b>	<b>955</b>



**Annual Publication of Emission Reduction Credit (ERC) And Short Term Emission Reduction Credit (STERC) Transactions for Fiscal Year 2012-13<sup>4</sup>  
(California Health and Safety Code Section 40452)**

Pursuant to paragraph (c) of section 40452 of the California Health and Safety Code, this report summarizes data on emission offset transactions and applications, by pollutant, during the previous fiscal year. Note that during Fiscal Year 2012-13, no applications were denied for a permit for a new source for the reason of failure to provide the required emission offsets.

Table 1 summarizes privately held Emission Reduction Credit (ERC) and Short Term Emission Reduction Credit (STERC) transactions for Fiscal Year 2012-13, including totals, by pollutant, of the number of emission offset transactions and the quantity of emission offsets transferred in units of pounds per day and tons per year. Table 2 summarizes ERC banking applications processed during Fiscal Year 2012-13, including the number of newly generated STERCs by pollutant in units of pounds per day and tons per year.

Tables 3 and 4 provide details on the amount of each emission offset transaction and processed ERC banking application, respectively.

**Table 1: Emission Offset Transactions – Fiscal Year 2012-13**

Criteria Pollutant	Number of Emission Offset Transfer Transactions <sup>5</sup>				Quantity of Emission Offsets Transferred <sup>6</sup> (lb/day)				Annualized Quantity of Emission Offsets Transferred <sup>3</sup> (ton/year)			
	ERC	STERC <sup>7</sup>	STERC <sup>8</sup>	TOTAL	ERC	STERC <sup>4</sup>	STERC <sup>5</sup>	TOTAL	ERC	STERC <sup>4</sup>	STERC <sup>5</sup>	TOTAL
ROG	46	8	12	66	897	87	169	1,153	163.7	15.9	30.8	210.4
NOx	5	1	17	23	58	5	128	191	10.6	0.9	23.4	34.9
SOx	1	0	0	1	2	0	0	2	0.4	0	0	0.4
CO	4	0	0	4	90	0	0	90	16.4	0	0	16.4
PM10	15	4	0	19	200	20	0	220	36.5	3.7	0	40

**Table 2: Emission Offset Applications – Fiscal Year 2012-13**

Criteria Pollutant	Number of Banking Applications Resulting in the Issuance of New STERCs <sup>9</sup>	Quantity of Emission Reductions Achieved (STERCs) <sup>10</sup> (lb/day)	Annualized Quantity of Emission Reductions Achieved <sup>7</sup> (ton/year)
ROG	8	251	45.8
NOx	0	0	0
SOx	0	0	0
CO	0	0	0
PM <sub>10</sub>	8	30	5.3

<sup>4</sup> This report does not include RECLAIM Trading Credit (RTC) transactions.

<sup>5</sup> Includes all emission offset certificates that transferred ownership.

<sup>6</sup> Includes the total amount of emission offsets transferred.

<sup>7</sup> STERC transfer transactions including the “yearly increments” and the “permanent credit” (designated with an ending year of “9999”) as described in Rule 1309.

<sup>8</sup> STERC transfer transactions including only the “yearly increments” as described in Rule 1309.

<sup>9</sup> Includes all emission offset applications resulting in the generation of new certificates.

<sup>10</sup> Includes the total amount of emission offsets generated.

**Table 3: Emission Offset Transaction Summary – Fiscal Year 2012-13**  
**Sorted by Pollutant and Amount**

SCAQMD NO.	POLLUTANT	AMOUNT <sup>11</sup> (LB/DAY)	AMOUNT <sup>8</sup> (TON/YR)	TYPE	START YEAR	END YEAR
SC1213-001	ROG	0	0	STERC	2012	2012
SC1213-002	ROG	0	0	STERC	2013	2013
SC1213-003	ROG	0	0	STERC	2014	2014
SC1213-004	ROG	0	0	STERC	2015	2015
SC1213-005	ROG	0	0	STERC	2016	2016
SC1213-006	ROG	0	0	STERC	2017	2017
SC1213-007	ROG	1	0.2	STERC	2018	9999
SC1213-008	ROG	1	0.2	ERC	N/A	N/A
SC1213-009	ROG	1	0.2	ERC	N/A	N/A
SC1213-010	ROG	1	0.2	ERC	N/A	N/A
SC1213-011	ROG	2	0.4	ERC	N/A	N/A
SC1213-012	ROG	2	0.4	ERC	N/A	N/A
SC1213-013	ROG	2	0.4	ERC	N/A	N/A
SC1213-014	ROG	2	0.4	ERC	N/A	N/A
SC1213-015	ROG	2	0.4	ERC	N/A	N/A
SC1213-016	ROG	2	0.4	STERC	2013	2013
SC1213-017	ROG	2	0.4	STERC	2013	2103
SC1213-018	ROG	0	0	STERC	2012	2012
SC1213-019	ROG	0	0	STERC	2013	2013
SC1213-020	ROG	0	0	STERC	2014	2014
SC1213-021	ROG	0	0	STERC	2015	2015
SC1213-022	ROG	0	0	STERC	2016	2016
SC1213-023	ROG	0	0	STERC	2017	2017
SC1213-024	ROG	3	0.5	STERC	2018	9999
SC1213-025	ROG	0	0	STERC	2012	2012
SC1213-026	ROG	0	0	STERC	2013	2013
SC1213-027	ROG	0	0	STERC	2014	2014
SC1213-028	ROG	0	0	STERC	2015	2015
SC1213-029	ROG	0	0	STERC	2016	2016
SC1213-030	ROG	0	0	STERC	2017	2017
SC1213-031	ROG	3	0.5	STERC	2018	9999
SC1213-032	ROG	3	0.5	ERC	N/A	N/A
SC1213-033	ROG	3	0.5	ERC	N/A	N/A
SC1213-034	ROG	3	0.5	ERC	N/A	N/A
SC1213-035	ROG	3	0.5	ERC	N/A	N/A
SC1213-036	ROG	4	0.7	ERC	N/A	N/A
SC1213-037	ROG	4	0.7	STERC	2013	2013
SC1213-038	ROG	4	0.7	ERC	N/A	N/A
SC1213-039	ROG	5	0.9	ERC	N/A	N/A
SC1213-040	ROG	5	0.9	ERC	N/A	N/A
SC1213-041	ROG	0	0	STERC	2012	2012
SC1213-042	ROG	0	0	STERC	2013	2013
SC1213-043	ROG	0	0	STERC	2014	2014

<sup>11</sup> Only long term emission offsets, those that have an ending year of 9999, or the offsets with the greatest year in instances where a trade did not include the long term emission offset are quantified to avoid over counting.

SCAQMD NO.	POLLUTANT	AMOUNT <sup>11</sup> (LB/DAY)	AMOUNT <sup>8</sup> (TON/YR)	TYPE	START YEAR	END YEAR
SC1213-044	ROG	0	0	STERC	2015	2015
SC1213-045	ROG	0	0	STERC	2016	2016
SC1213-046	ROG	0	0	STERC	2017	2017
SC1213-047	ROG	0	0	STERC	2018	2018
SC1213-048	ROG	5	0.9	STERC	2019	9999
SC1213-049	ROG	5	0.9	ERC	N/A	N/A
SC1213-050	ROG	0	0	STERC	2013	2013
SC1213-051	ROG	0	0	STERC	2014	2014
SC1213-052	ROG	0	0	STERC	2015	2015
SC1213-053	ROG	0	0	STERC	2016	2016
SC1213-054	ROG	0	0	STERC	2017	2017
SC1213-055	ROG	5	0.9	STERC	2018	9999
SC1213-056	ROG	6	1.1	ERC	N/A	N/A
SC1213-057	ROG	6	1.1	ERC	N/A	N/A
SC1213-058	ROG	6	1.1	ERC	N/A	N/A
SC1213-059	ROG	6	1.1	STERC	2013	2013
SC1213-060	ROG	6	1.1	ERC	N/A	N/A
SC1213-061	ROG	6	1.1	ERC	N/A	N/A
SC1213-062	ROG	0	0	STERC	2013	2013
SC1213-063	ROG	0	0	STERC	2014	2014
SC1213-064	ROG	0	0	STERC	2015	2015
SC1213-065	ROG	0	0	STERC	2016	2016
SC1213-066	ROG	6	1.1	STERC	2017	9999
SC1213-067	ROG	7	1.3	ERC	N/A	N/A
SC1213-068	ROG	7	1.3	ERC	N/A	N/A
SC1213-069	ROG	7	1.3	ERC	N/A	N/A
SC1213-070	ROG	7	1.3	ERC	N/A	N/A
SC1213-071	ROG	8	1.5	ERC	N/A	N/A
SC1213-072	ROG	9	1.6	ERC	N/A	N/A
SC1213-073	ROG	9	1.6	ERC	N/A	N/A
SC1213-074	ROG	10	1.8	ERC	N/A	N/A
SC1213-075	ROG	11	2	ERC	N/A	N/A
SC1213-076	ROG	11	2	ERC	N/A	N/A
SC1213-077	ROG	12	2.2	ERC	N/A	N/A
SC1213-078	ROG	13	2.4	ERC	N/A	N/A
SC1213-079	ROG	13	2.4	STERC	2013	2013
SC1213-080	ROG	13	2.4	STERC	2013	2013
SC1213-081	ROG	15	2.7	ERC	N/A	N/A
SC1213-082	ROG	15	2.7	STERC	2013	2013
SC1213-083	ROG	15	2.7	STERC	2013	2013
SC1213-084	ROG	16	2.9	ERC	N/A	N/A
SC1213-085	ROG	16	2.9	ERC	N/A	N/A
SC1213-086	ROG	17	3.1	STERC	2013	2013
SC1213-087	ROG	18	3.3	STERC	2013	2013
SC1213-088	ROG	19	3.5	STERC	2013	2013
SC1213-089	ROG	20	3.7	ERC	N/A	N/A
SC1213-090	ROG	25	4.6	ERC	N/A	N/A

SCAQMD NO.	POLLUTANT	AMOUNT <sup>11</sup> (LB/DAY)	AMOUNT <sup>8</sup> (TON/YR)	TYPE	START YEAR	END YEAR
SC1213-091	ROG	25	4.6	ERC	N/A	N/A
SC1213-092	ROG	0	0	STERC	2013	2013
SC1213-093	ROG	0	0	STERC	2014	2014
SC1213-094	ROG	0	0	STERC	2015	2015
SC1213-095	ROG	0	0	STERC	2016	2016
SC1213-096	ROG	0	0	STERC	2017	2017
SC1213-097	ROG	0	0	STERC	2018	2018
SC1213-098	ROG	32	5.8	STERC	2019	9999
SC1213-099	ROG	0	0	STERC	2013	2013
SC1213-100	ROG	0	0	STERC	2014	2014
SC1213-101	ROG	0	0	STERC	2015	2015
SC1213-102	ROG	0	0	STERC	2016	2016
SC1213-103	ROG	0	0	STERC	2017	2017
SC1213-104	ROG	0	0	STERC	2018	2018
SC1213-105	ROG	32	5.8	STERC	2019	9999
SC1213-106	ROG	38	6.9	ERC	N/A	N/A
SC1213-107	ROG	45	8.2	STERC	2013	2013
SC1213-108	ROG	50	9.1	ERC	N/A	N/A
SC1213-109	ROG	50	9.1	ERC	N/A	N/A
SC1213-110	ROG	109	19.9	ERC	N/A	N/A
SC1213-111	ROG	172	31.4	ERC	N/A	N/A
SC1213-112	ROG	172	31.4	ERC	N/A	N/A
<b>Total</b>		<b>1,153</b>	<b>210.3</b>		<b>N/A</b>	

SCAQMD NO.	POLLUTANT	AMOUNT <sup>8</sup> (LB/DAY)	AMOUNT <sup>8</sup> (TON/YR)	TYPE	START YEAR	END YEAR
SC1213-113	NOx	0	0	STERC	2013	2013
SC1213-114	NOx	0	0	STERC	2014	2014
SC1213-115	NOx	1	0.2	STERC	2015	2015
SC1213-116	NOx	0	0	STERC	2013	2013
SC1213-117	NOx	0	0	STERC	2014	2014
SC1213-118	NOx	1	0.2	STERC	2015	2015
SC1213-119	NOx	0	0	STERC	2013	2013
SC1213-120	NOx	0	0	STERC	2014	2014
SC1213-121	NOx	1	0.2	STERC	2015	2015
SC1213-122	NOx	0	0	STERC	2014	2014
SC1213-123	NOx	1	0.2	STERC	2015	2015
SC1213-124	NOx	0	0	STERC	2013	2013
SC1213-125	NOx	0	0	STERC	2014	2014
SC1213-126	NOx	1	0.2	STERC	2015	2015
SC1213-127	NOx	0	0	STERC	2013	2013
SC1213-128	NOx	0	0	STERC	2014	2014
SC1213-129	NOx	1	0.2	STERC	2015	2015
SC1213-130	NOx	0	0	STERC	2013	2013
SC1213-131	NOx	0	0	STERC	2014	2014
SC1213-132	NOx	1	0.2	STERC	2015	2015
SC1213-133	NOx	0	0	STERC	2013	2013

SCAQMD NO.	POLLUTANT	AMOUNT <sup>8</sup> (LB/DAY)	AMOUNT <sup>8</sup> (TON/YR)	TYPE	START YEAR	END YEAR
SC1213-134	NOx	0	0	STERC	2014	2014
SC1213-135	NOx	1	0.2	STERC	2015	2015
SC1213-136	NOx	1	0.2	STERC	2013	2013
SC1213-137	NOx	0	0	STERC	2013	2013
SC1213-138	NOx	0	0	STERC	2014	2014
SC1213-139	NOx	2	0.4	STERC	2015	2015
SC1213-140	NOx	0	0	STERC	2013	2013
SC1213-141	NOx	0	0	STERC	2014	2014
SC1213-142	NOx	2	0.4	STERC	2015	2015
SC1213-143	NOx	2	0.4	ERC	N/A	N/A
SC1213-144	NOx	0	0	STERC	2013	2013
SC1213-145	NOx	0	0	STERC	2014	2014
SC1213-146	NOx	3	0.5	STERC	2015	2015
SC1213-147	NOx	0	0	STERC	2012	2012
SC1213-148	NOx	0	0	STERC	2013	2013
SC1213-149	NOx	0	0	STERC	2014	2014
SC1213-150	NOx	0	0	STERC	2015	2015
SC1213-151	NOx	0	0	STERC	2016	2016
SC1213-152	NOx	0	0	STERC	2017	2017
SC1213-153	NOx	5	0.9	STERC	2018	9999
SC1213-154	NOx	0	0	STERC	2013	2013
SC1213-155	NOx	0	0	STERC	2014	2014
SC1213-156	NOx	6	1.1	STERC	2015	2015
SC1213-157	NOx	9	1.6	ERC	N/A	N/A
SC1213-158	NOx	12	2.2	ERC	N/A	N/A
SC1213-159	NOx	12	2.2	ERC	N/A	N/A
SC1213-160	NOx	0	0	STERC	2012	2012
SC1213-161	NOx	19	3.5	STERC	2013	2013
SC1213-162	NOx	0	0	STERC	2012	2012
SC1213-163	NOx	19	3.5	STERC	2013	2013
SC1213-164	NOx	23	4.2	ERC	N/A	N/A
SC1213-165	NOx	0	0	STERC	2012	2012
SC1213-166	NOx	0	0	STERC	2013	2013
SC1213-167	NOx	34	6.2	STERC	2014	2014
SC1213-168	NOx	0	0	STERC	2012	2012
SC1213-169	NOx	0	0	STERC	2013	2013
SC1213-170	NOx	34	6.2	STERC	2014	2014
Total		191	35.1	N/A		

SCAQMD NO.	POLLUTANT	AMOUNT <sup>8</sup> (LB/DAY)	AMOUNT <sup>8</sup> (TON/YR)	TYPE	START YEAR	END YEAR
SC1213-171	SOx	2	0.4	ERC	N/A	N/A
Total		2	0.4	N/A		

SCAQMD NO.	POLLUTANT	AMOUNT <sup>8</sup> (LB/DAY)	AMOUNT <sup>8</sup> (TON/YR)	TYPE	START YEAR	END YEAR
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SC1213-172	CO	1	0.2	ERC	N/A	N/A
SC1213-173	CO	1	0.2	ERC	N/A	N/A
SC1213-174	CO	11	2	ERC	N/A	N/A
SC1213-175	CO	77	14.1	ERC	N/A	N/A
<b>Total</b>		<b>90</b>	<b>16.5</b>	<b>N/A</b>		

SCAQMD NO.	POLLUTANT	AMOUNT <sup>8</sup> (LB/DAY)	AMOUNT <sup>8</sup> (TON/YR)	TYPE	START YEAR	END YEAR
SC1213-176	PM <sub>10</sub>	1	0.2	ERC	N/A	N/A
SC1213-177	PM <sub>10</sub>	1	0.2	ERC	N/A	N/A
SC1213-178	PM <sub>10</sub>	1	0.2	ERC	N/A	N/A
SC1213-179	PM <sub>10</sub>	1	0.2	ERC	N/A	N/A
SC1213-180	PM <sub>10</sub>	2	0.4	ERC	N/A	N/A
SC1213-181	PM <sub>10</sub>	3	0.5	ERC	N/A	N/A
SC1213-182	PM <sub>10</sub>	3	0.5	ERC	N/A	N/A
SC1213-183	PM <sub>10</sub>	0	0	STERC	2013	2013
SC1213-184	PM <sub>10</sub>	0	0	STERC	2014	2014
SC1213-185	PM <sub>10</sub>	0	0	STERC	2015	2015
SC1213-186	PM <sub>10</sub>	0	0	STERC	2016	2016
SC1213-187	PM <sub>10</sub>	0	0	STERC	2017	2017
SC1213-188	PM <sub>10</sub>	4	0.7	STERC	2018	9999
SC1213-189	PM <sub>10</sub>	4	0.7	ERC	N/A	N/A
SC1213-190	PM <sub>10</sub>	4	0.7	ERC	N/A	N/A
SC1213-191	PM <sub>10</sub>	4	0.7	ERC	N/A	N/A
SC1213-192	PM <sub>10</sub>	4	0.7	ERC	N/A	N/A
SC1213-193	PM <sub>10</sub>	4	0.7	ERC	N/A	N/A
SC1213-194	PM <sub>10</sub>	4	0.7	STERC	2012	9999
SC1213-195	PM <sub>10</sub>	0	0	STERC	2013	2013
SC1213-196	PM <sub>10</sub>	0	0	STERC	2014	2014
SC1213-197	PM <sub>10</sub>	4	0.7	STERC	2015	9999
SC1213-198	PM <sub>10</sub>	0	0	STERC	2013	2013
SC1213-199	PM <sub>10</sub>	0	0	STERC	2014	2014
SC1213-200	PM <sub>10</sub>	0	0	STERC	2015	2015
SC1213-201	PM <sub>10</sub>	0	0	STERC	2016	2016
SC1213-202	PM <sub>10</sub>	0	0	STERC	2017	2017
SC1213-203	PM <sub>10</sub>	8	1.5	STERC	2018	9999
SC1213-204	PM <sub>10</sub>	14	2.6	ERC	N/A	N/A
SC1213-205	PM <sub>10</sub>	40	7.3	ERC	N/A	N/A
SC1213-206	PM <sub>10</sub>	114	20.8	ERC	N/A	N/A
<b>Total</b>		<b>220</b>	<b>40</b>	<b>N/A</b>		

**Table 4: Emission Offset Application Summary – Fiscal Year 2012-13**  
**Sorted by Pollutant and Amount**

SCAQMD NO.	POLLUTANT	AMOUNT <sup>12</sup> (LB/DAY)	AMOUNT <sup>9</sup> (TON/YR)	TYPE	START YEAR	END YEAR
SC1213-207	ROG	0	0	STERC	2012	2012
SC1213-208	ROG	0	0	STERC	2013	2013
SC1213-209	ROG	0	0	STERC	2014	2014
SC1213-210	ROG	0	0	STERC	2015	2015
SC1213-211	ROG	0	0	STERC	2016	2016
SC1213-212	ROG	0	0	STERC	2017	2017
SC1213-213	ROG	0	0	STERC	2018	2018
SC1213-214	ROG	4	0.7	STERC	2019	9999
SC1213-215	ROG	0	0	STERC	2012	2012
SC1213-216	ROG	0	0	STERC	2013	2013
SC1213-217	ROG	0	0	STERC	2014	2014
SC1213-218	ROG	0	0	STERC	2015	2015
SC1213-219	ROG	0	0	STERC	2016	2016
SC1213-220	ROG	0	0	STERC	2017	2017
SC1213-221	ROG	0	0	STERC	2018	2018
SC1213-222	ROG	6	1.1	STERC	2019	9999
SC1213-223	ROG	0	0	STERC	2012	2012
SC1213-224	ROG	0	0	STERC	2013	2013
SC1213-225	ROG	0	0	STERC	2014	2014
SC1213-226	ROG	0	0	STERC	2015	2015
SC1213-227	ROG	0	0	STERC	2016	2016
SC1213-228	ROG	0	0	STERC	2017	2017
SC1213-229	ROG	0	0	STERC	2018	2018
SC1213-230	ROG	13	2.4	STERC	2019	9999
SC1213-231	ROG	0	0	STERC	2012	2012
SC1213-232	ROG	0	0	STERC	2013	2013
SC1213-233	ROG	0	0	STERC	2014	2014
SC1213-234	ROG	0	0	STERC	2015	2015
SC1213-235	ROG	0	0	STERC	2016	2016
SC1213-236	ROG	0	0	STERC	2017	2017
SC1213-237	ROG	0	0	STERC	2018	2018
SC1213-238	ROG	15	2.7	STERC	2019	9999
SC1213-239	ROG	0	0	STERC	2012	2012
SC1213-240	ROG	0	0	STERC	2013	2013
SC1213-241	ROG	0	0	STERC	2014	2014
SC1213-242	ROG	0	0	STERC	2015	2015
SC1213-243	ROG	0	0	STERC	2016	2016
SC1213-244	ROG	0	0	STERC	2017	2017
SC1213-245	ROG	0	0	STERC	2018	2018
SC1213-246	ROG	15	2.7	STERC	2019	9999
SC1213-247	ROG	0	0	STERC	2012	2012
SC1213-248	ROG	0	0	STERC	2013	2013
SC1213-249	ROG	0	0	STERC	2014	2014
SC1213-250	ROG	0	0	STERC	2015	2015

<sup>12</sup> Only long term emission offsets, those that have an ending year of 9999, are quantified to avoid over counting.

SCAQMD NO.	POLLUTANT	AMOUNT <sup>12</sup> (LB/DAY)	AMOUNT <sup>9</sup> (TON/YR)	TYPE	START YEAR	END YEAR
SC1213-251	ROG	0	0	STERC	2016	2016
SC1213-252	ROG	0	0	STERC	2017	2017
SC1213-253	ROG	0	0	STERC	2018	2018
SC1213-254	ROG	18	3.3	STERC	2019	9999
SC1213-255	ROG	0	0	STERC	2012	2012
SC1213-256	ROG	0	0	STERC	2013	2013
SC1213-257	ROG	0	0	STERC	2014	2014
SC1213-258	ROG	0	0	STERC	2015	2015
SC1213-259	ROG	0	0	STERC	2016	2016
SC1213-260	ROG	0	0	STERC	2017	2017
SC1213-261	ROG	0	0	STERC	2018	2018
SC1213-262	ROG	82	15	STERC	2019	9999
SC1213-263	ROG	0	0	STERC	2012	2012
SC1213-264	ROG	0	0	STERC	2013	2013
SC1213-265	ROG	0	0	STERC	2014	2014
SC1213-266	ROG	0	0	STERC	2015	2015
SC1213-267	ROG	0	0	STERC	2016	2016
SC1213-268	ROG	0	0	STERC	2017	2017
SC1213-269	ROG	0	0	STERC	2018	2018
SC1213-270	ROG	98	17.9	STERC	2019	9999
<b>Total</b>		<b>251</b>	<b>45.8</b>	<b>N/A</b>		



SCAQMD NO.	POLLUTANT	AMOUNT <sup>9</sup> (LB/DAY)	AMOUNT <sup>9</sup> (TON/YR)	TYPE	START YEAR	END YEAR
SC1213-271	PM <sub>10</sub>	0	0	STERC	2012	2012
SC1213-272	PM <sub>10</sub>	0	0	STERC	2013	2013
SC1213-273	PM <sub>10</sub>	0	0	STERC	2014	2014
SC1213-274	PM <sub>10</sub>	0	0	STERC	2015	2015
SC1213-275	PM <sub>10</sub>	0	0	STERC	2016	2016
SC1213-276	PM <sub>10</sub>	0	0	STERC	2017	2017
SC1213-277	PM <sub>10</sub>	0	0	STERC	2018	2018
SC1213-278	PM <sub>10</sub>	2	0.4	STERC	2019	9999
SC1213-279	PM <sub>10</sub>	0	0	STERC	2012	2012
SC1213-280	PM <sub>10</sub>	0	0	STERC	2013	2013
SC1213-281	PM <sub>10</sub>	0	0	STERC	2014	2014
SC1213-282	PM <sub>10</sub>	0	0	STERC	2015	2015
SC1213-283	PM <sub>10</sub>	0	0	STERC	2016	2016
SC1213-284	PM <sub>10</sub>	0	0	STERC	2017	2017
SC1213-285	PM <sub>10</sub>	0	0	STERC	2018	2018
SC1213-286	PM <sub>10</sub>	3	0.5	STERC	2019	9999
SC1213-287	PM <sub>10</sub>	0	0	STERC	2012	2012
SC1213-288	PM <sub>10</sub>	0	0	STERC	2013	2013
SC1213-289	PM <sub>10</sub>	0	0	STERC	2014	2014
SC1213-290	PM <sub>10</sub>	0	0	STERC	2015	2015
SC1213-291	PM <sub>10</sub>	0	0	STERC	2016	2016
SC1213-292	PM <sub>10</sub>	0	0	STERC	2017	2017
SC1213-293	PM <sub>10</sub>	0	0	STERC	2018	2018
SC1213-294	PM <sub>10</sub>	4	0.7	STERC	2019	9999
SC1213-295	PM <sub>10</sub>	0	0	STERC	2012	2012
SC1213-296	PM <sub>10</sub>	0	0	STERC	2013	2013
SC1213-297	PM <sub>10</sub>	0	0	STERC	2014	2014
SC1213-298	PM <sub>10</sub>	0	0	STERC	2015	2015
SC1213-299	PM <sub>10</sub>	0	0	STERC	2016	2016
SC1213-300	PM <sub>10</sub>	0	0	STERC	2017	2017
SC1213-301	PM <sub>10</sub>	0	0	STERC	2018	2018
SC1213-302	PM <sub>10</sub>	4	0.7	STERC	2019	9999
SC1213-303	PM <sub>10</sub>	0	0	STERC	2012	2012
SC1213-304	PM <sub>10</sub>	0	0	STERC	2013	2013
SC1213-305	PM <sub>10</sub>	0	0	STERC	2014	2014
SC1213-306	PM <sub>10</sub>	0	0	STERC	2015	2015
SC1213-307	PM <sub>10</sub>	0	0	STERC	2016	2016
SC1213-308	PM <sub>10</sub>	0	0	STERC	2017	2017
SC1213-309	PM <sub>10</sub>	0	0	STERC	2018	2018
SC1213-310	PM <sub>10</sub>	4	0.7	STERC	2019	9999
SC1213-311	PM <sub>10</sub>	0	0	STERC	2012	2012
SC1213-312	PM <sub>10</sub>	0	0	STERC	2013	2013
SC1213-313	PM <sub>10</sub>	0	0	STERC	2014	2014
SC1213-314	PM <sub>10</sub>	0	0	STERC	2015	2015
SC1213-315	PM <sub>10</sub>	0	0	STERC	2016	2016
SC1213-316	PM <sub>10</sub>	0	0	STERC	2017	2017
SC1213-317	PM <sub>10</sub>	0	0	STERC	2018	2018

SCAQMD NO.	POLLUTANT	AMOUNT <sup>9</sup> (LB/DAY)	AMOUNT <sup>9</sup> (TON/YR)	TYPE	START YEAR	END YEAR
SC1213-318	PM <sub>10</sub>	4	0.7	STERC	2019	9999
SC1213-319	PM <sub>10</sub>	0	0	STERC	2012	2012
SC1213-320	PM <sub>10</sub>	0	0	STERC	2013	2013
SC1213-321	PM <sub>10</sub>	0	0	STERC	2014	2014
SC1213-322	PM <sub>10</sub>	0	0	STERC	2015	2015
SC1213-323	PM <sub>10</sub>	0	0	STERC	2016	2016
SC1213-324	PM <sub>10</sub>	0	0	STERC	2017	2017
SC1213-325	PM <sub>10</sub>	0	0	STERC	2018	2018
SC1213-326	PM <sub>10</sub>	4	0.7	STERC	2019	9999
SC1213-327	PM <sub>10</sub>	0	0	STERC	2012	2012
SC1213-328	PM <sub>10</sub>	0	0	STERC	2013	2013
SC1213-329	PM <sub>10</sub>	0	0	STERC	2014	2014
SC1213-330	PM <sub>10</sub>	0	0	STERC	2015	2015
SC1213-331	PM <sub>10</sub>	0	0	STERC	2016	2016
SC1213-332	PM <sub>10</sub>	0	0	STERC	2017	2017
SC1213-333	PM <sub>10</sub>	0	0	STERC	2018	2018
SC1213-334	PM <sub>10</sub>	5	0.9	STERC	2019	9999
<b>Total</b>		<b>30</b>	<b>5.3</b>		<b>N/A</b>	

**CHAPTER II  
BUDGET AND FORECAST**

*[For information on this chapter, please see the SCAQMD's FY 2014-15  
Draft Budget and Work Program]*

**CHAPTER III**  
**CLEAN FUELS ANNUAL REPORT FOR 2013/2014**

*[An independent report to the Legislature on the Clean Fuels Program is required by March 31 of each year pursuant to Health and Safety Code 40448.5.1. The Clean Fuels Annual Report is included here as Chapter III.]*

**CHAPTER IV  
ANNUAL RECLAIM AUDIT REPORT  
FOR 2012 COMPLIANCE YEAR**

# DRAFT BUDGET & DRAFT WORK PROGRAM

FISCAL YEAR 2014-2015



**SOUTH COAST  
AIR QUALITY MANAGEMENT DISTRICT**

# **DRAFT BUDGET & DRAFT WORK PROGRAM**

## **FISCAL YEAR 2014-2015**

Prepared by Finance  
Michael B. O'Kelly, Chief Financial Officer



**SOUTH COAST  
AIR QUALITY MANAGEMENT DISTRICT**

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**SOUTH COAST  
AIR QUALITY MANAGEMENT DISTRICT**

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

**GOVERNING BOARD**

WILLIAM A. BURKE, Ed.D  
Chairman  
Speaker of the Assembly Appointee

DENNIS YATES  
Vice Chair  
County of San Bernardino  
Cities Representative

MICHAEL D. ANTONOVICH  
County of Los Angeles Representative

JOSEPH K. LYOU, Ph.D.  
Governor's Appointee

JOHN BENOIT  
County of Riverside Representative

JUDY MITCHELL  
County of Los Angeles  
Cities Representative  
Western Region

MICHAEL A. CACCIOTTI  
County of Los Angeles  
Cities Representative  
Eastern Region

SHAWN NELSON  
County of Orange Representative

DR. CLARK E. PARKER, SR.  
Senate Rules Committee Appointee

JOE BUSCAINO  
City of Los Angeles Representative

JOSIE GONZALES  
County of San Bernardino Representative

MIGUEL A. PULIDO  
County of Orange  
Cities Representative

BEN BENOIT  
County of Riverside  
Cities Representative

BARRY R. WALLERSTEIN, D.Env.  
Executive Officer



**SOUTH COAST  
AIR QUALITY MANAGEMENT DISTRICT**



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • www.aqmd.gov

April 4, 2014

South Coast Air Quality Management District Board and Stakeholders

## Transmittal of the Executive Officer's Draft Fiscal Year 2014-15 Budget and Work Program

This proposed draft Budget and Work Program for FY 2014-15 is a balanced budget which continues SCAQMD's commitment to protecting public health and efficient operations while meeting program requirements. Since 1991-92, when legislation went into effect limiting the agency's fee authority, the SCAQMD has successfully reduced staffing and program costs despite increased program complexities. The proposed level of expenditures and revenue for FY 2014-15 is \$132.2 million with staffing of 798 funded positions. Compared to the early nineties when SCAQMD staffing was at 1,163 positions, this year's request reflects 31% less staffing and a modest increase in expenditures of 17% over the 1991-92 adopted budget. Adjusting for inflation, this expenditure proposal is 25% less than the 1991-92 adopted budget.

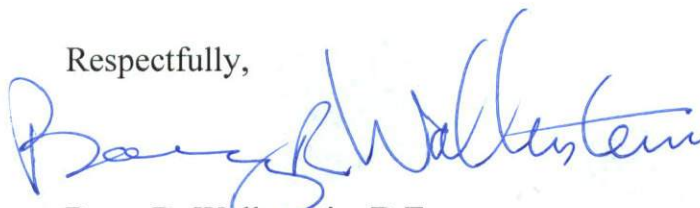
In comparison to the FY 2013-14 adopted budget, the FY 2014-15 proposed budget represents a \$3.0 million increase in total expenditures and revenues. The revenue budget includes a proposed CPI fee adjustment of 1.6% plus an additional fee adjustment of 3% in FY 2014-15 and an additional 3% in FY 2015-16 for Annual Operating Permit Renewal and Permit Processing Fees to better align program costs with revenues. The increase in expenditures is a result of increases in building operating costs and retirement contribution rates, with some increases offset by the continued effort to streamline operations. In addition, the proposed budget and five year projection address continued increases in retirement contribution rates and critical infrastructure improvement projects needed as result of the aging systems within our headquarters building.

The public and the business community have multiple opportunities to participate in the budget development process. These include meetings of the Budget Advisory Committee which is made up of representatives from the business and environmental communities, a

public workshop to discuss the proposed budget and work program, and two meetings of the Governing Board.

In summary, I am proposing a balanced budget for FY 2014-15 that allows our programs to operate efficiently and in a manner sensitive to businesses and the public yet addresses the need to continue streamlining our operations. SCAQMD will continue its efforts to make progress toward attaining the federal and state clean air mandates in the most cost-effective manner possible.

Respectfully,



Barry R. Wallerstein, D.Env.  
Executive Officer

BRW:MBO



GOVERNMENT FINANCE OFFICERS ASSOCIATION

*Distinguished  
Budget Presentation  
Award*

PRESENTED TO

**South Coast Air Quality Management District  
California**

For the Fiscal Year Beginning

**July 1, 2013**

Executive Director

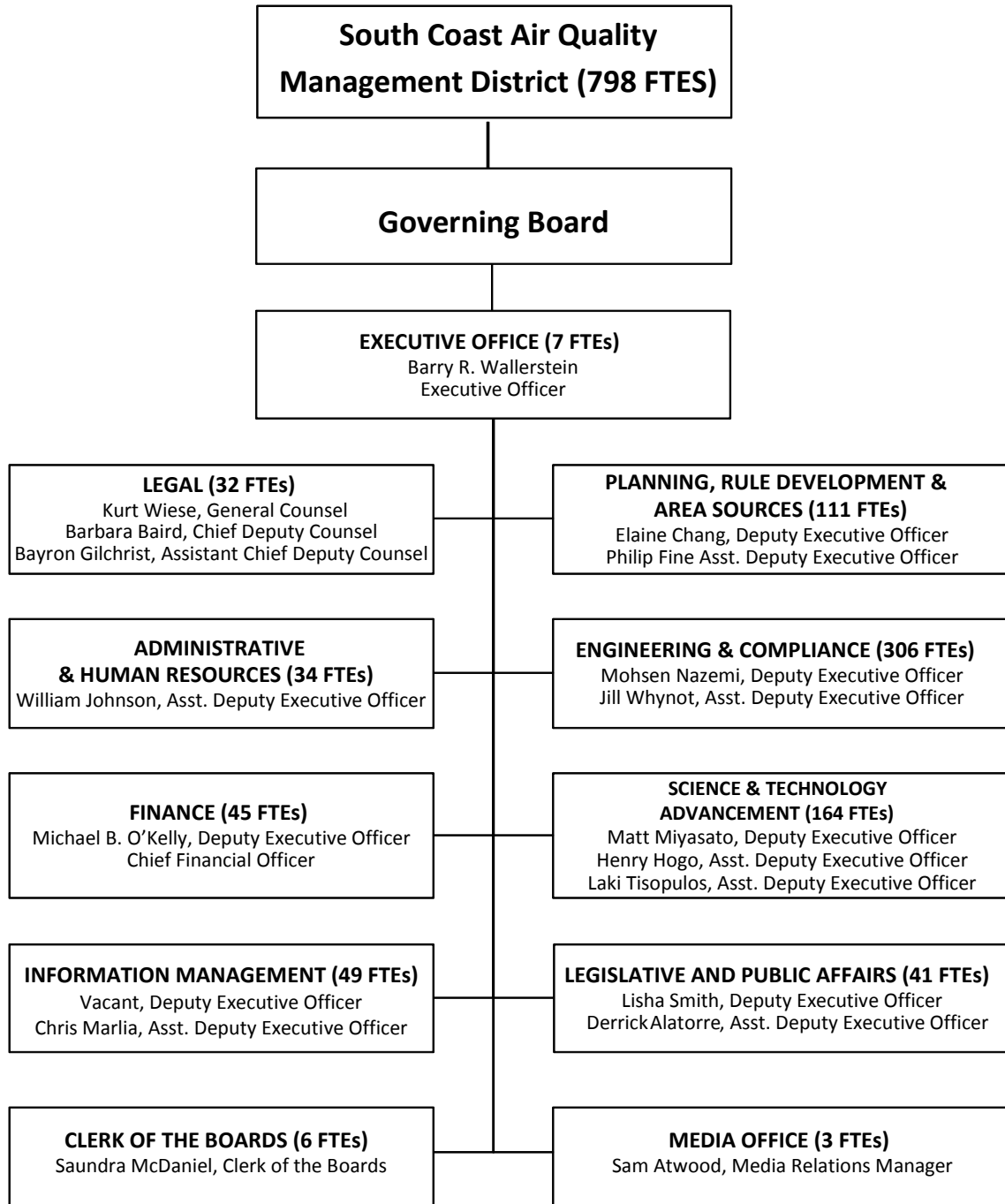
The Government Finance Officers Association of the United States and Canada (GFOA) presented a Distinguished Budget Presentation Award to the South Coast Air Quality Management District for its Annual Budget beginning July 1, 2013. In order to receive this award, a governmental unit must publish a budget document that meets program criteria as a policy document, operations guide, financial plan and communications device.

This award is valid for a period of one year only. We believe our current budget continues to conform to program requirements, and we are submitting it to GFOA to determine its eligibility for another award.





**SOUTH COAST  
AIR QUALITY MANAGEMENT DISTRICT**





**SOUTH COAST  
AIR QUALITY MANAGEMENT DISTRICT**

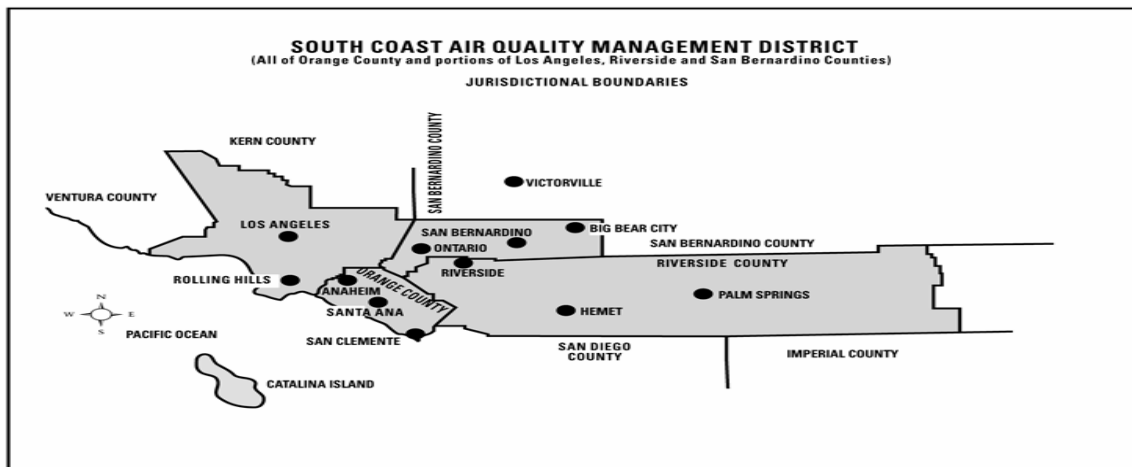
# SUMMARY

## Preface

This document represents the proposed FY 2014-2015 Draft Budget and Work Program of the South Coast Air Quality Management District (SCAQMD). The proposed budget is available for public review and comment during the month of April. Two workshops are scheduled to discuss the budget, one for the public on April 11, 2014 and one for the Governing Board on April 25, 2014. A final Draft Budget and Work Program, which may include changes based on input from the public and Board, will be presented for adoption at a public hearing on June 6, 2014.

## Introduction

The South Coast Air Quality Management District (SCAQMD) began operation on February 1, 1977 as a regional governmental agency established by the California Legislature pursuant to the Lewis Air Quality Management Act. The SCAQMD encompasses all of Orange County and parts of Los Angeles, San Bernardino and Riverside Counties. It succeeded the Southern California Air Pollution Control District (APCD) and its predecessor four county APCDs, of which the Los Angeles County APCD was the oldest in the nation, having been formed in 1947. The SCAQMD Governing Board is composed of 13 members, including four members appointed by the Boards of Supervisors of the four counties in SCAQMD's jurisdiction, six members appointed by cities in the SCAQMD's jurisdiction and three members appointed by the Governor, the Speaker of the State Assembly and the Rules Committee of the State Senate, respectively. The members appointed by the Boards of Supervisors and cities consist of one member of the Board of Supervisors of Los Angeles, Orange, Riverside, and San Bernardino Counties, respectively, and a mayor or member of the city council of a city within Orange, Riverside, and San Bernardino Counties. Los Angeles County cities have three representatives, one each from the western and eastern portions and one member representing the City of Los Angeles.



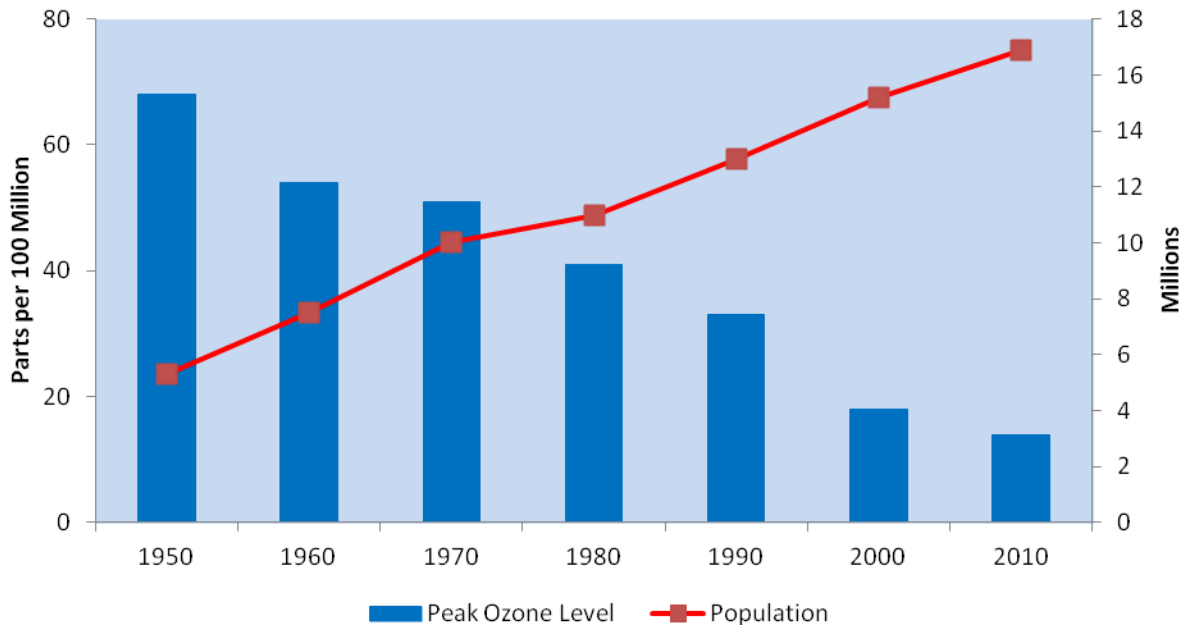
## Air Quality History

The South Coast Air Basin has suffered unhealthy air since its rapid population growth and industrialization during World War II. While air quality has improved, the residents of the Basin still breathe some of the most polluted air in the nation.

The 66-year history of the region's air pollution control efforts is, in many ways, one of the world's key environmental success stories. Peak ozone levels have been cut by almost three-fourths since air monitoring began in the 1950s. Population exposure was cut in half during the 1980s alone.

Since the late 1940s when the war on smog began, the region's population has more than tripled from 4.8 million to over 16.4 million; the number of motor vehicles has increased over five-fold from 2.3 million to over 12.3 million; and the area has grown into one of the most prosperous regions of the world. This phenomenal economic growth illustrates that pollution control and strong economic growth can coincide.

### 60 Years of Progress in Reducing Ozone Levels



### Mission

The SCAQMD believes all residents have a right to live and work in an environment of clean air and is committed to undertaking all necessary steps to protect public health from air pollution, with sensitivity to the impacts of its actions on the community and businesses. This mission is

pursued through a comprehensive program of planning, regulation, education, enforcement, compliance incentives, technical innovation and promoting public understanding of air quality issues. The SCAQMD has implemented a policy of working with regulated businesses to ensure their participation in making the rules which will impact them. This cooperative approach has resulted in greater business support for air that is more healthful to breathe.

To carry out its mission the SCAQMD develops a set of Goals and Priority Objectives which are evaluated and revised annually and presented at a public hearing. The following Goals have been established for FY 2014-15:

- I. Ensure expeditious progress toward meeting clean air standards and protecting public health.
- II. Enhance public education and ensure equitable treatment for all communities.
- III. Operate efficiently and in a manner sensitive to public agencies, businesses, the public and SCAQMD staff.

These goals are the foundation for the SCAQMD's Work Program. Each goal is supported by multiple activities, which target specific areas of program performance. A public hearing to receive input on the Goals and Priority Objectives for FY 2014-15 will be held on April 4, 2014.

## **Air Quality**

### Overview

The four-county Southern California region, designated for air quality purposes as the South Coast Air Basin, has some of the highest air pollution levels in the United States. The federal government has designated seven pollutants that are pervasive enough across the nation to warrant national health standards. Called "criteria pollutants," these are: ozone (O<sub>3</sub>); nitrogen dioxide (NO<sub>2</sub>); particulates (PM<sub>10</sub>); fine particulates (PM<sub>2.5</sub>); carbon monoxide (CO); lead (Pb); and sulfur dioxide (SO<sub>2</sub>).

In addition, the State of California through the California Air Resources Board (CARB) sets ambient air quality standards for these same pollutants. California's standards are in some cases tighter than the federal Environmental Protection Agency's (EPA) standards, reflecting the conclusion on CARB's part that some of the federal standards are not adequate to protect public health in this region. Toxic compounds also are a potential problem. More toxic pollution is emitted into the air in the South Coast Basin than in any other region in California. The Basin's large number of vehicles and small sources—including small businesses and households using ozone-forming consumer products and paints—compounds the problem.

### Air Quality Trends

Ozone levels have fallen by about three-quarters since peaks in the mid-1950s. Nitrogen dioxide, sulfur dioxide, and carbon monoxide levels have gone down from nonattainment to full

attainment of federal health standards. In November 2008, EPA revised the lead standard from a 1.5  $\mu\text{g}/\text{m}^3$  quarterly average to a 0.15  $\mu\text{g}/\text{m}^3$  rolling 3-month average and added new near-source monitoring requirements. The Los Angeles County portion of the Basin has since been designated non-attainment for lead due to monitored concentrations near one facility. However, the most recent preliminary 2013 data shows that the Basin meets the current lead standard. EPA revised the 8-hour ozone standard, effective May 2008, from concentrations exceeding 0.08 ppm to concentrations exceeding 0.075 ppm. In 2013, the current federal 8-hour ozone standard was exceeded on 94 days, the lowest number of exceedance days so far, based on preliminary 2013 data. The federal ozone standard was exceeded on 111 days in 2012 and 106 days in 2011. The maximum observed ozone levels show some year-to-year variability, but have generally been decreasing over the years. The highest 8-hour ozone level in the 2013 preliminary data was 0.112 ppm in 2013, compared to 0.112 ppm and 0.136 ppm in 2012 and 2011 respectively.

In 2007, EPA formally re-designated the Basin from nonattainment to full attainment of the federal health standard for carbon monoxide. Basin-wide maximum levels of carbon monoxide have been consistently measured at more than 30% below the federal standard since 2004. In 2010, EPA established a new  $\text{NO}_2$  1-hour standard at a level of 100 ppb (0.100ppm) and  $\text{SO}_2$  1-hour standard at a level of 75 ppb (0.075 ppm). In 2013, no sites exceeded the 1-hour  $\text{NO}_2$  standard in the preliminary data.

In 2006, EPA rescinded the annual federal standard for  $\text{PM}_{10}$  but retained the 24-hour standard. Ambient levels of  $\text{PM}_{10}$  in the Basin meet the federal 24-hour  $\text{PM}_{10}$  standard. EPA has re-designated the Basin as attainment of the health based standard for  $\text{PM}_{10}$ .  $\text{PM}_{2.5}$  levels have decreased dramatically in the Basin since the beginning of the decade; however, concentrations are still slightly above the federal annual and 24-hour standards at one monitoring station. While our air quality continues to improve, the South Coast Air Basin remains one of the most unhealthful areas in the nation in terms of air quality.

### Mandates

The SCAQMD is governed and directed by several state laws and a comprehensive federal law which provide the regulatory framework for air quality management in this Basin. These laws require the SCAQMD to take prescribed steps to improve air quality.

Generally speaking, SCAQMD is responsible for stationary sources such as factories and businesses. The CARB is primarily responsible for motor vehicles. The SCAQMD and CARB share responsibilities with respect to area sources. The SCAQMD and Southern California Association of Governments (SCAG) share some responsibilities with CARB regarding some aspects of mobile source emissions. Control of emissions from sources such as airports, harbors, and trains is shared by the federal EPA, CARB and the SCAQMD.

Under state law, the SCAQMD must periodically develop and submit to the state an Air Quality Management Plan (AQMP) demonstrating how the region will achieve state and federal ambient air quality standards, or at a minimum demonstrate that all feasible measures are

being carried out to meet state air quality standards. Each iteration of the plan is an update of the previous plan. To date, the SCAQMD's Governing Board has adopted such plans demonstrating attainment in 1989, 1991, 1994, 1997, 1999 (amendments to plan adopted in 1997), 2003, 2007 and 2012. Earlier plans in 1979 and 1982 did not show attainment and predicted continued unhealthful air well into this century. The current 2012 AQMP demonstrates attainment of the federal 24-hour PM<sub>2.5</sub> standard by 2014. Revisions to the federal annual PM<sub>2.5</sub> standard, adopted by EPA to further protect public health, will extend the projected attainment of the new annual PM<sub>2.5</sub> standard to the 2020-2025 timeframe. The revised 2008 federal 8-hour ozone standard is projected to extend attainment to 2032. Determination of the final attainment date will be part of the 2016 AQMP already under development.

State Laws include:

- California Clean Air Act (AB 2595) requires air districts in California to adopt plans to expeditiously meet state ambient air quality standards. It mandates that SCAQMD's attainment plans meet several specific requirements including:
  - ◆ a 5% per year reduction in emissions (the plan can achieve less than 5% annual reduction if it includes every feasible measure and an expeditious adoption schedule);
  - ◆ Best Available Control Technology (BACT) for new and modified sources;
  - ◆ Best Available Retrofit Control Technology (BARCT) for existing sources.
- Lewis-Presley Air Quality Management Act (SB 151) specifies additional, more stringent requirements for air quality plans in the South Coast area. It specifies that SCAQMD has responsibility to prepare the plan in conjunction with SCAG, which must prepare the portions of the plan relating to demographic projections, land use, and transportation programs.
- Air Toxics "Hot Spots" Information & Assessment Act (AB 2588) requires facilities that emit significant quantities of pollutants to prepare health risk assessments describing the impact of toxic contaminants on neighboring areas. If the SCAQMD determines that the toxic emissions create a significant risk, the public must be notified, and facilities must reduce emissions to below significant levels.
- Tanner Air Toxics Process (AB 1807) requires CARB to adopt air toxic control measures to limit emissions of toxic air contaminants from classes of industrial facilities. Local air districts are required to enforce these regulations or adopt equally stringent regulations of their own.

State law also includes the following measures:

- authorizes SCAQMD to adopt market incentives such as the emissions trading program known as RECLAIM as long as the emitters achieve reductions equivalent to command-and-control regulations;
- requires SCAQMD to establish a program to encourage voluntary participation in projects to increase the use of clean-burning fuels;



- requires SCAQMD to adopt and enforce rules to ensure no net emission increases from stationary sources.

Under the Federal Clean Air Act, the SCAQMD must develop and submit to CARB for review, followed by submittal to the EPA, an element of the State Implementation Plan (SIP) demonstrating how the region will achieve federal ambient air quality standards. In the case of ozone, the plan was required to be submitted by November 15, 1994 and for fine particulates, PM<sub>10</sub>, the plan was required to be submitted by February 8, 1997. Plans for other pollutants were submitted in earlier years. In 1997, EPA adopted new ambient air quality standards for PM<sub>2.5</sub> and replaced the 1-hour ozone standard with the new standard measured over an eight-hour period. Plans to attain these federal standards were submitted to EPA in November, 2007. The plan to attain the 24-hour PM<sub>2.5</sub> standard by 2014 was submitted in early 2013. The Federal Clean Air Act mandates that sanctions be imposed on an area if a suitable plan is not adopted. These sanctions can include loss of key federal funds and more stringent requirements on new or expanding industries. Specific requirements for SCAQMD's AQMP include stringent requirements plus Lowest Achievable Emission Rate (LAER) and offsets for major new sources. Federal law also requires an operating permit program for major stationary sources, known as Title V, which must be supported by permit fees. Also, air toxics regulations adopted by EPA pursuant to Title III must be implemented by SCAQMD.

#### Air Quality Control

Developing solutions to the air quality problem involve highly technical processes and a variety of resources and efforts to meet the legal requirements of California and federal laws.

**Monitoring:** The first step is to determine the smog problem by measuring air pollution levels. SCAQMD operates 41 monitoring stations throughout its four-county jurisdiction. These range from full-service stations that measure all criteria pollutants, as well as some toxic pollutant levels, to those which measure specific pollutants in critical areas. These measurements provide the basis of our knowledge about the nature of the air pollution problem and for planning efforts to address the problem.

**Pollution Sources:** The SCAQMD, in cooperation with CARB and SCAG, estimates the sources of emissions causing the air pollution problem. Nature itself causes a small portion of the emissions and must be considered. In general, the SCAQMD estimates stationary and natural sources of emissions, SCAG develops the information necessary to estimate population and traffic, and CARB develops the information necessary to estimate mobile and area source emissions using the SCAG traffic data. This data is then pulled together in the AQMP for use in developing the necessary control strategies.

**Air Quality Modeling:** Using air quality, meteorological and emissions models, SCAQMD planners simulate air pollution to demonstrate attainment of the air quality standards and the impacts of sources to local and regional air quality. Due to the nature of air pollution, air quality models can be very complex. Some pollutants are not emitted directly into the air but

are products of photochemical reactions in the atmosphere. For example, VOCs mix with nitrogen dioxide (NO<sub>2</sub>) and react in sunlight to form ozone; similarly, nitrogen oxide gases from tailpipes and smokestacks can be transformed into nitrates or particulates (PM<sub>2.5</sub> and PM<sub>10</sub>). The planners thus must take into account transport, land use characteristics and chemical reactions of emissions in the atmosphere to evaluate air quality impacts. Using model output, planners can look at different control scenarios to determine the best strategies to reduce air pollution for the lowest cost.

The considerable data required for these analyses is collected on an ongoing basis by SCAQMD staff. Modeling data is prepared and delivered using a geographic information system (GIS). GIS capability is used to prepare and produce data and spatial analysis maps for rulemaking, Environmental Impact Report (EIR) development and for other Offices within SCAQMD.

Planning: With emissions data and an air quality model in place, planners can develop possible control strategies and scenarios. The SCAQMD focuses most of its effort on stationary source controls. As mentioned earlier, for the most part, strategies to reduce driving are developed by SCAG, while mobile source control standards are developed by CARB.

Once a plan of emission controls to achieve federal standards is outlined, SCAQMD is required to hold multiple public meetings to present the proposed control strategies and receive public input. The SCAQMD also conducts a socioeconomic analysis of the strategies. The SCAQMD maintains an ongoing and independent advisory group of outside experts for both its air quality modeling and socioeconomic assessment methodologies.

To meet federal air quality standards, the 2007 AQMP called for significant reductions from projected baseline emissions (2015 for annual PM<sub>2.5</sub> and 2024 for eight-hour ozone). These combined reductions, while meeting federal standards, will still not result in attainment of all California air quality standards since these are more stringent than federal standards. The 2012 AQMP addresses the 24-hour PM<sub>2.5</sub> standard, demonstrating attainment by 2014 primarily through enhancements to existing episodic mandatory burn restrictions. The SCAQMD is working on improving the emissions inventory and modeling techniques to address the new federal annual PM<sub>2.5</sub> and 8-hour ozone air quality standards for the next AQMP revision, the 2015 AQMP.

Rulemaking: The regulatory process, known as rulemaking, takes the concepts of control measures outlined in the AQMP and turns them into proposed rule language. This process involves the following: extensive research on technology; site inspections of affected industries to determine feasibility; typically a year or more of public task force and workshop meetings; in-depth analyses of environmental, social and economic impacts; and thorough review with appropriate Governing Board Committees.

This extensive process of public and policymaker participation encourages consensus in development of rule requirements so that affected sources have an opportunity for input into the rules which will regulate their operations. Once the requirements are developed, the proposed rule, along with an environmental impact report and a socioeconomic report, is

presented to SCAQMD's Governing Board at a public hearing. Public testimony is presented and considered by the Board before any rule is adopted. The adopted or amended rules are then submitted to CARB and EPA for their approval. It is not uncommon that rulemaking will include follow-up implementation studies. These studies may extend one or more years past rule adoption/amendment and prior to rule implementation. Such studies are typically submitted to the Governing Board or appropriate Governing Board Committees.

**Enforcement and Education:** The SCAQMD issues permits to construct and operate equipment to companies to ensure equipment is operated in compliance with adopted rules. Follow-up inspections are made to ensure that equipment is being operated under permit conditions.

**Technical Innovation:** In the late 1980s, SCAQMD recognized that technological innovation, as well as rule enforcement, would be necessary to achieve clean air standards. Thus the Technology Advancement Office was created to look for and encourage technical innovation to reduce emissions. The California State Legislature supported this effort by providing a \$1 surcharge on every DMV registration fee paid within the SCAQMD. These funds have been matched at a ratio of approximately three-to-one with funds from the private sector to develop new technologies such as low-emission vehicles, low-NO<sub>x</sub> burners for boilers and water heaters, zero-pollution paints and solvents, fuel cells and other innovations.

An additional \$4 vehicle registration fee was authorized by the state legislature in 1990. These fees are administered through the SCAQMD with \$1.20 going to the SCAQMD for mobile source emissions reductions, \$1.60 subvended directly to cities and counties to support their air quality programs, and \$1.20 to the Mobile Source Reduction Review Committee (MSRC). The MSRC is an outside panel established by state law whose function is to make the decisions on the actual projects to be funded from that portion of the revenue.

**Public Education:** In the end, SCAQMD's efforts to clean up the air will be successful only to the extent that the public understands air quality issues and supports and participates in our cleanup effort. Thus, the SCAQMD strives to involve and inform the public through the Legislative and Public Affairs office, public meetings, publications, the press, and public service announcements.

## **Budget Synopsis**

The SCAQMD's annual budget is adopted for the General Fund for a fiscal year that runs from July 1 through June 30 of the following year. The period covered by the FY 2014-15 budget is from July 1, 2014 to June 30, 2015. The General Fund budget is the agency's operating budget and is structured by Office and account. The accounts are categorized into three Major Objects: Salaries and Employee Benefits, Services and Supplies, and Capital Outlays. The budget is supplemented with a work program which estimates staff resources and expenditures along program and activity lines. A Work Program Output Justification is completed for each work

program which identifies performance goals, measureable outputs, legal mandates, activity changes and revenue categories.

The annual budget is adopted on a modified accrual basis. All annual expenditure appropriations lapse at fiscal year end to the extent that they have not been expended or encumbered. Budgeted revenues are projected to be collected during the fiscal year. Throughout the year, budget amendments may be necessary to accommodate additional revenue streams and expenditure needs. Any amendments due to budget increases or transfers between expenditure accounts in different Major Objects must be approved by SCAQMD's Governing Board. They are submitted to the Governing Board for approval at a monthly Board meeting in the format of a board letter which documents the need for the request and the source of the additional revenue or funding for the expenditure. Budget amendments resulting from transfers between expenditure accounts within the same Major Object are approved at the Office level.

SCAQMD does not adopt annual budgets for its Special Revenue Funds. Special Revenue Funds are used to record transactions applicable to specific revenue sources that are legally restricted for specific purposes. All transactions in Special Revenue Funds are approved by the Governing Board.

#### Budget Process

The SCAQMD budget process begins by establishing Goals and Priority Objectives for the fiscal year. The proposed annual budget and multi-year forecast is then developed by the Offices, Finance, Executive Council, and the Executive Officer based on the Goals and Priority Objectives as well as guidelines issued by the Executive Officer. Each Office submits requests for staffing, select Salary accounts, Services and Supplies accounts, and the Capital Outlays account. The remaining salary and benefit costs are developed by Finance. Capital expenditure requests are reviewed by an in-house committee who prioritizes the requests. Revenue projections are developed by Finance based on input received from the appropriate Offices and incorporating any proposed changes to the fee schedules. This information is integrated into an initial budget request, including a top-level multi-year forecast, and then fine-tuned under the direction of the Executive Officer to arrive at a proposed budget. The public, business community, and other stakeholders have several opportunities to participate in the budget process, up to and at the budget adoption hearing by the Governing Board, including:

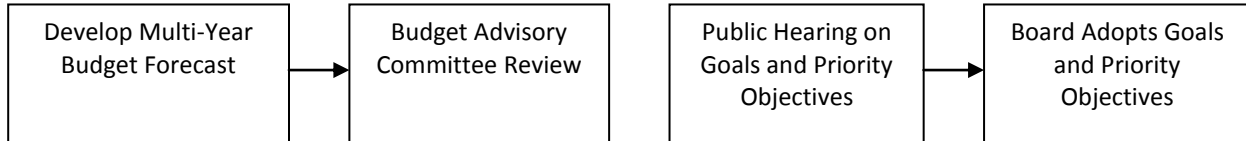
- two meetings of the Budget Advisory Committee whose members include various stakeholder representatives
- a public workshop to discuss proposed changes to the fee schedules and to discuss the proposed budget
- two public hearings, including one on the Goals and Priority Objectives and one on the proposed budget

The proposed budget is presented to SCAQMD's Governing Board at a budget workshop and to SCAQMD's Administrative Committee. Any public comment and Budget Advisory Committee

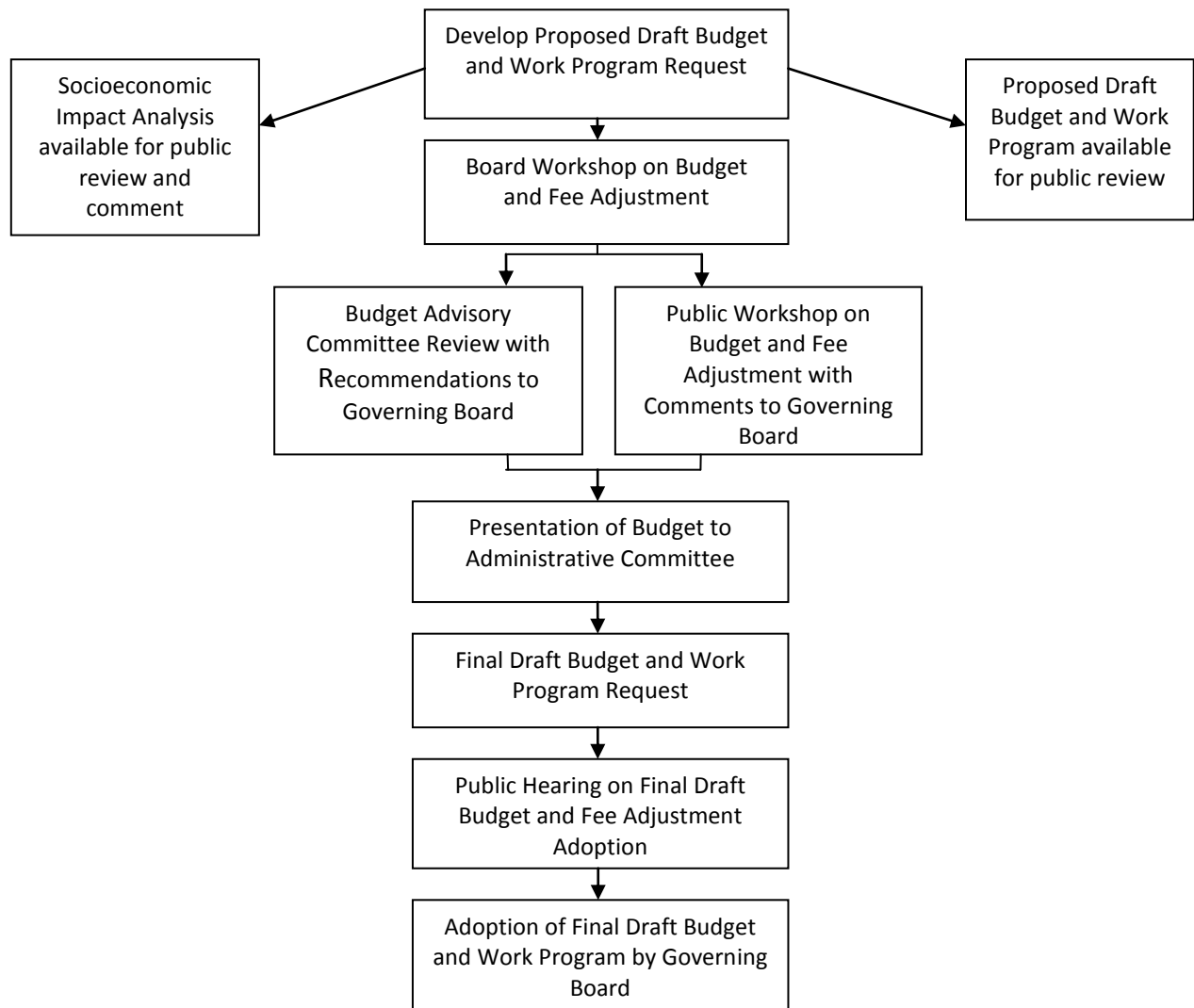
recommendations are also submitted to the Governing Board. The final proposed budget, including final fee schedules, is adopted by the Governing Board and is in place on July 1 for the start of the new fiscal year.

The following flow charts represent the major milestones and processes that take place in the development of the SCAQMD budget:

Preliminary Budget Process



Annual Budget Process



<b>Budget Timeline</b>	
Budget packages distributed to Offices	Mid November
Budget submissions received from Offices	Mid January
Budget Advisory Committee meeting	Mid January
Proposed budget available for public review	April
Public Hearing on Goals & Priority Objectives	April
Budget Advisory Committee meeting on proposed budget	April
Public Workshop on proposed budget	April
Public comments and Budget Advisory Committee recommendations submitted to Governing Board	April
Governing Board budget workshop	April
Budget presented to Administrative Committee	May
Public Hearing & Governing Board adoption of budget	June

## **Proposed Draft Budget & Work Program**

### Budget Overview

The proposed budget for FY 2014-15 is a balanced budget with expenditures and revenues of \$132.2 million. To compare against prior years, the following table shows SCAQMD amended budget and actual expenditures for FY 2012-13, adopted and amended budgets (as of March 2014) for FY 2013-14 and proposed budget for FY 2014-15.

<b>Description</b>	<b>FY 2012-13 Amended</b>	<b>FY 2012-13 Actual</b>	<b>FY 2013-14 Budget</b>	<b>FY 2013-14 Amended<sup>1</sup></b>	<b>FY 2014-15 Budget</b>
Revenue/Transfers In	\$133.7	\$135.2	\$129.2	\$134.2	\$132.2
Program Costs/Transfers Out	\$150.3	\$144.1	\$129.2	\$134.2	\$132.2

<sup>1</sup> Includes Board approved changes through March 2014

This budget reflects a decrease of approximately \$2 million in expenditures from the FY 2013-14 amended budget and a \$3 million increase in expenditures from the budget adopted for FY 2013-14. The increase in expenditures from the FY 2013-14 adopted budget can be attributed to increases in retirement, building operations, and infrastructure improvement costs. The FY 2014-15 proposed budget increases the funded staffing level by 1 position (from 797 to 798) from the FY 2013-14 adopted budget.

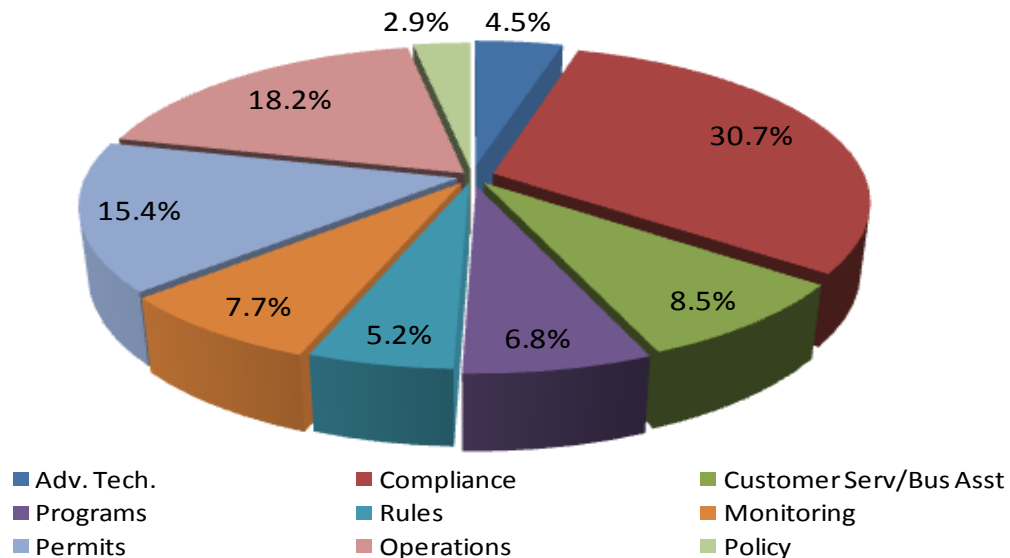
## Expenditures

### Work Program

SCAQMD expenditures are organized into nine Work Program Categories: Advance Clean Air Technology; Ensure Compliance with Clean Air Rules; Customer Service and Business Assistance; Develop Programs to Achieve Clean Air; Develop Rules to Achieve Clean Air; Monitoring Air Quality; Operational Support; Timely Review of Permits; and Policy Support. Each category consists of a number of Work Programs, or activities, which are classified according to the nature of the activity being performed.

Each Work Program corresponds to the Goals and Priority Objectives of the agency and identifies resources, performance measures/outputs and legal mandates. A complete description of each program category along with a detailed work program sort by program is included in the Work Program section. The pie chart that follows represents the budgeted expenditures by Program Category for FY 2014-15.

### Work Program Category Expenditures



The following table compares SCAQMD Work Program expenditures by category for the FY 2013-14 adopted budget and FY 2014-15 proposed budget.

<b>Work Program Categories</b>	<b>FY 2013-14 Adopted Budget</b>	<b>FY 2014 -15 Proposed Budget</b>
Advance Clean Air Technology	\$ 5,779,722	\$ 5,943,279
Ensure Compliance with Clean Air Rules	38,125,605	40,595,094
Customer Service and Business Assistance	10,537,656	11,257,410
Develop Programs to Achieve Clean Air	9,845,401	9,001,281
Develop Rules to Achieve Clean Air	6,539,563	6,937,646
Monitoring Air Quality	11,197,603	10,159,755
Operational Support	23,237,586	24,127,044
Timely Review of Permits	19,923,476	20,331,852
Policy Support	4,016,316	3,866,713
<b>Total</b>	<b>\$ 129,202,928</b>	<b>\$ 132,220,074</b>

#### Account Categories

The following table compares the FY 2013-14 adopted budget to the proposed budget for FY 2014-15 by account category. The middle column is the FY 2013-14 amended budget that includes the Board-approved mid-year adjustments through March 2014.

<b>Account Description</b>	<b>FY 2013-14 Adopted Budget</b>	<b>FY 2013-14 Amended Budget</b>	<b>FY 2014-15 Proposed Budget</b>
Salaries/Benefits	\$ 103,992,299	\$ 103,654,844	\$ 106,539,331
Insurance	1,097,400	1,121,249	1,317,400
Rents	424,780	666,506	431,234
Supplies	2,443,780	3,047,249	2,449,483
Contracts and Services	7,121,050	9,786,534	7,116,845
Maintenance	1,456,619	1,771,176	1,977,611
Travel/Auto Expense	696,502	891,039	693,502
Utilities	1,591,881	1,652,098	1,766,989
Communications	620,226	683,226	626,226
Capital Outlay	1,537,500	2,513,250	1,062,500
Other	1,004,850	1,166,,978	1,002,575
Debt Service	7,216,041	7,216,041	7,236,378
<b>Total</b>	<b>\$ 129,202,928</b>	<b>\$ 134,153,937</b>	<b>\$ 132,220,074</b>

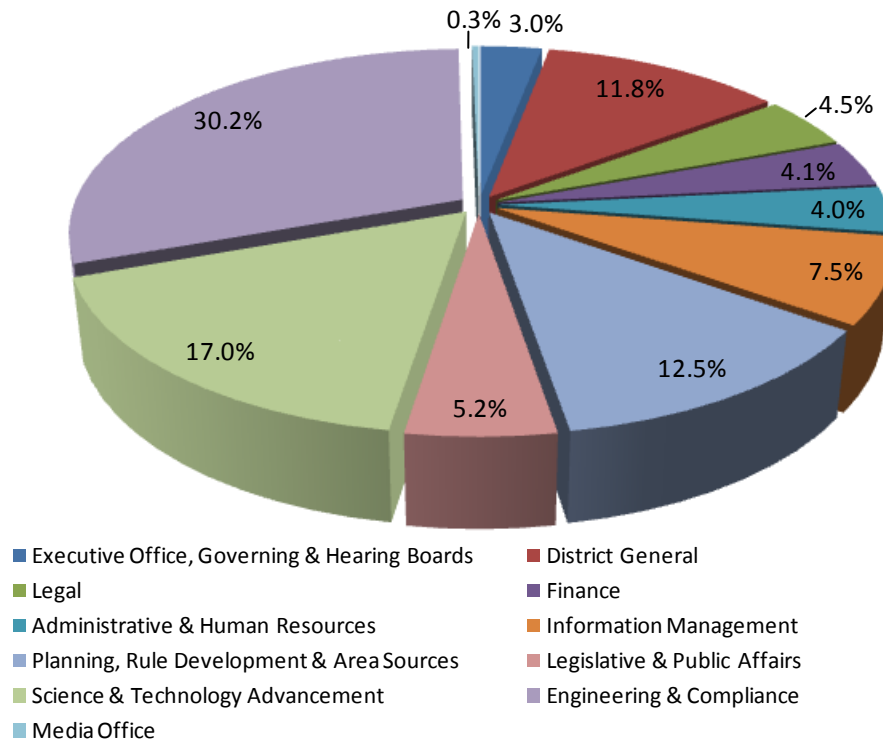
As mentioned previously, the proposed budget for FY 2014-15 represents an approximately \$2 million decrease in expenditures from the FY 2013-14 amended budget. The FY 2013-14 amended budget includes mid-year increases associated with the purchase of hydrogen sulfide analyzer systems, software development work, the MATES IV study, the purchase of a PM<sub>2.5</sub> monitor, implementation costs for the Low Emissions Hearth Product Incentive Voucher Program as well as grant related expenditures offset by revenue.



## Office Categories

The following pie chart represents budgeted expenditures by Office for FY 2014-15

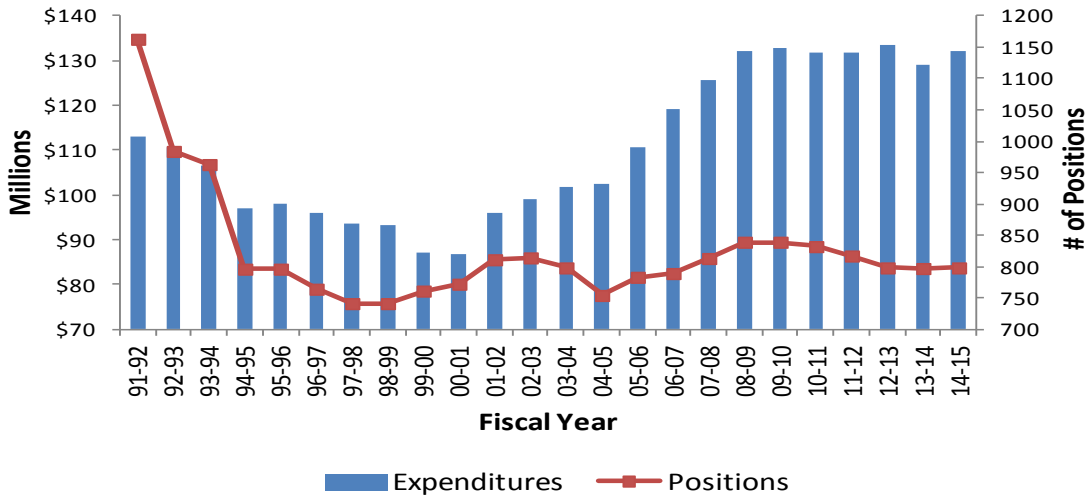
### Expenditures by Office



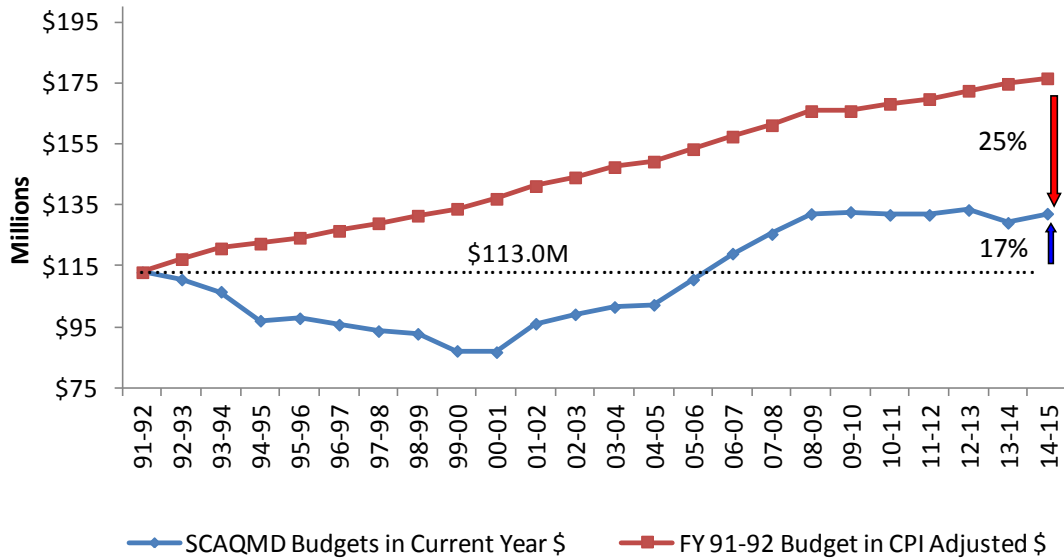
## Budget Changes

Over the years, SCAQMD has focused on streamlining many of its operations while still meeting its program commitments, despite new federal and state mandates and increased workload complexity. The focus has been on reducing expenditures in the Major Object of Services and Supplies and maximizing the efficient use of staff resources to enable select vacant positions to remain vacant, be deleted or be unfunded. This effort has resulted in reduced program costs and is reflected in the following charts showing SCAQMD's staffing and budget levels starting in FY 1991-92 when staffing was at 1,163 FTEs. The proposed budget for FY 2014-15 reflects a staffing level of 798 FTEs. This level is 31% (365 FTEs) below the FY 1991-92 level. The FY 2014-15 proposed budget when compared to the FY 1991-92 adopted budget of \$113M is only 17% higher. After adjusting the FY 1991-92 adopted budget for CPI over the last 23 years, the FY 14-15 proposal is 25% lower.

## Changes in Expenditure Budget



## Inflation Impact on SCAQMD Budgets FY 1991-92 through FY 14-15

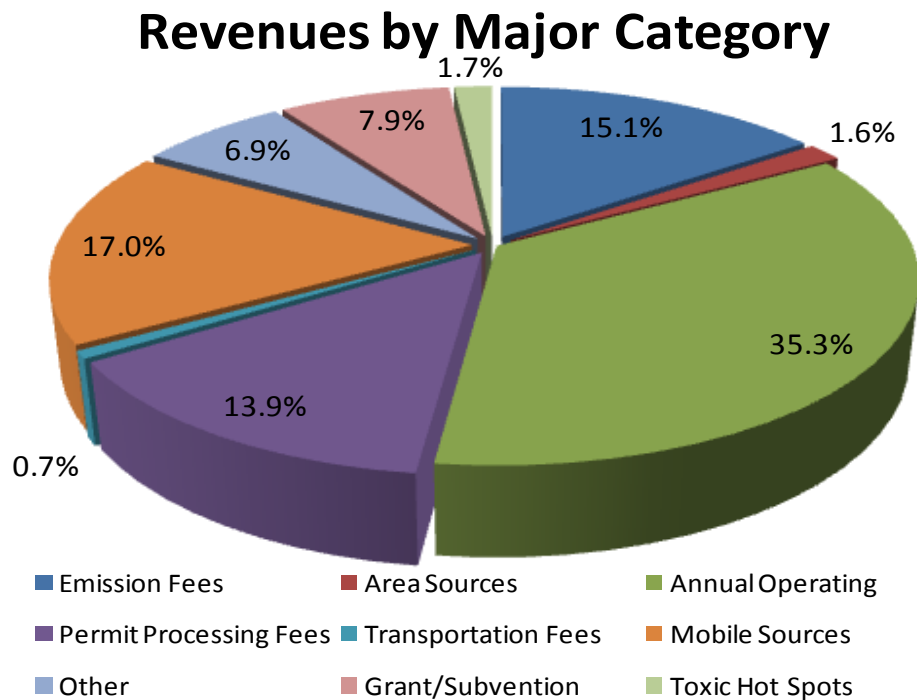


CPI adjustment based on California Consumer Price Index for preceding CY

## Revenues

### Revenue Categories

Each year, in order to meet its financial needs, the SCAQMD Governing Board adopts a budget supported by a system of annual operating and emission fees, processing fees, toxic “hot spots” fees, area sources fees, and transportation plan fees which are estimated to generate approximately \$90 million or about 68% of SCAQMD revenues. Other sources, which include penalties/settlements, interest, and miscellaneous income, generate approximately 7% of total revenues. The remaining 25% of revenue are projected to be received in the form of federal grants, California Air Resource Board (CARB) subvention, and California Clean Air Act motor vehicle fees. Beginning with its Fiscal Year 1978-79 Budget, the SCAQMD became a fee supported agency no longer receiving financial support from property taxes. The revenue budget includes a proposed CPI fee adjustment of 1.6% plus an additional fee adjustment of 3% in FY 2014-15 and an additional 3% in FY 2015-16 for Annual Operating Permit Renewal and Permit Processing Fees to better align program costs with revenues.



The following table compares the FY 2013-14 adopted revenues to the proposed revenues for FY 2014-15. The middle column is the adjusted revenues for FY 2013-14 that include Board-approved mid-year changes through March 2014.

<b>Revenue Description</b>	<b>FY 2013-14 Adopted Budget</b>	<b>FY 2013-14 Amended Budget</b>	<b>FY 2014-15 Proposed Budget</b>
Annual Operating Emission Fees	\$ 20,381,603	\$ 20,381,603	\$ 19,907,239
Annual Operating Permit Renewal Fees	43,077,692	43,077,692	45,519,161
Permit Processing Fees	18,199,082	18,199,082	18,340,435
Portable Equip Registration Prgm	745,780	745,780	1,184,169
Area Sources	2,040,720	2,040,720	2,133,600
Grant/Subvention	10,515,776	13,738,771	10,429,152
Mobile Sources	22,469,606	24,027,106	22,452,611
Transportation Program	954,037	954,037	894,080
Toxic Hot Spots	2,151,776	2,151,776	2,291,515
Other <sup>1</sup>	8,666,856	8,837,370	9,068,112
<b>Total</b>	<b>\$ 129,202,928</b>	<b>\$ 134,153,937</b>	<b>\$ 132,220,074</b>
<sup>1</sup> Includes revenues from Lease Income, Source Testing, Hearing Board, Penalties/Settlements, Interest, Subscriptions, Transfers In, and Other.			

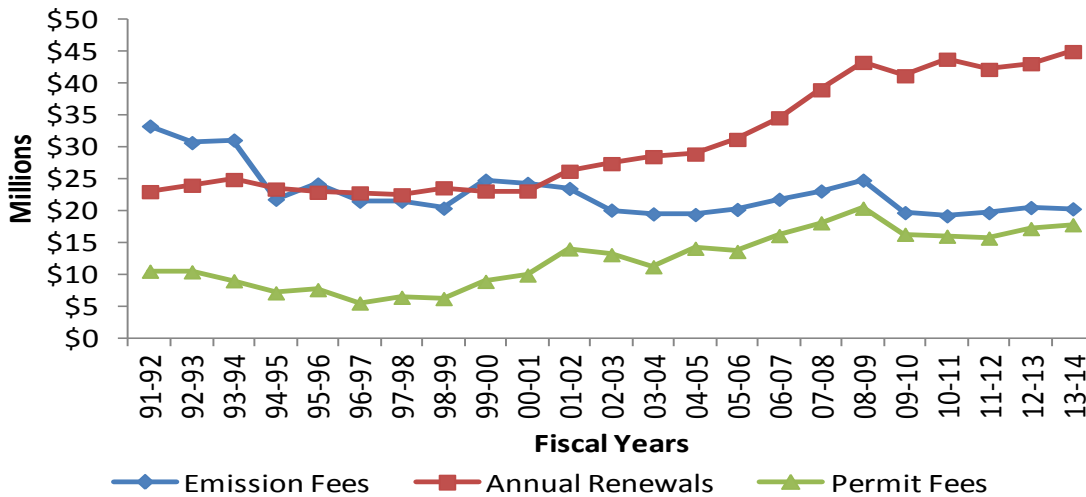
Over the past two decades, total permit fees (including permit processing, annual operating permit, and annual emissions based fees) collected from stationary sources has increased by about 24% from \$66.8 million in FY 1991-92 to \$83.1 million (estimated) in FY 2013-14. When adjusted for inflation however, stationary source revenues have decreased by 20% over this same period.

Mobile source revenues that are subvended to the SCAQMD by the Department of Motor Vehicles (DMV) are projected to stay flat from the FY 2013-14 budgeted amounts based on vehicle registration information from the DMV and recent revenue received. In addition, this category reflects incentive programs (Clean Fuels, Carl Moyer, and Prop 1B) whose contract activities and revenues are recorded in special revenue funds outside the General Fund. These incentive program costs are reimbursed to the General Fund from the various special revenue funds (subject to any administrative caps) and are reflected in the FY 2013-14 Amended Budget under the Mobile Source revenue category.

Revenues from the federal government, (Environmental Protection Agency, Department of Homeland Security, and Department of Energy) are projected to stay flat in FY 2014-15 from FY 2013-14 budgeted levels reflecting the anticipated amount of federal dollars from other one-

time and on-going grants in support of air quality efforts. State Subvention funding is expected to remain at the current level (reduced approximately 33% from FY 2001-02) for FY 2014-15. The following graph tracks actual stationary source revenues by type of fee from FY 1991-92 (when CPI limits were placed on SCAQMD fee authority) to estimated revenues for FY 2013-14.

## Stationary Source Fees



## Debt Structure

### Pension Obligation Bonds

These bonds were issued jointly by the County of San Bernardino and the SCAQMD in December 1995. In June 2004 the SCAQMD went out separately and issued pension obligation bonds to refinance its respective obligation to the San Bernardino County Employee's Retirement Association for certain amounts arising as a result of retirement benefits accruing to members of the Association.

The annual payment requirements under these bonds are as follows:

Year Ending June 30	Principal	Interest	Total
2015	\$ 3,159,384	\$ 4,031,994	\$ 7,191,378
2016	3,235,598	3,954,554	7,190,152
2017-2018	6,763,808	7,620,198	14,384,006
2019-2023	18,867,074	14,029,476	32,896,550
2024	4,010,000	118,897	4,128,897
<b>Total</b>	<b>\$ 36,035,864</b>	<b>\$ 29,755,119</b>	<b>\$ 65,790,983</b>

## Fund Balance

The SCAQMD is projecting an Unreserved Undesignated Fund Balance for June 30, 2015 of \$23,103,647 in addition to the following Reserved and Unreserved Designated Fund Balances for FY 2014-15.

Classification	Reserve/Unreserved Designation	Amount
Committed	Reserve for Encumbrances	\$ 6,947,000
Nonspendable	Reserve for Inventory of Supplies	80,000
	Unreserved Designations:	
Assigned	For Enhanced Compliance Activities	883,018
Assigned	For Litigation/Enforcement	1,600,000
Assigned	For Other Post Employment Benefit (OPEB) Obligations	2,952,496
Assigned	For Permit Streamlining	288,385
Assigned	For Self-Insurance	2,000,000
Assigned	For Unemployment Claims	80,000
Total Reserves & Unreserved Designations		\$ 14,830,899

Reserves represent portions of the fund balance set aside for future use and are therefore not available for appropriation. These reserves are made-up of encumbrances which represent the estimated amount of current and prior years' unperformed purchase orders and contract commitments at year-end; and inventory which represents the value at cost of office, computer, cleaning and laboratory supplies on hand at year-end.

Designations in the fund balance indicate plans for use of financial resources in future years. The SCAQMD is self-insured for general liability, workers' compensation, automobile liability, premises liability, and unemployment. The Designation for Litigation/Enforcement provides funding for outside legal support. The Designation for Permit Streamlining was established to fund program enhancements to increase permitting efficiency and customer service. The Designation for Enhanced Compliance Activities provides funding for inspection/compliance efforts. The Designation for Other Post Employment Benefit Obligations (OPEB) provides funding to cover the current actuarial valuation of the inherited OPEB obligation for long-term healthcare costs from the County of Los Angeles resulting from the consolidation of the four county Air Pollution Control Districts (APCDs).

## Long-Term Projection

The SCAQMD continues to face a number of challenges in the upcoming years, including higher operating costs due to the market losses incurred by the retirement system and the need for major infrastructure improvement projects for an aging headquarters building, streamlining operations while meeting program commitments and uncertainties in the business environment as the economy overcomes the economic downturn of the past several years. A primary uncertainty is the degree of fluctuations the financial markets will take over the next few years which will determine the performance of our retirement investments and other investments. Another uncertainty is any legislative action that may impact the level of federal and state funding from grant awards and subvention funds. Cost recovery within the constraints of Prop 26 is a third uncertainty as SCAQMD strives to balance program operating expenses with revenues collected from fees.

In order to face these challenges, SCAQMD has a five year plan in place that provides for critical infrastructure improvement projects, maintains a stable vacancy rate in order to maximize cost efficiency, and sets the percentage of unreserved fund balance to revenue above the Governing Board mandate of 20%. In addition, the Governing Board approved a transfer of \$5 million from the General Fund Undesignated Fund Balance to the Debt Service Fund to provide funding for the debt service payments related to outstanding Pension Obligation Bonds over Fiscal Years 2015-16 through 2019-20.

The following chart, outlining SCAQMD’s financial projection over this time period, shows the agency’s commitment to meet these challenges and uncertainties while protecting the health of the residents within the SCAQMD boundaries and remaining sensitive to business.

<b>Fiscal 2013-14 Estimate and Five Year Projection</b>						
<b>(\$ in Millions)</b>						
	<b>FY 13-14 Estimate</b>	<b>FY 14-15 Proposed</b>	<b>FY 15-16 Projected</b>	<b>FY 16-17 Projected</b>	<b>FY 17-18 Projected</b>	<b>FY 18-19 Projected</b>
STAFFING	797	798	797	797	797	797
REVENUES*	\$136.2	\$132.2	\$133.7	\$135.2	\$135.4	\$137.5
EXPENDITURES/TRANSFERS OUT	\$137.2	\$132.2	\$133.7	\$135.2	\$135.4	\$136.3
Change in Fund Balance	(\$1.0)	\$0.0	\$0.0	\$0.0	\$0.0	\$1.2
UNRESERVED FUND BALANCE (at year-end)	\$31.0	\$31.0	\$31.0	\$31.0	\$31.0	\$32.2
% of REVENUE	23%	23%	23%	23%	23%	23%
*Includes projected CPI fee increase of 1.6% for FY 2014-15, 2.1% for FY 2015-16, and 2.2% for FY 2016-17, FY 2017-18 and FY 2018-19. In FY 2014-15 & FY 2015-16 an additional 3% increase to Permit and Annual Operating revenue is being proposed.						

**SUMMARY OF FISCAL YEAR 2014-15 DRAFT BUDGET**

	<b>FY 2013-14 Adopted Budget</b>	<b>FY 2013-14 Amended Budget <sup>1</sup></b>	<b>FY 2013-14 Estimate <sup>2</sup></b>	<b>FY 2014-15 Proposed</b>
<b>Funding Sources</b>				
Revenue	\$129,202,928	\$ 134,318,183	\$ 136,192,085	\$ 131,244,456
Transfers-In*	0	0	0	975,618
Use of Designations	0	0	0	0
Use of Undesignated Fund Balance	0	0	0	0
Total Financing Sources	\$129,202,928	\$ 134,318,183	\$ 136,192,085	\$ 132,220,074
<b>Funding Uses</b>				
Salaries & Employee Benefits	\$103,992,299	\$ 103,654,844	\$ 101,663,335	\$ 106,539,331
Services & Supplies	23,673,129	27,985,843	26,030,548	24,618,243
Capital Outlays	1,537,500	2,513,250	2,496,567	1,062,500
Transfers-Out			2,055,000	
Total Funding Uses	\$129,202,928	\$ 134,153,937	\$ 132,245,450	\$ 132,220,074

\*Effective in FY 2014-15, reimbursements to the General Fund from special revenue funds without a recurring source of revenue will be budgeted as "Transfers-in."

<b>Fund Balances -Reserves &amp; Unreserved Designations</b>	<b>Classification</b>	<b>Projected June 30, 2014</b>	<b>Projected June 30, 2015</b>
Reserve for Encumbrances	Committed	\$ 6,857,000	\$ 6,947,000
Reserve for Inventory of Supplies	Nonspendable	80,000	80,000
Designated for Budget Stabilization	Assigned	1,481,502	-
Designated for Enhanced Compliance Activities	Assigned	883,018	883,018
Designated for Facilities Refurbishing	Assigned	578,289	-
Designated for Litigation/Enforcement	Assigned	1,600,000	1,600,000
Designated for Other Post Employment Benefit (OPEB) Obligations	Assigned	2,952,496	2,952,496
Designated for Permit Streamlining	Assigned	288,385	288,385
Designated for Retirement Actuarial Increases	Assigned	3,812,463	-
Designated for Self-Insurance	Assigned	2,000,000	2,000,000
Designated for Unemployment Claims	Assigned	80,000	80,000
Total Reserves & Unreserved Designations		\$ 20,613,153	\$ 14,830,899
Undesignated Fund Balance	Unassigned	\$ 22,231,393	\$ 22,128,029
<b>Total Fund Balances</b>		<b>\$ 42,844,546</b>	<b>\$ 36,958,928</b>

1. The FY 2013-14 Amended Budget includes mid-year changes through March 2014.

2. Includes estimated encumbrances of \$4,232,000 which will be applicable to the fiscal year ending June 30, 2014.



<b>ANALYSIS OF PROJECTED JUNE 30, 2014 FUND BALANCE</b>	
Fund Balances as of June 30, 2013	
Reserves	\$ 6,624,255
Designated	12,194,651
Undesignated	19,774,006
Total Fund Balances, June 30, 2013:	\$ 38,592,912
Add Excess Fiscal Year 2013-14 Revenues over Expenditures:	
Revenues	\$ 136,192,085
Expenditures <sup>1</sup>	125,958,450
Sub-Total:	\$ 10,233,634
Deduct Decrease in Encumbrances Open on June 30, 2013:	(3,927,000)
Deduct Projected FY 2013-14 Transfers Out to Other Funds	(2,055,000)
Total Projected Fund Balances, June 30, 2014:	\$ 42,844,546
Fund Balances (Projected) at June 30, 2014:	
Reserve for Encumbrances	\$ 6,857,000
Reserve for Inventory of Supplies	80,000
Designated for Budget Stabilization	1,481,502
Designated for Enhanced Compliance Activities	883,018
Designated for Facilities Refurbishing	578,289
Designated for Litigation/Enforcement	1,600,000
Designated for Other Post Employment Benefit (OPEB) Obligations	2,952,496
Designated for Permit Streamlining	288,385
Designated for Retirement Actuarial Increases	3,812,463
Designated for Self-Insurance	2,000,000
Designated for Unemployment Claims	80,000
Undesignated	22,231,393
Total Projected Fund Balances, June 30, 2014	\$ 42,844,546
Note: This analysis summarizes the estimated amount of funds that will be carried into FY 2014-15.	
1. Expenditures do not include estimated \$4,232,000 encumbrances for the Fiscal Year ended June 30, 2014	

SCHEDULE OF AVAILABLE FINANCING AND PROPOSED FISCAL YEAR 2014-15 RESERVES AND DESIGNATIONS		
Fund Balances	\$	42,844,546
Emission Fees		19,907,239
Annual Renewal Fees		45,519,161
Permit Processing Fees		18,340,435
Portable Equipment Registration Program		1,184,169
State Subvention		3,900,000
Federal Grant		6,529,152
Interest Revenue		529,000
Lease Revenue		140,895
Source Test/Analysis Fees		741,680
Hearing Board Fees		279,400
Penalties and Settlements		5,000,000
Area Sources		2,133,600
Transportation Programs		894,080
Mobile Sources/Clean Fuels		22,452,611
Air Toxics "Hot Spots"		2,291,515
Other Revenues/Transfers-In		2,377,136
Total Funds		\$ 175,064,621
Less Proposed Fiscal Year 2014-15 Reserves and Designations:		
Reserve for Encumbrances	\$	6,947,000
Reserve for Inventory of Supplies		80,000
Designated for Enhanced Compliance Activities		883,018
Designated for Litigation/Enforcement		1,600,000
Designated for Other Post Employment Benefit (OPEB) Obligations		2,952,496
Designated for Permit Streamlining		288,385
Designated for Self-Insurance		2,000,000
Designated for Unemployment Claims		80,000
Total Proposed Reserves and Designations:		\$ 14,830,899
Available Financing:		\$ 160,233,722

ANALYSIS OF PROJECTED JUNE 30, 2015 FUND BALANCE	
Fund Balances as of June 30, 2014	
Reserves	\$ 6,937,000
Designated	13,676,153
Undesignated	22,231,393
Total Fund Balances, June 30, 2014:	\$ 42,844,546
Excess Fiscal Year 2014-15 Revenues over Expenditures:	
Revenues/Transfers-In	\$ 131,244,456
Expenditures <sup>1</sup>	(128,020,074)
Sub-Total:	\$ 3,224,382
Decrease in Encumbrances Open on July 1, 2014:	(4,110,000)
Transfer Undesignated Fund Balance to the Debt Service Fund on July 1, 2014	(5,000,000)
Total Projected Fund Balances, June 30, 2015:	\$ 36,958,928
Fund Balances (Projected) Fiscal Year 2014-15:	
Reserve for Encumbrances	\$ 6,947,000
Reserve for Inventory of Supplies	80,000
Designated for Enhanced Compliance Activities	883,018
Designated for Litigation/Enforcement	1,600,000
Designated for Other Post Employment Benefit (OPEB) Obligations	2,952,496
Designated for Permit Streamlining	288,385
Designated for Self-Insurance	2,000,000
Designated for Unemployment Claims	80,000
Undesignated	22,128,029
Total Projected Fund Balances, June 30, 2015	\$ 36,958,928
1. Expenditures do not include estimated \$4,200,000 encumbrances for the Fiscal Year ended June 30, 2015	

Revenue Comparison				
Revenue Account	FY 2012-13 Actual *	FY 2013-14 Budget	FY 2013-14 Estimate	FY 2014-15 Proposed
Emission Fees	\$ 20,540,391	\$ 20,381,603	\$ 20,318,598	\$ 19,907,239
Annual renewal Fees	41,935,475	43,077,692	43,757,979	45,519,161
Permit Processing Fees	17,210,640	18,199,082	17,780,987	18,340,435
Portable Equipment Registration Program	1,120,745	745,780	1,281,711	1,184,169
State Subvention	3,948,646	3,900,000	3,949,439	3,900,000
State Grant	3,210,130	-	-	-
Federal Grant	7,694,890	6,615,776	8,117,410	6,529,152
Interest Revenue	343,206	529,000	482,000	529,000
Lease Revenue	140,739	140,152	122,717	140,895
Source Test/Analysis Fees	790,824	709,150	605,745	741,680
Hearing Board Fees	277,544	217,337	336,213	279,400
Penalties and Settlements	11,562,529	5,000,000	9,159,579	5,000,000
Area Sources	2,132,263	2,040,720	2,040,720	2,133,600
Transportation Programs	927,824	954,037	1,043,496	894,080
Mobile Sources/Clean Fuels	19,397,116	22,469,606	22,469,606	22,452,611
Air Toxics "Hot Spots"	1,431,740	2,151,776	2,151,776	2,291,515
Other Revenues/Transfers-In	2,484,868	2,071,217	2,574,109	2,377,136
Total Revenue	\$ 135,149,569	\$ 129,202,928	\$ 136,192,085	\$ 132,220,074

## EXPLANATION OF REVENUE SOURCES

### **Annual Operating Emissions Fees**

This program was initiated in January 1978. All permitted facilities pay a flat fee for up to four tons of emissions. In addition to the flat fee, facilities that emit four tons or greater (from both permitted and unpermitted equipment) of any organic gases, specific organics, nitrogen oxides, sulfur oxides, or particulate matter, or 100 tons per year or greater of carbon monoxide, also pay fees based on the facility's total emissions. These facilities pay for emissions from permitted equipment as well as emissions from unpermitted equipment and processes which are regulated, but for which permits are not required, such as solvent use. In addition, a fee-per-pound is assessed on the following toxic air contaminants and ozone depleters: ammonia; asbestos; benzene; cadmium; carbon tetrachloride; chlorinated dioxins and dibenzofurans; ethylene dibromide; ethylene dichloride; ethylene oxide; formaldehyde; hexavalent chromium; methylene chloride; nickel; perchloroethylene; 1,3-butadiene; inorganic arsenic; beryllium; polynuclear aromatic hydrocarbons (PAHs); vinyl chloride; lead; 1,4-dioxane; trichloroethylene; chlorofluorocarbons (CFCs); and 1,1,1-trichloroethane.

Along with annual operating permit renewal fees, emissions fees are intended to recover the costs of SCAQMD's compliance, planning, rule making, monitoring, testing, source education, public outreach, civil enforcement, and stationary and area source research projects. Historically, compliance-related costs for permitted sources are assigned to annual operating permit renewal fees, while planning and rulemaking are assigned to annual operating emissions-based fees.

*FY 2014-15 Proposed Budget:* The non-RECLAIM emissions is based on Annual Emission Report (AER) data for Calendar Year 2012. The RECLAIM NO<sub>x</sub> and So<sub>x</sub> emission projection is based on holdings according to the RECLAIM Trading Credit (RTC) listing. The flat emission fees are projected based on the number of active facilities with at least one permit. A 1.6% CPI increase is included.

### **Annual Operating Permit Renewal**

The Lewis-Presley Clean Air Act requires the SCAQMD to have an annual permit renewal program. The SCAQMD initiated this program in February 1977. This program requires that all active permits be renewed on an annual basis upon payment of annual renewal fees. The annual renewal rates are established in SCAQMD Rule 301 and are based on the type of equipment, which is related to the complexity of related compliance activity. For basic equipment (not control equipment), the operating fee schedule also corresponds to some extent to the emission potential of the equipment. Along with annual operating emissions fees, annual operating permit renewal fees are intended to recover the costs of programs such as SCAQMD's compliance program, planning, rule making, monitoring, testing, source education, public outreach, civil enforcement, and stationary and area source research projects. Historically, compliance-related costs for permitted sources are assigned to annual operating permit renewal fees, while planning and rulemaking are assigned to annual operating emissions-based fees.

*FY 2014-15 Proposed Budget:* The projection is based on an estimated number of permits at the various equipment fee schedules. A 1.6% CPI increase is included as well as an additional 3% fee increase to more fully recover costs.

### **Permit Processing Fees**

Permits are the primary vehicles the SCAQMD uses to ensure that equipment in SCAQMD's jurisdictional boundaries are in compliance with SCAQMD Rules and Regulations. Permit processing fees support the permit processing program and the fee rate schedule for the different equipment categories are based on the average time it takes to process and issue a permit. Each applicant, at the time of filing, pays a permit processing fee which partially recovers the costs for normal evaluation of the application and issuance of the permit to construct and permit modifications. This

## EXPLANATION OF REVENUE SOURCES

revenue category also includes fees charged to partially recover the costs of evaluation of plans, including but not limited to Rule 403 dust control plans, Rule 1118 flare monitoring plans, and Rule 1113 architectural coating plans. The permit processing fees also cover the administrative cost to process Change of Operator applications, applications for Emission Reduction Credits, and Administrative Changes to permits.

*FY 2014-15 Proposed Budget:* The projection is based on the anticipated number and type of applications that will be processed. A 1.6% CPI increase is included as well as an additional 3% fee increase to more fully recover costs.

### **Portable Equipment Registration Program (PERP)**

The California Air Resources Board (CARB) provides revenues to local air districts to offset the costs of inspecting equipment registered under CARB's Portable Equipment Registration Program (PERP). Fees for inspection of PERP-registered engines by SCAQMD field staff are collected by CARB at the time of registration and passed through to SCAQMD on an annual basis. Fees for inspection of all other PERP-registered equipment are billed at an hourly rate set forth in SCAQMD Rule 301, but determined by CARB and collected by SCAQMD at the time the inspection is conducted.

*FY 2014-15 Proposed Budget:* The revenue projection is based on the anticipated number of inspections.

### **Area Sources**

Emissions fees from architectural coatings revenue covers architectural coatings fair share of emissions supported programs. Quantity-based fees on architectural coatings are also assessed. Rule 314 covers emission-based fees and quantity-based fees. Beginning in FY 2008-09, annual assessments of architectural coatings, based on quantity (gallons) distributed or sold for use in SCAQMD's jurisdiction, are included in revenue projections; this revenue allows SCAQMD to recover the costs of staff working on compliance, laboratory support, architectural coatings emissions data, rule development, and architectural coatings revenue collection.

*FY 2014-15 Proposed Budget:* Emissions have remained relatively flat even though the sales volume is starting to recover. A 1.6% CPI increase is included.

### **California Air Resources Board Subvention**

The State appropriates monies each year to subvene to local air quality districts to support an active air quality program. The CARB subvention monies are not limited to specific programs, but are available for the general support of air quality-related programs.

*FY 2014-15 Proposed Budget:* In FY 2002-03 the State reduced SCAQMD's subvention to \$4 million, a cut of approximately \$2 million from the FY 2001-02 level. The current amount of \$3.9 million is included in FY 2014-15.

### **Federal Grants/Other Federal Revenue**

SCAQMD receives funding EPA Section 103 and 105 grants to help support the SCAQMD in its administration of active air quality control and monitoring programs where the SCAQMD is required to perform specific agreed-upon activities. Other EPA and Department of Energy (DOE) grants provide funding for various air pollution reduction projects. A Department of Homeland Security (DHS) grant funds a special particulate monitoring program. When stipulated in the grant agreement, the General Fund is reimbursed for administrative costs associated with grant-funded projects. Most

## EXPLANATION OF REVENUE SOURCES

federal grants are limited to specific purposes but EPA Section 105 grants are available for the general support of air quality-related programs.

*FY 2014-15 Proposed Budget:* The revenue projection is based on funding levels from current federal grants.

### **Interest**

Revenue from this source is the result of investing the SCAQMD's cash balances. However, interest attributable to special revenue funds, such as the Clean Fuels Program Fund, remains with those funds.

*FY 2014-15 Proposed Budget:* A projected rate of return of 0.56 percent is included in the proposed budget.

### **Leases**

Revenue in this category is a result of leasing a portion of SCAQMD's Headquarters facility.

*FY 2014-15 Proposed Budget:* The projection is based on the terms of any negotiated lease payments SCAQMD expects to receive.

### **Source Test/Sample Analysis Fees**

Revenue in this category includes fees for source tests, test protocol and report reviews, continuous emissions monitoring systems (CEMS) evaluations and certifications, laboratory approval program (LAP) evaluations, and laboratory sample analyses. The revenue recovers a portion of the costs of performing tests, technical evaluations, and laboratory analyses.

*FY 2014-15 Proposed Budget:* A 1.6% CPI increase is included.

### **Hearing Board**

The revenue from this source results from filing of petitions for variances and appeals, excess emissions fees, and daily appearance fees. The revenue recovers a portion of the costs associated with these activities. Petitions for Orders for Abatement are filed by the District; therefore, there are no Hearing Board fees/revenue related to Order for Abatement proceedings before the Hearing Board. Thirty percent (30%) of Hearing Board cases for FY 2012-13 were Orders for Abatement.

*FY 2014-15 Proposed Budget:* This estimate is based on the number of hearings held/cases heard. A 1.6% CPI increase is included.

### **Penalties/Settlements**

The revenue from this source is derived from cash settlements for violations of permit conditions, SCAQMD Rules, or state law. This revenue source is available for the general support of the SCAQMD's programs.

*FY 2014-15 Proposed Budget:* It is anticipated that revenue in this category will be approximately \$5.0 million.

## EXPLANATION OF REVENUE SOURCES

### **Mobile Sources**

Mobile Sources revenue is composed of five components: AB2766 revenue and administrative/program cost reimbursements from the Carl Moyer, Proposition 1B, and MSRC programs.

#### **AB2766:**

Section 9250.17 of the Vehicle Code gives the Department of Motor Vehicles (DMV) authority to collect and forward to the SCAQMD four dollars for every vehicle registered in SCAQMD's jurisdictional boundaries. Thirty percent of the money (\$1.20 per vehicle) collected is recognized in SCAQMD's General Fund as mobile sources revenue and is used for programs to reduce air pollution from motor vehicles and to carry out related planning, monitoring, enforcement, and technical studies authorized by, or necessary to implement, the California Clean Air Act of 1988 or the Air Quality Management Plan. A proportionate share of programs that are not associated with any individual type of source (e.g. air quality monitoring) is supported by these revenues.

The remaining monies are used to pay for projects to reduce air pollution from mobile vehicles: 40% (\$1.60 per vehicle) to the Air Quality Improvement Fund to be passed through to local governments and 30% (\$1.20 per vehicle) to the Mobile Sources Air Pollution Reduction Fund (MSRC) to pay for projects recommended by the MSRC and approved by the Governing Board.

#### **Carl Moyer Program:**

The Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program) provides funding from the state of California for the incremental cost of cleaner heavy-duty vehicles, off-road vehicles and equipment, marine, and locomotive engines. The General Fund receives reimbursements from the Carl Moyer Fund for staff time and other program implementation/administration costs.

#### **Proposition 1B:**

The Proposition 1B Program is a \$1 billion bond program approved by California voters in November 2006. This incentive program is designed to reduce diesel emissions and public health risks from goods movement activities along California's trade corridors. The General Fund receives reimbursements from the Proposition 1B Funds for staff time and other program implementation/administration costs.

#### **MSRC:**

Revenue posted to the General Fund reflects the reimbursement from the Mobile Source Air Pollution Reduction Fund for the cost of staff support provided to the MSRC in administering a mobile source program. These administrative costs are limited by State law and the MSRC adopts a budget for staff support each year.

*FY 2014-15 Proposed Budget:* Revenue projections are based on vehicle registration data from the DMV, recent revenue received, and anticipated reimbursable staff costs to implement the Carl Moyer Prop 1B, and MSRC programs.

### **Clean Fuels**

Section 9250.11 of the Vehicle Code gives the DMV authority to collect and forward to SCAQMD money for clean fuels technology advancement programs and transportation control measures related to stationary sources, according to the plan approved pursuant to Health & Safety Code section 40448.5. One dollar is collected by the DMV for every vehicle registered in SCAQMD's jurisdictional boundaries, forwarded to SCAQMD, and deposited in a revenue account in the Clean Fuels Program Fund.



## EXPLANATION OF REVENUE SOURCES

Clean fuels fees from stationary sources are recorded in a separate revenue account within the Clean Fuels Program Fund. Fees are collected from sources that emit 250 tons or more per year of Nitrogen Oxides (NO<sub>x</sub>), Sulfur Oxides (SO<sub>x</sub>), Reactive Organic Compounds (ROC), or Particulate Matter (PM). The fees collected are used to develop and implement activities that promote the use of clean-burning fuels. These activities include assessing the cost effectiveness of emission reductions associated with clean fuels development and use of new clean fuels technologies, and other clean fuels related projects.

*FY 2014-15 Proposed Budget:* The General Fund receives reimbursements from the Clean Fuels Program Fund for staff time and other program implementation/administration costs necessary to implement the Clean Fuels Program.

### **Transportation Programs**

In accordance with federal and state Clean Air Act requirements, SCAQMD's Rule 2202 provides employers with a menu of options to reduce mobile source emissions generated from employee commutes or alternatively, implement mobile source emission reduction programs. The options are to offset mobile source emissions generated from the employee commutes, and options to meet a worksite-specific emission reduction target for the subsequent year. Employers with 250 or more employees at a worksite are subject to Rule 2202 and are required to submit an annual registration. The revenue from this category is used to recover a portion of the costs associated with filing, processing, reviewing, and auditing the registrations.

*FY 2014-15 Proposed Budget:* The projection is based on the anticipated number of registrations. A 1.6% CPI increase is included.

### **Toxic "Hot Spots"**

Health and Safety Code Section 44380 requires the SCAQMD to assess and collect fees from facilities that emit toxic compounds. Fees collected are used to recover state and SCAQMD costs to collect and analyze data regarding air toxics and their effect on the public. Costs recovered include a portion of the administrative, outreach, plan processing, and enforcement costs to implement this program.

*FY 2014-15 Proposed Budget:* The revenue projection is based on estimated General Fund reimbursements from the Air Toxics Fund for staff time and other program and administrative expenditures.

### **Other**

Miscellaneous revenue includes revenue attributable to professional services the SCAQMD renders to other agencies, reimbursements from special revenue funds (non-mobile source), vanpool revenue, fees from fitness center memberships, Public Records Act requests, and staff serving as witnesses.

*FY 2014-15 Proposed Budget:* The revenue projections are based on historical trend information.

SCAQMD						
Line Item Expenditure						
Major Object / Account # / Account Description	FY 2012-13 Actuals *	FY 2013-14 Adopted Budget	FY 2013-14 Amended Budget	FY 2013-14 Estimate **	FY 2014-15 Proposed	
<b>Salary &amp; Employee Benefits</b>						
51000-52000	Salaries	\$ 69,407,933	\$ 69,380,911	\$ 69,043,456	\$ 68,117,561	\$ 70,157,184
53000-55000	Employee Benefits	32,881,955	34,611,388	34,611,388	33,545,773	36,382,147
Sub-total Salary & Employee Benefits		\$ 102,289,888	\$ 103,992,299	\$ 103,654,844	\$ 101,663,335	\$ 106,539,331
<b>Services &amp; Supplies</b>						
67250	Insurance	\$ 1,146,926	\$ 1,097,400	\$ 1,121,249	\$ 1,121,249	\$ 1,317,400
67300	Rents & Leases Equipment	344,233	137,880	353,106	274,695	143,628
67350	Rents & Leases Structure	301,420	286,900	313,400	296,999	287,606
67400	Household	443,098	712,287	707,287	488,452	712,287
67450	Professional & Special Services	7,021,432	4,989,193	7,296,516	6,576,354	5,059,793
67460	Temporary Agency Services	1,035,266	946,920	1,282,320	1,243,739	898,235
67500	Public Notice & Advertising	229,115	426,100	420,100	367,948	394,100
67550	Demurrage	71,555	46,550	80,308	69,112	52,430
67600	Maintenance of Equipment	816,858	524,140	735,197	634,040	520,132
67650	Building Maintenance	566,306	932,479	1,035,979	927,517	1,457,479
67700	Auto Mileage	161,459	65,142	161,179	151,490	63,142
67750	Auto Service	294,314	312,047	314,047	295,054	312,047
67800	Travel	298,087	319,313	415,813	306,267	318,313
67850	Utilities	1,405,249	1,591,881	1,652,098	1,652,098	1,766,989
67900	Communications	580,569	620,226	683,226	688,015	626,226
67950	Interest Expense	2,872,971	4,094,658	4,094,658	4,094,658	4,076,994
68000	Clothing	25,963	30,550	33,804	26,852	27,550
68050	Laboratory Supplies	519,077	275,000	554,682	526,403	275,000
68060	Postage	275,352	407,387	431,037	330,150	409,387
68100	Office Expense	1,512,068	1,070,826	1,157,946	1,115,104	1,079,779
68200	Office Furniture	56,502	59,000	78,679	71,179	56,500
68250	Subscriptions & Books	124,929	163,757	166,257	144,735	164,107
68300	Small Tools, Instruments, Equipment	96,465	65,160	236,494	170,591	65,160
68350	Film	-	100	100	-	-
68400	Gas and Oil	286,385	372,000	372,000	316,676	372,000
69500	Training/Conference/Tuition/ Board Exp.	644,542	658,292	683,592	640,160	655,492
69550	Memberships	178,591	73,725	162,425	135,114	70,960
69600	Taxes	30,632	49,000	70,628	42,669	49,000
69650	Awards	97,663	79,723	79,723	74,527	77,023
69700	Miscellaneous Expenses	129,606	144,110	170,610	127,317	150,100
69750	Prior Year Expense	(76,014)	-	-	-	-
69800	Uncollectable Accounts Receivable	454,094	-	-	-	-
89100	Principal Repayment	7,347,007	3,121,383	3,121,383	3,121,383	3,159,384
Sub-total Services & Supplies		\$ 29,291,720	\$ 23,673,129	\$ 27,985,843	\$ 26,030,548	\$ 24,618,243
77000	<b>Capital Outlays</b>	\$ 3,034,824	\$ 1,537,500	\$ 2,513,250	\$ 2,496,567	\$ 1,062,500
79050	<b>Building Remodeling</b>	\$ -	\$ -	\$ -	\$ -	\$ -
Total Expenditures		\$ 134,616,433	\$ 129,202,928	\$ 134,153,937	\$ 130,190,450	\$ 132,220,074
* Does not include Transfers Out.						
** Estimates based on July 2013 through March 2014 actual expenditures and budget amendments.						

**SALARIES & EMPLOYEE BENEFITS**

<b>Acct. #</b>	<b>Account Description</b>	<b>FY 2013-14 Adopted Budget</b>	<b>FY 2013-14 Amended Budget</b>	<b>FY 2013-14 Estimate</b>	<b>FY 2014-15 Proposed Budget</b>	<b>Increase/ (Decrease)<sup>(a)</sup></b>
<b>51000-52000</b>	<b>Salaries</b>	<b>\$69,380,911</b>	<b>\$69,043,456</b>	<b>\$ 68,117,561</b>	<b>\$70,157,184</b>	<b>\$925,895</b>
<p>These accounts include Salaries and special pays such as: Call-Back, Hazard, Night Shift, Rideshare, Skilled Based, Stand By and Overtime. The FY 2014-15 Request proposes to maintain vacant positions at 8%. In FY 2013-14 vacant positions were budgeted 9% and are projected to end the fiscal year at 10%. The FY 2014-15 Proposed Budget does not include overtime amounts for federal grant work that is not awarded until mid-year. An expenditure appropriation will occur mid-year when the grants are awarded.</p>						
<b>53000</b>	<b>Employee Benefits</b>	<b>\$2,859,144</b>	<b>\$2,859,142</b>	<b>\$2,681,750</b>	<b>\$2,724,527</b>	<b>(\$134,617)</b>
<p>This account includes the costs associated with state disability insurance and the employer's share of unemployment insurance, Social Security and Medicare. In addition, this account includes manager's individual memberships and/or management physicals.</p>						
<b>54000</b>	<b>Retirement</b>	<b>\$21,254,518</b>	<b>\$21,254,520</b>	<b>\$ 20,692,836</b>	<b>\$22,904,535</b>	<b>\$1,650,017</b>
<p>This account includes employer's share of the employee retirement system contributions. The increase from the FY 2013-14 Adopted Budget is based on the contribution rates provided from the San Bernardino County Retirement Association (SBCERA).</p>						
<b>55000</b>	<b>Insurance</b>	<b>\$10,497,726</b>	<b>\$10,497,726</b>	<b>\$ 10,171,188</b>	<b>\$10,753,085</b>	<b>\$255,359</b>
<p>This account includes employer's share of health, life, dental, vision care, and accident insurance.</p>						

<b>SCAQMD Personnel Summary – Authorized/Funded Positions</b>						
<b>Positions as of</b>	<b>Mid-Year Adjustments</b>		<b>Positions as of</b>	<b>FY 2014-15 Request</b>		<b>Positions as of</b>
July 1, 2013	Add	Delete	June 30, 2014	Add	Delete	June 30, 2015
797	0	0	797	3	2	798

<b>Fiscal Year 2014-15 Requested Personnel Actions</b>				
<b>Office</b>	<b>Position</b>	<b>Add</b>	<b>Delete</b>	<b>Total</b>
Finance	Supervising Payroll Technician	1		1
Science & Technology Advancement	Senior Public Information Specialist	1		1
Science & Technology Advancement	Administrative Secretary	1		1
Science & Technology Advancement	Senior Administrative Secretary		(1)	(1)
Science & Technology Advancement	Secretary		(1)	(1)
<b>Total</b>		<b>3</b>	<b>(2)</b>	<b>1</b>

<sup>(a)</sup>FY 2014-15 Proposed Budget vs. FY 2013-14 Adopted Budget.

SERVICES & SUPPLIES

Acct. #	Account Description	FY 2013-14 Adopted Budget	FY 2013-14 Amended Budget	FY 2013-14 Estimate	FY 2014-15 Proposed Budget	Increase/ (Decrease) <sup>(a)</sup>
<b>67250</b>	<b>INSURANCE</b>	<b>\$ 1,097,400</b>	<b>\$ 1,121,249</b>	<b>\$ 1,121,249</b>	<b>\$ 1,317,400</b>	<b>\$ 220,000</b>
<p>This account is for insurance coverage for the following: commercial property (real and personal) with earthquake and flood coverage, boiler and machinery, public official liability, excess workers' compensation and excess general liability. The SCAQMD is self-insured for workers' compensation, general liability, and automobile liability. The amount requested reflects anticipated workers' compensation claims, insurance policy premiums, property losses above SCAQMD's insurance deductibles, and liability claim payments.</p>						
<b>67300</b>	<b>RENTS &amp; LEASES EQUIPMENT</b>	<b>\$ 137,880</b>	<b>\$ 353,106</b>	<b>\$ 274,695</b>	<b>\$ 143,628</b>	<b>\$ 5,748</b>
<p>This account is for lease agreements and/or rental of office equipment such as communication devices for emergency response inspectors, laboratory and atmospheric measurement equipment for special projects, audio visual equipment for outside meetings, printing equipment and photocopiers. The increase from the FY 2013-14 Adopted Budget reflects anticipated needs.</p>						
<b>67350</b>	<b>RENTS &amp; LEASES STRUCTURE</b>	<b>\$ 286,900</b>	<b>\$ 313,400</b>	<b>\$ 296,999</b>	<b>\$ 287,606</b>	<b>\$ 706</b>
<p>This account is for expenditures associated with structures and lot leases, and off-site storage rentals:                      Long Beach/Sacramento field offices - \$122,706;                      Conference and meeting rooms - \$14,000; and                      Air monitoring sites/Wind Station Leases - \$150,900                      Free and low-cost public facilities are used whenever possible for public workshops and informational meetings. The increase from the FY 2013-14 Adopted Budget reflects anticipated needs. The FY 2014-15 Proposed Budget does not include amounts for federally funded grant programs. An expenditure appropriation will occur mid-year when the grants are awarded.</p>						
<b>67400</b>	<b>HOUSEHOLD</b>	<b>\$ 712,287</b>	<b>\$ 707,287</b>	<b>\$ 488,452</b>	<b>\$ 712,287</b>	<b>\$ 0</b>
<p>This account is used for trash disposal, landscape maintenance, parking lot maintenance, janitorial supplies, and janitorial contracts. This account is also used for expenses associated with the Diamond Bar facility, such as specialized cleaning supplies and services required in the computer room.</p>						
<b>67450</b>	<b>PROFESSIONAL &amp; SPECIAL SERVICES</b>	<b>\$ 4,989,193</b>	<b>\$ 7,296,516</b>	<b>\$ 6,576,354</b>	<b>\$ 5,059,793</b>	<b>\$ 70,600</b>
<p>This account is for services rendered to the SCAQMD by other agencies and consultants. The FY 2014-15 Professional &amp; Special Services supporting detail is located at the end of this section. The FY 2014-15 Proposed Budget does not include amounts for federally funded grant programs. An expenditure appropriation will occur mid-year when the grants are awarded.</p>						

<sup>(a)</sup>FY 2014-15 Proposed Budget vs. FY 2013-14 Adopted Budget.

SERVICES & SUPPLIES

Acct. #	Account Description	FY 2013-14 Adopted Budget	FY 2013-14 Amended Budget	FY 2013-14 Estimate	FY 2014-15 Proposed Budget	Increase/ (Decrease) <sup>(a)</sup>
67460	TEMPORARY AGENCY SERVICES	\$ 946,920	\$ 1,282,320	\$ 1,243,739	\$ 898,235	\$ (48,685)
<p>Funds budgeted in this account are used for specialized temporary services that supplement staff in support of SCAQMD programs. Amounts are budgeted as a contingency for long-term absences and retirements/resignations. Also, budgeted in this account is the student internship program that provides college students with the opportunity to gain experience in the workplace. The decrease from the FY 2013-14 Adopted Budget reflects anticipated needs. The FY 2014-15 Proposed Budget does not include amounts for federally funded grant programs. An expenditure appropriation will occur mid-year when the grants are awarded.</p>						
67500	PUBLIC NOTICE & ADVERTISING	\$ 426,100	\$ 420,100	\$ 367,948	\$ 394,100	\$ (32,000)
<p>This account is used for legally required publications such as Requests for Proposals, Requests for Quotations, personnel recruitment, outreach, and advertisement of SCAQMD Governing Board and Hearing Board meetings, and public notification of SCAQMD rulemaking activities. The decrease from the FY 2013-14 Adopted Budget reflects anticipated needs.</p>						
67550	DEMURRAGE	\$ 46,550	\$ 80,308	\$ 69,112	\$ 52,430	\$ 5,880
<p>This account is for various freight and cylinder charges as well as workspace reconfigurations and personnel moves. The FY 2014-15 Proposed Budget reflects anticipated needs but does not include amounts for federally funded grant programs. An expenditure appropriation will occur mid-year when the grants are awarded.</p>						
67600	MAINTENANCE OF EQUIPMENT	\$ 524,140	\$ 735,197	\$ 634,040	\$ 520,132	\$ (4,008)
<p>This account is for maintenance costs of SCAQMD equipment. Amounts are budgeted for the following: mainframe computer hardware, phone switch, air monitoring equipment, print shop equipment, copiers, and audio visual equipment. The FY 2014-15 Proposed Budget reflects anticipated needs but does not include amounts for federally funded grant programs. An expenditure appropriation will occur mid-year when the grants are awarded.</p>						
67650	BUILDING MAINTENANCE	\$ 932,479	\$ 1,035,979	\$ 927,517	\$1,457,479	\$ 525,000
<p>This account reflects expenditures for maintaining SCAQMD offices and air monitoring stations. Also included are the following: a contingency amount for unplanned repairs; Gateway Association Dues; elevator maintenance; energy management and compressor services; and carpet replacement. The increase from the FY 2013-14 Adopted Budget is due to the carpet replacement. The FY 2014-15 Proposed Budget does not include amounts for federally funded grant programs. An expenditure appropriation will occur mid-year when the grants are awarded.</p>						

<sup>(a)</sup>FY 2014-15 Proposed Budget vs. FY 2013-14 Adopted Budget.

SERVICES & SUPPLIES

Acct. #	Account Description	FY 2013-14 Adopted Budget	FY 2013-14 Amended Budget	FY 2013-14 Estimate	FY 2014-15 Proposed Budget	Increase/ (Decrease) <sup>(a)</sup>
<b>67700</b>	<b>AUTO MILEAGE</b>	<b>\$ 65,142</b>	<b>\$ 161,179</b>	<b>\$ 151,490</b>	<b>\$ 63,142</b>	<b>\$ (2,000)</b>
<p>This account is used to reimburse employees for the cost of using personal vehicles while on SCAQMD business. The requests include the mileage incurred for staff that are required to work on their scheduled days off and for employees who use their personal car on SCAQMD-related business, conferences, and seminars. Mileage reimbursement for the Legislative and Public Affairs staff to attend various community, business and intergovernmental events is also included. The FY 2014-15 Proposed Budget reflects anticipated needs but does not include amounts for federally funded grant programs. An expenditure appropriation will occur mid-year when the grants are awarded.</p>						
<b>67750</b>	<b>AUTO SERVICE</b>	<b>\$ 312,047</b>	<b>\$ 314,047</b>	<b>\$ 295,054</b>	<b>\$ 312,047</b>	<b>\$ 0</b>
<p>This account is used for the maintenance, towing, and repair of SCAQMD fleet vehicles. The FY 2014-15 Proposed Request reflects anticipated needs to maintain fleet vehicles.</p>						
<b>67800</b>	<b>TRAVEL</b>	<b>\$ 319,313</b>	<b>\$ 415,813</b>	<b>\$ 306,267</b>	<b>\$ 318,313</b>	<b>\$ (1,000)</b>
<p>This account is for business travel, including lodging and meals paid pursuant to the Administrative Code, for participation in legislative hearings and meetings involving state, federal, and inter-agency issues that affect air quality in the South Coast Air Basin. The FY 2014-15 Proposed Budget reflects anticipated needs but does not include amounts for federally funded grant programs. An expenditure appropriation will occur mid-year when the grants are awarded.</p>						
<b>67850</b>	<b>UTILITIES</b>	<b>\$ 1,591,881</b>	<b>\$ 1,652,098</b>	<b>\$ 1,652,098</b>	<b>\$1,766,989</b>	<b>\$ 175,108</b>
<p>This account is used to pay utility costs at the SCAQMD's headquarters building, the South Bay field office, and air monitoring stations. The increase from the FY 2013-14 Adopted Budget reflects anticipated rate increases in gas, water, and electricity costs for these sites along with an increase in the number of air monitoring sites.</p>						
<b>67900</b>	<b>COMMUNICATIONS</b>	<b>\$ 620,226</b>	<b>\$ 683,226</b>	<b>\$ 688,015</b>	<b>\$ 626,226</b>	<b>\$ 6,000</b>
<p>This account includes telephone and fax service, leased computer lines, video conferencing, wireless internet access for inspectors in the field, radio, and microwave services. The increase from the FY 2013-14 Adopted Budget reflects the anticipated level of expenditures for FY 2014-15. The FY 2014-15 Proposed Budget does not include amounts for federally funded grant programs. An expenditure appropriation will occur mid-year when the grants are awarded.</p>						
<b>67950</b>	<b>INTEREST EXPENSE</b>	<b>\$ 4,094,658</b>	<b>\$ 4,094,658</b>	<b>\$ 4,094,658</b>	<b>\$4,076,994</b>	<b>\$ (17,664)</b>
<p>This account is for the interest due on the 1995 and 2004 Pension Obligation Bonds. The FY 2014-15 Proposed Budget reflects scheduled payments for the fiscal year.</p>						

<sup>(a)</sup>FY 2014-15 Proposed Budget vs. FY 2013-14 Adopted Budget.

SERVICES & SUPPLIES

Acct. #	Account Description	FY 2013-14 Adopted Budget	FY 2013-14 Amended Budget	FY 2013-14 Estimate	FY 2014-15 Proposed Budget	Increase/ (Decrease) <sup>(a)</sup>
<b>68000</b>	<b>CLOTHING</b>	\$ 30,550	\$ 33,804	\$ 26,852	\$ 27,550	\$ (3,000)
<p>This account is for the purchase of safety equipment and protective clothing used by source testing, laboratory, compliance, and stockroom personnel. The decrease from the FY 2013-14 Adopted Budget reflects the anticipated level of expenditures for FY 2014-15.</p>						
<b>68050</b>	<b>LABORATORY SUPPLIES</b>	\$ 275,000	\$ 554,682	\$ 526,403	\$ 275,000	\$ 0
<p>This account is used to purchase various laboratory supplies such as chemicals, calibration gases and glassware for laboratory services. The FY 2014-15 Proposed Budget reflects anticipated needs but does not include amounts for federally funded grant programs. An expenditure appropriation will occur mid-year when the grants are awarded.</p>						
<b>68060</b>	<b>POSTAGE</b>	\$ 407,387	\$ 431,037	\$ 330,150	\$ 409,387	\$ 2,000
<p>This account covers the cost of SCAQMD mailings such as annual billings, permits, notifications to the Governing Board and Advisory groups, monthly newsletters, warrants, outreach materials to local governments, and Rule 2202 notifications. The FY 2014-15 Proposed Budget reflects anticipated needs.</p>						
<b>68100</b>	<b>OFFICE EXPENSE</b>	\$ 1,070,826	\$ 1,157,946	\$ 1,115,104	\$ 1,079,779	\$ 8,953
<p>This account is used for the purchase of office supplies, computer hardware and software under \$5,000, photocopier supplies, print shop and artist supplies, stationery and forms. The FY 2014-15 Proposed Budget reflects anticipated needs but does not include amounts for federally funded grant programs. An expenditure appropriation will occur mid-year when the grants are awarded.</p>						
<b>68200</b>	<b>OFFICE FURNITURE</b>	\$ 59,000	\$ 78,679	\$ 71,179	\$ 56,500	\$ (2,500)
<p>This account is for office furniture under \$5,000. The decrease from the FY 2013-14 Adopted Budget reflects anticipated needs.</p>						
<b>68250</b>	<b>SUBSCRIPTION &amp; BOOKS</b>	\$ 163,757	\$ 166,257	\$ 144,735	\$ 164,107	\$ 350
<p>This account is used to purchase reference materials, magazine subscriptions, books, and on-line database legal research services. The FY 2014-15 Proposed Budget reflects anticipated needs.</p>						
<b>68300</b>	<b>SMALL TOOLS, INSTRUMENTS, EQUIPMENT</b>	\$ 65,160	\$ 236,494	\$ 170,591	\$ 65,160	\$ 0
<p>This account covers the purchase of small tools and equipment utilized at the air monitoring stations, the laboratory, and in the maintenance of the headquarters building. The FY 2014-15 Proposed Budget does not include amounts for federally funded grant programs. An expenditure appropriation will occur mid-year when the grants are awarded.</p>						

<sup>(a)</sup>FY 2014-15 Proposed Budget vs. FY 2013-14 Adopted Budget.

SERVICES & SUPPLIES

Acct. #	Account Description	FY 2013-14 Adopted Budget	FY 2013-14 Amended Budget	FY 2013-14 Estimate	FY 2014-15 Proposed Budget	Increase/ (Decrease) <sup>(a)</sup>
<b>68350</b>	<b>FILM</b>	\$ 100	\$ 100	\$ -	\$ -	\$ (100)
<p>This account covers the purchase of film for use in rule compliance court cases, the laboratory for microscopy, and by other organizational units for publications and presentations. As of FY 2014-15, this account is no longer used.</p>						
<b>68400</b>	<b>GAS &amp; OIL</b>	\$ 372,000	\$ 372,000	\$ 316,676	\$ 372,000	\$ -
<p>This account is for the purchase of gasoline, oil, and alternative fuels for the SCAQMD fleet. The FY 2014-15 Proposed Budget reflects anticipated needs.</p>						
<b>69500</b>	<b>TRAINING/CONF/ TUITION/BOARD EXP</b>	\$ 658,292	\$ 683,592	\$ 640,160	\$ 655,492	\$ (2,800)
<p>This account is used for tuition reimbursement, registration, training, certain costs associated with the SCAQMD's Governing and Hearing Boards and SCAQMD advisory groups, training-related travel expenditures, and per diems for SCAQMD advisory groups. The FY 2014-15 Proposed Budget reflects anticipated needs.</p>						
<b>69550</b>	<b>MEMBERSHIPS</b>	\$ 73,725	\$ 162,425	\$ 135,114	\$ 70,960	\$ (2,765)
<p>This account provides for SCAQMD membership in various organizations such as: Merchants and Manufacturers Association; California Air Pollution Control Officers Association; Air and Waste Management Association; Western Region Item Bank; Inland Empire Economic Council; the Black, Latino, and Asian Business Associations; and several Chambers of Commerce. Also budgeted are the continued memberships in scientific, clean fuels, advanced technology, and related environmental business/policy organizations, such as ASTM (American Society for Testing and Materials), California Environmental Business Council, and the California Hydrogen Business Council. The decrease from the FY 2013-14 Adopted Budget reflects anticipated needs.</p>						
<b>69600</b>	<b>TAXES</b>	\$ 49,000	\$ 70,628	\$ 42,669	\$ 49,000	\$ 0
<p>This account is for unsecured property and use taxes, fuel taxes, and sales taxes. The FY 13-14 Amended Budget included a one-time tax for a fuel cell at the Diamond Bar Headquarters. The FY 2014-15 Proposed Budget reflects anticipated needs.</p>						
<b>69650</b>	<b>AWARDS</b>	\$ 79,723	\$ 79,723	\$ 74,527	\$ 77,023	\$ (2,700)
<p>This account includes for employee service awards for continuous service, employee recognition programs, plaques/awards the SCAQMD may present to individuals/businesses/ community groups for outstanding contributions towards air quality goals, and promotional awards for community events. The FY 2014-15 Proposed Budget reflects anticipated needs.</p>						

<sup>(a)</sup>FY 2014-15 Proposed Budget vs. FY 2013-14 Adopted Budget.



SERVICES & SUPPLIES

	Account Description	FY 2013-14 Adopted Budget	FY 2013-14 Amended Budget	FY 2013-14 Estimate	FY 2014-15 Proposed Budget	Increase/ (Decrease) <sup>(a)</sup>
<b>69700</b>	<b>MISCELLANEOUS EXPENSES</b>	<b>\$ 144,110</b>	<b>\$ 170,610</b>	<b>\$ 127,317</b>	<b>\$ 150,100</b>	<b>\$ 5,990</b>
This account is to record expenditures that cannot be classified in another account. The increase from the FY 2013-14 Adopted Budget reflects the anticipated miscellaneous expenses for FY 2014-15						
<b>69750</b>	<b>PRIOR YEAR EXPENSE</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
This account is used to record expenditures attributable to prior year budgets. No amount is budgeted for this account due to the nature of the account.						
<b>69800</b>	<b>UNCOLLECTIBLE ACCOUNTS RECEIVABLE</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
No amount is budgeted for this account due to the nature of the account.						
<b>89100</b>	<b>PRINCIPAL REPAYMENT</b>	<b>\$ 3,121,383</b>	<b>\$ 3,121,383</b>	<b>\$ 3,121,383</b>	<b>\$ 3,159,384</b>	<b>\$ 38,001</b>
This account is for the principal due on pension obligation bonds. The FY 2014-15 Proposed Budget reflects scheduled principal payments.						

<sup>(a)</sup>FY 2014-15 Proposed Budget vs. FY 2013-14 Adopted Budget.

SERVICES & SUPPLIES

Proposed Fiscal Year 2014-15 Professional & Special Services Detail by Office			
Office	Program	Contract Description	Amount
<b>District General</b>	Dist. General Overhead	Administrative Fees for 1995 & 2004 Pension Obligation Bonds (POBs)	\$1,500
	Dist. General Overhead	Arbitration/Hearing Officer	9,400
	Dist. General Overhead	Benefits Administrator	13,000
	Dist. General Overhead	Commercial Real Estate Broker	95,000
	Dist. General Overhead	Employee Assistance Program	13,995
	Dist. General Overhead	Employee Relations Litigation	250,000
	Dist. General Overhead	Custodial Fees for 1995 & 2004 POBs	800
	Dist. General Overhead	Health Reimbursement Arrangement Plan Admin	5,000
	Dist. General Overhead	Modular Furniture Maintenance, Setup, and Moving Services	15,000
	Dist. General Overhead	Online Benefits Enrollment/Administration	47,000
	Dist. General Overhead	Oracle Software Support	30,400
	Dist. General Overhead	PeopleSoft Maintenance	208,400
	Dist. General Overhead	Security Alarm Monitoring	1,534
	Dist. General Overhead	Security Guard Services	450,000
	Dist. General Overhead	Wellness Program	15,000
	<b>Sub-total District General</b>		<b>\$1,156,029</b>
<b>Governing Board</b>	Operational Support	Board Member Assistant/Consultants	\$436,777
	<b>Sub-total Governing Board</b>		<b>\$436,777</b>
<b>Executive Office</b>	Develop Programs	Professional & Special Services	\$50,000
	<b>Sub-total Executive Office</b>		<b>\$50,000</b>
<b>Finance</b>	Operational Support	AB 2766 Audit of DMV Fee Recipients	\$10,000
	Operational Support	Bank Service Charges/Los Angeles County Treasurer Office	60,000
	Ensure Compliance	Bank Services Fund 15, Hot Spots Lockbox	15,000
	Operational Support	Financial Audit	40,000
	Operational Support	Financial Consultant for Treasury Management	22,000
	Operational Support	LA County Treasurer Office - PGP Maintenance	1,500
	<b>Sub-total Finance</b>		<b>\$148,500</b>
<b>Legal</b>	Ensure Compliance	Experts/Court Reporters/Attorney Services	\$25,000
	Ensure Compliance	Litigation Counsel	164,500
	Ensure Compliance	Software Maintenance & Licensing - Courtview Justice Solutions	30,000
	Operational Support	Specialized Legal Services	60,000
	<b>Sub-total Legal</b>		<b>\$279,500</b>

SERVICES & SUPPLIES

<b>Proposed Fiscal Year 2014-15 Professional &amp; Special Services Detail by Office (cont.)</b>			
<b>Office</b>	<b>Program</b>	<b>Contract Description</b>	<b>Amount</b>
<b>Administrative &amp; Human Resources</b>	Operational Support	Architectural, Engineering and Surveyor Consultants	\$3,250
	Operational Support	Classification Study & Consulting Services	30,000
	Operational Support	In-house Training Classes	500
	Operational Support	Insurance Broker of Record	55,000
	Operational Support	Locksmith	2,000
	Operational Support	Medical Services Provider	13,000
	Operational Support	NEOGOV Subscription License	8,000
	Operational Support	Occupational Health Services	10,000
	Operational Support	Office Ergonomics Evaluations and Training	10,000
	Customer Service & Business Assistance	Outside Binding Services	6,000
	Customer Service & Business Assistance	Outside Printing Services	5,000
	Operational Support	Test Development	15,000
	Operational Support	Third-Party Claims Administrator for Workers Compensation	45,000
	<b>Sub-total Administrative &amp; Human Resources</b>		<b>\$202,750</b>
<b>Clerk of the Boards</b>	Ensure Compliance	Court Reporting, Audiovisual, and/or Security Services	\$4,000
	Ensure Compliance	Outside Legal Contract	15,000
	Ensure Compliance	Professional Interpreter Services	6,400
	<b>Sub-total Clerk of the Boards</b>		<b>\$25,400</b>
<b>Media Office</b>	Policy Support	Graphics, Printing & Outreach Materials	\$4,000
	Policy Support	News Release Services	9,000
	Policy Support	Photographic & Video Services	5,000
	Policy Support	Radio/Television Monitoring	11,000
	<b>Sub-total Media Office</b>		<b>\$29,000</b>
<b>Information Management</b>	Operational Support	Action Works Metro System Software Support	\$30,000
	Operational Support	AER & R1113/314 Upgrade & Maintenance	15,000
	Operational Support	AIS (Address Information System) Five Digit subscription	1,100
	Operational Support	Anti-Spam Maintenance/Support	11,500
	Operational Support	AQMD Web Application Modifications	20,000

SERVICES & SUPPLIES

Proposed Fiscal Year 2014-15 Professional & Special Services Detail by Office (cont.)			
Office	Program	Contract Description	Amount
Information Management (cont.)	Operational Support	Backup Software	\$28,500
	Operational Support	Backup Utility Maintenance	9,500
	Operational Support	CLASS System Maintenance	80,000
	Operational Support	Computer-Based Training Software Support	1,800
	Operational Support	Crystal Reports Software Support	20,000
	Operational Support	Dundas Chart Software Support	700
	Operational Support	Email Recovery Software (PowerControls) Maint/Support	1,750
	Operational Support	Email Reporting	3,800
	Operational Support	ERwin ERX & BPwin SW Support	24,000
	Operational Support	Faxcom FaxServer Support	12,500
	Operational Support	Imaging Software Support	125,000
	Operational Support	Ingres/OpenIngres Additional Licensing	72,000
	Operational Support	Ingres/OpenIngres Advanced Success Pack	140,000
	Operational Support	Installshield Software Support	3,600
	Operational Support	Internet Filtering (SmartFilter) Maintenance/Support	35,000
	Operational Support	Kronos Time Keeper	2,000
	Operational Support	Microsoft Developer Network CD - Application Development	15,196
	Operational Support	Microsoft Developer Network Premium Renewal	4,000
	Operational Support	Microsoft Technical Software Support (Server Applications)	15,000
	Operational Support	Microsoft Virtual Earth Maintenance/Support	12,500
	Operational Support	Network Analyzer (Sniffer) Maintenance/Support	4,500
	Operational Support	Network Backbone Support	15,000
	Operational Support	NT Software Support - Proactive	62,000
	Operational Support	Off-site Document Destruction Services	15,000
	Operational Support	Off-site Storage Nightly Computer Backup	25,000
Operational Support	Off-Site Storage Services	10,000	

SERVICES & SUPPLIES

<b>Proposed Fiscal Year 2013-14 Professional &amp; Special Services Detail by Office (cont.)</b>			
<b>Office</b>	<b>Program</b>	<b>Contract Description</b>	<b>Amount</b>
<b>Information Management (cont.)</b>	Operational Support	Online Filing Infrastructure	\$25,000
	Operational Support	PowerBuilder Software Support	24,000
	Operational Support	Proxy Reporting Support	3,250
	Operational Support	PVCS Software Support	4,500
	Operational Support	ScaleOut StateServer Maintenance	2,000
	Operational Support	Secure Service Digital ID DEC Internet Server	850
	Operational Support	Secure Service Digital ID Services	1,000
	Operational Support	Silk Test, Silk Central Test Manager, and Silk Performer Maintenance and Support	22,500
	Operational Support	Sitefinity CMS Software Support	9,500
	Operational Support	Software Support for EOS.Web Enterprise	6,300
	Operational Support	Software Support for On-Line Catalog	2,050
	Operational Support	Swiftview Software Support	950
	Operational Support	Telephone Switchview Software Support	9,500
	Operational Support	Terminal Emulation (Reflection) Maintenance/Support	1,175
	Operational Support	Videoteleconferencing Maintenance & Support	13,000
	Operational Support	Virus Scan Support	15,000
	Operational Support	Visual Expert Software Support	6,000
	Operational Support	Web Consulting Support	10,000
	Operational Support	Web Core Technology Upgrade (.NET upgrade)	10,000
	<b>Sub-total Information Management</b>		<b>\$982,521</b>
<b>Planning, Rules, &amp; Area Sources</b>	Ensure Compliance	AER Printing	\$5,000
	Develop Programs	California Emissions Estimator Model (CalEEMod) Upgrades/Support	10,000
	Develop Programs	CEQA for AQMD Projects	20,000
	Monitoring Air Quality	Check Before You Burn Programming Support	50,000
	Develop Rules	Coating Application Techniques	50,000
	Monitoring Air Quality	Contracted Communication Services	5,000
	Timely review of Permits	Dispersion Modeling Support	20,000
	Develop Programs	Dun & Bradstreet Data	30,000

SERVICES & SUPPLIES

<b>Proposed Fiscal Year 2014-15 Professional &amp; Special Services Detail by Office (cont.)</b>			
<b>Office</b>	<b>Program</b>	<b>Contract Description</b>	<b>Amount</b>
<b>Planning, Rules, &amp; Area Sources (cont.)</b>	Monitoring Air Quality	Maintain Wind Stations and Analyze Data	\$60,000
	Monitoring Air Quality	Meteorological Data Services	7,500
	Develop Rules	PM and Ozone Model Consulting	50,000
	Develop Rules	Polymer Research and Technology Transfer of Coatings	50,000
	Develop Programs	REMI Renewal	51,000
	Develop Programs	Rule 2202 Computer System Maintenance	15,000
	Develop Programs	SIP, AQMP and Rule Printing	5,000
	Develop Rules	Software/Hardware Maintenance in Support of Regional Modeling	5,000
	Develop Programs	STAMPFRAG Member Sole Source Contracts	28,000
	Ensure Compliance	Technology Assessment Studies	50,000
	Monitoring Air Quality	Weather Data Services Communications	7,500
	<b>Sub-total Planning, Rules &amp; Area Sources</b>		<b>\$519,000</b>
<b>Legislative &amp; Public Affairs</b>	Policy Support	After-hours Call Center Service	\$3,500
	Customer Service & Business Assistance	Clean Air Awards	12,600
	Customer Service & Business Assistance	Community Outreach	160,000
	Policy Support	Graphics & Printing	33,616
	Policy Support	Legislative Advocacy - Sacramento	365,000
	Policy Support	Legislative Advocacy - Washington DC	440,600
	Policy Support	Legislative Computer Services	10,000
	Customer Service & Business Assistance	Multi-Lingual Translation - Public Participation	20,000
	Policy Support	Photographic and Video Services	50,000
	Customer Service & Business Assistance	Promotion Marketing of Smart Phone Tools	50,000
	<b>Sub-total Legislative &amp; Public Affairs</b>		<b>\$1,145,316</b>

SERVICES & SUPPLIES

<b>Proposed Fiscal Year 2014-15 Professional &amp; Special Services Detail by Office (cont.)</b>			
<b>Office</b>	<b>Program</b>	<b>Contract Description</b>	<b>Amount</b>
<b>Science &amp; Tech. Advancement</b>	Ensure Compliance	Laboratory Analytical Services	\$15,000
	Ensure Compliance	Source Testing Services	30,000
	Ensure Compliance	Technical Support for Air Monitoring and Community Complaint Resolution	35,000
	<b>Sub-total Science &amp; Technology Advancement</b>		<b>\$80,000</b>
<b>Engineering &amp; Compliance</b>	Operational Support	Workspace Reconfiguration	\$5,000
	<b>Sub-total Engineering &amp; Compliance</b>		<b>\$5,000</b>
	<b>Total Professional &amp; Special Services Request</b>		<b>\$5,059,793</b>

CAPITAL OUTLAYS & BUILDING REMODELING

Acct. #	Account Description	FY 2013-14 Adopted Budget	FY 2013-14 Amended Budget	FY 2013-14 Estimate	FY 2014-15 Proposed Budget	Increase/ (Decrease) <sup>(a)</sup>
77000	CAPITAL OUTLAYS	\$ 1,537,500	\$ 2,513,250	\$ 2,496,567	\$ 1,062,500	(\$ 475,000)

This account is for tangible asset expenditures with a value of at least \$5,000 and a useful life of at least three years and intangible asset expenditures with a value of at least \$5,000 and a useful life of at least one year. The decrease from the FY 2013-14 Adopted Budget reflects anticipated needs. The FY 2014-15 Proposed Budget does not include amounts for federally funded grant programs. An expenditure appropriation will occur mid-year when the grants are awarded.

The following is a listing by office of the approved Capital Outlays for FY 2014-15.

Fiscal Year 2014-15 Capital Outlays Detail					
Item #	Office	Category	Description	Program	Amount
1	District General	Replacement	System Support and Programming (PeopleSoft/CLASS)	Operational Support	\$75,000
2		N/A	Unbudgeted Capital Outlay	Operational Support	75,000
<b>Sub-total District General</b>					<b>\$150,000</b>
3	Planning, Rules & Area Sources	Replacement	Architectural Coating Reporting & Fee Billing	Develop Rules	\$50,000
4		Replacement	Support Web-based Annual Emissions Reporting (AER) Program	Ensure Compliance	100,000
<b>Sub-total Planning, Rules &amp; Area Sources</b>					<b>\$150,000</b>
5	Information Management	New	e-Government Infrastructure	Operational Support	\$27,500
6		New	Misc Telecommunication Upgrade/Enhancement	Operational Support	35,000
7		New	PeopleSoft Migration/Upgrade	Operational Support	250,000
8		Replacement	Systems Replacement - Financial Systems	Operational Support	150,000
9		Replacement	Systems Replacement - Integrated On-Line Permit Processing	Operational Support	250,000
<b>Sub-total Information Management</b>					<b>\$712,500</b>
10	Engineering & Compliance	New	PAATS/Title V Tracking Updates	Timely Review of Permits	\$25,000
11		New	Permit Processing System (PPS) Updates	Timely Review of Permits	25,000
<b>Sub-total Engineering &amp; Compliance</b>					<b>\$50,000</b>
<b>Total Capital Outlays Request</b>					<b>\$1,062,500</b>

<sup>(a)</sup>FY 2014-15 Proposed Budget vs. FY 2013-14 Adopted Budget.



CAPITAL OUTLAYS & BUILDING REMODELING

Acct. #	Account Description	FY 2013-14 Adopted Budget	FY 2013-14 Amended Budget	FY 2013-14 Estimate	FY 2014-15 Proposed Budget	Increase/ (Decrease) <sup>(a)</sup>
<b>79050</b>	<b>BUILDING REMODELING</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<p>This account is used for minor remodeling projects which become necessary as a result of reorganizations or for safety reasons. No projects are anticipated in FY 2014-15.</p>						

<sup>(a)</sup>FY 2014-15 Proposed Budget vs. FY 2013-14 Adopted Budget.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
DRAFT GOALS AND PRIORITY OBJECTIVES FOR FY 2014-2015**

**MISSION STATEMENT**

“All residents have a right to live and work in an environment of clean air and we are committed to undertaking all necessary steps to protect public health from air pollution with sensitivity to the impacts of our actions on the community, public agencies and businesses.”

**VALUES**

- S** Sound scientific, technical, and legal basis for actions
- C** Customer service
- A** Air that is healthful to breathe
- Q** Quality programs that are effective and efficient
- M** Multiple partnerships and collaboration with stakeholders
- D** Developing solutions for the future

**GOALS AND PRIORITY OBJECTIVES**

The following Goals and Priority Objectives have been identified as being critical to meeting SCAQMD’s Mission in Fiscal Year 2014-15.

**GOAL I. Ensure expeditious progress toward meeting clean air standards and protecting public health.**

Priority Objective/Project	Outcome
1. Implement 2012 AQMP	Adopt/implement measures scheduled for 2014.
2. Initiate development of 2016 AQMP	Conduct technical and policy analyses and produce white papers in preparation for the 2016 AQMP, while enhancing the AQMP development process including early stakeholder input and close collaboration, and conducting socioeconomic methodology review. Present the socioeconomic methodology review to the Governing Board and appropriate committees/work groups and recommend further action.
3. Ensure compliance through a program that includes using community-based and/or industry specific deployment of field personnel.	Inspect all Major or RECLAIM sources at least annually and inspect all chrome plating facilities quarterly. Conduct a total of 22,000 site visits for compliance evaluations and perform inspections of 3,500 portable equipment and 2,200 Asbestos demolition or renovation activities. Expand targeted evaluation program for select industries, including, but not limited to metal processing, oil production, and waste processing facilities.
4. Prioritize prosecution of high-impact enforcement cases to maximize deterrence for air pollution violations	Enhance prosecution of high-impact enforcement cases, such as prosecutions of major or serial violators, major toxic releases, significant public nuisance cases, or companies having violations at several locations. Achieve satisfactory resolution of these cases to reduce health impacts and provide for future deterrence.

**GOAL I. Ensure expeditious progress toward meeting clean air standards and protecting public health. (Continued)**

Priority Objective/Project	Outcome
5. Ensure compliance through a program that includes timely processing of permit applications for stationary sources	Process all complete applications for permits, plans and ERCs in a timely manner and in compliance with all statutory requirements. Process a total of 8,800 applications, including 2,200 Permits to Construct (new construction, modification or relocations). Process all Title V Permit Renewals in timely manner and meet all statutory requirements. Through SCAQMD's Small Business Assistance program help more local businesses understand the permit process, prepare and submit permit applications, and expand efforts to educate small business owners about the agency and compliance. Begin process of reviewing and updating standard permit conditions for specific equipment or industries. Prepare a presentation for the Stationary Source Committee to provide a status of the permit process and convene permit streamlining working groups.
6. Continue to implement SCAQMD's Environmental Justice (EJ) policies and programs, and other initiatives directed at equitable treatment for all communities and sensitive populations	Increase awareness of the SCAQMD in EJ communities and work with residents and community leaders to remedy their air quality concerns. Formalize internal response team to coordinate and streamline agency response to community concerns, increased partnerships with health, educational, and other organizations in impacted communities. Representation of SCAQMD on community task forces and other organizations as appropriate, including business organizations to help mitigate current and prevent future air quality impacts.
7. Enhance community response program	Assess current SCAQMD community response program and identify measurement techniques and protocols with consideration to recurring types of community concerns and update the program accordingly to be more informative and responsive to impacted communities in a more timely manner. Develop an enhanced communication plan to inform the community regarding complaints.
8. Continue to respond expeditiously and effectively to community issues that require the deployment of air monitoring resources	Enhance monitoring and response capabilities through technology improvements, a focus of resources, and efficiency improvements to address future community air quality concerns. Evaluate personal monitors for air quality accuracy.
9. Implementation of AB 8 (Carl Moyer AB 923 and AB 118 H2 funding.)	Develop approaches to maximize deployment of zero and near zero-emission vehicles in EJ areas. Continue Carl Moyer AB 923 Program with enhancements identified above. Assist hydrogen station rollout in the South Coast region.
10. Complete implementation of heavy-duty replacement trucks for small fleets under the Proposition 1B-Goods Movement Program.	The program will reduce emissions from older trucks with 2010 certified trucks, and will help small fleets be in compliance with CARB's truck and bus regulation requirements.

**GOAL I. Ensure expeditious progress toward meeting clean air standards and protecting public health. (Continued)**

<b>Priority Objective/Project</b>	<b>Outcome</b>
11. Develop and demonstrate advanced natural gas engines and zero-emission technologies for locomotives.	Issue RFP for the development of natural gas-powered passenger and freight locomotives and start demonstration program as appropriate. Issue RFP for the demonstration of zero-emission technologies applicable to locomotives including hybrid systems and battery-tender car concepts.
12. Continue development and demonstration of Zero Emission Container Movement Technologies, and initiate deployment with strategies and policies to enable the market.	Initiate demonstration of zero emission technology projects and continue working with stakeholders to enable the market for these technologies through incentives, policies and regulations.
13. Multiple Air Toxics Exposure Study (MATES IV) and Risk Assessment Methodology Update.	Complete exposure assessment and risk estimates based on regional modeling of air toxics emissions. Prepare MATES IV report. Implement Risk Assessment Methodology update approved by the State of California.
14. Continue implementation of Clean Communities Pilot Study for Boyle Heights and San Bernardino.	Complete remaining projects and programs for both communities to address cumulative air quality issues. Produce final program report. Implement Clean Vehicle Rebate Pilot for EJ areas.
15. Implement the fireplace/woodstove exchange voucher incentive program in and around Mira Loma.	Implement a targeted incentive program to improve PM2.5 air quality in and around Mira Loma and help the Basin reach attainment with federal PM2.5 standards.
16. Work proactively on drought related air quality impacts and needed response.	Drought response plan with action items to be implemented.
17. Develop and demonstrate low emission energy generation technology as well as energy storage options.	Initiated demonstration projects and continue working with stakeholders to facilitate additional power options.

**GOAL II. Enhance public education and ensure equitable treatment for all communities.**

<b>Priority Objective/Project</b>	<b>Outcome</b>
1. Employ the latest communication technologies; engage in community based programs and outreach events; and foster relationships with traditional media outlets	Heighten public awareness of air quality issues that affect public health to motivate decision makers and other key stakeholders to give higher priority to air quality issues and concerns; encourage targeted public members and key stakeholders to take personal actions to reduce air pollution; Actively engage the public, through town hall and community meetings, as well as social media and the SCAQMD webpage, to increase their communication with the agency and advocacy for our clean air efforts.
2. Continue timely response to community complaints	Respond to all air quality complaints received by SCAQMD within 24 hours.

**GOAL III. Operate efficiently and in a manner sensitive to public agencies, businesses, the public and SCAQMD staff.**

Priority Objective/Project	Outcome
1. Maintain a knowledgeable, professional and well-trained staff	Provide training and educational opportunities to ensure up-to-date expertise and competency in core agency functions. Develop leadership development programs to ensure a smooth transition of key leadership positions within the agency.
2. Continue to overhaul SCAQMD's information technology systems, including the use of state of the art software, hardware, and communications systems to improve overall agency effectiveness and efficiency.	Implement and integrate the Legal Division's case and document management software system with SCAQMD's current permitting, enforcement and imaging databases to efficiently track and manage assignments and case documents. Replace the phone switch with a hardware/software system that utilizes unified communication technology, integrating all forms of communication that are exchanged via a network. Expand mapping infrastructure into a GIS portal for many SCAQMD mapping functions. Continue to support and seek permit processing efficiencies through automation and IT solutions.
3. Provide excellent customer service to the business and regulated community, as well as other stakeholders.	Ensure that all stakeholders are treated as partners, and that regulations, requirements and objectives are made clear early in the permitting, rulemaking and planning processes. Work with stakeholders in a cooperative and collaborative manner toward air quality goals and related activities in a timely and cost-effective manner, always seeking to balance public health with business retention, economic growth, and job creation, while meeting Federal and State Clean Air Laws.
4. Build and maintain partnerships with public agencies, stakeholder groups and the business community.	Further enhanced outreach programs to public agencies in areas including, but not limited to, rulemaking and rule implementation and enforcement, regional air quality impacts and attainment strategies, and other issues affecting public agencies, especially local government and issues related to future waste diversion requirements. Develop partnerships with local jurisdictions and regional agencies, and seek cooperative strategies for achieving air quality goals and objectives while supporting local control and sustainable economic growth, and leveraging local efforts to improve the health and well-being of residents. Develop new partnerships with the business and regulated communities, as well as environmental justice, environmental organizations, and community groups through outreach to, and participation in, various activities, conferences, and other opportunities to cultivate early and continuing cooperative relationships.
5. Ensure rulemaking is transparent and inclusive.	Implement early and continuing outreach to affected and interested stakeholders, including businesses, local agencies, environmental justice and environmental groups, and affected communities in the rulemaking process, and provide ample opportunity for input and collaboration.

## **PROGRAM CATEGORIES**

### **ADVANCE CLEAN AIR TECHNOLOGY**

Identify technologies from anywhere in the world that may have application in reducing emissions from mobile and stationary sources in the SCAQMD's jurisdiction. Suggest strategies to overcome any barriers and, when appropriate, implement those strategies.

- (A) Identify short-term and long-term technical barriers to the use of low-emission clean fuels and transportation technologies.
- (B) Promote development and assess the use of clean fuels and low-emitting technologies.
- (C) Work with industry to promote research and development in promising low-emission technologies and clean fuels.
- (D) Provide technical and program support to the Mobile Source Air Pollution Reduction Review Committee (MSRC).
- (E) Conduct source tests and analysis of samples to assess effectiveness of low-emissions technology.
- (F) Implement and administer state-funded programs such as the Carl Moyer program for retrofitting, re-powering, or replacing diesel engines with newer and cleaner engines and the Proposition 1B program that provides funding for projects to reduce air pollution associated with freight movement along California's trade corridors.

### **ENSURE COMPLIANCE WITH CLEAN AIR RULES**

Ensure compliance with SCAQMD rules for existing major and small stationary sources.

- (A) Verify compliance with SCAQMD rules through inspections, sample collections, Visible Emissions Evaluations, certification of Continuous Emission Monitoring Systems (CEMS), and emissions audits.
- (B) Issue Notices of Violation for major violations when discovered or a Notice to Comply for minor violations or to request records.
- (C) Respond to and resolve public complaints concerning air pollution.
- (D) Participate in Hearing Board cases, investigate breakdowns and notifications of demolitions or renovations of structures which may contain asbestos, conduct periodic monitoring, and observe source tests.
- (E) Respond to industrial and chemical emergencies when requested by other agencies.
- (F) Provide training classes for compliance with various SCAQMD rules such as Gasoline Transfer and Dispensing (Rule 461), Asbestos Demolition and Renovation (Rule 1403), Chrome Plating Operations (Rule 1469), Fugitive Dust Plans (Rule 403 & 403.1), Sump and Wastewater Separators (Rule 1176) and Combustion Gas Portable Analyzer Training & Certification (Rules 1146, 1146.1 & 1110.2).

## **PROGRAM CATEGORIES**

### **CUSTOMER SERVICE AND BUSINESS ASSISTANCE**

- (A) Provide local government, business and the public with accesses and input into the regulatory and policy processes of the SCAQMD.
- (B) Assist cities and others with AB 2766 projects.
- (C) Interact with local, state and federal agencies as well as others to share air quality information, resolve jurisdictional questions, and implement joint programs.
- (D) Support air pollution reduction through implementation of comprehensive public information, legislative and customer service programs.
- (E) Provide small business assistance services and support economic development and business retention activities.
- (F) Make presentations to and meet with regulated organizations, individuals, public agencies and the media.
- (G) Notify all interested parties of upcoming changes to air quality rules and regulations through public meetings, workshops, and printed and electronic information.
- (H) Resolve permit- and fee-related problems and provide technical assistance to industry.
- (I) Respond to Public Records Act requests.
- (J) Produce brochures, newsletters, television, radio and print media information and materials, and electronic information.
- (K) Respond to letters and Internet inquiries from the public and to media inquiries and requests.

### **DEVELOP PROGRAMS TO ACHIEVE CLEAN AIR**

Develop a regional Air Quality Management Plan (AQMP) to achieve federal and state ambient air quality standards and to meet all other requirements of the federal and California Clean Air Acts.

- (A) Analyze air quality data and provide an estimation of pollutant emissions by source category.
- (B) Develop pollutant control strategies and project future air quality using computer models and statistical analysis of alternative control scenarios.
- (C) Analyze issues pertaining to air toxics, acid deposition, and potential socioeconomic and environmental impacts (CEQA) of SCAQMD plans and regulations.
- (D) Conduct outreach activities to solicit public input on proposed control measures.
- (E) Implement Rule 2201 On-Road Motor Vehicle Mitigation Options and process employee commute reduction program submittals and registrations. Provide one-on-one assistance to employers to ensure compliance with the rule.
- (F) Develop and update emissions inventories; conduct in-house auditing of annual emission reports; conduct field audits.

## PROGRAM CATEGORIES

### DEVELOP RULES TO ACHIEVE CLEAN AIR

Develop emission reduction regulations for sulfur dioxide, nitrogen dioxide, organic gases, particulate matter, toxics, and other pollutants to implement the regional AQMP, Tanner Air Toxics Process (AB 1807), National Emission Standards for Hazardous Air Pollutants (NESHAPS), and Prevention of Significant Deterioration (PSD) requirements.

- (A) Provide an assessment of control technologies, evaluation of control cost, source testing and analysis of samples to determine emissions.
- (B) Test and analyze products and processes to demonstrate pollution reduction potential.
- (C) Solicit public input through meetings and workshops.
- (D) Prepare rules to provide flexibility to industry, ensure an effective permit program and increase rule effectiveness.
- (E) Evaluate effectiveness of area source rules, evaluate area source emission inventories, and propose new rules or amendments to improve implementation of area source programs, including the certification/registration of equipment, and as necessary pursuant to statewide regulatory requirements.
- (F) Implement the AQMP. Develop feasibility studies and control measures.
- (G) Conduct research and analyze health effects of air pollutants and assess the health implications of pollutant reduction strategies.

### MONITORING AIR QUALITY

Operate and maintain within SCAQMD's jurisdiction a network of air quality monitoring sites for ozone, nitrogen oxides, sulfur oxides, particulate matter, carbon monoxide and other pollutants to obtain data regarding public exposure to air contaminants.

- (A) Analyze, summarize, and report air quality information generated from the monitoring sites.
- (B) Provide continuous records for assessment of progress toward meeting federal and state air quality standards.
- (C) Develop and prepare meteorological forecasts and models.
- (D) Respond to emergency requests by providing technical assistance to first-response public safety agencies.
- (E) Notify the public, media, schools, regulated industries and others whenever predicted or observed levels exceed the episode levels established under state law.
- (F) Conduct special studies such as MATES IV, National Air Toxics Trends (NATTS), Port Air Quality Monitoring, Near Road NO<sub>2</sub> Monitoring, and TraPac Air Filtration Program.



## **PROGRAM CATEGORIES**

### **OPERATIONAL SUPPORT**

Provide operational support to facilitate overall air quality improvement programs.

- (A) Provide services that enable SCAQMD offices to function properly. Services include facility administration, human resources and financial services.
- (B) Provide information management services in support of all SCAQMD operations, including automation of permitting and compliance records, systems analysis and design, computer programming and operations, records management, and the library.
- (C) Provide legal support and representation on all policy and regulatory issues and all associated legal actions.

### **TIMELY REVIEW OF PERMITS**

Ensure timely processing of permits for new sources based on compliance with New Source Review and other applicable local, state and federal air quality rules and regulations.

- (A) Process applications for Permits to Construct and/or to Operate for new construction, modification and change of operations of equipment from major and non-major sources.
- (B) Process Title V permits (Initial, Renewal, and Revisions) and facility permits for RECLAIM sources.
- (C) Process applications for Administrative Changes, Change of Operator, Plans and Emission Reductions Credits (RTC).
- (D) Continue efforts to streamline and expedite permit issuance through:
  - (1) Equipment certification/registration programs
  - (2) Area sources filing program
  - (3) Streamlined standard permits
  - (4) Certification of Permit Processing (CPP) professionals
  - (5) Enhancement of permitting systems
  - (6) Expedited Permit Processing Program

### **POLICY SUPPORT**

Monitor, analyze and attempt to influence the outcome of state/federal legislation.

- (A) Track changes to the state/federal budgets that may affect SCAQMD.
- (B) Respond to Congressional and Senatorial inquiries regarding SCAQMD programs, policies or initiatives.
- (C) Assist SCAQMD consultants in identifying potential funding sources and securing funding for SCAQMD programs.

## **PROGRAM CATEGORIES**

- (D) Provide support staff to the Governing Board, Board committees, and various advisory and other groups such as the Air Quality Management Plan Advisory Group, the Environmental Justice Advisory Group; the Home Rule Advisory Group; the Local Government and Small Business Assistance Advisory Group; the Mobile Source Air Pollution Reduction Review Committee (MSRC) and MSRC Technical Advisory Committee; the Scientific, Technical and Modeling Peer Review Advisory Group; the Technology Advancement Advisory Group; as well as ad hoc committees established from time to time and various Rule working groups.

## REVENUE CATEGORIES

### I. **Allocatable**

A portion of SCAQMD revenue offsets operational support costs of the SCAQMD.

1a Allocatable SCAQMD – District-wide administrative and support services (e.g., Human Resources, Payroll, Information Management).

1b Allocatable – Office – Administrative activities specific to a given division/office.

### II. **Annual Operating Emissions Fees**

### III. **Permit Processing Fees**

### IV. **Annual Operating Permit Renewal**

### V. **Federal Grants/Other Federal Revenue**

### VI. **Source Test/Sample Analysis Fees**

### VII. **Hearing Board Fees**

### VIII. **Clean Fuels Fees**

### IX. **Mobile Sources**

### X. **Air Toxics AB 2588**

### XI. **Transportation Programs**

XII - XIV. These revenue categories are no longer used.

### XV. **California Air Resources Board Subvention**

XVI. This revenue category is no longer used.

### XVII. **Other Revenue**

### XVIII. **Area Sources**

### XIX. **Portable Equipment Registration Program (PERP)**

For a description of the revenue categories listed above, please refer to the corresponding revenue account in the FUND BALANCE & REVENUES tab, EXPLANATION OF FUNDING SOURCES section.

## WORK PROGRAM OVERVIEW

The Fiscal Year 2014-15 Work Program was developed from individual Work Programs and output justifications submitted by each Office based on information and estimates for each activity. The Work Programs are tied to the FY 2014-15 Budget and the Work Programs for each Office can be found in the OFFICE BUDGETS section of this document. A glossary of terms and acronyms used in the Work Program is included at the end of this section.

The costs shown in the Work Program are based on average expenditures for Salaries and Benefits and most Services and Supplies costs. Professional & Special Services, Temporary Agency Services, and Capital Outlays expenditures are assigned to a specific work program code. A District General overhead cost has been apportioned to each Work Program line based on the number of Full-Time Equivalent (FTE) staff positions for that line.

A spreadsheet format is used to present the Work Program. The following is a brief description of each spreadsheet column:

The **#** column identifies each line in the Work Program in numerical order.

The **Program Code** is a five-digit code assigned to each program. The first two digits represent the Office number. The last three digits are the program number.

The **Goal** column identifies which of the three program goals (defined in the Draft Goals and Priority Objectives) applies to that output. The goals are:

- GOAL I**      **Ensure expeditious progress toward meeting clean air standards and protection public health.**
- GOAL II**     **Enhance public education and ensure equitable treatment for all communities.**
- GOAL III**    **Operate efficiently and in a manner sensitive to public agencies, businesses, the public and SCAQMD staff.**

The **Office** column, which appears on the Work Program by Category document, identifies the Office expected to perform the work.

The **Program Category** column, which appears in the Work Program by Office section, identifies one of the nine program categories associated with an activity.

The **Program** column identifies the program associated with the work.

The **Activities** column provides a brief description of the work.

The **FTEs** column identifies the number of Full Time Equivalent (FTE) staff positions in the current-year adopted budget, mid-year and proposed changes (+/-), and the proposed budget for the next fiscal year. An FTE position represents one person-year.

The **COST** column, found in the Work Program by Category Schedules, identifies the costs in the current-year adopted budget, proposed changes (+/-) and the proposed budget for the next fiscal year.

The **Revenue Categories** column identifies the revenue that supports the work. Revenue Category descriptions can be found on the preceding page.

**Advance Clean Air Technology  
Work Program by Category**

#	Program Code	Goal	Office	Program	Activities	FTEs		Cost		Revenue Categories		
						FY 2013-14	+/-	FY 2014-15	+/-		FY 2013-14	FY 2014-15
1	108	001	I	LEG AB2766/Mob Src/Legal Advice	AB2766 Leg Adv: Trans/Mob Source	0.05		0.05	\$ 9,802	\$ 18	\$ 9,820	IX
2	104	003	III	FIN AB2766/MSRC	MSRC Program Administration	0.35		0.35	45,693	1,237	46,930	IX
3	108	003	I	LEG AB2766/MSRC	Legal Advice: MSRC Prog Admin	0.10	0.05	0.15	19,604	9,856	29,460	IX
4	144	003	I	STA AB2766/MSRC	Mob Src Review Comm Prg Admin	1.00		1.00	151,543	3,425	154,968	IX
5	144	004	I	STA AB2766/MSRC/Contract Admin	AB2766 Admin Discretionary Prog	3.00		3.00	454,629	10,274	464,903	IX
6	144	039	I	STA Admin/Office Mgt/Tech Adv	Admin Support/Coordination	0.77		0.77	116,688	2,637	119,325	VIII
7	144	048	I	STA Admin/Prog Mgmt/Tech Advance	Overall TA Program Mgmt/Coord	1.55		1.55	234,891	5,308	240,200	VIII
8	144	066	I	STA AQIP Marine SCR DPF	AQIP Marine SCR DPF/Admin/impl	0.15		0.15	22,731	514	23,245	IX
9	144	012	I	STA AQMP/Control Tech Assessment	Tech Supp: Quantify Cost Effec	0.10		0.10	15,154	342	15,497	VIII
10	144	095	I	STA CA Natural Gas Veh Partnership	CA Natural Gas Veh Partnership	0.05		0.05	7,577	171	7,748	VIII
11	104	130	III	FIN Clean Fuels/Contract Admin	Clean Fuels Contract Admin/Monitor	0.15		0.15	19,583	530	20,113	VIII
12	144	130	I	STA Clean Fuels/Contract Admin	Admin/Project Supp for TA Cont	3.40		3.40	515,246	11,644	526,890	VIII
13	108	131	I	LEG Clean Fuels/Legal Advice	Legal Advice: Clean Fuels	0.05		0.05	9,802	18	9,820	VIII
14	144	132	I	STA Clean Fuels/Mobile Sources	Dev/Impl Mobile Src Proj/Demo	5.30	(0.20)	5.10	803,177	(12,842)	790,335	VIII
15	144	134	I	STA Clean Fuels/Stationary Combust	Dev/Demo Clean Combustion Tech	0.70		0.70	106,080	2,397	108,477	VIII
16	144	135	I	STA Clean Fuels/Stationary Energy	Dev/Demo Alt Clean Energy	0.70		0.70	106,080	2,397	108,477	VIII
17	144	136	I	STA Clean Fuels/Tech Transfer	Disseminate Low Emiss CF Tech	1.45		1.45	232,337	(7,634)	224,703	VIII
18	144	188	I	STA DERA FY 13 Veh Repl	DERA Vehicle Repl Admin/Impl	0.00	0.20	0.20	-	30,994	30,994	XVII
19	144	190	I	STA Diesel Projects EPA	Diesel Projects EPA/Admin/impl	0.11		0.11	16,670	377	17,046	V
20	144	361	I	STA HD Trucks DOE ARRA	DOE HD Trucks Admin (ARRA)	2.00		2.00	303,086	6,849	309,935	XVII
21	144	424	I	STA LNG Trucks CEC	LNG Trucks Admin CEC	1.00		1.00	151,543	3,425	154,968	IX
22	144	457	I	STA Mob Src/C Moyer Adm/Outreach	Carl Moyer: Impl/Admin Grant	5.65		5.65	856,217	19,350	875,567	IX
23	144	459	I	STA Mob Src/C Moyer/impl/Prg Dev	Moyer/implen/Program Dev	2.80		2.80	424,320	9,589	433,909	IX
24	108	457	I	LEG Mob Src/C Moyer/Leg Advice	Moyer/implen/Program Dev	0.20		0.20	39,209	71	39,280	IX
25	144	453	I	STA Mob Src: Emiss Inven Method	Rwv CARB/US EPA emissions inven methodology	1.50		1.50	227,314	5,137	232,451	VIII,IX
26	104	457	III	FIN Mobile Source/Moyer Adm	Carl Moyer: Contract/Fin Admin	1.02		1.02	133,163	3,604	136,767	IX
27	103	455	I	EO Mobile Sources	Dev/Impl Mobile Source Strategies	0.10		0.10	22,943	38	22,981	IX
28	116	457	I	AHR MS/Carl Moyer Admin	C Moyer/Contractor Compliance	1.00	(0.50)	0.50	167,037	(81,678)	85,359	IX
29	144	497	I	STA Plug-in Hybrid EV DOE ARRA	DOE Plug-in Hybrid EV Admin (ARRA)	0.75		0.75	113,657	2,569	116,226	V
30	104	542	I	FIN Prop 1B: Goods Movement	Contracts/Finance Admin	0.50		0.50	65,276	1,767	67,043	IX
31	116	542	I	AHR Prop 1B: Goods Movement	Prop 1B: Goods Movement	0.00	0.50	0.50	-	85,359	85,359	IX
32	104	544	I	FIN Prop 1B: Low Emiss Sch Bus	Grants/Finance Admin	0.05		0.05	6,528	177	6,704	IX
33	144	677	I	STA School Bus/Lower Emission Prog	School Bus Program Oversight	0.20	0.50	0.70	30,309	78,169	108,477	VIII
34	26	738	I	PRA Target Air Shed EPA	Targeted Air Shed Admin/impl	0.50	(0.25)	0.25	79,056	(38,695)	40,360	XVII
35	144	738	I	STA Target Air Shed EPA	Targeted Air Shed Admin/impl	0.15		0.15	22,731	514	23,245	XVII
36	144	740	I	STA Tech Adv/Commercialization	Assess CFs/Adv Tech Potential	0.25		0.25	37,886	856	38,742	VIII
37	144	741	I	STA Tech Adv/Non-Combustion	Dev/Demo Non-Combustion Tech	0.10		0.10	15,154	342	15,497	VIII
38	144	816	I	STA Transportation Research	Transport Research/Adv Systems	0.50		0.50	75,771	1,712	77,484	VIII
39	144	460	I	STA VIP Admin	VIP Admin/Outreach/impl	0.80		0.80	121,234	2,740	123,974	IX
<b>Total</b>						<b>38.05</b>	<b>0.30</b>	<b>38.35</b>	<b>\$ 5,779,722</b>	<b>\$ 163,557</b>	<b>\$ 5,943,280</b>	

A prorated share of the District General budget has been allocated to each line in the workplan based on the number of FTEs reflected on the line.

**Ensure Compliance with Clean Air Rules  
Work Program by Category**

#	Program Code	Goal	Office	Program	Activities	FTEs		Cost		Revenue Categories	
						FY 2013-14	+/-	FY 2014-15	+/-		FY 2013-14
1	44 015	I	STA	Acid Rain Program	Acid Rain CEMS Eval/Cert	0.50		\$ 75,771	\$ 1,712	\$ 77,484	II,IV
2	26 042	I	PRA	Admin/Office Mgmt/Compliance	Admin: Compl w SCAQMD Rules	0.25		39,528	832	40,360	1b
3	26 046	I	PRA	Admin/Office Mgmt/Compliance	Admin: Compl of Existing Source	0.00	0.52	-	83,949	83,949	1b
4	44 042	I	STA	Admin/Office Mgmt/Compliance	Compliance: Assign/Manage/Supp	0.37		56,071	1,267	57,338	1b
5	26 215	I	PRA	Annual Emission Reporting	Annl Des/Imp/Emiss Monitor Sys	4.00	3.50	737,445	578,361	1,315,806	II,V
6	50 071	I	EAC	Arch Ctgs - Admin	Report Review	0.10		14,607	366	14,973	XVIII
7	08 072	I	LEG	Arch Ctgs - End User	Case Dispo/Rvw, Track, Prep NOV's	0.05		9,802	18	9,820	XVIII
8	26 072	I	PRA	Arch Ctgs - End User	Compliance/Rpts/Rule Implementation	1.00		158,111	3,329	161,441	XVIII
9	44 072	I	STA	Arch Ctgs - End User	Sample Analysis/Rpts	1.00		151,543	3,425	154,968	XVIII
10	50 072	I	EAC	Arch Ctgs - End User	Compliance/Rpts/Rule Implementation	0.10		14,607	366	14,973	XVIII
11	08 073	I	LEG	Arch Ctgs - Other	Case Dispo/Rvw, Track, Prep NOV's	0.50	(0.30)	98,021	(58,742)	39,280	XVIII
12	26 073	I	PRA	Arch Ctgs - Other	Compliance/Rpts/Rule Implementation	1.00		158,111	3,329	161,441	XVIII
13	50 073	I	EAC	Arch Ctgs - Other	Compliance/Rpts/Rule Implementation	4.50		657,337	16,458	673,794	XVIII
14	26 076	I	PRA	Area Sources/Compliance	Area Source Compliance	3.50	(0.50)	603,390	(69,067)	534,322	IV,IX,XV
15	16 080	III	AHR	Auto Services	Vehicle/Radio Repair & Maint	3.00		501,110	11,045	512,155	1a
16	35 111	II	LPA	Call Center/CUT SMOG	Smoking Vehicle Complaints	8.00		1,229,980	16,417	1,246,397	IX,XV
17	50 070	I	EAC	CARB PERP Program	CARB Audits/Statewide Equip Reg	7.00		1,022,524	25,601	1,048,124	XIX
18	08 115	I	LEG	Case Disposition	Trial/Dispo-Civil Case/Injunct	6.00		1,176,256	2,136	1,178,392	II,IV,VII,XV
19	44 105	I	STA	CEMS Certification	CEMS Review/Approval	6.15		931,989	21,062	953,051	III,VI
20	50 155	I	EAC	Compliance Guidelines	Procedures/Memos/Manuals	0.50		73,037	1,829	74,866	II
21	50 158	I	EAC	Compliance Testing	R461/Combustion Equip Testing	1.00		146,075	3,657	149,732	II
22	50 152	III	EAC	Compliance/IM Related Activiti	Assist IM: Design/Review/Test	0.50		73,037	1,829	74,866	II
23	08 154	I	LEG	Compliance/NOV Administration	Review/Track/Prep NOV's/MSAs	1.20		235,251	427	235,678	IV
24	50 157	I	EAC	Compliance/Special Projects	Prog Audits/Data Reg/Board Supp	5.00		730,374	18,286	748,660	IV
25	08 185	I	LEG	Database Management	Support IM/Dev Tracking System	0.20		39,209	30,071	69,280	IV
26	44 175	I	STA	DB/Computerization	Develop Systems/Database	0.44		66,679	1,507	68,186	II,IV,VI
27	26 357	I	PRA	GHG Reptg Sys EPA	GHG Reptg Sys EPA Admin/Impl	0.10	(0.10)	15,811	(15,811)	-	V
28	50 365	I	EAC	Hearing Bd/Variations	Variations/Orders of Abatement	1.50		219,112	5,486	224,598	VII
29	17 364	I	CB	Hearing Board/Abatement Orders	Attn/Recrd/Monitr Mtgs	0.10		19,265	276	19,541	IV
30	08 366	I	LEG	Hearing Board/Legal	Hear/Disp-Variation/Appeal/Rev	2.80		548,919	997	549,916	IV
31	17 365	I	CB	Hearing Board/Variations/Appeal	Attn/Recrd/Monitr HB Mtgs	3.20		641,889	8,824	650,713	IV,V,VII
32	50 375	I	EAC	Inspections	Compliance/Inspection/Follow-up	79.20		11,569,125	289,653	11,858,778	IV,V,XV
33	50 377	I	EAC	Inspections/RECLAIM Audits	Audit/Compliance Assurance	23.80		3,476,581	87,042	3,563,623	II,IV
34	08 380	I	LEG	Interagency Coordination	Coordinate with Other Agencies	0.25		49,011	89	49,100	II,V
35	08 402	III	LEG	Legal Advice/Legislation	Legal Support/Rep on Legal Matter	0.25	(0.15)	49,011	(29,371)	19,640	1a
36	08 403	III	LEG	Legal Rep/Litigation	Prep/Hearing/Disposition	3.60	(0.10)	895,253	(18,358)	876,895	1a,II
37	44 450	I	STA	Microscopic Analysis	Asbestos/PM/Metals Analysis	3.00		454,629	10,274	464,903	VI
38	08 465	I	LEG	Mutual Settlement	Mutual Settlement Program	3.00		588,128	1,068	589,196	IV
39	50 156	I	EAC	Perm Proc/Info to Compliance	Prov Permit Info to Compliance	3.00		438,224	10,972	449,196	III,IV
40	44 500	I	STA	PM2.5 Program	Est/Operate/Maint PM2.5 Network	4.80	6.50	787,406	963,728	1,751,134	II,V,IX
41	50 538	I	EAC	Port Comm AQ Enforcement	Port Comm AQ Enforcement	0.50		73,037	1,829	74,866	IX
42	50 542	I	EAC	Prop 1B: Goods Movement	Prop 1B: Gds Mvmt/Inspect	0.30		43,822	1,097	44,920	IX
43	50 550	II	EAC	Public Complaints/Breakdowns	Compl/resp/invtiwp/resoltn	10.00		1,460,748	36,572	1,497,321	II,IV,V,XV

**Ensure Compliance with Clean Air Rules  
Work Program by Category**

#	Program Code	Goal	Office	Program	Activities	FTEs		Cost		Revenue Categories			
						FY 2013-14	+/-	FY 2014-15	+/-		FY 2013-14	+/-	FY 2014-15
44	50	605	I	EAC	RECLAIM/Admin Support	Admin/Policy/Guidelines	10.00	10.00	\$ 1,460,748	\$ 36,572	\$ 1,497,321	II,III,IV	
45	26	620	I	PRA	Refinery Pilot Project	Refinery Pilot Project	0.25	0.25	39,528	832	40,360	II	
46	26	645	I	PRA	Rule 1610 Plan Verification	Rule 1610 Plan Verification	0.50	0.50	79,056	1,665	80,720	VI,X	
47	50	678	I	EAC	School Siting	Identify Haz. Emission Sources near Schools	1.00	1.00	146,075	3,657	149,732	II	
48	50	680	I	EAC	Small Business Assistance	Asst sm bus w/ Permit Process	0.50	0.50	73,037	1,829	74,866	IV	
49	44	700	I	STA	Source Testing/Compliance	Conduct ST/Prov Data/Compl	2.25	2.25	360,971	17,706	378,677	VI	
50	26	716	I	PRA	Spec Monitoring/R403	Rule 403 Compliance Monitoring	0.75	0.25	118,583	42,857	161,441	IV,IX,XV	
51	44	716	I	STA	Special Monitoring	Rule 403 Compliance Monitoring	2.20	2.20	383,394	(7,466)	375,929	IV,IX,XV	
52	44	704	I	STA	ST/Sample Analysis/Compliance	Analyze ST Samples/Compliance	4.00	4.00	606,172	13,699	619,870	VI	
53	50	751	I	EAC	Title III Inspections	Title III Comp/Insp/Follow Up	0.50	0.50	73,037	1,829	74,866	IV	
54	08	770	I	LEG	Title V	Leg Advice: Title V Prog/Perm Dev	0.05	0.05	9,802	18	9,820	II,IV	
55	50	771	I	EAC	Title V Inspections	Title V Comp/Inspect/Follow Up	11.00	11.00	1,606,823	40,230	1,647,053	II,IV	
56	04	791	III	FIN	Toxics/AB2588	AB2588 Toxics HS Fee Collection	0.15	0.15	34,583	530	35,113	X	
57	08	791	I	LEG	Toxics/AB2588	AB2588 Legal Advice: Plan & Impl	0.05	0.05	9,802	18	9,820	X	
58	26	794	I	PRA	Toxics/AB2588	AB2588 Core, Tracking, IWS	7.00	1.50	1,106,779	265,467	1,372,247	X	
59	27	791	III	IM	Toxics/AB2588	AB2588 Database Software Supp	0.50	0.50	141,675	2,317	143,992	X	
60	44	794	I	STA	Toxics/AB2588	Eval Protocols/Methods/ST	1.25	1.25	189,428.60	4,281	193,710	X	
61	50	791	I	EAC	Toxics/AB2588	AB2588 Rev Rpts/Risk Redplans	0.00	0.25	-	37,433	37,433	X	
62	26	790	I	PRA	Toxics/AB2588 Plans/Reports	AB2588 Rev Rpt/Risk Assmt Plan	0.50	(0.50)	79,056	(79,056)	-	X	
63	44	795	I	STA	Toxics/Engineering	R1401 Toxics/HRA Prot/Rpt Eval	0.05	0.05	7,577	171	7,748	X	
64	08	805	III	LEG	Training	Continuing Education/Training	0.50	0.50	98,021	178	98,199	1b	
65	50	850	I	EAC	VEE Trains	Smoking Trains-Comp/Inspe/FU	0.50	0.50	73,037	1,829	74,866	IX,XV	
66	44	707	I	STA	VOC Sample Analysis/Compliance	VOC Analysis & Rptg/Compliance	7.00	7.00	1,092,800	28,973	1,121,773	IV,XV	
67	17	855	II	CB	Web Tasks	Create/edit/review web content	0.03	0.03	5,780	83	5,862	1a	
<b>Total</b>							245.79	10.87	256.66	\$ 38,125,604	\$ 2,469,490	\$ 40,595,094	

**Customer Service and Business Assistance  
Work Program by Category**

#	Program Code	Goal	Office	Program	Activities	FTEs		Cost		Revenue Categories	
						FY 2013-14 +/-	FY 2014-15 +/-	FY 2013-14 +/-	FY 2014-15 +/-		
1	04	002	III	FIN	AB2766/Mobile Source	0.10	0.10	\$ 13,055	\$ 10,353	\$ 23,409	IX
2	26	007	I	PRA	AB2766/MSRC	1.10	1.10	173,922	3,662	177,585	IX
3	50	038	I	EAC	Admin/Office Management	4.00	4.00	584,299	14,629	598,928	1b
4	50	047	I	EAC	Admin/Operations Support	5.00	5.00	735,374	18,286	753,660	1b
5	35	046	III	LPA	Admin/Prog Mgmt	3.02	3.02	464,317	6,197	470,515	1b
6	26	216	I	PRA	AER Public Assistance	0.15	1.85	23,717	299,165	322,882	II
7	04	170	I	FIN	Billing Services	8.00	8.00	1,054,418	33,268	1,087,685	II,III,IV
8	04	631	III	FIN	Cash Mgmt/Refunds	0.30	0.30	39,166	1,060	40,226	III,IV,XI
9	35	126	II	LPA	Clean Air Connections	1.00	1.00	153,747	2,052	155,800	II,IX
10	50	200	I	EAC	Economic Dev/Bus Retention	0.10	0.10	14,607	366	14,973	III
11	35	205	II	LPA	Environmental Education	0.25	0.25	38,437	513	38,950	II,X,XV
12	35	240	I	LPA	Environmental Justice	2.00	2.00	307,495	4,104	311,599	II,IV
13	04	260	III	FIN	Fee Review	0.10	0.10	13,055	353	13,409	II,III,IV,XV
14	35	260	III	LPA	Fee Review	0.50	0.50	76,874	1,026	77,900	II,III,IV,XV
15	50	260	III	EAC	Fee Review	0.45	0.45	65,734	1,646	67,379	II,III,IV
16	04	355	III	FIN	Grants Management	1.00	1.00	130,552	3,533	134,086	IV,V
17	35	381	III	LPA	Interagency Liaison	0.15	0.15	23,062	308	23,370	1a,XV
18	35	390	I	LPA	Intergov/Geographic Deployment	9.50	9.50	1,498,601	19,495	1,518,096	II,IX
19	08	404	I	LEG	Legal Rep/Legislation	0.05	0.05	9,802	18	9,820	II,IX
20	50	425	I	EAC	Lobby Permit Services	1.00	1.00	146,075	3,657	149,732	III
21	03	390	I	EO	Local Govt Policy Development	0.05	0.05	11,471	19	11,490	1a
22	27	481	III	IM	New System Development	1.75	1.75	582,063	158,111	740,173	1a,III
23	03	490	II	EO	Outreach	1.00	1.00	229,426	381	229,807	1a
24	35	491	II	LPA	Outreach/Business	1.00	1.00	153,747	14,652	168,400	II,IV
25	35	496	II	LPA	Outreach/Visiting Dignitary	0.25	0.25	38,437	513	38,950	1a
26	50	520	I	EAC	Perm Proc/Pre-App'l Mtg Outreach	4.00	4.00	584,299	14,629	598,928	III
27	35	514	I	LPA	Permit: Expired Permit Program	0.30	0.30	46,124	616	46,740	IV
28	16	540	III	AHR	Print Shop	4.00	4.00	679,147	14,726	693,873	1a
29	35	555	II	LPA	Public Education/Public Events	1.00	1.00	313,747	2,052	315,800	II,IX,XV
30	35	555	II	LPA	Public Information Center	1.00	1.00	243,747	2,052	245,800	II,IX
31	03	565	III	EO	Public Records Act	0.05	0.05	11,471	19	11,490	1a
32	04	565	I	FIN	Public Records Act	0.02	0.02	2,611	71	2,682	1a
33	08	565	III	LEG	Public Records Act	0.50	0.50	98,021	178	98,199	1a
34	16	565	III	AHR	Public Records Act	0.20	(0.15)	33,407	(24,871)	8,536	1a
35	17	565	III	CB	Public Records Act	0.02	0.02	3,853	55	3,908	1a
36	26	565	III	PRA	Public Records Act	0.05	0.48	7,906	77,658	85,564	1a
37	27	565	III	IM	Public Records Act	3.75	3.75	645,563	17,380	662,943	1a
38	35	565	III	LPA	Public Records Act	0.10	0.10	15,375	205	15,580	1a
39	44	565	III	STA	Public Records Act	0.17	0.17	25,762	582	26,344	1a
40	50	565	III	EAC	Public Records Act	0.50	0.50	73,037	1,829	74,866	1a
41	26	833	III	PRA	Rule 2202 ETC Training	1.30	1.30	205,545	4,328	209,873	XI
42	35	679	III	LPA	Small Business Assistance	1.00	1.00	153,747	2,052	155,800	III
43	08	681	III	LEG	Small Business/Legal Advice	0.10	(0.05)	19,604	(9,784)	9,820	II,III



Customer Service and Business Assistance Work Program by Category												
#	Program Code	Goal	Office	Program	Activities	FY 2013-14	FTEs +/-	FY 2014-15	FY 2013-14	Cost +/-	FY 2014-15	Revenue Categories
44	50	690	I	EAC	Source Education	Prov Tech Asst To Industries	2.80	2.80	\$ 409,009	\$ 10,240	\$ 419,250	III,IV,V,XV
45	44	701	I	STA	Source Testing/Customer Svc	Conduct ST/Prov Data/Cust Svc	0.05	0.05	7,577	171	7,748	VI
46	35	710	I	LPA	Speakers Bureau	Coordinate/conduct speeches	0.10	0.10	15,375	205	15,580	1a
47	16	720	I	AHR	Subscription Services	Rule & Gov Board Materials	1.70	1.70	283,963	6,259	290,221	IV
48	35	791	I	LPA	Toxics/AB2588	Outreach/AB 2588 Air Toxics	0.01	0.01	1,537	21	1,558	X
49	44	709	I	STA	VOC Sample Analysis/SBA/Other	VOC Analysis & Reptg/Cust Svc	0.50	0.50	75,771	1,712	77,484	VI
<b>Total</b>							65.04	2.13	\$ 10,537,656	\$ 719,754	\$ 11,257,410	

A prorated share of the District General budget has been allocated to each line in the workplan based on the number of FTEs reflected on the line.

**Develop Programs to Achieve Clean Air  
Work Program by Category**

#	Program Code	Goal	Office	Program	Activities	FTEs		Cost		Revenue Categories		
						FY 2013-14 +/-	FY 2014-15 +/-	FY 2013-14 +/-	FY 2014-15 +/-			
1	04	009	I	FIN	AB 1318 Mitigation	AB 1318 Projects Adm/Impl	0.13	0.13	\$ 16,972	\$ 459	\$ 17,431	XVII
2	08	009	I	LEG	AB 1318 Mitigation	AB 1318 Projects Adm/Impl	0.05	0.05	9,802	18	9,820	XVII
3	26	009	I	PRA	AB 1318 Mitigation	AB 1318 Projects Adm/Impl	0.50	(0.50)	79,056	(79,056)	-	XVII
4	44	009	I	STA	AB 1318 Mitigation	AB 1318 Projects Adm/Impl	0.75	0.75	113,657	2,569	116,226	XVII
5	26	002	I	PRA	AB2766/Mobile Source	AB2766 Mobile Source Outreach	0.89	0.89	140,719	2,963	143,682	IX
6	26	038	I	PRA	Admin/Office Management	Coordinate Off/Admin Activities	0.50	0.50	79,056	1,665	80,720	1b
7	26	049	I	PRA	Admin/Prog Mgmt/AQMP	Admin: AQMP Development	0.75	0.75	118,583	2,497	121,081	1b
8	03	028	I	EO	Admin/SCAQMD Policy	Dev/Coord Goals/Policies/Overs	2.00	2.00	508,853	762	509,614	1a
9	26	057	I	PRA	Admin/Transportation Prog Mgmt	Admin: Transportation Programs	0.86	0.86	135,976	2,863	138,839	1b
10	44	069	I	STA	AQIP Evaluation	AQIP Contract Admin/Evaluation	0.65	0.65	98,503	2,226	100,729	IX
11	03	010	I	EO	AQMP	Develop/Implement AQMP	0.05	0.05	11,471	19	11,490	II,IX
12	08	010	I	LEG	AQMP	AQMP Revision/CEQA Review	0.10	0.10	19,604	19,675	39,280	IV,IX
13	26	010	I	PRA	AQMP	AQMP Special Studies	2.00	2.00	321,223	6,659	327,882	IV,IX,XV
14	26	218	I	PRA	AQMP/Emissions Inventory	Dev Emiss Inv: Forecasts/RFPs	2.25	2.45	355,750	39,779	395,530	II,IX
15	26	102	II	PRA	CEQA Document Projects	Review/Prepare CEQA Comments	3.40	3.35	537,578	67,824	605,403	II,IX
16	26	104	I	PRA	CEQA Policy Development	ID/Develop/impl CEQA Policy	1.10	(0.60)	183,922	(93,202)	90,720	IV,IX
17	26	103	II	PRA	CEQA Special Projects	Contracted by Lead Agency	0.40	(0.40)	63,245	(63,245)	-	XVII
18	26	128	I	PRA	Cln Communities Pln	Cln Communities Plan Adm/Impl	1.50	(1.00)	237,167	(156,447)	80,720	II,IX
19	26	600	I	PRA	Credit Generation Programs	Dev RFP/AQMP Ctrl Strats/Inter	1.25	1.25	197,639	4,162	201,801	II,IX
20	26	219	I	PRA	Emissions Field Audit	Emissions Field Audit	2.00	(1.50)	316,223	(235,502)	80,720	II
21	26	217	I	PRA	Emissions Inventory Studies	Dev Emiss DB/Dev/Update Emiss	4.00	(2.00)	632,445	(309,564)	322,882	II,IX,XV
22	44	396	I	STA	Lawmower Exchange	Law Mower Admin/Impl/Outreach	0.30	0.30	45,463	1,027	46,490	XVII
23	26	397	II	PRA	Lead Agency Projects	Prep Envrntm Asmts/Perm Proj	1.30	(0.55)	205,545	(84,464)	121,081	III
24	44	451	I	STA	Mob Src/CARB/EPA Monitoring	CARB/US EPA Mob Src Fuel Policies	1.50	1.50	227,314	5,137	232,451	IX
25	44	452	I	STA	Mob Src/CEC/US DOE Monitoring	CEC/US DOE Mob Src rulemaking proposals	1.00	1.00	151,543	3,425	154,968	IX,XVII
26	44	458	I	STA	Mobile Source Strategies	Implement Fleet Rules	1.00	1.00	151,543	3,425	154,968	VIII
27	44	448	I	STA	Mobile Src Strategies-Off Road	CARB Off-Road Mob Src ctrl strategy for SIP	1.00	1.00	151,543	3,425	154,968	XVII
28	26	463	I	PRA	Mold Project EPA	Mold Project EPA/Admin Impl	0.10	(0.10)	15,811	(15,811)	-	V
29	26	503	I	PRA	PM Strategies	PM10 Plan/Analyze/Strategy Dev	4.00	4.00	632,445	13,318	645,763	II,IX,XV
30	26	221	I	PRA	PR2301 ISR Rule Implementation	Mitigate dev growth	1.02	0.48	161,274	80,888	242,161	II,IX
31	44	542	I	STA	Prop 18:Goods Movement	Prop 18:Goods Movement	5.70	5.70	863,794	19,521	883,315	IX
32	44	544	II	STA	Prop 18:Low Emiss Sch Bus	Prop 18:Low Emiss Sch Bus	1.00	(0.50)	151,543	(74,059)	77,484	IX
33	35	560	I	LPA	Public Notification	Public notif of rules/hearings	0.50	0.50	96,874	1,026	97,900	II,IX,IX
34	26	745	I	PRA	Rideshare	Dist Rideshare/Telecommute Prog	0.65	0.65	102,772	2,164	104,936	IX
35	26	834	I	PRA	Rule 2202 Implement	Rule 2202 Proc/Sub Plans/Tech Eval	3.07	3.07	485,402	10,221	495,623	XI
36	26	836	I	PRA	Rule 2202 Support	R2202 Supt/CmptrMaint/WebSubmt	2.73	0.07	446,644	20,390	467,034	V,VI
37	26	068	II	PRA	SCAQMD Projects	Prepare Environmental Assessments	5.10	(0.40)	826,368	(47,596)	778,772	II,IX,IX
38	26	685	I	PRA	Socio-Economic	Apply econ models/Socio-econ	3.25	0.20	675,362	(9,391)	665,971	II,IX
39	44	702	I	STA	ST Methods Development	Eval ST Methods/Validate	0.95	0.95	143,966	3,254	147,219	II
40	44	705	I	STA	ST Sample Analysis/Air Program	Analyze ST Samples/Air Prgrms	0.25	0.25	37,886	856	38,742	II
41	26	816	I	PRA	Transportation Regional Progs	Dev AQMP Meas/Coord w/Reg Agn	0.60	0.60	94,867	1,998	96,864	IX
<b>Total</b>							60.15	(6.15)	\$ 9,845,401	\$ (844,120)	\$ 9,001,281	

A prorated share of the District General budget has been allocated to each line in the workplan based on the number of FTEs reflected on the line.

**Develop Rules to Achieve Clean Air  
Work Program by Category**

#	Program Code	Goal	Office	Program	Activities	FTEs		Cost		Revenue Categories	
						FY 2013-14	+/-	FY 2014-15	+/-		FY 2013-14
1	44	043	I	STA Admin/Office Mgmt/Rules	Rules: Assign/Manage/Supp	0.15		\$ 22,731	\$ 514	\$ 23,245	1b
2	26	050	I	PRA Admin/Rule Dev/PRA	Admin: Rule Development	1.00		158,111	3,329	161,441	1b
3	26	071	I	PRA Arch Ctg - Admin	Rdev/Aud/DB/TA/SCAQMD/Rpts/AER	1.00	(0.25)	158,111	(37,031)	121,081	VIII
4	26	077	I	PRA Area Sources/Rulemaking	Dev/Eval/Impl Area Source Prog	4.00		632,445	13,318	645,763	II,IX
5	26	084	I	PRA Blk Carbon Study EPA	EPA Blk Carbon Climate Study	0.00	0.20	-	32,288	32,288	VXVII
6	26	165	I	PRA Conformity	Monitor Transp. Conformity	0.50		79,056	1,665	80,720	V,IX
7	03	385	I	EO Credit Generation Programs	Dev/Impl Marketable Permit	0.02		4,589	8	4,596	II
8	26	385	I	PRA Criteria Pollutants/Mob SrCs	Dev/Impl Intercredit Trading	1.00	(0.25)	158,111	(37,031)	121,081	IV,IX
9	26	362	II	PRA Health Effects	Study Health Effect/Toxicology	1.80		284,600	5,993	290,593	II,III,IX
10	44	449	I	STA Mob Src/SCAQMD Rulemaking	Prepare SCAQMD Mob Src rulemaking proposals	2.00		303,086	6,849	309,935	IX
11	44	456	I	STA MS & AQMP Control Strategies	AQMP Control Strategies	0.30		45,463	1,027	46,490	VIII
12	26	655	I	PRA NSR/Adm Rulemaking	Amend/Develop NSR & Admin Rules	5.00	(2.00)	790,557	(306,234)	484,322	II,IV
13	26	460	I	PRA Regional Modeling	Rule Impact/Analyses/Model Dev	5.25	0.20	930,084	4,768	934,852	II,VI,IX
14	50	650	I	EAC Rulemaking	Dev/Amend/Impl Rules	0.50		73,037	1,829	74,866	II,IX
15	44	653	I	STA Rulemaking/BACT	Dev/Amend BACT Guidelines	2.00		303,086	6,849	309,935	II
16	26	654	I	PRA Rulemaking/NOX	Rulemaking/NOX	1.00	1.00	158,111	164,770	322,882	II,IV
17	08	661	I	LEG Rulemaking/RECLAIM	RECLAIM Legal Adv/Related Iss	0.10	(0.05)	19,604	(9,784)	9,820	II
18	26	661	I	PRA Rulemaking/RECLAIM	RECLAIM Amend Rules/Related Iss	2.00	0.20	316,223	38,947	355,170	II
19	44	657	I	STA Rulemaking/Support PRA	Assist PRA w/ Rulemaking	0.05		7,577	171	7,748	II
20	50	657	I	EAC Rulemaking/Support PRA	Provide Rule Development Supp	0.50		73,037	1,829	74,866	II
21	26	659	I	PRA Rulemaking/Toxics	Develop/Amend Air Toxic Rules	3.20	1.80	505,956	301,248	807,204	II
22	26	656	I	PRA Rulemaking/VOC	Dev/Amend VOC Rules	6.90	0.60	1,210,968	149,838	1,360,806	II,IV,XV
23	03	650	I	EO Rules	Develop & Implement Rules	0.04		9,177	15	9,192	IV,IX
24	08	651	I	LEG Rules/Legal Advice	Legal Advice: Rules/Draft Regs	0.75	0.25	147,032	49,367	196,399	II
25	44	706	I	STA ST Sample Analysis/Air Program	Analyze ST Samples/Rules	0.25		37,886	856	38,742	II
26	50	752	I	EAC Title III Rulemaking	Title III Dev/Implement Rules	0.25		36,519	914	37,433	II
27	50	773	I	EAC Title V & NSR Rulemaking-Supp	Title V Rules Dev/Amend/Impl	0.25		36,519	914	37,433	II
28	44	708	I	STA VOC Sample Analysis/Rules	VOC Analysis & Rptg/Rules	0.25		37,886	856	38,742	II,XV
<b>Total</b>						40.06	1.70	\$ 6,539,563	\$ 398,083	\$ 6,937,646	

A prorated share of the District General budget has been allocated to each line in the workplan based on the number of FTEs reflected on the line.

Monitoring Air Quality Work Program by Category										
Program Code	Goal	Office	Program	Activities	FY 2013-14	FY 2014-15	FY 2013-14	FY 2014-15	Revenue Categories	
#					FTEs +/-	FTEs +/-	Cost +/-	Cost +/-		
1	44	038	I	STA	Admin/Office Mgmt/Monitoring	0.90	0.90	\$ 136,389	\$ 3,082	1b
2	44	046	I	STA	Admin/Program Management	2.00	2.00	315,086	6,849	1b
3	44	081	I	STA	Air Filtration EPA	0.25	0.25	37,886	856	V
4	44	082	I	STA	Air Filtration Other	0.50	0.50	75,771	1,712	XVII
5	44	065	I	STA	Air Quality Data Management	1.00	1.00	151,543	3,425	154,968
6	26	061	I	PRA	Air Quality Evaluation	1.00	1.00	158,111	3,329	161,441
7	44	063	I	STA	Ambient Air Analysis	11.91	11.91	1,804,876	40,789	1,845,664
8	44	067	II	STA	Ambient Lead Monitoring	0.50	0.50	75,771	1,712	77,484
9	44	064	I	STA	Ambient Network	18.05	18.85	2,842,949	185,791	3,028,740
10	44	073	I	STA	Arch Ctg - Other	2.00	2.00	303,086	6,849	309,935
11	44	084	I	STA	Blk Carbon Study EPA	0.00	0.20	-	30,994	30,994
12	26	151	II	PRA	Community Scale AirToxicsStudy	0.50	(0.50)	79,056	(79,056)	XVII
13	44	151	I	STA	Community Scale AirToxicsStudy	1.00	(1.00)	151,543	(151,543)	XVII
14	50	210	II	EAC	Emergency Response	0.25	0.25	36518.70	914	37,433
15	44	240	I	STA	Environmental Justice	0.45	0.45	68,194	1,541	69,735
16	26	439	I	PRA	MATES IV	0.10	0.10	15,811	333	16,144
17	44	439	I	STA	MATES IV	0.50	(0.50)	75,771	(75,771)	VIII
18	26	445	I	PRA	Meteorology	2.00	2.20	472,223	12,947	485,170
19	44	468	I	STA	NATTS(Natl Air Tox Trends Sta)	1.50	1.50	227,314	5,137	232,451
20	44	469	I	STA	Near Roadway Mon	1.50	1.50	227,314	5,137	232,451
21	26	530	I	PRA	Photochemical Assessment	0.25	0.25	39,528	832	40,360
22	44	530	I	STA	Photochemical Assessment	3.00	3.00	454,629	10,274	464,903
23	44	505	I	STA	PM Sampling Program (EPA)	10.60	10.60	1,606,355	36,302	1,642,657
24	44	507	I	STA	PM Sampling Spec	0.10	0.10	15,154	342	15,497
25	44	501	I	STA	PM2.5 Program	6.00	(6.00)	909,257	(909,257)	II,V,IX
26	44	585	I	STA	Quality Assurance	3.00	3.00	454,629	10,274	464,903
27	44	663	I	STA	Salton Sea Monit	0.25	0.25	37885.72	856	38,742
28	44	715	II	STA	Spec Monitoring/Emerg Response	0.50	0.50	75,771	1,712	77,484
29	26	789	I	PRA	Toxic Inventory Development	1.00	(1.00)	158,111	(158,111)	X
30	26	821	II	PRA	TraPac Air Filtr Prg	0.25	(0.25)	39,528	(39,528)	XVII
31	44	821	II	STA	TraPac Air Filtr Prg	1.00	1.00	151,543	3,425	154,968
<b>Total</b>					71.86	(8.05)	63.81	\$ 11,197,603	\$ (1,037,849)	\$ 10,159,755

A prorated share of the District General budget has been allocated to each line in the workplan based on the number of FTEs reflected on the line.

**Operational Support  
Work Program by Category**

#	Program Code	Goal	Office	Program	Activities	FTEs		Cost		Revenue Categories
						FY 2013-14 +/-	FY 2014-15 +/-	FY 2013-14 +/-	FY 2014-15 +/-	
1	04	III	FIN	Admin/Office Budget	Office Budget/Prep/Impl/Track	0.05	0.05	\$ 6,528	\$ 177	6,704 1b
2	03	III	EO	Admin/Office Management	Budget/Program Management	1.00	1.00	229,426	381	229,807 1b
3	04	III	FIN	Admin/Office Management	Fin Mgmt/Oversee Activities	3.00	3.00	391,657	10,600	402,257 1b
4	08	III	LEG	Admin/Office Management	Attorney Timekeeping/Perf Eval	2.75	0.75	574,117	128,278	702,395 1b
5	16	III	AHR	Admin/Office Management	Reports/Proj/Budget/Contracts	2.05	2.05	347,425	7,547	354,973 1b
6	27	III	IM	Admin/Office Management	Overall Direction/Coord of IM	3.00	3.00	516,450	13,904	530,354 1b
7	44	I	STA	Admin/Prog Mgmt/Mob Src	Admin: Mobile Source	1.80	1.80	272,777	6,165	278,942 1b
8	04	III	FIN	Admin/SCAQMD Budget	Analyze/Prepare/Impl/Track WP	2.50	2.50	326,380	8,834	335,214 1a
9	04	III	FIN	Admin/SCAQMD Capital Assets	FA Rep/Reconcile/Inv/Acct	0.70	0.70	91,387	2,473	93,860 1a
10	04	III	FIN	Admin/SCAQMD Contracts	Contract Admin/Monitor/Process	3.20	3.20	417,767	11,307	429,074 1a
11	17	III	CB	Admin/SCAQMD/GB/HB Mgmt	Admin Governing/Hearing Brds	1.25	1.25	240,816	3,447	244,263 1a,VII,XV
12	08	III	LEG	Admin/SCAQMD-Legal Research	Legal Research/Staff/Exec Mgmt	1.25	1.25	245,053	445	245,498 1a
13	27	I	IM	Annual Emission Reporting	System Enhancements for GHG	0.50	0.50	86,075	2,317	88,392 II,XVII
14	04	III	FIN	Arch Ctgs - Admin	Cost Analysis/Payments	0.04	0.04	5,222	141	5,363 XVIII
15	08	III	LEG	Arch Ctgs - Admin	Rule Dev/TA/Reinterpretations	1.40	1.40	274,460	498	274,958 XVIII
16	27	I	IM	Arch Ctgs - Admin	Database Dev/Maintenance	0.25	0.25	43,038	1,159	44,196 XVIII
17	04	III	FIN	Building Corporation	Building Corp Acct/Fin Reports	0.02	0.02	2,611	71	2,682 1a
18	16	III	AHR	Building Maintenance	Repairs & Preventative Maint	7.00	7.00	1,172,507	25,771	1,198,278 1a
19	16	III	AHR	Business Services	Building Services Admin/Contracts	2.40	2.40	400,888	8,836	409,724 1a
20	04	III	FIN	Cash Mgmt/Revenue Receiving	Receive/Post Pymts/Reconcile	5.25	5.25	685,399	18,551	703,950 II,III,IV,XI
21	08	III	LEG	CEQA Document Projects	CEQA Review	1.00	1.00	147,032	49,367	196,399 II,III,X
22	16	III	AHR	Classification & Pay	Class & Salary Studies	0.30	0.30	80,111	1,104	81,215 1a
23	27	III	IM	Computer Operations	Oper/Manage Host Computer Sys	5.25	5.25	1,219,138	53,832	1,272,970 1a
24	27	III	IM	Database Information Support	Ad Hoc Reports/Bulk Data Update	1.00	1.00	192,150	4,635	196,785 1a
25	27	III	IM	Database Management	Dev/Maintain Central Database	2.25	2.25	387,338	10,428	397,766 1a
26	16	III	AHR	Employee Benefits	Benefits Analysis/Orient/Records	1.40	1.40	233,851	5,154	239,006 1a
27	04	III	FIN	Employee Relations	Assist HR/Interpret Salary Res	0.10	0.10	13,055	353	13,409 1a
28	16	III	AHR	Employee Relations	Meet/Confer/Labor-Mgmt/Grievance	2.70	2.70	450,999	9,940	460,939 1a
29	08	III	LEG	Employee/Employment Law	Legal Advice: Employment Law	1.00	1.00	196,043	356	196,399 1a
30	16	III	AHR	Equal Employment Opportunity	Program Dev/Monitor/Reporting	0.10	0.10	16,704	368	17,072 1a
31	16	III	AHR	Facilities Services	Phones/Space/Keys/Audio-Visual	1.00	1.00	169,037	3,682	172,718 1a
32	04	III	FIN	Financial Mgmt/Accounting	Record Accts Rec & Pay/Rpts	6.20	6.20	849,424	21,908	871,331 1a
33	04	III	FIN	Financial Mgmt/Fin Analysis	Fin/SCAQMD Stat Analysis & Audit	0.80	0.80	104,442	2,827	107,269 1a
34	04	III	FIN	Financial Mgmt/Treasury Mgmt	Treas Mgt Anlyz/Trk/Proj/Invst	0.90	0.90	219,497	(15,320)	204,177 1a
35	04	III	FIN	Financial Systems	CLASS/Rev/Acct/PR/Sys Analyze	0.10	0.10	13,055	353	13,409 1a
36	02	III	GB	Governing Board	Rep of Dist Meet/Conf/Testimony	0.00	0.00	1,325,858	55,359	1,381,217 1a
37	08	III	LEG	Governing Board	Legal Advice:Attend Board/Cmte Mtgs	1.00	1.00	196,043	356	196,399 1a
38	17	III	CB	Governing Board	Attend/Record/Monitor Meetings	1.40	1.40	269,714	3,861	273,575 1a
39	35	III	LPA	Graphic Arts	Graphic Arts	2.00	2.00	307,495	4,104	311,599 1a
40	27	III	IM	Information Technology Svcs	Enhance Oper Effic/Productivity	2.75	2.75	505,763	13,145	518,908 1a
41	26	III	PRA	Lead Agency Projects	Rep Employees in Grievance Act	0.01	0.01	1,581	33	1,614 1a
42	08	III	LEG	Legal Advice/SCAQMD Programs	General Advice: Contracts	2.50	2.00	550,107	(97,309)	452,797 1a
43	27	III	IM	Library	General Library Svcs/Archives	0.25	0.25	51,388	1,159	52,546 1a

**Operational Support  
Work Program by Category**

#	Program Code	Goal	Office	Program	Activities	FTEs		Cost		Revenue Categories		
						FY 2013-14	+/-	FY 2014-15	+/-		FY 2013-14	+/-
44	04	447	FIN	Mobile Sources/Accounting	Record Acct Rec & Pay/Special Funds	0.65		0.65	\$ 84,859	\$ 2,297	\$ 87,156	IX
45	27	470	IM	Network Operations/Telecomm	Operate/Maintain/Implem SCAQMD	9.25		9.25	1,888,584	12,151	1,900,735	1a
46	27	480	IM	New System Development	Dev sys for special loper needs	3.00		3.00	583,646	13,904	597,550	II,IV
47	04	493	II	Outreach/SB/MB/DVBE	Outreach/Incr SB/DVBE Partic	0.05		0.05	6,528	177	6,704	1a
48	04	510	FIN	Payroll	Ded/Ret Rpts/PR/ST & Fed Rpts	3.60	1.00	4.60	514,988	145,121	660,109	1a
49	16	232	AHR	Position Control	Track Positions/Workforce Anlys	0.40	0.15	0.55	66,815	27,080	93,895	1a
50	04	570	FIN	Purchasing	Purch/Track Svcs & Supplies	2.50		2.50	326,380	8,834	335,214	1a
51	04	571	FIN	Purchasing/Receiving	Receive/Record SCAQMD Purchases	1.20		1.20	156,663	4,240	160,903	1a
52	04	572	FIN	Purchasing-Receiving/Stockroom	Track/Monitor SCAQMD Supplies	1.00		1.00	130,552	3,533	134,086	1a
53	27	615	IM	Records Information Mgmt Plan	Plan/Impl/Dir/Records Mgmt plan	1.25		1.25	258,188	5,793	263,981	1a
54	27	616	IM	Records Services	Records/Documents processing	3.75		3.75	780,563	17,380	797,943	1a,III,IV
55	16	228	AHR	Recruitment & Selection	Recruit Candidates for SCAQMD	3.25		3.25	566,370	11,965	578,335	1a
56	16	640	AHR	Risk Management	Liabl/Property/Wk Comp/Selfins	1.00		1.00	300,037	3,682	303,718	1a
57	16	026	AHR	SCAQMD Mail	Posting/Mailing/Delivery	2.30		2.30	384,185	8,468	392,652	1a
58	27	736	IM	Systems Implementation/Peoples	Fin/HR Peoplesoft Systems Impl	1.50		1.50	258,225	256,952	515,177	1a
59	27	735	IM	Systems Maintenance	Maintain Existing Software Prog	4.50		4.50	1,361,576	(55,224)	1,306,352	II,III,IV
60	04	805	FIN	Training	Continuing Education/Training	0.20		0.20	26,110	707	26,817	1b
61	26	805	PRA	Training	Training	0.05		0.05	7,906	166	8,072	1b
62	50	805	III	EAC	Dist/Org Unit Training	6.00		6.00	876,449	21,943	898,392	1b
63	04	825	III	FIN	Union Negotiations	0.02		0.02	2,611	71	2,682	1a
64	08	825	III	LEG	Legal Adv. Union Negotiations	0.05		0.05	9,802	18	9,820	1a
65	26	825	III	PRA	Union Negotiations	0.01		0.01	1,581	33	1,614	1a
66	35	825	III	LPA	Union Negotiations	0.01		0.01	1,537	21	1,558	1a
67	44	825	III	STA	Union Negotiations	0.05		0.05	7,577	171	7,748	1a
68	50	825	III	EAC	Union Negotiations	0.10		0.10	14,607	366	14,973	1a
69	04	826	III	FIN	Union Steward Activities	0.01		0.01	1,306	35	1,341	1a
70	08	826	III	LEG	Union Steward Activities	0.05		0.05	9,802	18	9,820	1a
71	35	826	III	LPA	Union Steward Activities	0.01		0.01	1,537	21	1,558	1a
72	44	826	III	STA	Union Steward Activities	0.05		0.05	7,577	171	7,748	1a
73	50	826	III	EAC	Union Steward Activities	0.10		0.10	14,607	366	14,973	1a
74	03	855	II	EO	Web Tasks	0.03		0.03	6,883	11	6,894	1a
75	04	855	II	FIN	Web Tasks	0.02		0.02	2,611	71	2,682	1a
76	20	855	II	MO	Web Tasks	0.04		0.04	6,282	(227)	6,055	1a
77	26	855	II	PRA	Web Tasks	0.10		0.10	15,811	333	16,144	1a
78	27	855	II	IM	Web Tasks	3.25		3.25	590,488	15,563	606,051	1a
79	35	855	II	LPA	Web Tasks	0.40		0.40	61,499	821	62,320	1a
80	50	855	II	EAC	Web Tasks	0.50		0.50	73,037	1,829	74,866	1a

<b>Total</b>	123.42	1.65	125.07	\$ 23,237,586	\$ 889,458	\$ 24,127,044
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**Timely Review of Permits  
Work Program by Category**

#	Program Code	Goal	Office	Program	Activities	FTEs		Cost		Revenue Categories			
						FY 2013-14 +/-	FY 2014-15	FY 2013-14	FY 2014-15 +/-				
1	26	040	I	PRA	Admin/Office Mgmt/AQ Impl	Admin/Modeling/New Legis/Sm Sr	0.42	0.42	\$ 66,407	\$ 1,398	67,805	1b	
2	26	044	I	PRA	Admin/Office Mgmt/Permit & Fee	Admin: Resolve Perm/Fee Issues	0.10	0.10	15,811	333	16,144	1b	
3	26	120	I	PRA	Certification/Registration Pro	Certification/Registration Prog	1.80	1.80	284,600	5,993	290,593	III	
4	50	253	I	EAC	ERC Appl Processing	Process ERC Applications	3.50	3.50	511,262	12,800	524,062	III	
5	50	367	I	EAC	Hearing Board/Appeals	Appeals: Permits & Denials	0.50	0.50	73,037	1,829	74,866	III	
6	50	476	I	EAC	NSR Data Clean Up	Edit/Update NSR Data	0.50	0.50	73,037	1,829	74,866	II	
7	50	475	I	EAC	NSR Implementation	Implement NSR/AI locate ERCs	2.50	2.50	365,187	9,143	374,330	I,III,V	
8	50	521	I	EAC	Perm Proc/Expedited Permit	Proc Expedited Permits (301OT)	0.50	0.50	73,037	1,829	74,866	III	
9	50	728	I	EAC	Perm Proc/IM Programming	Assist IM: Design/Review/Test	2.00	2.00	292,150	7,314	299,464	II,II,IV	
10	50	515	I	EAC	Perm Proc/Non TV/Non RECLAIM	PP: Non Title V/Title III/RECLAIM	55.30	55.30	8,187,937	192,245	8,380,182	III	
11	50	519	I	EAC	Perm Proc/Title III (Non TV)	Process Title III Permits	1.00	1.00	146,075	3,657	149,732	III	
12	26	461	I	PRA	Permit & CEQA Modeling Review	Review Model Permit/Risk Assmnt	1.50	1.50	257,167	4,994	262,161	III	
13	08	516	I	LEG	Permit Processing/Legal	Legal Advice: Permit Processing	0.25	0.15	49,011	(19,551)	29,460	III	
14	44	725	I	STA	Permit Processing/Support EAC	Assist EAC w/ Permit Process	0.05	0.05	7,577	171	7,748	III	
15	50	517	I	EAC	Permit Services	Facility Data-Create/Edit	12.50	12.50	1,825,935	45,715	1,871,651	III	
16	27	523	III	IM	Permit Streamlining	Permit Streamlining	0.25	0.25	43,038	1,159	44,196	III	
17	50	523	I	EAC	Permit Streamlining	Permit Streamlining	3.75	3.75	547,781	13,715	561,495	III	
18	44	545	I	STA	Protocols/Reports/Plans	Eval Test Protocols/Cust Svc	0.10	0.10	15,154	342	15,497	III,IV	
19	44	546	I	STA	Protocols/Reports/Plans	Eval Test Protocols/Compliance	6.15	6.15	931,989	21,062	953,051	IV,VI	
20	50	607	I	EAC	RECLAIM & Title V	Process RECLAIM & TV Permits	12.65	12.40	1,847,846	8,831	1,856,677	III	
21	50	518	I	EAC	RECLAIM Non-Title V	Process RECLAIM Only Permits	4.50	4.50	657,337	16,458	673,794	III,IV,XV	
22	26	643	I	PRA	Rule 222 Filing Program	Rule 222 Filing Program	0.20	0.20	77,622	4,666	82,288	IV	
23	35	680	I	LPA	Small Business/Permit Streamlin	Asst sm bus to comply/SCAQMD req	3.95	3.95	607,303	8,106	615,408	II,II,IV,IV,XV	
24	27	770	I	IM	Title V	Dev/Maintain Title V Program	1.00	1.00	172,150	4,635	176,785	III	
25	50	775	I	EAC	Title V - Admin	Title V Administration	1.00	1.00	146,075	3,657	149,732	III	
26	08	772	I	LEG	Title V Permits	Leg Advice: New Source Title V Permit	0.10	0.05	19,604	(9,784)	9,820	III	
27	50	774	I	EAC	TV/Non-RECLAIM	Process Title V Only Permits	18.00	18.00	2,629,347	65,830	2,695,177	III	
<b>Total</b>							134.07	(0.40)	133.67	\$ 19,923,476	\$ 408,377	\$ 20,331,852	

A prorated share of the District General budget has been allocated to each line in the workplan based on the number of FTEs reflected on the line.

Policy Support Work Program by Category										
Program #	Code	Goal	Office	Program	Activities	FY 2013-14	FY 2014-15	FY 2013-14	FY 2014-15	Revenue Categories
						+/-	+/-	Cost	Cost	
144	041	I	STA	Admin/Office Mgmt/Policy Supp	Overall Policy Supp/Mgmt/Coord	0.49	0.49	\$ 174,256	\$ 1,678	1b
226	048	I	PRA	Admin/Prog Mgmt/Policy	Admin: GB/Committee Support	1.00	1.00	158,111	3,329	1b, 11,441
326	277	I	PRA	Advisory Group/AQMP	Governing Board AQMP Advisory Group	0.05	0.05	7,906	166	8,072
435	280	I	LPA	Advisory Group/Ethnic Comm	GB Ethnic Comm Advisory Group	0.40	0.40	61,499	821	62,320
503	276	III	EO	Advisory Group/Governing Board	Governing Board Advisory Group	0.05	0.05	11,471	19	11,490
626	276	I	PRA	Advisory Group/Home Rule	Governing Board Advisory Group	0.30	0.30	47,433	999	48,432
726	278	I	PRA	Advisory Group/Sci, Tech/Model	Scientific/Tech/Model Peer Rev	0.05	0.05	7,906	166	8,072
835	281	I	LPA	Advisory Group/Small Business	SBA Advisory Group Staff Support	0.50	0.50	76,874	1,026	77,900
944	276	I	STA	Advisory Group/Technology Adva	Tech Adv Advisory Group Supp	0.10	0.10	15,154	342	15,497
1003	078	II	EO	Asthma & Outdoor AQ Consortium Board Committees	Asthma & Outdoor AQ Consortium Admin/Stationary Source Committees	0.01	0.01	2,294	4	2,298
1150	276	I	EAC	Board Committees	Admin/Stationary Source Committees	0.25	0.25	36,519	914	37,433
1206	083	II	EO	Brain Tumor & Air Poll Fdn	Brain Tumor & Air Poll Foundation Support	0.10	0.10	15,811	333	16,144
1303	083	II	EO	Brain Tumor & Air Poll Foundat	Brain Tumor & Air Poll Foundation Support	0.03	0.03	6,883	11	6,894
1404	083	II	FIN	Brain Tumor & Air Poll Foundat	Brain Tumor & Air Poll Foundation Support	0.02	0.02	2,611	71	2,682
1526	148	I	PRA	Climate Change	GHG/Climate Change Policy Development	2.00	1.10	316,223	(138,638)	177,585
1650	148	I	EAC	Climate Change	GHG/Climate Change Support	0.50	0.50	73,037	1,829	74,866
1726	240	I	PRA	El-AQ Guidance Document	AQ Guidance Document	0.28	(0.05)	44,271	(7,140)	37,131
1835	345	II	LPA	Goods Mvmt&Financial Incentive	Goods Movement & Financial Incentives Progr	1.00	1.00	153,747	2,052	155,800
1903	275	I	EO	Governing Board	Board/Committee Support	1.60	1.60	367,082	609	367,691
2035	283	I	LPA	Governing Board Policy	Brd sup/Respond to GB req	0.55	0.55	84,561	1,129	85,690
2103	381	I	EO	Interagency Liaison	Local/State/Fed Coord/Interact	0.40	0.40	91,771	152	91,923
2203	410	I	EO	Legislation	Testimony/Mtgs/New/Current Leg	0.50	0.50	114,713	190	114,904
2344	410	I	STA	Legislation	Support Pollution Reduction thru Legislatio	0.50	0.50	75,771	1,712	77,484
2435	413	I	LPA	Legislation/Exec Office Support	Coord Legis w/ EO, EC, Mgmt	0.25	0.25	38,437	513	38,950
2535	412	I	LPA	Legislation/Federal	Lobbying/Analyses/Tracking/Out	0.25	0.25	479,037	513	479,550
2635	414	I	LPA	Legislation-Effects	Lobbying/Analyses/Tracking/Out	0.80	0.80	132,998	1,642	134,640
2703	416	I	EO	Legislative Activities	Supp/Promote/Influence Legis/Adm	0.05	0.05	11,471	19	11,490
2808	416	I	LEG	Legislative Activities	Lobbying, Supp/Promote/Influence Legis/Adm	0.10	0.10	19,604	36	19,640
2926	416	I	PRA	Legislative Activities	Supp/Promote/Influence Legis/Adm	0.10	0.10	15,811	333	16,144
3035	416	I	LPA	Legislative Activities	Supp/Promote/Influence Legis/Adm	0.50	0.50	441,874	1,026	442,900
3150	416	I	EAC	Legislative Activities	Legislative Activities	0.25	0.25	36,519	914	37,433
3244	454	I	STA	Mob Src-Greenhs Gas Reduc Meas	Provide comments on mob src portion of AB32	1.39	1.39	210,645	4,760	215,405
3335	494	I	LPA	Outreach/Collateral Developmen	Edits, Brds, Talk shows, Commercl	0.60	0.60	179,364	1,231	180,596
3420	494	II	MO	Outreach/Media	Edits, Brds, Talk shows, Commercl	2.96	2.96	490,886	(13,817)	477,070
3503	717	III	EO	Student Interns	Gov Board/Student Intern Program	0.02	0.02	4,589	8	4,596
3608	717	II	LEG	Student Interns	Gov Board/Student Intern Program	0.30	0.20	58,813	(19,533)	39,280
3716	717	II	AHR	Student Interns	Gov Board/Student Intern Program	0.20	0.20	33,407	736	34,144
3826	717	II	PRA	Student Interns	Gov Bd/Student Intern Program	0.01	0.01	1,581	33	1,614
3935	717	II	LPA	Student Interns	Student Interns	0.10	0.10	15,375	205	15,580
<b>Total</b>						18.56	(1.05)	\$ 4,016,316	\$ (149,602)	\$ 3,866,713
<b>Total SCAQMD</b>						797.00	1.00	\$ 129,202,927	\$ 3,017,147	\$ 132,220,074

A prorated share of the District General Budget has been allocated to each line in the workplan based on the number of FTEs reflected on the line.



## WORK PROGRAM GLOSSARY

**Below are descriptions of the activities related to the Work Program.**

**AB 1318 Mitigation** - an eligible electrical generating facility shall pay mitigation fees for the transfer of emission credits from SCAQMD's internal emission credit accounts. Mitigation fees shall be used to finance emission reduction projects, pursuant to the requirements of AB 1318.

**AB 2766** (Mobile Sources, MSRC) - programs funded from motor vehicle registration revenues. The activities include evaluation, monitoring, technical assistance, and tracking of AB2766 Subvention Fund Program progress reports including cost-effectiveness and emissions reductions achieved, supporting programs implemented by the Mobile Source Review Committee (MSRC), disbursing and accounting for revenues subvended to local governments, and performing SCAQMD activities related to reduction of emissions from mobile sources.

**Acid Rain Program** - developing and implementing the Continuous Emissions Monitoring Program in compliance with 40 CFR Part 75 of the Clean Air Act.

**Administration/SCAQMD** - supporting the administration of the SCAQMD. Examples are tracking fixed assets, operating the mailroom, preparing and reviewing contracts, conducting oversight of SCAQMD activities, developing district-wide policies and procedures, preparing the SCAQMD budget, providing legal advice on SCAQMD programs and other activities, and performing activities in support of the SCAQMD as a whole.

**Admin/SCAQMD Capital Assets (Asset Management)** – tracking of acquisitions, disposals/retirements and reconciliation of capital assets to capital outlay account, and conducting annual lab and biennial asset inventories.

**Administration/Office Management** - supporting the administration of an organizational unit or a unit within a division. This includes such items as preparing organizational unit budgets, tracking programs, providing overall direction and coordination of the office, providing program management and integration, preparing policies and procedures manuals, and preparing special studies and projects.

**Advisory Group** – providing support to various groups such as: AQMP (Air Quality Management Plan), Environmental Justice, Home Rule, Local Government and Small Business Assistance, Technology Advancement, and Permit Streamlining Task Force.

**AER (Air Emission Reporting Program) Public Assistance** – provides public assistance in implementing SCAQMD's AER program by conducting workshops, resolving fee-related issues, and responding to questions.

**Air Filtration** - installation of high-efficiency air filtration devices in schools with the goal of reducing children's exposure to particulate matter in the classroom.

## WORK PROGRAM GLOSSARY

**Air Monitoring** (Ambient Air Analysis, Ambient Network, Audit, Data Reporting, Special Monitoring) - monitoring the ambient air in the SCAQMD's jurisdiction. This includes operating the SCAQMD's air monitoring network and localized monitoring at landfill sites as well as conducting specialized monitoring in response to public nuisance situations. Also see Special Monitoring.

**Air Quality Evaluation** - analyzing air quality trends and preparing the RFP (Reasonable Further Progress) report.

**Ambient Air Analysis/Ambient Network** (Audit, Data Reporting, Special Monitoring) – complying with Federal regulations to monitor air quality for criteria pollutants at air monitoring stations to determine progress toward meeting the federal ambient air quality standards. This includes operating the SCAQMD's air monitoring network and localized monitoring at landfill sites as well as conducting specialized monitoring in response to public nuisance situations. SCAQMD monitoring stations also collect samples which are analyzed by SCAQMD's laboratory. Also see Special Monitoring.

**Annual Emission Reporting (AER)** – implementing the AER Program and tracking actual emissions reported by facilities, conducting audits of data, handling refunds, and preparing inventories and various reports.

**AQIP Evaluation** – provides incentive funding for projects to meet VOC, NO<sub>x</sub>, and CO emission targets with funds generated from companies who pay fees in lieu of carpool programs. Projects are funded through a semi-annual solicitation process.

**AQMP** (Air Quality Management Plan) – Management Plan for the South Coast Air Basin and the Interagency AQMP Implementation Committee.

**Architectural Coatings** (Admin, End User, Other) – Rule 314 requiring architectural coatings manufacturers which distribute or sell their manufactured architectural coatings into or within the SCAQMD for use in the SCAQMD to submit an Annual Quantity and Emissions Report. To recover the cost of the program, a fee is assessed to these manufacturers. The fee is based on the quantity of coatings as well as the cumulative emissions from the quantity of coatings distributed or sold for use in the SCAQMD.

**Area Sources/Compliance** – developing rules and compliance programs, as well as alternatives to traditional permitting for smaller sources of emissions of VOC and NO<sub>x</sub>.

**Asthma and Outdoor Air Quality Consortium** – a group composed of researchers from local universities with air pollution and respiratory disease expertise that conducts research projects relating to asthma and air quality.

**Auto Services** - maintaining the SCAQMD's fleet of automobiles, trucks, and vans as well as providing messenger services as needed.

## WORK PROGRAM GLOSSARY

**Billing Services** - administering the SCAQMD's permit billing system, responding to inquiries and resolving problems related to fees billed.

**Board Committees** - participation in Governing Board committees by preparing materials, presenting information on significant or new programs and providing technical expertise.

**Brain Tumor and Air Pollution Foundation** – foundation established to support research on the relationship between air pollution and brain tumors. The demographic, behavioral, and genetic factors in patients with brain tumors in the Los Angeles area being studied to determine any potential impact that air pollution may have on brain tumor incidence.

**Building Corporation** - managing the South Coast Air Quality Management District Building Corporation. The Building Corporation issued Installment Sale Revenue Bonds in conjunction with the construction of the SCAQMD's Diamond Bar headquarters facility.

**Building Maintenance** - maintaining and repairing the Diamond Bar Headquarters facility and SCAQMD air monitoring sites.

**Business Services** – overseeing operation of the Facilities Services, Automotive Services, Print Shop and Mail/Subscriptions Services; negotiating and administering Diamond Bar facility and air monitoring station lease agreements.

**California Natural Gas Vehicle Partnership** – strategic, non-binding partnership formed to work together in developing and deploying natural gas vehicles and implementing a statewide natural gas infrastructure.

**Call Center** (Central Operator, CUT-SMOG, Field Support) - operating the 24-hour radio communication system via telephone between SCAQMD headquarters and the public.

**CARB PERP (Portable Equipment Registration Program) Program** – A program established by CARB allowing the operation of portable equipment in any air district throughout the state without individual local district permits. Amended to enhance enforceability and expand CARB's requirements for portable engines and equipment units, creating a more comprehensive and inclusive statewide registration program that now provides for triennial inspection and renewal of PERP registration.

**Carl Moyer Program** – provides incentive funding for the repower, replacement, or purchase of new heavy-duty vehicles and equipment beyond the emission limits mandated by regulations. Awards are granted through an annual solicitation process. Separate program announcements are also issued for pre-1990 diesel Class 7 or 8 truck fleet and ports truck fleet modernization programs. Also see Mobile Sources.

## WORK PROGRAM GLOSSARY

**Case Disposition** - resolving Notices of Violation (NOV) issued by SCAQMD inspectors. This includes preparing both civil and criminal cases and administering SCAQMD's Mutual Settlement Letter Program.

**Cash Management** (Revenue Receiving, Refunds) – receiving revenue, posting of payments, processing of refunds associated with SCAQMD programs, and bank and cash reconciliations.

**CEMS Certification** (Continuous Emissions Monitoring System) - evaluating, approving, and certifying the continuous emissions monitoring systems installed on emissions sources to ensure compliance with SCAQMD rules and permit conditions.

**CEQA Document Projects/Special Projects** (California Environmental Quality Act) - reviewing, preparing, assessing, and commenting on projects which have the potential of an air quality impact.

**Certification/Registration Program** – implementing an alternative, streamlined program for evaluating and certifying individual, standard equipment models submitted by manufacturers and then registering the equipment as they are proposed to be individual users.

**Classification and Pay** – maintaining the classification plan and conducting job analyses to ensure SCAQMD positions are allocated to the proper class, and conducting compensation studies to ensure classes are appropriately compensated and salaries remain competitive in the workforce.

**Clean Air Connections** – increase awareness of air quality issues and SCAQMD's programs and goals by developing and nurturing a region-wide group of community members with an interest in air quality issues.

**Clean Communities Plan (CCP)** – an update to the 2000 Air Toxics Control Plan (ATCP) and the 2004 Addendum. The objective of the 2010 CCP is to reduce the exposure to air toxics and air-related nuisances throughout the district, with emphasis on cumulative impacts.

**Clean Fuels Program** (Contract Admin, Legal Advice, Mobile Sources, Stationary Combust/Energy, Tech Transfer) – accelerate the development and deployment of advanced, low emission technologies, including, but not limited to plug-in hybrid electric vehicles, low emission heavy-duty engines; after treatment for off-road construction equipment and identification of tailpipe emissions from biofuels.

**Climate Change** – developing and evaluating policy and strategy related to local, state, federal and international efforts on climate change. Seek to maximize synergies for criteria and toxic reduction and minimize and negative impacts.

## WORK PROGRAM GLOSSARY

**Compliance** (Guidelines, Testing, IM Related Activities, NOV Admin, Special Projects) – ensuring compliance of clean air rules and regulations through regular inspection of equipment and facilities, as well as responding to air quality complaints made by the general public.

**Compliance/Notice of Violation (NOV) Administration** – NOV processing and review for preparation for assignment to Mutual Settlement Agreement, Civil, or Criminal handling.

**Computer Operations** - operating and managing the SCAQMD's computer resources. These resources support the SCAQMD's business processes, air quality data, and modeling activities and the air monitoring telemetry system. Also see Systems Maintenance.

**Conformity** - reviewing of federal guidance and providing input on conformity analysis for the Regional Transportation Improvement Program (RTIP). Staff also participates in various Southern California Association of Governments (SCAG) meetings, the Statewide Conformity Working group, and other meetings to address conformity implementation issues. Staff participates in the federal Conformity Rule revision process, and monitors and updates Rule 1902, Transportation Conformity, as needed.

**Credit Generation Programs** (Intercredit Trading) – rulemaking and developing and implementing a program that expands emission credit trading by linking the SCAQMD's stationary and mobile source credit markets.

**Criteria Pollutants/Mobile Sources** – coordinates the implementation of the AQMP and conducts feasibility studies for mobile source categories; develops control measures and amended rules as warranted.

**1-800-CUT-SMOG** - See Call Center.

**Database Information Support** – day-to-day supporting of ad hoc reports and bulk data updates required from SCAQMD's enterprise databases.

**Database Management** - developing and supporting the data architecture framework, data modeling, database services, and the ongoing administration of SCAQMD's central information repository.

**DB/Computerization** – developing laboratory instrument computer systems for data handling and control, evaluating the quality of the stored information, and further development and maintenance of the Source Test Information Management System (STIMS).

**District Prosecutor Support** – see Legal

**Economic Development/Business Retention** – meeting with various governmental agencies to assist company expansion or retention in the Basin.

## WORK PROGRAM GLOSSARY

**EJ-AQ Guidance Document** – provides outreach to local governments as they update their general plans and make land use decisions. Provide updates to the reference document titled “Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning.”

**Emergency Response** - responding to emergency air pollution (toxic) incidents, providing air quality monitoring support to local authorities.

**Emission Reduction Credit Application Processing** – process applications for Emission Reduction Credits (ERC).

**Emissions Field Audit** – conducting field audits at facilities that have reported through Annual Emissions Reporting (AER) to ensure accurate emission reporting and improve the program.

**Emissions Inventory Studies** – developing major point source emissions data and area source emissions inventory, updating emissions factors, developing and updating control factors, performing special studies to improve emission data, and responding to public inquiries regarding emission data.

**Employee Benefits** – administering SCAQMD’s benefit plans, including medical, dental, vision, and life insurance, as well as State Disability Insurance, Section 125 cafeteria plan, Long Term Care and Long Term Disability plans, Section 457 deferred compensation plan, and COBRA program.

**Employee Relations** – managing the collective bargaining process, administering MOU’s, preparing disciplinary documents, and administering SCAQMD’s performance appraisal program, Family and Medical Leave Act (FMLA) requests, tuition reimbursement, and outside training requests.

**Employee/Employment Law** – by coordinating with outside counsel, handles legal issues dealing with employment law.

**Environmental Education** - informing and educating young people about air pollution and their role in bringing clean air to the area.

**Environmental Justice (EJ)** - a strategy for equitable environmental policymaking and enforcement to protect the health of all persons who live or work in the South Coast District from the health effects of air pollution regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location. The Environmental Justice Initiatives help to identify and address potential areas where citizens may be disproportionately impacted by air pollutants and ensure clean air benefits are accorded to all citizens and communities of the region.

**Equal Employment Opportunity** – ensuring non-discrimination and equal employment for employees and applicants through broad-based, targeted advertising; training interviewers to ensure fairness in evaluating candidates; ensuring that selection processes and testing

## WORK PROGRAM GLOSSARY

instruments are appropriate and job-related; coaching supervisors and managers regarding hiring processes; and gathering data and preparing related staffing reports.

**Facilities Services** – monitoring service contracts, supporting tenants, overseeing conference center use, administering identification badges, building access control, and key/lock systems, and workspace planning.

**Fee Review** – activities relating to conducting Fee Review Committee hearings for businesses that contest SCAQMD fees.

**Financial Management** (Accounting, Financial Analyses, Treasury Management, Systems) - managing the financial aspects of the SCAQMD. This includes SCAQMD's cash management, investment, and accounting programs, and program and financial audits. It also includes maintaining SCAQMD's permit-related financial and accounting records as well as maintaining and enhancing SCAQMD's payroll and accounting systems.

**Goods Movement and Financial Incentives** – a program to evaluate the air quality issues associated with goods movement and traffic congestion, and for the identification of financial incentives for expedited facility modernization and diesel engine conversion.

**Governing Board** (Policy) – supporting the operation of the Governing Board and Advisory Groups of the SCAQMD. These activities range from preparing the agenda and minutes to providing support services, legal advice, speeches, letters, and conference coordination.

**Grants Management** - coordinating, negotiating, monitoring, accounting, and reporting of the SCAQMD's air pollution program and financial activities relating to grants, including EPA, DOE, CEC, and DHS grants and the CARB Subvention.

**Graphics Arts** - designing and producing presentation materials and SCAQMD publications.

**Green House Gas Reporting** - many of the businesses and facilities within SCAQMD's jurisdiction are required to report their GHG emissions to CARB under the regulation for Mandatory Reporting of Greenhouse Gases (state) and, beginning in 2011, to the U.S. EPA under their Mandatory Reporting Rule (federal).

**Health Effects** – conducting research and analyzing the health effects of air pollutants and assessing the health implications of pollutant reduction strategies; working with industry, trade associations, environmental groups, CARB and EPA; providing information to concerned citizens.

**Hearing Board** (Variances, Abatement Orders, Appeals, Legal) – supporting operation of the SCAQMD's Hearing Board. These activities include accepting petitions filed; preparation and distribution of notices; preparation of minute orders, findings, and decisions of the Board; collection of fees; and general clerical support for the Board.

## WORK PROGRAM GLOSSARY

**Heavy Duty Trucks DOE ARRA** – implement/administer the Department of Energy (DOE) American Recovery and Reinvestment Act (ARRA) Heavy-Duty Natural Gas Drayage Truck Replacement Program.

**Information Technology Services** - implementing new information technologies to enhance operational efficiency and productivity. Examples include developing workflow applications, training and supporting computer end users, and migrating network operating systems.

**Inspections** - inspecting facilities and equipment that emit or have the potential to emit air pollutants.

**Inspections/RECLAIM Audits** – conducting RECLAIM inspections and audits at facilities subject to Regulation XX (RECLAIM).

**Interagency Coordination/Liaison** - interacting with state, local, and federal control agencies and governmental entities.

**Intergovernmental/Geographic Deployment** - influencing local policy development and implementing a local government clean air program.

**Lawnmower Exchange** – residents of the South Coast Air Basin may trade in their gas-powered lawnmower and purchase a new zero-emission, battery electric lawnmower at a significant discount.

**Lead Agency Projects** – SCAQMD permitting and rule development projects where a CEQA document is prepared and the SCAQMD is the lead agency.

**Legal** (Advice, District Prosecutor Support, Representation, Legislation, Liability Defense) - providing legal support to SCAQMD in the areas of liability defense, writs of mandate, injunctions, and public hearings. This activity also includes reviewing contracts, and advising staff on rules, fees and other governmental issues.

**Legislation** (Annual Reports, State, Federal, Legislative Activity) - drafting new legislation, analyzing and tracking proposed legislation, and developing position recommendations on legislation which impacts air quality.

**Library** - acquiring and maintaining reference materials and documentation that support the SCAQMD's programs.

**LNG Trucks CEC** – implement/Administer grant agreement with the Clean Energy Commission (CEC) to deploy up to 180 natural gas vehicles used for goods movement operations at the Ports or along the Los Angeles/Inland Empire trade corridor.



## WORK PROGRAM GLOSSARY

**Lobby Permit Services** – providing information and support to applicants to expedite permit processing. Includes consolidating forms, prescreening review for completeness of applications, providing internet access of certain forms and providing “over-the-counter” permits in the lobby of the SCAQMD’s Diamond Bar headquarters.

**MATES IV (Multiple Air Toxics Exposure Study)** – study that characterizes the concentration of airborne toxic compounds within the South Coast Air Basin and to determine the Basin-wide risks associated with major airborne carcinogens. A new focus of MATES IV will be the inclusion of measurements of ultrafine particle concentrations.

**Meteorology** - modeling, characterizing, and analyzing both meteorological and air quality data to produce the SCAQMD's daily air quality forecast.

**Microscopical Analysis** - analyzing, identifying, and quantifying asbestos for compliance with SCAQMD, state, and federal regulations.

**Mobile Sources** (SCAQMD Rulemaking, Carl Moyer, CARB/EPA and CEC/US DOE monitoring, Emission Incentive Method, Greenhouse Gas Reduction Measures, Strategies (Off Road, Control, Accounting,) - transportation monitoring, strategies, control measures, demonstration projects, and the Mobile Source Air Pollution Reduction Review Committee (MSRC), implementation of Fleet Rules, High Emitter Repair & Scrappage Program, and locomotive remote sensing.

**Moyer Program** – see Carl Moyer Program

**Mutual Settlement Program** - resolving civil penalties without court intervention; this program is a mechanism to resolve violations and avoid criminal proceedings.

**National Air Toxics Trends Stations (NATTS)** – through EPA funding, two sites in the monitoring network are utilized to collect ambient VOC and particulate samples. Samples are analyzed by the SCAQMD lab and reported to EPA where the data is used to determine toxic trends.

**Near Roadway (NO<sub>2</sub>) Monitoring** – federal monitoring requirement that calls for State and Local air monitoring agencies to install near-road NO<sub>2</sub> monitoring stations at locations where peak hourly NO<sub>2</sub> concentrations are expected to occur within the near-road environment in larger urban areas.

**Network Operations/Telecommunications** – installing, maintaining, and providing operational support of the SCAQMD's PC, voice, data, image, and radio networks; planning, designing, and implementing new network systems or services in response to the SCAQMD's communications and business needs; and providing training, support, and application development services for end-users of voice and PC systems.

## WORK PROGRAM GLOSSARY

**New Systems Development** – providing support for major computer systems development efforts.

**New Source Review (NSR)** (Data Clean-up, Implementation, Modeling Permit Review, Rulemaking) - developing and implementing New Source Review rules; designing, implementing, and maintaining the Emission Reduction Credits and the New Source Review programs. These programs streamline the evaluation of permit renewal and emissions reporting.

**Outreach** (Business, Media, Visiting Dignitary) - increasing public awareness of the SCAQMD's programs, goals, permit requirements, and employment opportunities; interacting, providing technical assistance, and acting as liaison between SCAQMD staff and various sectors of the private industry, local governments, and small businesses.

**Outreach Media/Communications** - monitoring local and national press accounts, both print and broadcast media, to assess SCAQMD's outreach and public opinion on SCAQMD rules and activities. This also includes responding to media calls for informational background material on SCAQMD news stories.

**Payroll** - paying salaries and benefits to SCAQMD employees, withholding and remitting applicable taxes, and issuing W2s.

**Permit Processing NSR**, (RECLAIM, Non RECLAIM, Title V, Title III, Pre-Application, Services, Expedited, IM Processing, CEQA Modeling Review, Legal, Support EAC, Expired) - inspecting, evaluating, auditing, analyzing, reviewing and preparing final approval or denial to operate equipment which may emit or control air contaminants.

**Permit Streamlining** – activities relating to reducing organizational costs and streamlining regulatory and permit requirements on business

**Photochemical Assessment Monitoring Systems (PAMS)** - promulgating PAMS (a federal regulation), which requires continuous ambient monitoring of speciated hydrocarbons during smog season. Through EPA funding, ozone precursors are measured at seven stations and samples are collected.

**Plug-in Hybrid EV DOE ARRA** – implement/administer the Department of Energy (DOE) American Recovery and Reinvestment Act (ARRA) Plug-in Hybrid Electric (PHE) Medium Duty Commercial Fleet Demonstration and Evaluation Program.

**PM Sampling Program (EPA)** – daily collection of particulate samples

**PM Monitoring/Strategies Programs** (PM<sub>2.5</sub>, PM<sub>10</sub>, PM<sub>10-2.5</sub>) – planning and developing rules related to PM<sub>2.5</sub>, PM<sub>10</sub>, and PM<sub>10-2.5</sub>. Obtaining measurements of particulates at air monitoring stations throughout the South Coast Air Basin (Basin). Measurements are made for Total

## WORK PROGRAM GLOSSARY

Suspended Particulate lead, PM<sub>10</sub>, and PM<sub>2.5</sub> using federal reference methods (FRM) to determine compliance with state and federal air quality standards.

**Port Community Air Quality Enforcement/I-710 Monitoring** - inspecting and auditing marine vessels in the Rule 1631 pilot credit generation program. These oversight activities will help ensure the credit generation program produces real, quantified, and enforceable emissions reductions. Measurements including air toxics and criteria pollutants collected to determine impact of port activities on air quality near the ports and surrounding communities.

**Portable Equipment Registration Program (PERP)** – see CARB PERP Program.

**Position Control** – tracking Board position authorizations and SCAQMD workforce utilization, processing personnel transactions for use by Payroll, and preparing reports regarding employee status, personnel transactions, and vacant positions.

**PR 2301 ISR Rule Implementation**– developing and implementing rules to mitigate emissions growth from new and redevelopment projects; the scope of the rule will include the reduction of emissions related to residential, commercial and industrial projects.

**Print Shop** – prioritizing, coordinating, and performing in-house printing jobs and contracting outside printing/binding services when necessary.

**Proposition 1B** provides incentive funding for goods movement and lower emission school bus projects with funds approved by voters in November 2006.

**Protocols/Reports/Plans/LAP** - evaluating and approving protocols, source testing plans and reports submitted by regulated facilities as required by SCAQMD rules and permit conditions, New Source Review, state and federal regulations; and evaluating the capabilities of source test laboratories under the Laboratory Approval Program (LAP).

**Public Complaints/Breakdowns** - responding to air pollution complaints about odors, smoke, dust, paint overspray, or companies operating out of compliance; responding to industry notifications of equipment breakdowns, possibly resulting in emission exceedances.

**Public Education/Public Events** – implementing community events and programs to increase the public's understanding of air pollution and their role in improving air quality.

**Public Information Center** - notifying schools and large employers of predicted and current air quality conditions on a daily basis and providing the public with printed SCAQMD information materials.

**Public Notification** – providing timely and adequate notification to the public of SCAQMD rulemaking workshops and public hearing, proposed rules, upcoming compliance dates and projects of interest to the public.

## WORK PROGRAM GLOSSARY

**Public Records Act** - providing information to the public as requested and as required by Government Code, Section 6254.

**Purchasing** (Receiving, Stockroom) - procuring services and supplies necessary to carry out SCAQMD programs.

**Quality Assurance** – assuring the data quality from the Monitoring and Analysis Division meets or exceeds state and federal standards and also assuring the appropriateness of the data for supporting SCAQMD regulatory, scientific and administrative decisions.

**RECLAIM/Admin Support** – developing and implementing rules, and monitoring of emissions of the REgional CLean Air Incentives Market (RECLAIM) program, a market incentives trading program designed to help achieve federal and state ambient air quality standards in a cost-effective manner with minimal impacts to jobs or public health. Also see Permit Processing.

**Records Information Management Plan** – providing the process to comply with internal and external requirements for the retention and retrieval of information pertinent to the mission and operation of the SCAQMD.

**Records Services** – maintaining SCAQMD’s central records and files, converting paper files to images, and operating the network image management system; providing for all off-site long-term storage of records and for developing and monitoring the SCAQMD’s Records Retention Policy.

**Recruitment and Selection** – assisting SCAQMD management in meeting staffing needs by conducting fair and non-discriminatory recruitment and selection processes that result in qualified, diverse applicants for SCAQMD jobs; overseeing promotional and transfer processes, and reviewing proposed staff reassignments.

**Refinery Pilot Project** – pursuant to the AQMP, a Working Group was formed to examine the efficacy of an alternative regulatory approach to reducing refinery emissions beyond the current requirements by establishing a targeted emission reduction commitment for each refinery which would be established for a set period of time and allow the use of on-site or off-site reduction strategies with acceptable environmental justice attributes.

**Regional Modeling** – designing, performing, and reviewing modeling and risk assessment analysis to assess the air quality impacts of new or modified sources of air pollution. Also see Meteorology.

**Ridesharing** - implementing the SCAQMD’s own Rule 2202 Trip Reduction Plan.

**Risk Management** - developing and administering the SCAQMD's liability, property, and workers’ compensation and safety programs.

## WORK PROGRAM GLOSSARY

**Rule 1610** – ensuring compliance with Rule 1610, Old-Vehicle Scrapping.

**Rule 2202 ETC Training** –administering and conducting monthly Rule 2202 implementation training classes, workshops and/or forums for the regulated public and other interested individuals.

**Rule 222 Implement/Support/Filing Program** – ensuring compliance with Rule 222 for equipment subject to a filing requirement with the SCAQMD.

**Rulemaking/Rules** (NO<sub>x</sub>, BACT, SO<sub>x</sub>, VOC, Toxics, RECLAIM, Support PRA, Legal Advice) – developing new rules and evaluating existing SCAQMD and CARB rules and compliance information to assure timely implementation of the AQMP and its control measures.

**School Bus Lower Emission Program** – funding to replace pre-1987 diesel school buses with new alternative fuel buses owned and operated by public school districts.

**SCAQMD Mail** – processing and delivering all incoming and outgoing mail.

**SCAQMD Projects** – SCAQMD permitting and rule development projects where a CEQA (California Environmental Quality Act) document is prepared and the SCAQMD is the lead agency.

**School Siting** – identifying any hazardous emission sources within one-quarter mile of a new school site as required by AB3205. District activities include reporting of criteria and toxic pollutant information and conducting inspections of permitted facilities within a quarter-mile radius of proposed schools.

**Small Business Assistance** (Financial, Legal, Permit Streamlining) - providing technical and financial assistance to facilitate the permit process for small businesses.

**Socio-Economic** - developing an economic database to forecast economic activity, analyzing economic benefits of air pollution control, and analyzing the social impact of economic activity resulting from air quality regulations and plans.

**Source Education** - providing classes to facility owners and operators to ensure compliance with applicable SCAQMD's rules and regulations.

**Source Testing (ST)** – conducting source tests as needed in support of permitting functions and to determine compliance with permit conditions and SCAQMD Rules. Additionally, data submitted by facilities is reviewed for protocol approval, CEMS certification, or test data acceptance.

## WORK PROGRAM GLOSSARY

**Speaker's Bureau** - training SCAQMD staff for advising local government and private industry on air quality issues.

**Special Monitoring** (Emergency, Rule 403) – performing special ambient air sampling at locations where public health, nuisance concern, or Rule 403 violations may exist; determining the impacts from sources emitting toxics on receptor areas; and performing special monitoring in support of the emergency response program and public complaints response. Also see Emergency Responses.

**Sample Analyses** – analyzing samples submitted by inspectors to determine compliance with SCAQMD Rules. Samples are also analyzed in support of rule development activities.

**Student Interns** – providing mutually beneficial educational hands-on experience for high school and college students by providing them with the opportunity to engage in day-to-day work with mentoring professionals within SCAQMD.

**Subscription Services** - maintaining the SCAQMD's rule subscription mailing list and coordinating the mailing of SCAQMD publications.

**Systems Implementation** – implementing activities required to maintain an integrated Financial and Human Resources system, including additional features and functions introduced with scheduled software upgrades.

**Systems Maintenance** - routinely maintaining installed production data systems that support SCAQMD's business fluctuations, including minor modifications, special requests, fixes, and general maintenance.

**Targeted Air Shed** – funding from EPA to reduce air pollution in the nation's areas with the highest levels of ozone or particulate matter 2.5 (PM<sub>2.5</sub>) exposure.

**Technology Advancement** (Commercialization, non-Combustion) - supporting the development of innovative controls for mobile and stationary sources, reviewing promising control technologies, and identifying those most deserving of SCAQMD developmental support.

**Title III** (Inspections, Rulemaking) - permitting equipment that emits hazardous air pollutants in compliance with the federal Clean Air Act.

**Title V** (Compliance/Legal Advice, Inspections, NSR Legal Advice Permit Streamlining, Permits, Rulemaking) - developing and implementing a permit program in compliance with the federal Clean Air Act.

**Toxic Inventory Development** – non-facility specific tasks performed by the AB 2588 team to include toxic inventory development, support for rule development, and responding to public records and other data requests.

## WORK PROGRAM GLOSSARY

**Toxics/AB 2588** – evaluation of toxic inventories, risk assessments and risk reduction plans, with public notification as required. Analyzing, evaluating, reviewing, and making recommendations regarding toxic substances and processes and contributing input to District toxic rules and programs.

**Training** (Education, Organizational and Human Resources Development, Staff) - providing increased training in the areas of personnel education, computers, safety procedures, new programs, hazardous materials, and new technologies.

**Transportation Regional Programs/Research** – actively participate in Advisory Groups and Policy Committees involving the development and monitoring of the District’s AQMP, Congestion Mitigation Air Quality Improvement Program (CMAQ), Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Transportation Control Measures (TCMs) and regional alternative commute mode programs.

**TraPac Air Filtration Program** – implement/administer the installation and maintenance of air filtration systems at Wilmington area schools.

**Union Negotiations/Union Steward Activities** – Union-related activities of union stewards including labor management negotiations and assisting in the filing of employee grievances.

**VEE Trains** – conducting periodic visible emission evaluations of trains to verify compliance with visible emission requirements.

**VOC Sample Analysis** (Compliance/Rules/SBA/Other) - providing data and technical input for VOC rule development, performing analytical testing for compliance with SCAQMD rules regulating VOC content in coatings, inks, plastic foam, paint, adhesives, and solvents, and providing assistance and technical input to small businesses and other regulatory agencies, industry and the public.

**Voucher Incentive Program (VIP)** - incentive program designed to reduce emissions by replacing old, high-polluting vehicles with newer, lower-emission vehicles, or by installing a Verified Diesel Emission Control Strategy (VDECS).

**Web Tasks** – preparing and reviewing materials for posting to SCAQMD’s internet and/or intranet website.

# WORK PROGRAM ACRONYMS

## ORGANIZATIONAL UNITS

AHR	Administrative & Human Resources
CB	Clerk of the Boards
EAC	Engineering & Compliance
EO	Executive Office
FIN	Finance
GB	Governing Board
IM	Information Management
LEG	Legal
LPA	Legislative & Public Affairs
MO	Media Office
PRA	Planning, Rule Development & Area Sources
STA	Science & Technology Advancement

## PROGRAMS

AB 1318	Offsets-Electrical Generating Facilities
AB 2588	Air Toxics (“Hot Spots”)
AB 2766	Mobile Sources
APEP	Annual Permit Emissions Program
AQIP	Air Quality Investment Program
AQMP	Air Quality Management Plan
BACT	Best Available Control Technology
CEMS	Continuous Emissions Monitoring Systems
CEQA	California Environmental Quality Act
CF	Clean Fuels Program
CMP	Congestion Management Plan
ERC	Emission Reduction Credit
MATES	Multiple Air Toxics Exposure Study
MS	Mobile Sources Program
NSR	New Source Review
PERP	Portable Equipment Registration Program
PR	Public Records Act
QA	Quality Assurance
RFP	Reasonable Further Progress
RECLAIM	REgional Clean Air Incentives Market
SB 1928	Clean Fuels
ST	Source Test
Title III	Federally Mandated Toxics Program
Title V	Federally Mandated Permit Program
VIP	Voucher Incentive Program

## POLLUTANTS

CO	Carbon Monoxide
NO <sub>x</sub>	Oxides of Nitrogen
O <sub>3</sub>	Ozone
PM <sub>2.5</sub>	Particulate Matter <2.5 microns
PM <sub>10</sub>	Particulate Matter ≤ 10 microns
ROG	Reactive Organic Gases
SO <sub>x</sub>	Oxides of Sulfur
VOC	Volatile Organic Compound

## SCAQMD RULES AND REGULATIONS

Rule 403	Fugitive Dust
Rule 2202	On-Road Motor Vehicle Mitigation Options

## GOVERNMENT AGENCIES

APCD	Air Pollution Control District (Generic)
CARB	California Air Resources Board
CEC	California Energy Commission
DHS	Department of Homeland Security
DOE	Department of Energy
EPA	Environmental Protection Agency
NACAA	National Association of Clean Air Agencies
SCAG	Southern California Association of Governments

## GENERAL

AA	Affirmative Action
AER	Annual Emissions Reporting
AM	Air Monitoring
AQSCR	Air Quality Standards Compliance Report
ARRA	American Recovery and Reinvestment Act
ATIP	Air Toxics Inventory Plan
AVR	Average Vehicle Ridership
CE-CERT	College of Engineering-Center for Environmental Research and Technology
CLASS	Clean Air Support System
CNG	Compressed Natural Gas
CTC	County Transportation Commission
CTG	Control Techniques Guideline
DB	Database
DPF	Diesel Particulate Filter
EIR	Environmental Impact Report
EJ	Environmental Justice
ETC	Employee Transportation Coordinator
EV	Electric Vehicle
FIP	Federal Implementation Plan
FY	Fiscal Year
GHG	Greenhouse Gas
HR	Human Resources
HRA	Health Risk Assessment
IAIC	Interagency AQMP Implementation Committee
IGA	Intergovernmental Affairs
ISR	Indirect Source Rules
LAER	Lowest Achievable Emissions Rate
LEV	Low Emission Vehicle
LNG	Liquefied Natural Gas
LS	Laboratory Services
MA	Monitoring & Analysis Activities
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization
MSERCs	Mobile Source Emission Reduction Credits
MSRC	Mobile Source (Air Pollution Reduction) Review Committee
NATTS	National Air Toxics Trends Stations
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NGV	Natural Gas Vehicle
NOV	Notice of Violation
ODC	Ozone Depleter Compounds
PAMS	Photochemical Assessment Monitoring System
PAR	Proposed Amended Rule
PE	Program Evaluations
PR	Proposed Rule
RFP	Request for Proposal
RFQ	Request for Quotations
RTC	RECLAIM Trading Credit
SBA	Small Business Assistance
SIP	State Implementation Plan
SCR	Selective Catalytic Reduction
STE	Source Testing Evaluations
SULEV	Super Ultra Low-Emission Vehicle
TA	Technology Advancement Activities
TCM	Transportation Control Measure
ULEV	Ultra- Low-Emissions Vehicle
VEE	Visible Emissions Evaluations
VMT	Vehicle Miles Traveled
ZEV	Zero-Emission Vehicle





**SOUTH COAST  
AIR QUALITY MANAGEMENT DISTRICT**

## **Governing Board**

The Governing Board is made up of 13 officials who meet monthly to establish policy and review new or amended rules for approval. The Governing Board appoints the SCAQMD Executive Officer and General Counsel, and members of the Hearing Board.

Governing Board members include:

- One county Board of Supervisor's representative each from the counties of Los Angeles, Orange, Riverside, and San Bernardino;
- One representative each from cities within Orange, Riverside, and San Bernardino counties, two representatives from cities within Los Angeles County, and one city representative from the City of Los Angeles;
- One representative appointed by the Governor, one by the Assembly Speaker, and one by the Senate Rules Committee.

Governing Board Work Program by Office									
#	Program Code	Program Category	Goal	Program	Activities	FY 2013-14	FTEs +/-	FY 2014-15	Revenue Categories
1	02	275	Operational Support	Governing Board	Rep of Dist Meet/Conf/Testimony	0.00	0.00	0.00	1a
<b>Total</b>						0.00	0.00	0.00	\$ -

<b>Governing Board Line Item Expenditure</b>					
<b>Major Object / Account # / Account Description</b>	<b>FY 2012-13 Actuals</b>	<b>FY 2013-14 Adopted Budget</b>	<b>FY 2013-14 Amended Budget</b>	<b>FY 2013-14 Estimate *</b>	<b>FY 2014-15 Proposed</b>
<b>Salary &amp; Employee Benefits</b>					
51000-52000 Salaries	\$ 257,548	\$ 362,856	\$ 362,856	\$ 337,892	\$ 403,710
53000-55000 Employee Benefits	21,747	248,815	248,815	92,629	252,431
Sub-total Salary & Employee Benefits	\$ 279,295	\$ 611,671	\$ 611,671	\$ 430,521	\$ 656,140
<b>Services &amp; Supplies</b>					
67250 Insurance	\$ -	\$ -	\$ -	\$ -	\$ -
67300 Rents & Leases Equipment	-	-	-	-	-
67350 Rents & Leases Structure	-	-	-	-	-
67400 Household	-	-	-	-	-
67450 Professional & Special Services	362,376	436,777	436,777	370,254	436,777
67460 Temporary Agency Services	-	-	-	-	-
67500 Public Notice & Advertising	34,472	52,000	44,000	37,743	52,000
67550 Demurrage	-	-	-	-	-
67600 Maintenance of Equipment	-	-	-	-	-
67650 Building Maintenance	-	-	-	-	-
67700 Auto Mileage	11,299	10,000	10,000	10,000	10,000
67750 Auto Service	-	-	-	-	-
67800 Travel	45,104	64,800	64,800	42,994	64,800
67850 Utilities	-	-	-	-	-
67900 Communications	21,046	15,000	21,104	30,317	20,000
67950 Interest Expense	-	-	-	-	-
68000 Clothing	-	-	-	-	-
68050 Laboratory Supplies	-	-	-	-	-
68060 Postage	3,916	10,000	10,000	3,046	10,000
68100 Office Expense	57	4,000	4,000	3,446	4,000
68200 Office Furniture	-	-	-	-	-
68250 Subscriptions & Books	-	-	-	-	-
68300 Small Tools, Instruments, Equipment	-	-	-	-	-
68350 Film	-	-	-	-	-
68400 Gas and Oil	-	-	-	-	-
69500 Training/Conference/Tuition/ Board Exp.	105,763	112,500	112,500	105,763	112,500
69550 Memberships	-	-	-	-	-
69600 Taxes	-	-	-	-	-
69650 Awards	-	-	-	-	-
69700 Miscellaneous Expenses	15,010	9,110	17,110	17,110	15,000
69750 Prior Year Expense	-	-	-	-	-
69800 Uncollectable Accounts Receivable	-	-	-	-	-
89100 Principal Repayment	-	-	-	-	-
Sub-total Services & Supplies	\$ 599,043	\$ 714,187	\$ 720,291	\$ 620,672	\$ 725,077
77000 <b>Capital Outlays</b>	\$ -	\$ -	\$ -	\$ -	\$ -
79050 <b>Building Remodeling</b>	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Expenditures</b>	<b>\$ 878,337</b>	<b>\$ 1,325,858</b>	<b>\$ 1,331,962</b>	<b>\$ 1,051,194</b>	<b>\$ 1,381,217</b>

\* Estimates based on July 2013 through March 2014 actual expenditures and budget amendments.



**SOUTH COAST  
AIR QUALITY MANAGEMENT DISTRICT**

## **DISTRICT GENERAL**

Accounts associated with general operations of the SCAQMD are budgeted and tracked in District General. Included are such items as principal and interest payments, insurance, utilities, taxes, housekeeping, security, and building maintenance and improvements.

District General Line Item Expenditure						
Major Object / Account # / Account Description		FY 2012-13 Actuals	FY 2013-14 Adopted Budget	FY 2013-14 Amended Budget	FY 2013-14 Estimate *	FY 2014-15 Proposed
<b>Salary &amp; Employee Benefits</b>						
51000-52000	Salaries	\$ -	\$ 1,584,000	\$ 1,334,000	\$ 1,061,185	\$ 992,197
53000-55000	Employee Benefits	16,240	120,000	120,000	32,443	120,000
Sub-total Salary & Employee Benefits		\$ 16,240	\$ 1,704,000	\$ 1,454,000	\$ 1,093,628	\$ 1,112,197
<b>Services &amp; Supplies</b>						
67250	Insurance	\$ 1,132,351	\$ 1,097,400	\$ 1,097,400	\$ 1,097,400	\$ 1,317,400
67300	Rents & Leases Equipment	31,986	18,600	22,600	22,600	18,600
67350	Rents & Leases Structure	19,824	30,000	30,000	19,824	30,000
67400	Household	442,424	707,332	702,332	486,853	707,332
67450	Professional & Special Services	1,045,074	1,091,029	1,131,029	1,069,009	1,156,029
67460	Temporary Agency Services	-	-	-	-	-
67500	Public Notice & Advertising	21,398	28,000	28,000	21,398	25,000
67550	Demurrage	-	-	-	-	-
67600	Maintenance of Equipment	115,308	141,400	101,400	82,689	141,900
67650	Building Maintenance	529,382	911,479	836,479	836,479	1,436,479
67700	Auto Mileage	12	-	-	-	-
67750	Auto Service	-	-	-	-	-
67800	Travel	-	-	-	-	-
67850	Utilities	1,405,249	1,591,881	1,587,881	1,587,881	1,766,989
67900	Communications	97,119	116,900	109,812	109,812	120,900
67950	Interest Expense	2,872,971	4,094,658	4,094,658	4,094,658	4,076,994
68000	Clothing	-	-	-	-	-
68050	Laboratory Supplies	-	-	-	-	-
68060	Postage	23,022	20,000	25,000	25,000	20,000
68100	Office Expense	690,024	278,800	278,800	278,800	278,800
68200	Office Furniture	-	4,000	4,000	4,000	4,000
68250	Subscriptions & Books	-	-	-	-	-
68300	Small Tools, Instruments, Equipment	-	-	-	-	-
68350	Film	-	-	-	-	-
68400	Gas and Oil	-	-	-	-	-
69500	Training/Conference/Tuition/ Board Exp.	-	-	-	-	-
69550	Memberships	-	-	-	-	-
69600	Taxes	16,314	41,000	41,000	19,341	41,000
69650	Awards	12,216	27,342	27,342	22,146	27,342
69700	Miscellaneous Expenses	10,984	10,275	10,275	10,010	10,375
69750	Prior Year Expense	(18,262)	-	-	-	-
69800	Uncollectable Accounts Receivable	454,094	-	-	-	-
89100	Principal Repayment	7,347,007	3,121,383	3,121,383	3,121,383	3,159,384
Sub-total Services & Supplies		\$ 16,248,496	\$ 13,331,479	\$ 13,249,391	\$ 12,909,283	\$ 14,338,524
77000	<b>Capital Outlays</b>	\$ 1,341,163	\$ 840,000	\$ 729,377	\$ 871,028	\$ 150,000
79050	<b>Building Remodeling</b>	\$ -	\$ -	\$ -	\$ -	\$ -
Total Expenditures		\$ 17,605,899	\$ 15,875,479	\$ 15,432,768	\$ 14,873,939	\$ 15,600,721

\* Estimates based on July 2013 through March 2014 actual expenditures and budget amendments.

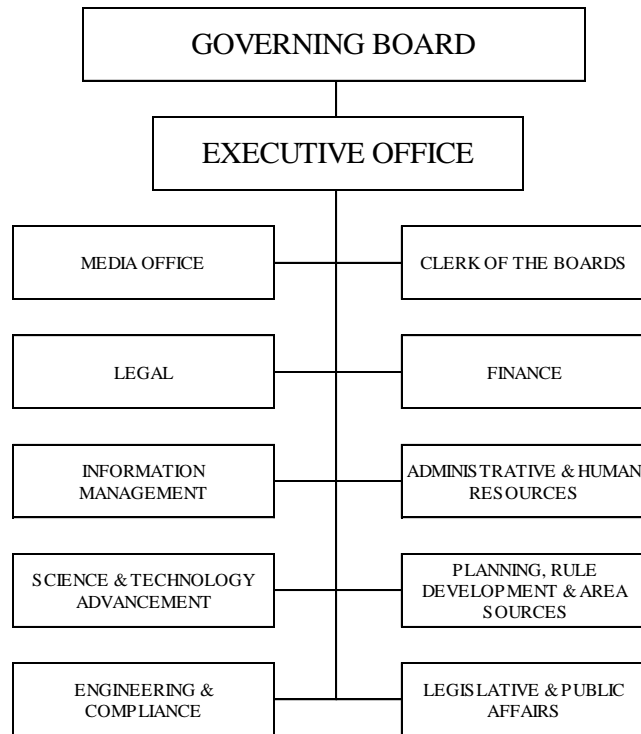
## EXECUTIVE OFFICE

**BARRY R. WALLERSTEIN  
EXECUTIVE OFFICER**

### DESCRIPTION OF MAJOR SERVICES:

The Executive Office is responsible for the comprehensive management of the SCAQMD and the development and implementation of near-term and long-term strategies to attain ambient air quality standards. The office translates set goals and objectives into effective programs and enforceable regulations that meet federal and state statutory requirements, while being sensitive to potential socioeconomic and environmental justice impacts in the South Coast Air Basin.

The Executive Office currently consists of the Executive Officer, a Senior Policy Advisor, and five support staff. The Executive Officer serves as Chief of Operations in implementing policy directed by the agency’s 13-member Governing Board and in working proactively with state and federal regulatory officials. The Executive Officer also oversees all of the day-to-day administrative functions of staff and the annual operating budget.





**POSITION SUMMARY: 7 FTEs**

Unit	Current (FY 13-14)	Changes	Proposed (FY 14-15)
Office Administration	7	-	7

**STAFFING DETAIL:**

2014-15 Requested Staffing

<u>Position</u>	<u>Title</u>
1	Executive Officer
3	Executive Secretary
1	Senior Administrative Secretary
1	Senior Policy Advisor
<u>1</u>	Staff Specialist
7	Total Requested Positions

Executive Office Work Program by Office									
#	Program Code	Program Category	Goal	Program	Activities	FY 2013-14 +/-	FY 2014-15	Revenue Categories	
1	03	010	Develop Programs	AQMP	Develop/Implement AQMP	0.05	0.05	II,IX	
2	03	028	Develop Programs	Admin/SCAQMD Policy	Dev/Coord Goals/Policies/Overs	2.00	2.00	1a	
3	03	038	Operational Support	Admin/Office Management	Budget/Program Management	1.00	1.00	1b	
4	03	078	Policy Support	Asthma & Outdoor AQ Consortium	Asthma & Outdoor AQ Consortium	0.01	0.01	1a	
5	03	083	Policy Support	Brain Tumor & Air Poll Foundat	Brain Tumor & Air Poll Foundation Support	0.03	0.03	1a	
6	03	275	Policy Support	Governing Board	Board/Committee Support	1.60	1.60	1a	
7	03	276	Policy Support	Advisory Group/Governing Board	Governing Board Advisory Group	0.05	0.05	1a	
8	03	381	Policy Support	Interagency Liaison	Local/State/Fed Coord/Interact	0.40	0.40	1a	
9	03	385	Develop Rules	Credit Generation Programs	Dev/Impl Marketable Permit	0.02	0.02	II	
10	03	390	Customer Service and Business Assistance	Local Govt Policy Development	Policy Development	0.05	0.05	1a	
11	03	410	Policy Support	Legislation	Testimony/Mtgs:New/Current Leg	0.50	0.50	1a	
12	03	416	Policy Support	Legislative Activities	Supp/Promote/Influence Legis/Adm	0.05	0.05	1a	
13	03	455	Advance Clean Air Technology	Mobile Sources	Dev/Impl Mobile Source Strategies	0.10	0.10	IX	
14	03	490	Customer Service and Business Assistance	Outreach	Publ Awareness Clean Air Prog	1.00	1.00	1a	
15	03	565	Customer Service and Business Assistance	Public Records Act	Comply w/ Public Req for Info	0.05	0.05	1a	
16	03	650	Develop Rules	Rules	Develop & Implement Rules	0.04	0.04	IV,IX	
17	03	717	Policy Support	Student Interns	Gov Board/Student Intern Program	0.02	0.02	1a	
18	03	855	Operational Support	Web Tasks	Create/edit/review web content	0.03	0.03	1a	

<b>Total</b>	7.00	0.00	7.00
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Executive Office Line Item Expenditure						
Major Object / Account # / Account Description	FY 2012-13 Actuals	FY 2013-14 Adopted Budget	FY 2013-14 Amended Budget	FY 2013-14 Estimate *	FY 2014-15 Proposed	
<b>Salary &amp; Employee Benefits</b>						
51000-52000	Salaries	\$ 878,845	\$ 829,017	\$ 829,017	\$ 837,159	\$ 825,697
53000-55000	Employee Benefits	553,134	500,334	500,333	525,137	508,905
Sub-total Salary & Employee Benefits		\$ 1,431,979	\$ 1,329,351	\$ 1,329,350	\$ 1,362,296	\$ 1,334,602
<b>Services &amp; Supplies</b>						
67250	Insurance	\$ -	\$ -	\$ -	\$ -	\$ -
67300	Rents & Leases Equipment	-	-	-	-	-
67350	Rents & Leases Structure	-	-	-	-	-
67400	Household	-	-	-	-	-
67450	Professional & Special Services	49,585	50,000	35,000	30,447	50,000
67460	Temporary Agency Services	-	-	-	-	-
67500	Public Notice & Advertising	0	7,500	7,500	-	7,500
67550	Demurrage	-	-	-	-	-
67600	Maintenance of Equipment	-	400	400	-	400
67650	Building Maintenance	-	-	-	-	-
67700	Auto Mileage	296	800	800	638	800
67750	Auto Service	-	-	-	-	-
67800	Travel	38,752	52,000	52,000	43,100	52,000
67850	Utilities	-	-	-	-	-
67900	Communications	3,542	6,500	6,500	6,410	6,500
67950	Interest Expense	-	-	-	-	-
68000	Clothing	-	-	-	-	-
68050	Laboratory Supplies	-	-	-	-	-
68060	Postage	154	7,000	7,000	154	7,000
68100	Office Expense	1,534	6,000	6,000	2,868	6,000
68200	Office Furniture	-	-	-	-	-
68250	Subscriptions & Books	359	5,000	5,000	694	5,000
68300	Small Tools, Instruments, Equipment	-	-	-	-	-
68350	Film	-	-	-	-	-
68400	Gas and Oil	-	-	-	-	-
69500	Training/Conference/Tuition/ Board Exp.	2,095	1,000	2,000	1,905	1,000
69550	Memberships	25,000	26,000	26,000	25,000	26,000
69600	Taxes	-	-	-	-	-
69650	Awards	-	-	-	-	-
69700	Miscellaneous Expenses	1,536	25,000	24,000	2,195	25,000
69750	Prior Year Expense	-	-	-	-	-
69800	Uncollectable Accounts Receivable	-	-	-	-	-
89100	Principal Repayment	-	-	-	-	-
Sub-total Services & Supplies		\$ 122,853	\$ 187,200	\$ 172,200	\$ 113,411	\$ 187,200
77000	<b>Capital Outlays</b>	\$ -	\$ -	\$ -	\$ -	\$ -
79050	<b>Building Remodeling</b>	\$ -	\$ -	\$ -	\$ -	\$ -
Total Expenditures		\$ 1,554,832	\$ 1,516,551	\$ 1,501,550	\$ 1,475,706	\$ 1,521,802

\* Estimates based on July 2013 through March 2014 actual expenditures and budget amendments.

## **CLERK OF THE BOARDS**

**SAUNDRA MCDANIEL  
CLERK OF THE BOARDS**

### **DESCRIPTION OF MAJOR SERVICES:**

The Clerk of the Boards office coordinates the activities, provides operational support, and maintains the official records for both the Governing Board and the Hearing Board. The Clerk's office is responsible for preparing the legal notices for hearings and meetings, and ensuring that such notices are published as required. Clerk of the Boards' staff assists petitioners and attorneys in the filing of petitions before the Hearing Board and explains the Hearing Board's functions and procedures. Staff prepares Minute Orders, Findings and Decisions of the Hearing Board, and Summary Minutes of Governing Board meetings. The Clerk acts as communication liaison for the Boards with SCAQMD staff and state and federal agencies.

### **ACCOMPLISHMENTS:**

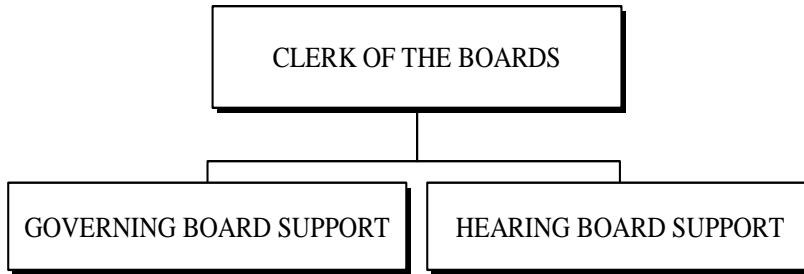
#### **RECENT:**

- Received and processed 44 subpoenas, public/administrative records requests, and claims against the District.
- Provided support for 13 Governing Board meetings, including: preparing an agenda and minutes for each meeting; preparation, distribution, and publication of 23 meeting and public hearing notices; preparation of 23 Board Resolutions.
- Provided support for 132 hearings, pre-hearing conferences, and general meetings held by the Hearing Board, including: processing 150 petitions; preparation, distribution, and publication of 155 meeting and public hearing notices; preparation of 206 Minute Orders, Findings & Decisions, Pre-hearing Memoranda, and General Meeting Reports of Actions; and preparation and distribution of 202 daily agendas and monthly case calendars.
- Switched from cassette tape to digital recording of Governing Board and Hearing Board proceedings.
- Planned/coordinated efforts and provided clerical support for special offsite meetings.

#### **ANTICIPATED:**

- Provide support for approximately 140 hearings, pre-hearing conferences, and general meetings held by the Hearing Board, including: processing approximately 160 petitions; preparation, distribution, and publication of 130-140 meeting and public hearing notices; preparation of over 200 Minute Orders, Findings and Decisions, Pre-hearing Memoranda, and General Meeting Reports of Actions; and preparation and distribution of more than 200 daily agendas and monthly case calendars.

**ORGANIZATIONAL CHART:**



**POSITION SUMMARY: 6 FTEs**

Unit	Current (FY 2013-14)	Changes	Proposed (FY 2014-15)
Governing/Hearing Board Support	6	-	6

**STAFFING DETAIL:**

2014-15 Requested Staffing

<u>Position</u>	<u>Title</u>
1	Clerk of the Board
3	Deputy Clerk/Transcriber
1	Office Assistant
<u>1</u>	Senior Deputy Clerk
6	Total Requested Positions

**Clerk of the Boards  
Work Program by Office**

#	Program Code	Program Category	Goal	Program	Activities	FY 2013-14	FTEs +/-	FY 2014-15	Revenue Categories
1	17 024	Operational Support	III	Admin/SCAQMD/GB/HB Mgmt	Admin Governing/Hearing Brds	1.25		1.25	1a,VII,XV
2	17 275	Operational Support	III	Governing Board	Attend/Record/Monitor Meetings	1.40		1.40	1a
3	17 364	Ensure Compliance	I	Hearing Board/Abatement Orders	Attn/Recrd/Monitr Mtgs	0.10		0.10	IV
4	17 365	Ensure Compliance	I	Hearing Board/Variiances/Appeal	Attend/Record/Monitor HB Mtgs	3.20		3.20	IV,V,VII
5	17 565	Customer Service and Business Assistance	III	Public Records Act	Comply w/ Public Rec Requests	0.02		0.02	1a
6	17 855	Ensure Compliance	II	Web Tasks	Create/edit/review web content	0.03		0.03	1a
<b>Total</b>						6.00	0.00	6.00	

Clerk of the Boards Line Item Expenditure					
Major Object / Account # / Account Description	FY 2012-13 Actuals	FY 2013-14 Adopted Budget	FY 2013-14 Amended Budget	FY 2013-14 Estimate *	FY 2014-15 Proposed
<b>Salary &amp; Employee Benefits</b>					
51000-52000 Salaries	\$ 413,597	\$ 377,796	\$ 377,796	\$ 386,556	\$ 377,366
53000-55000 Employee Benefits	240,364	227,856	227,856	250,365	247,048
Sub-total Salary & Employee Benefits	\$ 653,961	\$ 605,652	\$ 605,652	\$ 636,922	\$ 624,414
<b>Services &amp; Supplies</b>					
67250 Insurance	\$ -	\$ -	\$ -	\$ -	\$ -
67300 Rents & Leases Equipment	-	-	-	-	-
67350 Rents & Leases Structure	-	-	-	-	-
67400 Household	-	-	-	-	-
67450 Professional & Special Services	17,393	25,400	25,400	17,393	25,400
67460 Temporary Agency Services	-	-	-	-	-
67500 Public Notice & Advertising	29,676	40,000	40,000	34,527	40,000
67550 Demurrage	-	-	-	-	-
67600 Maintenance of Equipment	-	200	200	-	200
67650 Building Maintenance	-	-	-	-	-
67700 Auto Mileage	-	100	100	60	100
67750 Auto Service	-	-	-	-	-
67800 Travel	24	200	200	24	200
67850 Utilities	-	-	-	-	-
67900 Communications	-	500	500	500	500
67950 Interest Expense	-	-	-	-	-
68000 Clothing	-	-	-	-	-
68050 Laboratory Supplies	-	-	-	-	-
68060 Postage	788	1,200	1,200	975	1,200
68100 Office Expense	1,529	6,600	6,600	2,181	6,600
68200 Office Furniture	-	-	-	-	-
68250 Subscriptions & Books	-	-	-	-	-
68300 Small Tools, Instruments, Equipment	-	-	-	-	-
68350 Film	-	-	-	-	-
68400 Gas and Oil	-	-	-	-	-
69500 Training/Conference/Tuition/ Board Exp.	359,701	381,450	381,450	372,871	381,450
69550 Memberships	-	-	-	-	-
69600 Taxes	-	-	-	-	-
69650 Awards	-	-	-	-	-
69700 Miscellaneous Expenses	106	500	500	106	500
69750 Prior Year Expense	-	-	-	-	-
69800 Uncollectable Accounts Receivable	-	-	-	-	-
89100 Principal Repayment	-	-	-	-	-
Sub-total Services & Supplies	\$ 409,216	\$ 456,150	\$ 456,150	\$ 428,637	\$ 456,150
77000 Capital Outlays	\$ -	\$ -	\$ -	\$ -	\$ -
79050 Building Remodeling	\$ -	\$ -	\$ -	\$ -	\$ -
Total Expenditures	\$ 1,063,176	\$ 1,061,802	\$ 1,061,802	\$ 1,065,559	\$ 1,080,564
* Estimates based on July 2013 through March 2014 actual expenditures and budget amendments.					

## **MEDIA OFFICE**

### **SAM ATWOOD MEDIA RELATIONS MANAGER**

#### **DESCRIPTION OF MAJOR SERVICES:**

SCAQMD's Media Office serves as the agency's official liaison with news media in its many forms, including newspapers, radio, television, cable TV, online and social media. The Media Office also supports programs and policies of SCAQMD and its Board with a wide range of proactive media and public relations programs.

Services provided by the Media Office include phone, in-person and on-camera interviews with news media; production of media events; and the creation, production and distribution of news releases, media advisories, letters to the editor, op-eds, flyers, brochures and videos. The Media Office designs and executes major advertising and marketing initiatives with the assistance of outside contractors.

The Media Office also provides strategic counsel to the Executive Council and Executive Officer on media relations and building public awareness of air quality issues.

#### **ACCOMPLISHMENTS:**

##### **RECENT:**

- Implemented Latino advertising and outreach initiative targeting Spanish-speaking and bilingual residents to increase awareness of SCAQMD, increase awareness of the Southland's air quality problem and solutions, and promote a call to action.
- Implemented second phase of TV partnership with local KABC-7 TV to promote summer and winter air quality messages to generate public interest in and support for air quality improvement programs.
- Implemented CBS radio and digital promotion to complement TV partnership with KABC-7 to increase awareness of and support for SCAQMD and its programs.
- Implemented an enhanced winter Check Before You Burn advertising and outreach campaign, including TV, radio, online and billboard ads, and live TV interviews, to help educate residents about the program and mandatory no-burn days.
- Supported SCAQMD programs and projects through ongoing outreach to media through press releases, media advisories, press events, opinion pieces and letters to the editor.
- Provided media relations services and strategic counsel for high-profile media issues through press releases, media advisories, in-person and on-camera interviews, and opinion pieces and letters to the editor.

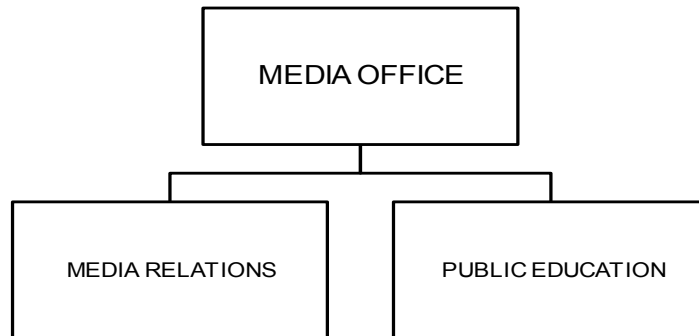
##### **ANTICIPATED:**

- Support Lawn Mower Exchange program with enhanced advertising and outreach for the 2014 exchange program.



- Implement winter Check Before You Burn outreach campaign to educate media and public about the program and mandatory no-burn days.
- Support SCAQMD programs and projects through ongoing outreach to media through press releases, media advisories, press events, opinion pieces and letters to the editor.
- Provide media relations services and strategic counsel for high-profile media issues through press releases, media advisories, in-person and on-camera interviews, and opinion pieces and letters to the editor.

**ORGANIZATIONAL CHART:**



**POSITION SUMMARY: 3 FTEs**

Unit	Current (FY 2013-14)	Changes	Proposed (FY 2014-15)
Media Relations/Public Education	3	--	3

**STAFFING DETAIL:**

2014-15 Requested Staffing

<u>Position</u>	<u>Title</u>
1	Community Relations Manager
1	Secretary
<u>1</u>	Senior Public Information Specialist
3	Total Requested Positions

Media Office Work Program by Office								
#	Program Code	Program Category	Goal	Program	Activities	FY 2013-14	FY 2014-15	Revenue Categories
1	20	494	Policy Support	Outreach/Media	Edits, Brds., Talk shows, Commercl	2.96	2.96	1a, IX
2	20	855	Operational Support	Web Tasks	Create/edit/review web content	0.04	0.04	1a

<b>Total</b>	
3.00	0.00
3.00	

Media Office Line Item Expenditure					
Major Object / Account # / Account Description	FY 2012-13 Actuals	FY 2013-14 Adopted Budget	FY 2013-14 Amended Budget	FY 2013-14 Estimate *	FY 2014-15 Proposed
<b>Salary &amp; Employee Benefits</b>					
51000-52000 Salaries	\$ 279,372	\$ 256,156	\$ 256,155	\$ 284,177	\$ 264,030
53000-55000 Employee Benefits	144,789	136,375	136,375	143,642	125,195
Sub-total Salary & Employee Benefits	\$ 424,161	\$ 392,531	\$ 392,530	\$ 427,819	\$ 389,225
<b>Services &amp; Supplies</b>					
67250 Insurance	\$ -	\$ -	\$ -	\$ -	\$ -
67300 Rents & Leases Equipment	-	1,500	1,500	-	500
67350 Rents & Leases Structure	-	-	-	-	-
67400 Household	-	-	-	-	-
67450 Professional & Special Services	827,443	26,000	26,000	26,000	29,000
67460 Temporary Agency Services	-	-	-	-	-
67500 Public Notice & Advertising	-	-	-	-	-
67550 Demurrage	-	-	-	-	-
67600 Maintenance of Equipment	-	-	-	-	-
67650 Building Maintenance	-	-	-	-	-
67700 Auto Mileage	620	1,000	1,000	931	-
67750 Auto Service	-	-	-	-	-
67800 Travel	404	3,000	3,000	3,000	2,000
67850 Utilities	-	-	-	-	-
67900 Communications	2,032	1,000	1,984	1,984	-
67950 Interest Expense	-	-	-	-	-
68000 Clothing	-	-	-	-	-
68050 Laboratory Supplies	-	-	-	-	-
68060 Postage	535	1,000	1,500	1,445	-
68100 Office Expense	1,130	2,480	2,480	1,130	1,500
68200 Office Furniture	-	-	-	-	-
68250 Subscriptions & Books	1,389	2,000	2,000	1,545	-
68300 Small Tools, Instruments, Equipment	-	-	-	-	-
68350 Film	-	-	-	-	-
68400 Gas and Oil	-	-	-	-	-
69500 Training/Conference/Tuition/ Board Exp.	-	2,800	2,300	-	1,500
69550 Memberships	700	1,500	1,500	1,150	750
69600 Taxes	-	-	-	-	-
69650 Awards	-	-	-	-	-
69700 Miscellaneous Expenses	1,014	2,600	2,600	959	-
69750 Prior Year Expense	-	-	-	-	-
69800 Uncollectable Accounts Receivable	-	-	-	-	-
89100 Principal Repayment	-	-	-	-	-
Sub-total Services & Supplies	\$ 835,267	\$ 44,880	\$ 45,864	\$ 38,144	\$ 35,250
77000 <b>Capital Outlays</b>	\$ -	\$ -	\$ -	\$ -	\$ -
79050 <b>Building Remodeling</b>	\$ -	\$ -	\$ -	\$ -	\$ -
Total Expenditures	\$ 1,259,428	\$ 437,411	\$ 438,394	\$ 465,963	\$ 424,475

\* Estimates based on July 2013 through March 2014 actual expenditures and budget amendments.

## **LEGAL**

### **KURT WIESE GENERAL COUNSEL**

#### **DESCRIPTION OF MAJOR SERVICES:**

The General Counsel's office is responsible for advising the SCAQMD Board and staff on all legal matters and enforcing SCAQMD rules and state laws related to air pollution controls. Attorneys review and assist in the drafting of SCAQMD rules and regulations to ensure they are within the District's authority, and are written in a clear and enforceable manner. Attorneys ensure that all legal requirements for noticing, public workshop, CEQA analysis, and socioeconomic analysis of proposed rules are satisfied.

The General Counsel's Office is also responsible for representing the SCAQMD Board and staff in court proceedings and administrative hearings related to matters arising out of staff's performance of official duties as SCAQMD officers and employees.

The Office is responsible for the enforcement of all SCAQMD rules and regulations and applicable state law. In addition, staff attorneys represent the Executive Officer in all matters before the SCAQMD Hearing Board, including variances, permit appeals, and abatement orders. Staff investigators support civil penalty and Hearing Board litigation.

#### **ACCOMPLISHMENTS:**

##### **RECENT:**

- Won California Supreme Court case holding that air districts may adopt technology forcing rules where it is reasonably anticipated the technology will be available by the time required. Defeated legal challenges to SCAQMD rules requiring the Gas Company to monitor gas quality, and Rule 1143 (VOC content of paint thinners).
- Provided legal advice including responses to comments on all legal issues concerning the 2012 AQMP, the Port Backstop Measure, and EPA's disapproval of AQMD's transportation control measures in ozone plans, and EPA's requirement to develop new 1-hour ozone SIP (State Implementation Plan).
- Provided legal advice on all issues related to permitting, including the reactivation of the restart of power plant boilers at Huntington Beach to prevent blackouts associated with the San Onofre Nuclear Generating Station being taken off line.
- Initiated and implemented a pilot project providing for the filing of enforcement cases in Small Claims Courts. The program allows small business to have their "day in court" without having to incur the expense of retaining counsel. The program also increases

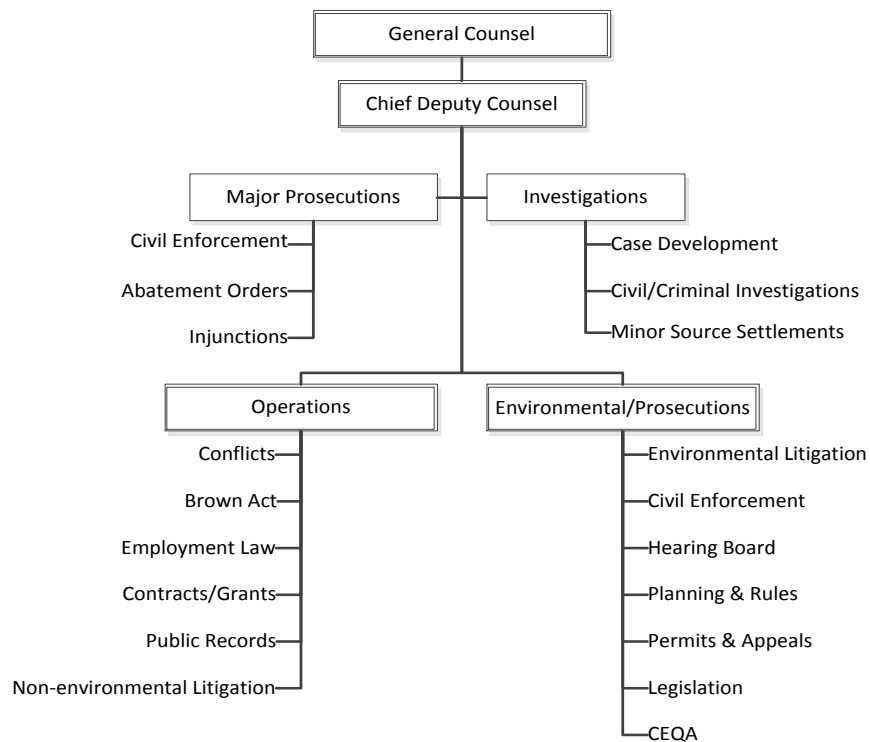
office efficiencies by avoiding having to assign these small penalty cases to an attorney for filing in Superior Court.

- The Office worked with Engineering staff and counsel for Southern California Edison to resolve a problem involving the manual manipulation of the Continuous Emissions Monitoring system at SCE’s facility on Catalina Island.

**ANTICIPATED:**

- Develop high impact enforcement cases to maximize deterrence for air pollution violations.
- Implement training programs to broaden staff knowledge of and ability to handle all types of work handled by the office.
- Provide legal advice concerning the District’s priority projects such as adopting rules relating to lead emissions from battery recycling facilities and requiring fees for use of certain offset exemptions and the use of offsets from the District’s internal accounts.

**ORGANIZATIONAL CHART:**



**POSITION SUMMARY: 32 FTEs**

Unit	Current (FY 2013-14)	Changes	Proposed (FY 2014-15)
Office Administration	4	0	4
General Counsel	22	0	22
Investigations	6	0	6
Total	32	0	32

**STAFFING DETAIL:**

2014-15 Requested Staffing

<u>Position</u>	<u>Title</u>
4	Administrative Secretary/Legal
1	Assistant Chief Deputy – Major Prosecutions
1	Chief Deputy Counsel
1	General Counsel
1	Investigations Manager
4	Investigator
3	Legal Secretary
1	Office Assistant
1	Paralegal
4	Principal Deputy District Counsel
8	Senior Deputy District Counsel
1	Senior Office Assistant
1	Senior Paralegal
<u>1</u>	Supervising Investigator
32	Total Requested Positions

**Legal  
Work Program by Office**

#	Program Code	Program Category	Goal	Program	Activities	FTEs +/-		Revenue Categories
						FY 2013-14	FY 2014-15	
1	08	001	Advance Clean Air Technology	AB2766/Mob Src/Legal Advice	AB2766 Leg Adv: Trans/Mob Source	0.05	0.05	IX
2	08	003	Advance Clean Air Technology	AB2766/MSRC	Legal Advice: MSRC Prog Admin	0.10	0.05	IX
3	08	009	Develop Programs	AB 1318 Mitigation	AB 1318 Projects Adm/Impl	0.05	0.05	XVII
4	08	010	Develop Programs	AQMP	AQMP Revision/CEQA Review	0.10	0.10	IV,IX
5	08	025	Operational Support	Admin/SCAQMD-Legal Research	Legal Research/Staff/Exec Mgmt	1.25	1.25	1a
6	08	038	Operational Support	Admin/Office Management	Attorney Timekeeping/Perf Eval	2.75	0.75	1b
7	08	071	Operational Support	Arch Ctgs - Admin	Rule Dev/TA/Reinterpretations	1.40	1.40	XVIII
8	08	072	Ensure Compliance	Arch Ctgs - End User	Case Dispo/Rvw, Track, Prep NOVs	0.05	0.05	XVIII
9	08	073	Ensure Compliance	Arch Ctgs - Other	Case Dispo/Rvw, Track, Prep NOVs	0.50	(0.30)	XVIII
10	08	102	Operational Support	CEQA Document Projects	CEQA Review	0.75	0.25	II,III,IX
11	08	115	Ensure Compliance	Case Disposition	Trial/Dispo-Civil Case/Injunct	6.00	6.00	II,IV,VII,XV
12	08	131	Advance Clean Air Technology	Clean Fuels/Legal Advice	Legal Advice: Clean Fuels	0.05	0.05	VIII
13	08	154	Ensure Compliance	Compliance/NOV Administration	Review/Track/Prep NOVs/MSAs	1.20	1.20	IV
14	08	185	Ensure Compliance	Database Management	Support IM/Dev Tracking System	0.20	0.20	IV
15	08	227	Operational Support	Employee/Employment Law	Legal Advice: Employment Law	1.00	1.00	1a
16	08	275	Operational Support	Governing Board	Legal Advice:Attend Board/Cmte Mtgs	1.00	1.00	1a
17	08	366	Ensure Compliance	Hearing Board/Legal	Hear/Disp-Variant/Appeal/Rev	2.80	2.80	IV
18	08	380	Ensure Compliance	Interagency Coordination	Coordinate with Other Agencies	0.25	0.25	II,V
19	08	401	Operational Support	Legal Advice/SCAQMD Programs	General Advice: Contracts	2.50	(0.50)	1a
20	08	402	Ensure Compliance	Legal Advice/Legislation	Legal Support/Rep on Legal Matter	0.25	(0.15)	1a
21	08	403	Ensure Compliance	Legal Rep/Litigation	Prep/Hearing/Disposition	3.60	(0.10)	1a,II
22	08	404	Customer Service and Business Assistance	Legal Rep/Legislation	Draft Legis/SCAQMD Position/Mtgs	0.05	0.05	II,IX
23	08	416	Policy Support	Legislative Activities	Lobbying:Supp/Promote/influence Legis/Adm	0.10	0.10	1a
24	08	457	Advance Clean Air Technology	Mob Src/C Moyer/Leg Advice	Moyer/Implem/Program Dev	0.20	0.20	IX
25	08	465	Ensure Compliance	Mutual Settlement	Mutual Settlement Program	3.00	3.00	IV
26	08	516	Timely Review of Permits	Permit Processing/Legal	Legal Advice: Permit Processing	0.25	(0.10)	III
27	08	565	Customer Service and Business Assistance	Public Records Act	Comply w/ Public Rec Requests	0.50	0.50	1a
28	08	651	Develop Rules	Rules/Legal Advice	Legal Advice: Rules/Draft Regs	0.75	0.25	II
29	08	661	Develop Rules	Rulmaking/RECLAIM	RECLAIM Legal Adv/Related Iss	0.10	(0.05)	II
30	08	681	Customer Service and Business Assistance	Small Business/Legal Advice	Legal Advice: SB/Fee Review	0.10	(0.05)	II,III
31	08	717	Policy Support	Student Interns	Gov Board/Student Intern Program	0.30	(0.10)	1a
32	08	770	Ensure Compliance	Title V	Leg Advice: Title V Prog/Perm Dev	0.05	0.05	II,IV
33	08	772	Timely Review of Permits	Title V Permits	Leg Advice: New Source Title V Permit	0.10	(0.05)	III
34	08	791	Ensure Compliance	Toxics/AB2588	AB2588 Legal Advice: Plan & Impl	0.05	0.05	X
35	08	805	Ensure Compliance	Training	Continuing Education/Training	0.50	0.50	1b
36	08	825	Operational Support	Union Negotiations	Legal Adv: Union Negotiations	0.05	0.05	1a
37	08	826	Operational Support	Union Steward Activities	Rep Employees in Grievance Act	0.05	0.05	1a

<b>Total</b>	32.00	0.00	32.00
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Legal Line Item Expenditure					
Major Object / Account # / Account Description	FY 2012-13 Actuals	FY 2013-14 Adopted Budget	FY 2013-14 Amended Budget	FY 2013-14 Estimate *	FY 2014-15 Proposed
<b>Salary &amp; Employee Benefits</b>					
51000-52000 Salaries	\$ 3,566,816	\$ 3,580,825	\$ 3,580,825	\$ 3,524,083	\$ 3,560,762
53000-55000 Employee Benefits	1,786,985	1,888,659	1,888,659	1,840,274	1,911,932
Sub-total Salary & Employee Benefits	\$ 5,353,801	\$ 5,469,485	\$ 5,469,484	\$ 5,364,357	\$ 5,472,694
<b>Services &amp; Supplies</b>					
67250 Insurance	\$ -	\$ -	\$ -	\$ -	\$ -
67300 Rents & Leases Equipment	-	-	-	-	-
67350 Rents & Leases Structure	-	-	-	-	-
67400 Household	-	-	-	-	-
67450 Professional & Special Services	318,674	249,500	797,500	1,197,500	279,500
67460 Temporary Agency Services	62,439	35,000	40,000	35,000	15,000
67500 Public Notice & Advertising	-	10,000	3,500	-	8,000
67550 Demurrage	1,207	4,000	4,000	4,000	10,000
67600 Maintenance of Equipment	-	300	300	-	300
67650 Building Maintenance	-	-	-	-	-
67700 Auto Mileage	795	1,600	1,600	795	1,600
67750 Auto Service	-	-	-	-	-
67800 Travel	10,822	15,000	13,000	12,292	15,000
67850 Utilities	-	-	-	-	-
67900 Communications	2,716	10,300	10,300	3,470	10,300
67950 Interest Expense	-	-	-	-	-
68000 Clothing	-	250	250	250	250
68050 Laboratory Supplies	-	-	-	-	-
68060 Postage	4,395	4,750	4,750	4,395	4,750
68100 Office Expense	10,035	9,520	8,320	9,081	9,520
68200 Office Furniture	-	-	-	-	-
68250 Subscriptions & Books	91,379	95,000	95,000	95,000	100,000
68300 Small Tools, Instruments, Equipment	-	-	-	-	-
68350 Film	-	-	-	-	-
68400 Gas and Oil	-	-	-	-	-
69500 Training/Conference/Tuition/ Board Exp.	25,340	15,000	17,000	17,000	25,000
69550 Memberships	700	750	1,950	750	750
69600 Taxes	-	-	-	-	-
69650 Awards	-	-	-	-	-
69700 Miscellaneous Expenses	1,139	-	1,500	1,488	1,000
69750 Prior Year Expense	-	-	-	-	-
69800 Uncollectable Accounts Receivable	-	-	-	-	-
89100 Principal Repayment	-	-	-	-	-
Sub-total Services & Supplies	\$ 529,640	\$ 450,970	\$ 998,970	\$ 1,381,022	\$ 480,970
77000 <b>Capital Outlays</b>	\$ -	\$ -	\$ -	\$ -	\$ -
79050 <b>Building Remodeling</b>	\$ -	\$ -	\$ -	\$ -	\$ -
Total Expenditures	\$ 5,883,442	\$ 5,920,455	\$ 6,468,454	\$ 6,745,379	\$ 5,953,664

\* Estimates based on July 2013 through March 2014 actual expenditures and budget amendments.





**SOUTH COAST  
AIR QUALITY MANAGEMENT DISTRICT**

## **FINANCE**

**MICHAEL B. O'KELLY**  
**CHIEF FINANCIAL OFFICER; DEPUTY EXECUTIVE OFFICER**

### **DESCRIPTION OF MAJOR SERVICES:**

The Finance office provides services to internal and external customers and stakeholders, including fee payers, other divisions, employees, the Mobile Source Air Pollution Reduction Review Committee, the Building Corporation, and the Brain and Lung Tumor and Air Pollution Foundation. These services are provided through three distinct sections: Controller, Financial Services, and Procurement. The Controller is responsible for accounting, financial reporting, accounts payable, payroll, state and federal tax reporting, revenue posting, and asset management. The Financial Services Manager is responsible for budget preparation, budgetary reporting, forecasting, grants management, billing services, and ad-hoc internal financial support. The Procurement Manager is responsible for the procurement of goods and services, contracting, proposal/bid solicitations and advertising, processing supplier deliveries, and controlling/dispensing/reconciling inventory.

### **ACCOMPLISHMENTS:**

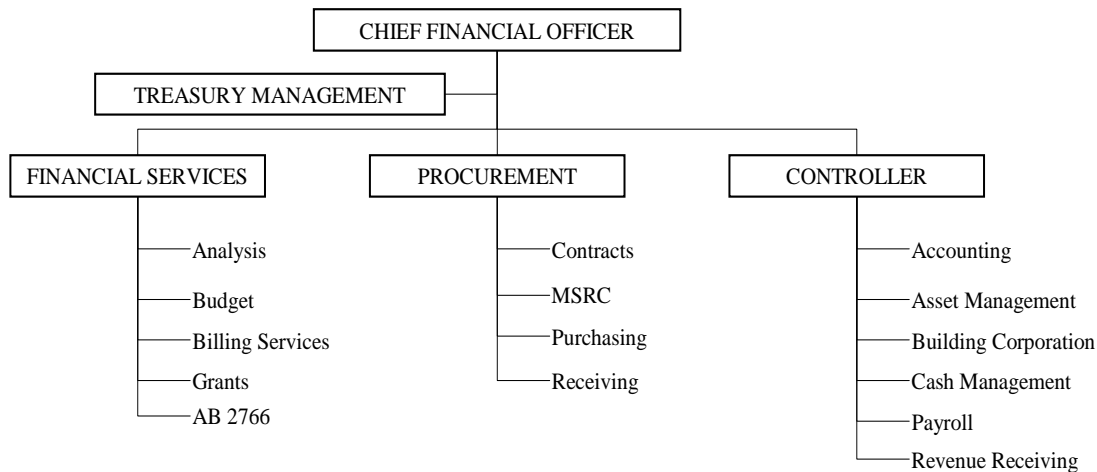
#### **RECENT:**

- Implemented expanded electronic fee payment options, including online credit card and no fee e-check options, to make paying SCAQMD fees more convenient for the fee payer.
- Proposed the first annual budget since FY 2001-02 that was balanced without the use of prior-year revenues or fund balance.
- Completed the biannual audit of AB 2766 revenues for FY's 2009-10 and 2010-11, including reviewing 54 AB 2766 recipients.
- Processed 1,116 contracts and modifications, issued 45 Request for Proposals/Quotes, and processed 1,443 proposals/quotations.
- Received the Government Finance Officer's Association's (GFOA) awards for the Annual Budget, Comprehensive Annual Financial Report (CAFR), and Popular Annual Financial Report (PAFR) for the most recent fiscal year.

**ANTICIPATED:**

- Complete the implementation of Public Employee Pension Reform Act changes into the payroll system through coordination with other SCAQMD divisions and San Bernardino County Employees’ Retirement Association.
- Monitor the changing investment yield environment for allowable investments to ensure SCAQMD’s investments continue to earn a market rate of return while maintaining safety and liquidity.
- Continue to receive GFOA Awards for the Annual Budget, CAFR, and PAFR to ensure SCAQMD’s financial reports meet the highest professional standards.
- Perform additional cost analysis to determine if various fees are sufficient to cover the activities for which they are collected.

**ORGANIZATIONAL CHART:**



**POSITION SUMMARY: 45 FTEs**

Unit	Current (FY 2013-14)	Changes	Proposed (FY 2014-15)
Office Administration	3	-	3
Financial Services	13	-	13
Procurement	9	-	9
Controller	19	1	20
<b>Total</b>	<b>44</b>	<b>1</b>	<b>45</b>

The FTE proposed to be added for FY 2014-15 is for a Supervising Payroll Technician and will allow for training by the current Supervising Payroll Technician prior to retiring in March 2015. The FTE will be deleted in FY 2015-16.

**STAFFING DETAIL:**

2014-15 Requested Staffing

<u>Position</u>	<u>Title</u>
2	Accounting Technician
1	Chief Financial Officer
2	Contracts Assistant
1	Controller
1	District Storekeeper
3	Financial Analyst
1	Financial Services Manager
6	Fiscal Assistant
2	Payroll Technician
1	Procurement Manager
1	Purchasing Assistant
1	Purchasing Supervisor
2	Secretary
3	Senior Accountant
1	Senior Administrative Secretary
2	Senior Fiscal Assistant
9	Senior Office Assistant
1	Staff Assistant
1	Staff Specialist
1	Stock Clerk
1	Supervising Office Assistant
<u>2</u>	Supervising Payroll Technician
45	Total Requested Positions

**Finance  
Work Program by Office**

#	Program Code	Program Category	Goal	Program	Activities	FTEs +/-		Revenue Categories
						FY 2013-14	FY 2014-15	
1	04 002	Customer Service and Business Assistance	III	AB2766/Mobile Source	Prog Admin: Monitor/Dist/Audit	0.10	0.10	IX
2	04 003	Advance Clean Air Technology	III	AB2766/MISRC	MISRC Program Administration	0.35	0.35	IX
3	04 009	Develop Programs	I	AB 1318 Mitigation	AB 1318 Projects Admin/Impl	0.13	0.13	XVII
4	04 020	Operational Support	III	Admin/SCAQMD Budget	Analyze/Prepare/Impl/Track WP	2.50	2.50	1a
5	04 021	Operational Support	III	Admin/SCAQMD Contracts	Contract Admin/Monitor/Process	3.20	3.20	1a
6	04 023	Operational Support	III	Admin/SCAQMD Capital Assets	FA Rep/Reconcile/Inv/Act	0.70	0.70	1a
7	04 038	Operational Support	III	Admin/Office Management	Fin Mgmt/Oversee Activities	3.00	3.00	1b
8	04 045	Operational Support	III	Admin/Office Budget	Office Budget/Prep/Impl/Track	0.05	0.05	1b
9	04 071	Operational Support	I	Arch Cigs - Admin	Cost Analysis/Payments	0.04	0.04	XVIII
10	04 083	Policy Support	II	Brain Tumor & Air Poll Foundat	Brain Tumor & Air Poll Foundation Support	0.02	0.02	1a
11	04 085	Operational Support	III	Building Corporation	Building Corp Actt/Fin Reports	0.02	0.02	1a
12	04 130	Advance Clean Air Technology	III	Clean Fuels/Contract Admin	Clean Fuels Contract Admin/Monitor	0.15	0.15	VIII
13	04 170	Customer Service and Business Assistance	I	Billing Services	Answer/Resp/Resolv Prob & Inq	8.00	8.00	II,III,IV
14	04 233	Operational Support	III	Employee Relations	Assist HR/Interpret Salary Res	0.10	0.10	1a
15	04 260	Customer Service and Business Assistance	III	Fee Review	Cnte Mig/Fee-Related Complaint	0.10	0.10	II,III,IV,XV
16	04 265	Operational Support	III	Financial Mgmt/Accounting	Record Accts Rec & Pay/Rpts	6.20	6.20	1a
17	04 266	Operational Support	III	Financial Mgmt/Fin Analysis	Fin/SCAQMD Sta Analtis & Audit	0.80	0.80	1a
18	04 267	Operational Support	III	Financial Mgmt/Treasury Mgmt	Treas Mgt Anlyz/Trk/Proj/Invst	0.90	0.90	1a
19	04 268	Operational Support	III	Financial Systems	CLASS/Rev/Actt/PR/Sys Analyze	0.10	0.10	1a
20	04 355	Customer Service and Business Assistance	III	Grants Management	Grant Anlyz/Eval/Negot/Acc/Rpt	1.00	1.00	IV,V
21	04 447	Operational Support	I	Mobile Sources/Accounting	Record Acct Rec & Pay/Special Funds	0.65	0.65	IX
22	04 457	Advance Clean Air Technology	III	Mobile Source/Moyer Adm	Carl Moyer: Contract/Fin Admin	1.02	1.02	IX
23	04 493	Operational Support	II	Outreach/SB/MB/DVBE	Outreach/Incr SB/DVBE Partic	0.05	0.05	1a
24	04 510	Operational Support	III	Payroll	Ded/Ret Rpts/PR/St & Fed Rpts	3.60	1.00	1a
25	04 542	Advance Clean Air Technology	I	Prop 1B:Goods Movement	Contracts/Finance Admin	0.50	0.50	IX
26	04 544	Advance Clean Air Technology	I	Prop 1B:Low Emiss Sch Bus	Grants/Finance Admin	0.05	0.05	IX
27	04 565	Customer Service and Business Assistance	I	Public Records Act	Comply w/ Public Rec Requests	0.02	0.02	1a
28	04 570	Operational Support	III	Purchasing	Purch/Track Svcs & Supplies	2.50	2.50	1a
29	04 571	Operational Support	III	Purchasing/Receiving	Receive/Record SCAQMD Purchases	1.20	1.20	1a
30	04 572	Operational Support	III	Purchasing-Receiving/Stockroom	Track/Monitor SCAQMD Supplies	1.00	1.00	1a
31	04 630	Operational Support	III	Cash Mgmt/Revenue Receiving	Receive/Post Pymts/Reconcile	5.25	5.25	II,III,IV,XI
32	04 631	Customer Service and Business Assistance	III	Cash Mgmt/Refunds	Research/Doc/P rep/Proc Refunds	0.30	0.30	III,IV,XI
33	04 791	Ensure Compliance	III	Toxics/AB2588	AB2588 Toxics HS Fee Collection	0.15	0.15	X
34	04 805	Operational Support	III	Training	Continuing Education/Training	0.20	0.20	1b
35	04 825	Operational Support	III	Union Negotiations	Official Labor/Mgmt Negotiate	0.02	0.02	1a
36	04 826	Operational Support	III	Union Steward Activities	Rep Employees in Grievance Act	0.01	0.01	1a
37	04 855	Operational Support	II	Web Tasks	Create/edit/review web content	0.02	0.02	1a

<b>Total</b>	44.00	1.00	45.00
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Finance						
Line Item Expenditure						
Major Object / Account # / Account Description	FY 2012-13 Actuals	FY 2013-14 Adopted Budget	FY 2013-14 Amended Budget	FY 2013-14 Estimate *	FY 2014-15 Proposed	
<b>Salary &amp; Employee Benefits</b>						
51000-52000	Salaries	\$ 3,019,888	\$ 2,879,385	\$ 2,879,385	\$ 3,131,055	\$ 3,041,031
53000-55000	Employee Benefits	1,782,032	1,759,545	1,759,545	1,843,777	1,883,972
Sub-total Salary & Employee Benefits		\$ 4,801,920	\$ 4,638,930	\$ 4,638,930	\$ 4,974,832	\$ 4,925,003
<b>Services &amp; Supplies</b>						
67250	Insurance	\$ -	\$ -	\$ -	\$ -	\$ -
67300	Rents & Leases Equipment	-	-	-	-	-
67350	Rents & Leases Structure	-	-	-	-	-
67400	Household	-	900	900	900	900
67450	Professional & Special Services	130,278	157,000	157,000	147,987	148,500
67460	Temporary Agency Services	50,837	55,000	55,000	27,713	58,315
67500	Public Notice & Advertising	6,003	6,500	6,500	6,500	6,500
67550	Demurrage	1,025	900	900	854	780
67600	Maintenance of Equipment	778	950	950	948	1,070
67650	Building Maintenance	-	-	-	-	-
67700	Auto Mileage	1,717	1,483	3,883	1,883	1,483
67750	Auto Service	-	-	-	-	-
67800	Travel	3,102	6,000	6,000	4,652	6,000
67850	Utilities	-	-	-	-	-
67900	Communications	1,072	9,000	9,000	1,203	9,000
67950	Interest Expense	-	-	-	-	-
68000	Clothing	1,126	1,200	1,200	1,126	1,200
68050	Laboratory Supplies	-	-	-	-	-
68060	Postage	92,544	130,350	130,350	97,187	130,350
68100	Office Expense	21,165	35,920	33,520	25,304	35,920
68200	Office Furniture	-	-	-	-	-
68250	Subscriptions & Books	2,723	3,160	3,160	2,632	3,160
68300	Small Tools, Instruments, Equipment	-	-	-	-	-
68350	Film	-	-	-	-	-
68400	Gas and Oil	-	-	-	-	-
69500	Training/Conference/Tuition/ Board Exp.	6,352	26,250	26,250	10,863	26,250
69550	Memberships	2,197	2,190	2,190	2,190	2,375
69600	Taxes	-	-	-	-	-
69650	Awards	-	-	-	-	-
69700	Miscellaneous Expenses	3,256	4,125	4,125	4,125	4,125
69750	Prior Year Expense	-	-	-	-	-
69800	Uncollectable Accounts Receivable	-	-	-	-	-
89100	Principal Repayment	-	-	-	-	-
Sub-total Services & Supplies		\$ 324,175	\$ 440,928	\$ 440,928	\$ 336,067	\$ 435,928
77000	<b>Capital Outlays</b>	\$ -	\$ -	\$ -	\$ -	\$ -
79050	<b>Building Remodeling</b>	\$ -	\$ -	\$ -	\$ -	\$ -
Total Expenditures		\$ 5,126,095	\$ 5,079,858	\$ 5,079,858	\$ 5,310,899	\$ 5,360,931
* Estimates based on July 2013 through March 2014 actual expenditures and budget amendments.						



**SOUTH COAST  
AIR QUALITY MANAGEMENT DISTRICT**

## **ADMINISTRATIVE & HUMAN RESOURCES**

**WILLIAM JOHNSON  
ASSISTANT DEPUTY EXECUTIVE OFFICER**

### **DESCRIPTION OF MAJOR SERVICES:**

Administrative and Human Resources consists of 3 sections: Human Resources, Business Services and Building Services. Human Resources is responsible for administering the full range of personnel and employee relations programs to maximize hiring, retention, and development of highly-qualified employees necessary to meet SCAQMD's air quality goals. Business Services oversees the management of the SCAQMD headquarters facility, the maintenance of vehicles, and Print Shop services, including maintenance of walk-up copiers. This section also coordinates and handles SCAQMD's subscription services and incoming and outgoing mail. Building Services is responsible for maintenance and repairs of the SCAQMD headquarters buildings and building equipment, childcare center, field offices, air monitoring stations, meteorological stations, and landscape maintenance. Building Services is also responsible for repairs of kitchen equipment, restroom fixtures, construction projects, roof repairs, temperature control, and performing preventative maintenance on all SCAQMD equipment.

### **ACCOMPLISHMENTS:**

#### **RECENT:**

- Implemented and administered effective human resources and administrative support programs that further SCAQMD goals and objectives and conform to best business practices.
- Provided support and direction to management and staff with respect to adherence to relevant state and federal laws and SCAQMD policies, procedures and memoranda of understanding.
- Negotiated, interpreted and administered MOUs with three bargaining groups.
- Established an Employee Assistance Program for SCAQMD's workforce.
- Continued to ensure personalized workspace evaluations to reduce/eliminate ergonomic risks.

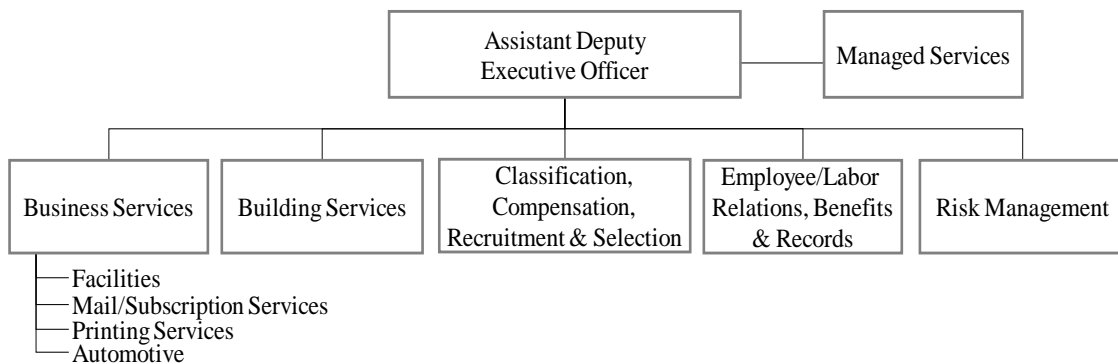
#### **ANTICIPATED:**

- Continue to provide support and direction to management and staff with respect to adherence to relevant state and federal laws and SCAQMD policies, procedures and memoranda of understanding.
- Continue negotiating for a favorable successor MOU with the Technical & Enforcement, and Office Clerical & Maintenance bargaining units.



- Formalize Succession Planning model utilizing internal and/or external resources.
- Evaluate and plan for significant turnover of vehicle fleet due to CNG tank expiration.
- Assist the Science and Technology Advancement (STA) Office with establishing an electrical vehicle (EV) charging plaza, including design and implementation of the necessary charging station locations.

**ORGANIZATIONAL CHART:**



**POSITION SUMMARY: 34 FTEs**

Unit	Current (FY 13-14)	Changes	Proposed (FY 14-15)
Office Administration	2	-	2
Business Services	15	-	15
Building Services	7	-	7
Classification, Compensation, Recruitment & Selection	5	-	5
Employee/Labor Relations, Benefits & Records	3	-	3
Risk Management	2	-	2
<b>Total</b>	<b>34</b>	<b>-</b>	<b>34</b>

**STAFFING DETAIL:**

2014-15 Requested Staffing

<u>Position</u>	<u>Title</u>
1	Assistant Deputy Executive Officer/Administrative & Human Resources
1	Building Maintenance Manager
1	Building Supervisor
1	Business Services Manager
1	Facilities Services Technician
1	Fleet Services Supervisor
2	Fleet Services Worker II
4	General Maintenance Worker
4	Human Resources Analyst
2	Human Resources Manager
1	Human Resources Technician
3	Mail Subscription Services Clerk
1	Mail Subscription Services Supervisor
2	Office Assistant
1	Offset Press Operator
2	Print Shop Duplicator
1	Print Shop Supervisor
1	Risk Manager
2	Secretary
1	Senior Administrative Secretary
<u>1</u>	Staff Specialist
34	Total Requested Positions

**Administrative & Human Resources  
Work Program by Office**

#	Program Code	Program Category	Goal	Program	Activities	FTEs +/-		Revenue Categories	
						FY 2013-14	FY 2014-15		
1	16	026	Operational Support	III	SCAQMD Mail	Posting/Mailing/Delivery	2.30	2.30	1a
2	16	038	Operational Support	III	Admin/Office Management	Reports/Proj/Budget/Contracts	2.05	2.05	1b
3	16	060	Operational Support	III	Equal Employment Opportunity	Program Dev/Monitor/Reporting	0.10	0.10	1a
4	16	080	Ensure Compliance	III	Auto Services	Vehicle/Radio Repair & Maint	3.00	3.00	1a
5	16	090	Operational Support	III	Building Maintenance	Repairs & Preventative Maint	7.00	7.00	1a
6	16	092	Operational Support	III	Business Services	Building Services Admin/Contracts	2.40	2.40	1a
7	16	225	Operational Support	III	Employee Benefits	Benefits Analysis/Orient/Records	1.40	1.40	1a
8	16	226	Operational Support	III	Classification & Pay	Class & Salary Studies	0.30	0.30	1a
9	16	228	Operational Support	III	Recruitment & Selection	Recruit Candidates for SCAQMD	3.25	3.25	1a
10	16	232	Operational Support	III	Position Control	Track Positions/Workforce Anlys	0.40	0.55	1a
11	16	233	Operational Support	III	Employee Relations	Meet/Confer/Labor-Mgmt/Grievance	2.70	2.70	1a
12	16	255	Operational Support	III	Facilities Services	Phones/Space/Keys/Audio-Visual	1.00	1.00	1a
13	16	457	Advance Clean Air Technology	I	MS/Carl Moyer Admin	C Mover/Contractor Compliance	1.00	(0.50)	IX
14	16	540	Customer Service and Business Assistance	III	Print Shop	Printing/Collating/Binding	4.00	4.00	1a
15	16	542	Advance Clean Air Technology	I	Prop 1B:Goods Movement	Prop 1B: Goods Movement	0.00	0.50	IX
16	16	565	Customer Service and Business Assistance	III	Public Records Act	Comply w/ Public Rec Requests	0.20	(0.15)	1a
17	16	640	Operational Support	III	Risk Management	Lia bl/Property/Wk Comp/Selfins	1.00	1.00	1a
18	16	717	Policy Support	II	Student Interns	Gov Board/Student Intern Program	0.20	0.20	1a
19	16	720	Customer Service and Business Assistance	I	Subscription Services	Rule & Gov Board Materials	1.70	1.70	IV

<b>Total</b>	34.00	0.00	34.00
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Administrative & Human Resources						
Line Item Expenditure						
Major Object / Account # / Account Description	FY 2012-13 Actuals	FY 2013-14 Adopted Budget	FY 2013-14 Amended Budget	FY 2013-14 Estimate *	FY 2014-15 Proposed	
<b>Salary &amp; Employee Benefits</b>						
51000-52000	Salaries	\$ 2,562,411	\$ 2,431,136	\$ 2,431,137	\$ 2,506,073	\$ 2,495,200
53000-55000	Employee Benefits	1,459,153	1,469,393	1,469,393	1,475,831	1,540,938
Sub-total Salary & Employee Benefits		\$ 4,021,564	\$ 3,900,530	\$ 3,900,530	\$ 3,981,904	\$ 4,036,137
<b>Services &amp; Supplies</b>						
67250	Insurance	\$ -	\$ -	\$ -	\$ -	\$ -
67300	Rents & Leases Equipment	93,534	91,600	91,600	91,600	98,348
67350	Rents & Leases Structure	-	-	-	-	-
67400	Household	224	2,305	2,305	224	2,305
67450	Professional & Special Services	179,683	202,750	202,750	202,750	202,750
67460	Temporary Agency Services	2,585	5,000	10,000	10,000	5,000
67500	Public Notice & Advertising	7,987	26,500	19,500	19,240	26,500
67550	Demurrage	-	-	-	-	-
67600	Maintenance of Equipment	92,068	76,390	76,390	76,390	71,762
67650	Building Maintenance	-	-	-	-	-
67700	Auto Mileage	4,263	4,200	6,200	6,200	4,200
67750	Auto Service	294,314	311,047	311,047	294,314	311,047
67800	Travel	1,310	1,440	3,440	3,129	1,440
67850	Utilities	-	-	-	-	-
67900	Communications	3,518	20,900	20,900	11,770	20,900
67950	Interest Expense	-	-	-	-	-
68000	Clothing	8,748	8,180	8,180	6,903	8,180
68050	Laboratory Supplies	-	-	-	-	-
68060	Postage	5,059	11,469	11,469	2,335	11,469
68100	Office Expense	82,556	90,740	88,740	88,740	90,740
68200	Office Furniture	45,009	50,000	50,000	50,000	50,000
68250	Subscriptions & Books	811	1,920	1,920	1,558	1,920
68300	Small Tools, Instruments, Equipment	6,268	4,700	4,700	4,159	4,700
68350	Film	-	-	-	-	-
68400	Gas and Oil	286,385	372,000	372,000	316,676	372,000
69500	Training/Conference/Tuition/ Board Exp.	21,412	12,817	12,817	12,817	12,817
69550	Memberships	1,981	3,265	3,265	1,616	3,265
69600	Taxes	-	-	-	-	-
69650	Awards	-	-	-	-	-
69700	Miscellaneous Expenses	887	12,000	12,000	6,314	12,000
69750	Prior Year Expense	(619)	-	-	-	-
69800	Uncollectable Accounts Receivable	-	-	-	-	-
89100	Principal Repayment	-	-	-	-	-
Sub-total Services & Supplies		\$ 1,137,984	\$ 1,309,223	\$ 1,309,223	\$ 1,206,736	\$ 1,311,343
77000	<b>Capital Outlays</b>	\$ -	\$ -	\$ -	\$ -	\$ -
79050	<b>Building Remodeling</b>	\$ -	\$ -	\$ -	\$ -	\$ -
Total Expenditures		\$ 5,159,548	\$ 5,209,753	\$ 5,209,753	\$ 5,188,639	\$ 5,347,480

\* Estimates based on July 2013 through March 2014 actual expenditures and budget amendments.



**SOUTH COAST  
AIR QUALITY MANAGEMENT DISTRICT**

## **INFORMATION MANAGEMENT**

**CHRIS MARLIA  
ASSISTANT DEPUTY EXECUTIVE OFFICER**

### **DESCRIPTION OF MAJOR SERVICES:**

The Information Management (IM) unit provides a wide range of information management systems and services in support of all SCAQMD operations. In addition to the unit's administration, which provides for overall planning, administration and coordination of the unit's activities, IM is comprised of two Information Technology (IT) sections, and a Special Projects unit. Due to the increasing convergence between hardware, software and digital technologies, the work performed by the two sections often overlaps and requires close coordination. The units are distinguished from each other in that one is primarily concerned with hardware and network issues (while acquiring and applying software to integrate systems and functions), whereas the other focuses on system development (while integrating communication functions and the latest computer technologies). Areas where the two sections overlap include workflow automation, imaging, and automatic system messaging (e.g., through email).

### **ACCOMPLISHMENTS:**

#### **RECENT:**

- Oil and Gas Well Operation – Provided a fully functional web-based application to implement reporting requirements of recently adopted Rule 1148.2 – Notification and Reporting Requirements for Oil and Gas Wells and Chemical Suppliers. The application includes a public portal for viewing non-confidential reported information.
- Operational Support – Provided rule-mandated enhancements to the web-based application for the Rule 1113 Architectural Coatings, offering external reporting, internal data management and access to the central information repository for all users requiring the information.
- Annual Emission Reporting – Provided a fully functional web-based application system including external reporting, internal data management, and access to the central information repository for all users requesting information.
- Network Operations/Telecommunications – Supported over 7,000 pieces of computer hardware for the SCAQMD; maintained and supported approximately 100 Windows/NT servers; handled approximately 8,300 support line calls for the SCAQMD; accessed and supported approximately 750 SCAQMD remotes lines; installed and upgraded approximately 700 requests for VPN remote access, DMV, EBAM (Cellular Modems), Faxes, AMS (Air Monitoring Stations) telemetry lines; installed and upgraded software in response to approximately 1,800 requests; provided 80 videoconferences for Board

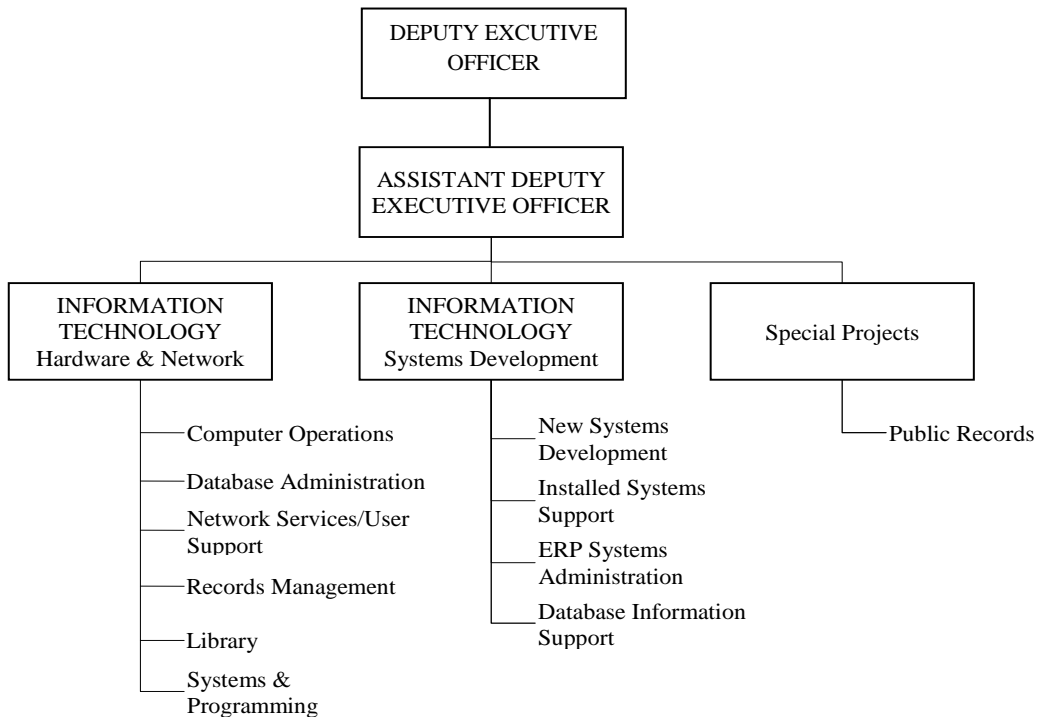
Members, Assistants and the Executive Office; provided approximately 950 internet/intranet access requests for SCAQMD staff.

- Public Records Act – Provided troubleshooting for accuracy for all Public Information Requests that were entered (almost 4,000); provided information for over 3,000 requests for public information and ensured they were provided; provided assistance for over 2,000 records retrieved by Public Records Unit staff and reviewed for confidentiality.
- Web Tasks – Maintained over 10,000 Web pages/support files on SCAQMD’s public website; maintained over 1,000 Web pages/support files on AIRNet (SCAQMD’s internal website); processed approximately 300 Web requests a month; provided over 12 Board and special meeting agenda packages translated for the web; provided Web training as needed; updated procedural and guidance documents as needed.

**PROJECTS IN PROCESS:**

- Develop online filing infrastructure
- Implement videoconferencing bridge
- Implement replacement DPO/Enforcement tracking system
- Implement eGovernment infrastructure
- Upgrade all desktops computer operating systems and Office Suite

**ORGANIZATIONAL CHART:**



**POSITION SUMMARY: 49 FTEs**

Unit	Current (FY 2013-14)	Changes	Proposed (FY 2014-15)
Office Administration	3	-	3
Hardware & Network	27	-	27
Systems Development	14	-	14
Special Projects	2	-	2
Public Records	3	-	3
Total	49	-	49

**STAFFING DETAIL:**

2014-15 Requested Staffing

<u>Position</u>	<u>Title</u>
1	Assistant Database Administrator
1	Assistant Deputy Executive Officer/Information Management
1	Audio Visual Specialist
1	Computer Operations Supervisor
4	Computer Operator
1	Database Administrator
1	Deputy Executive Officer/Information Management
4	Office Assistant
1	Principal Office Assistant
1	Public Affairs Specialist
2	Secretary
2	Senior Administrative Secretary
3	Senior Office Assistant
9	Systems Analyst
8	Systems and Programming Supervisor
2	Technology Implementation Manager
2	Telecommunications Supervisor
<u>5</u>	Telecommunications Technician II
49	Total Requested Positions



**Information Management  
Work Program by Office**

#	Program Code	Program Category	Goal	Program	Activities	FTEs		Revenue Categories
						FY 2013-14	+/-	
1	27	038	Operational Support	Admin/Office Management	Overall Direction/Coord of IM	3.00	3.00	1b
2	27	071	Operational Support	Arch Ctgs - Admin	Database Dev/Maintenance	0.25	0.25	XVIII
3	27	160	Operational Support	Computer Operations	Oper/Manage Host Computer Sys	5.25	5.25	1a
4	27	184	Operational Support	Database Information Support	Ad Hoc Reports/Bulk Data Update	1.00	1.00	1a
5	27	185	Operational Support	Database Management	Dev/Maintain Central Database	2.25	2.25	1a
6	27	215	Operational Support	Annual Emission Reporting	System Enhancements for GHG	0.50	0.50	II,XVII
7	27	370	Operational Support	Information Technology Svcs	Enhance Oper Effic/Productivity	2.75	2.75	1a
8	27	420	Operational Support	Library	General Library Svcs/Archives	0.25	0.25	1a
9	27	470	Operational Support	Network Operations/Telecomm	Operate/Maintain/Implem SCAQMD	9.25	9.25	1a
10	27	480	Operational Support	New System Development	Dev sys for special oper needs	3.00	3.00	II,IV
11	27	481	Customer Service and Business Assistance	New System Development	Dev sys in supp of Dist-wide	1.75	1.75	1a,III
12	27	523	Timely Review of Permits	Permit Streamlining	Permit Streamlining	0.25	0.25	III
13	27	565	Customer Service and Business Assistance	Public Records Act	Comply w/ Public Req for Info	3.75	3.75	1a
14	27	615	Operational Support	Records Information Mgmt Plan	Plan/impl/Dir/Records Mgmt plan	1.25	1.25	1a
15	27	616	Operational Support	Records Services	Records/Documents processing	3.75	3.75	1a,III,IV
16	27	735	Operational Support	Systems Maintenance	Maintain Existing Software Prog	4.50	4.50	II,III,IV
17	27	736	Operational Support	Systems Implementation/PeopleS	Fin/HR PeopleSoft Systems Impl	1.50	1.50	1a
18	27	770	Timely Review of Permits	Title V	Dev/Maintain Title V Program	1.00	1.00	III
19	27	791	Ensure Compliance	Toxics/AB2588	AB2588 Database Software Supp	0.50	0.50	X
20	27	855	Operational Support	Web Tasks	Create/edit/review web content	3.25	3.25	1a

<b>Total</b>	49.00	0.00	49.00
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Information Management Line Item Expenditure						
Major Object / Account # / Account Description		FY 2012-13 Actuals	FY 2013-14 Adopted Budget	FY 2013-14 Amended Budget	FY 2013-14 Estimate *	FY 2014-15 Proposed
<b>Salary &amp; Employee Benefits</b>						
51000-52000	Salaries	\$ 4,714,743	\$ 4,512,618	\$ 4,512,618	\$ 4,671,752	\$ 4,542,714
53000-55000	Employee Benefits	2,475,499	2,409,857	2,409,858	2,616,837	2,625,156
Sub-total Salary & Employee Benefits		\$ 7,190,242	\$ 6,922,476	\$ 6,922,476	\$ 7,288,589	\$ 7,167,870
<b>Services &amp; Supplies</b>						
67250	Insurance	\$ -	\$ -	\$ -	\$ -	\$ -
67300	Rents & Leases Equipment	-	1,880	1,880	-	1,880
67350	Rents & Leases Structure	-	-	-	-	-
67400	Household	-	1,250	1,250	-	1,250
67450	Professional & Special Services	1,007,940	983,921	1,182,091	1,088,721	982,521
67460	Temporary Agency Services	106,854	500,320	179,320	222,896	500,320
67500	Public Notice & Advertising	-	-	-	-	-
67550	Demurrage	-	650	650	-	650
67600	Maintenance of Equipment	53,122	82,000	94,630	65,015	82,000
67650	Building Maintenance	-	-	-	-	-
67700	Auto Mileage	2,102	1,250	3,250	3,250	1,250
67750	Auto Service	-	-	-	-	-
67800	Travel	6,502	2,160	5,560	4,266	2,160
67850	Utilities	-	-	-	-	-
67900	Communications	19,517	36,900	36,900	21,465	36,900
67950	Interest Expense	-	-	-	-	-
68000	Clothing	-	-	-	-	-
68050	Laboratory Supplies	-	-	-	-	-
68060	Postage	777	5,500	5,500	1,094	5,500
68100	Office Expense	367,769	323,912	317,412	317,412	323,912
68200	Office Furniture	6,862	-	-	-	-
68250	Subscriptions & Books	9,026	30,000	30,000	16,606	30,000
68300	Small Tools, Instruments, Equipment	-	2,000	-	-	2,000
68350	Film	-	-	-	-	-
68400	Gas and Oil	-	-	-	-	-
69500	Training/Conference/Tuition/ Board Exp.	80,764	46,575	49,875	49,875	46,575
69550	Memberships	300	1,770	1,770	400	1,570
69600	Taxes	-	1,000	1,000	-	1,000
69650	Awards	-	-	-	-	-
69700	Miscellaneous Expenses	-	-	-	-	-
69750	Prior Year Expense	-	-	-	-	-
69800	Uncollectable Accounts Receivable	-	-	-	-	-
89100	Principal Repayment	-	-	-	-	-
Sub-total Services & Supplies		\$ 1,661,533	\$ 2,021,088	\$ 1,911,088	\$ 1,791,000	\$ 2,019,488
77000	<b>Capital Outlays</b>	\$ 721,929	\$ 387,500	\$ 706,260	\$ 614,500	\$ 712,500
79050	<b>Building Remodeling</b>	\$ -	\$ -	\$ -	\$ -	\$ -
Total Expenditures		\$ 9,573,705	\$ 9,331,064	\$ 9,539,824	\$ 9,694,088	\$ 9,899,858
* Estimates based on July 2013 through March 2014 actual expenditures and budget amendments.						



**SOUTH COAST  
AIR QUALITY MANAGEMENT DISTRICT**

## **PLANNING, RULE DEVELOPMENT & AREA SOURCES**

**ELAINE CHANG  
DEPUTY EXECUTIVE OFFICER**

### **DESCRIPTION OF MAJOR SERVICES:**

The Office of Planning, Rule Development and Area Sources (PRDAS) is responsible for the majority of SCAQMD's air quality planning functions, including State Implementation Plan (SIP) related activities, maintenance plans, reporting requirements and other federal Clean Air Act requirements. PRDAS is also responsible for developing proposals for new rules and amendments to existing rules to implement the SIP obligations and to reduce air toxic emissions/exposures, and for conducting socioeconomic assessments of AQMPs and rulemaking actions. All CEQA functions are part of this office including lead agency, responsible agency, and commenting agency under CEQA. In addition, this office is responsible for developing and implementing the SCAQMD's Clean Communities Plan which is an overall plan for air toxics and includes communities that support the agency's overall goals for environmental justice. The office also conducts air quality evaluations and forecasting, inventories of area sources, and permitting and compliance activities related to area sources. The Transportation Program provides Rule 2202 and AB2766 Subvention fund program assistance and training to the regulated community and local governments.

### **ACCOMPLISHMENTS:**

#### **RECENT:**

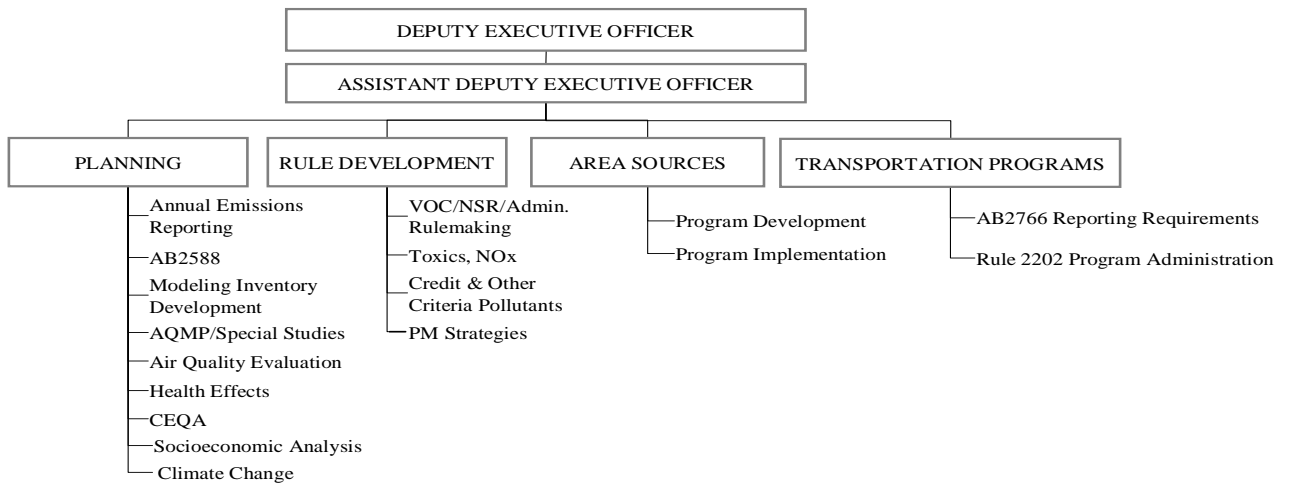
- Completed the 2012 AQMP.
- Adopted/amended 3 rules for SIP implementation which resulted in achieving the following emission reductions: 0.4 tons/day VOC, and 11.4 tons/day PM2.5.
- Adopted/amended notification and reporting rule for oil and gas wells and established additional air toxic standards for large lead-acid battery recycling facilities (non-SIP measures).
- Reviewed and commented on approximately 700 CEQA documents prepared by other lead agencies, including Southern California International Gateway (SCIG) rail yard, warehouse and distribution centers, and the I-710 project.
- Continued ongoing implementation of the Clean Communities Plan, including administering programs funded by EPA's Targeted Air Shed Grant.
- Upgraded the objective air quality forecasting program to address the residential burn rule implementation.

#### **ANTICIPATED:**

- Continue implementation of 2012 AQMP SIP obligations through development of new and amended VOC, NOx, and PM2.5 rules.
- Initiate development of 2016 AQMP and prepare RACT analysis by July 2014 for submittal to U.S. EPA.

- Develop toxic rule for metal forging operations, strengthen emission standards for large lead-acid battery recycling facilities, develop additional requirements for other lead sources, revise toxic requirements for existing sources (AB2588), and develop new requirements to control odors from rendering facilities.
- Analyze and implement OEHHA’s revised risk reduction guidelines, pending OEHHA approval.
- Complete warehouse/distribution center truck trip rate study.
- Complete pilot studies for Clean Communities Plan.
- Support development of backstop regulations to limit emissions from port facilities.
- Complete development and begin implementation of a new web-based Annual Emission Reporting system.
- Complete the MATES IV monitoring and modeling air toxic exposure and risk analysis.
- Complete the Socioeconomic Analysis review and implementation.
- Complete the NOx RECLAIM rule amendment and implement the corresponding shave.

**ORGANIZATIONAL CHART:**



**POSITION SUMMARY: 111 FTEs**

Unit	Current (FY 2013-14)	Changes	Proposed (FY 2014-15)
Office Administration	6	-	6
Planning	66	-	66
Rule Development	12	-	12
Area Sources	12	-	12
Transportation Programs	13	-	13
Health Effects	2	-	2
<b>Total</b>	<b>111</b>	<b>-</b>	<b>111</b>

**STAFFING DETAIL:**

2014-15 Requested Staffing

<u>Position</u>	<u>Title</u>
2	Administrative Secretary
9	Air Quality Engineer II
4	Air Quality Inspector II
1	Air Quality Inspector III
41	Air Quality Specialist
1	Assistant Deputy Executive Officer
1	Deputy Executive Officer - Planning, Rule Development & Area Sources
1	Director of Strategic Initiatives
1	Health Effects Officer
6	Office Assistant
5	Planning and Rules Manager
18	Program Supervisor
7	Secretary
2	Senior Administrative Secretary
4	Senior Air Quality Engineer
1	Senior Meteorologist
3	Senior Office Assistant
1	Senior Staff Specialist
1	Senior Transportation Specialist
<u>2</u>	Transportation Plan Reviewer
111	Total Requested Positions

**Planning, Rule Development, and Area Sources  
Work Program by Office**

#	Program Code	Program Category	Goal	Program	Activities	FTEs +/-		Revenue Categories
						FY 2013-14	FY 2014-15	
1	26 002	Develop Programs	I	AB2766/Mobile Source	AB2766 Mobile Source Outreach	0.89	0.89	IX
2	26 007	Customer Service and Business Assistance	I	AB2766/MSRC	AB2766 Prov Tech Asst to Cities	1.10	1.10	IX
3	26 009	Develop Programs	I	AB 1318 Mitigation	AB 1318 Projects Admn/Impl	0.50	(0.50)	XVII
4	26 010	Develop Programs	I	AQMP	AQMP Special Studies	2.00	2.00	IV,IX,XV
5	26 038	Develop Programs	I	Admin/Office Management	Coordinate Off/Admin Activities	0.50	0.50	1b
6	26 040	Timely Review of Permits	I	Admin/Office Mgmt/AQ Impl	Admin/Modeling/New Legi/Sm Sr	0.42	0.42	1b
7	26 042	Ensure Compliance	I	Admin/Office Mgmt/Compliance	Admin: Compl w SCAQMD Rules	0.25	0.25	1b
8	26 044	Timely Review of Permits	I	Admin/Office Mgmt/Permit & Fee	Admin: Resolve Perm/Fee Issues	0.10	0.10	1b
9	26 046	Ensure Compliance	I	Admin/Office Mgmt/Compliance	Admin: Compl of Existing Source	0.00	0.52	1b
10	26 048	Policy Support	I	Admin/Prog Mgmt/Policy	Admin: GB/Committee Support	1.00	1.00	1b,
11	26 049	Develop Programs	I	Admin/Prog Mgmt/AQMP	Admin: AQMP Development	0.75	0.75	1b
12	26 050	Develop Rules	I	Admin/Rule Dev/PRA	Admin: Rule Development	1.00	1.00	1b
13	26 057	Develop Programs	I	Admin/Transportation Prog Mgmt	Admin: Transportation Programs	0.86	0.86	1b
14	26 061	Monitoring Air Quality	I	Air Quality Evaluation	Air Quality Evaluation	1.00	1.00	IX
15	26 068	Develop Programs	II	SCAQMD Projects	Prepare Environmental Assessments	5.10	(0.40)	II,IV,IX
16	26 071	Develop Rules	I	Arch Ctgs - Admin	Rdev/Aud/DB/TA/SCAQMD/Rpts/AER	1.00	(0.25)	XVIII
17	26 072	Ensure Compliance	I	Arch Ctgs - End User	Compliance/Rpts/Rule Implementation	1.00	1.00	XVIII
18	26 073	Ensure Compliance	I	Arch Ctgs - Other	Compliance/Rpts/Rule Implementation	1.00	1.00	XVIII
19	26 076	Ensure Compliance	I	Area Sources/Compliance	Area Source Compliance	3.50	(0.50)	IV,IX,XV
20	26 077	Develop Rules	I	Area Sources/Rulemaking	Dev/Eval/Impl Area Source Prog	4.00	4.00	II,IX
21	26 083	Policy Support	II	Brain Tumor & Air Poll Fdn	Brain Tumor & Air Poll Foundation Support	0.10	0.10	1a
22	26 084	Develop Rules	I	Blk Carbon Study EPA	EPA Blck Carbon Climate Study	0.00	0.20	V,XVII
23	26 102	Develop Programs	II	CEQA Document Projects	Review/Prepare CEQA Comments	3.40	0.35	II,IX
24	26 103	Develop Programs	II	CEQA Special Projects	Contracted by Lead Agency	0.40	(0.40)	XVII
25	26 104	Develop Programs	I	CEQA Policy Development	ID/Develop/Impl CEQA Policy	1.10	(0.60)	IV,IX
26	26 120	Timely Review of Permits	I	Certification/Registration Pro	Certification/Registration Prog	1.80	1.80	III
27	26 128	Develop Programs	I	Cln Communities Pln	Cln Communities Plan Admn/Impl	1.50	(1.00)	II,IX
28	26 148	Policy Support	I	Climate Change	GHG/Climate Change Policy Development	2.00	(0.90)	IV
29	26 151	Monitoring Air Quality	II	Community Scale AirToxics Study	EPA-funded airports air monit	0.50	(0.50)	XVII
30	26 165	Develop Rules	I	Conformity	Monitor Transp. Conformity	0.50	0.50	V,IX
31	26 215	Ensure Compliance	I	Annual Emission Reporting	Annl Des/Impl/Emiss Monitor Sys	4.00	3.50	II,V
32	26 216	Customer Service and Business Assistance	I	AER Public Assistance	AER Design/Impl/Monitor Emiss	0.15	1.85	II
33	26 217	Develop Programs	I	Emissions Inventory Studies	Dev Emiss DB/Dev/Update Emiss	4.00	(2.00)	II,IV,IX,XV
34	26 218	Develop Programs	I	AQMP/Emissions Inventory	Dev Emiss Inv: Forecasts/RFPs	2.25	0.20	II,IX
35	26 219	Develop Programs	I	Emissions Field Audit	Emissions Field Audit	2.00	(1.50)	II
36	26 221	Develop Programs	I	PR2301 ISR Rule Implementation	Mitigate dev growth	1.02	0.48	II,IX
37	26 240	Policy Support	I	El-AQ Guidance Document	AQ Guidance Document	0.28	(0.05)	II,IX
38	26 276	Policy Support	I	Advisory Group/Home Rule	Governing Board Advisory Group	0.30	0.30	1a
39	26 277	Policy Support	I	Advisory Group/AQMP	Governing Board AQMP Advisory Group	0.05	0.05	II,IX
40	26 278	Policy Support	I	Advisory Group/Sci,Tech,Model	Scientific/Tech/Model Peer Rev	0.05	0.05	II,IX
41	26 357	Ensure Compliance	I	GHG Reptg Sys EPA	GHG Reptg Sys EPA Admn/Impl	0.10	(0.10)	V
42	26 362	Develop Rules	II	Health Effects	Study Health Effect/Toxicology	1.80	1.80	II,III,IX
43	26 385	Develop Rules	I	Criteria Pollutants/Mob Srcs	Dev/Impl Intercredit Trading	1.00	(0.25)	IV,IX

**Planning, Rule Development, and Area Sources  
Work Program by Office**

#	Program Code	Program Category	Goal	Program	Activities	FTEs		Revenue Categories	
						FY 2013-14	+/- FY 2014-15		
44	26	397	Develop Programs	II	Lead Agency Projects	1.30	(0.55)	0.75	III
45	26	416	Policy Support	I	Legislative Activities	0.10		0.10	1a
46	26	439	Monitoring Air Quality	I	MATES IV	0.10		0.10	II,IX
47	26	445	Monitoring Air Quality	I	Meteorology	2.00	0.20	2.20	II,V,IX
48	26	460	Develop Rules	I	Regional Modeling	5.25	0.20	5.45	II,V,IX
49	26	461	Timely Review of Permits	I	Permit & CEQA Modeling Review	1.50		1.50	III
50	26	463	Develop Programs	I	Mold Project EPA	0.10	(0.10)	0.00	V
51	26	503	Develop Programs	I	PM Strategies	4.00		4.00	II,V,XV
52	26	530	Monitoring Air Quality	I	Photochemical I Assessment	0.25		0.25	II,V
53	26	565	Customer Service and Business Assistance	III	Public Records Act	0.05	0.48	0.53	1a
54	26	600	Develop Programs	I	Credit Generation Programs	1.25		1.25	II,IX
55	26	620	Ensure Compliance	I	Refinery Pilot Project	0.25		0.25	II
56	26	643	Timely Review of Permits	I	Rule 222 Filing Program	0.20		0.20	IV
57	26	645	Ensure Compliance	I	Rule 1610 Plan Verification	0.50		0.50	V,IX
58	26	654	Develop Rules	I	Rulemaking/NOX	1.00	1.00	2.00	II,IV
59	26	655	Develop Rules	I	NSR/Adm Rulemaking	5.00	(2.00)	3.00	II,IV
60	26	656	Develop Rules	I	Rulemaking/VOC	6.90	0.60	7.50	II,IV,XV
61	26	659	Develop Rules	I	Rulemaking/Toxics	3.20	1.80	5.00	II
62	26	661	Develop Rules	I	Rulemaking/RECLAIM	2.00	0.20	2.20	II
63	26	685	Develop Programs	I	Socio-Economic	3.25	0.20	3.45	II,IV
64	26	716	Ensure Compliance	I	Spec Monitoring/R403	0.75	0.25	1.00	IV,IX,XV
65	26	717	Policy Support	II	Student Interns	0.01		0.01	1a
66	26	738	Advance Clean Air Technology	I	Target Air Shed EPA	0.50	(0.25)	0.25	XVII
67	26	745	Develop Programs	I	Rideshare	0.65		0.65	IX
68	26	789	Monitoring Air Quality	I	Toxic Inventory Development	1.00	(1.00)	0.00	X
69	26	790	Ensure Compliance	I	Toxics/AB2588 Plans/Reports	0.50	(0.50)	0.00	X
70	26	794	Ensure Compliance	I	Toxics/AB2588	7.00	1.50	8.50	X
71	26	805	Operational Support	III	Training	0.05		0.05	1b
72	26	816	Develop Programs	I	Transportation Regional Progs	0.60		0.60	IX
73	26	821	Monitoring Air Quality	II	TraPac Air Filtr Prg	0.25	(0.25)	0.00	XVII
74	26	826	Operational Support	III	Union Negotiations	0.01		0.01	1a
75	26	826	Operational Support	III	Lead Agency Projects	0.01		0.01	1a
76	26	833	Customer Service and Business Assistance	II	Rule 2202 ETC Training	1.30		1.30	XI
77	26	834	Develop Programs	I	Rule 2202 Implement	3.07		3.07	XI
78	26	836	Develop Programs	I	Rule 2202 Support	2.73	0.07	2.80	V,XI
79	26	855	Operational Support	II	Web Tasks	0.10		0.10	1a
<b>Total</b>						111.00	(0.00)	111.00	



Planning, Rule Development & Area Sources						
Line Item Expenditure						
Major Object / Account # / Account Description		FY 2012-13 Actuals	FY 2013-14 Adopted Budget	FY 2013-14 Amended Budget	FY 2013-14 Estimate *	FY 2014-15 Proposed
<b>Salary &amp; Employee Benefits</b>						
51000-52000	Salaries	\$ 9,853,905	\$ 9,994,864	\$ 9,994,864	\$ 8,947,655	\$ 10,187,633
53000-55000	Employee Benefits	4,426,191	4,902,666	4,902,667	4,265,837	5,136,667
Sub-total Salary & Employee Benefits		\$ 14,280,096	\$ 14,897,530	\$ 14,897,531	\$ 13,213,492	\$ 15,324,301
<b>Services &amp; Supplies</b>						
67250	Insurance	\$ -	\$ -	\$ -	\$ -	\$ -
67300	Rents & Leases Equipment	-	1,000	1,200	92	1,000
67350	Rents & Leases Structure	25,759	5,000	25,000	18,775	5,000
67400	Household	-	-	-	-	-
67450	Professional & Special Services	532,678	536,500	814,200	477,579	519,000
67460	Temporary Agency Services	36,022	72,000	112,000	87,706	50,000
67500	Public Notice & Advertising	59,776	127,000	102,000	90,472	100,000
67550	Demurrage	240	500	1,000	1,000	500
67600	Maintenance of Equipment	42,763	12,000	79,500	53,962	12,000
67650	Building Maintenance	3,697	1,000	14,000	13,569	1,000
67700	Auto Mileage	3,098	5,000	5,000	2,455	4,000
67750	Auto Service	-	-	-	-	-
67800	Travel	29,957	45,000	48,000	29,957	45,000
67850	Utilities	-	-	-	-	-
67900	Communications	30,664	30,000	53,000	40,026	30,000
67950	Interest Expense	-	-	-	-	-
68000	Clothing	285	600	600	285	600
68050	Laboratory Supplies	-	-	-	-	-
68060	Postage	11,961	17,000	35,150	24,586	20,000
68100	Office Expense	86,444	139,061	150,061	83,861	150,000
68200	Office Furniture	-	-	-	-	-
68250	Subscriptions & Books	1,688	7,650	7,650	6,941	5,000
68300	Small Tools, Instruments, Equipment	132	-	600	79	-
68350	Film	-	-	-	-	-
68400	Gas and Oil	-	-	-	-	-
69500	Training/Conference/Tuition/ Board Exp.	10,975	21,500	24,500	13,260	21,500
69550	Memberships	1,689	4,000	4,000	1,689	2,000
69600	Taxes	-	-	-	-	-
69650	Awards	-	-	-	-	-
69700	Miscellaneous Expenses	30,013	25,500	25,500	25,500	28,000
69750	Prior Year Expense	(29)	-	-	-	-
69800	Uncollectable Accounts Receivable	-	-	-	-	-
89100	Principal Repayment	-	-	-	-	-
Sub-total Services & Supplies		\$ 907,810	\$ 1,050,311	\$ 1,502,961	\$ 971,794	\$ 994,600
77000	<b>Capital Outlays</b>	\$ 177,117	\$ 200,000	\$ 226,000	\$ 159,426	\$ 150,000
79050	<b>Building Remodeling</b>	\$ -	\$ -	\$ -	\$ -	\$ -
Total Expenditures		\$ 15,365,023	\$ 16,147,841	\$ 16,626,492	\$ 14,344,712	\$ 16,468,901

\* Estimates based on July 2013 through March 2014 actual expenditures and budget amendments.

## **LEGISLATIVE & PUBLIC AFFAIRS**

**LISHA B. SMITH  
DEPUTY EXECUTIVE OFFICER**

### **DESCRIPTION OF MAJOR SERVICES:**

Legislative and Public Affairs' (LPA) primary responsibilities include all legislative matters at the federal and state levels, community and local government relations, creation and production of collateral materials to support all District departments and programs, and staffing the 1-800-CUT-SMOG phone line. The Public Advisor, also within the LPA office, is responsible for keeping open lines of communication and coordination with the public, elected officials at all levels, the business community, as well as local residents. LPA is also the primary point of contact for the SCAQMD's Speakers Bureau and Visiting Dignitary program, oversees the Air Quality Institute, and provides assistance to small businesses within SCAQMD jurisdiction.

### **ACCOMPLISHMENTS:**

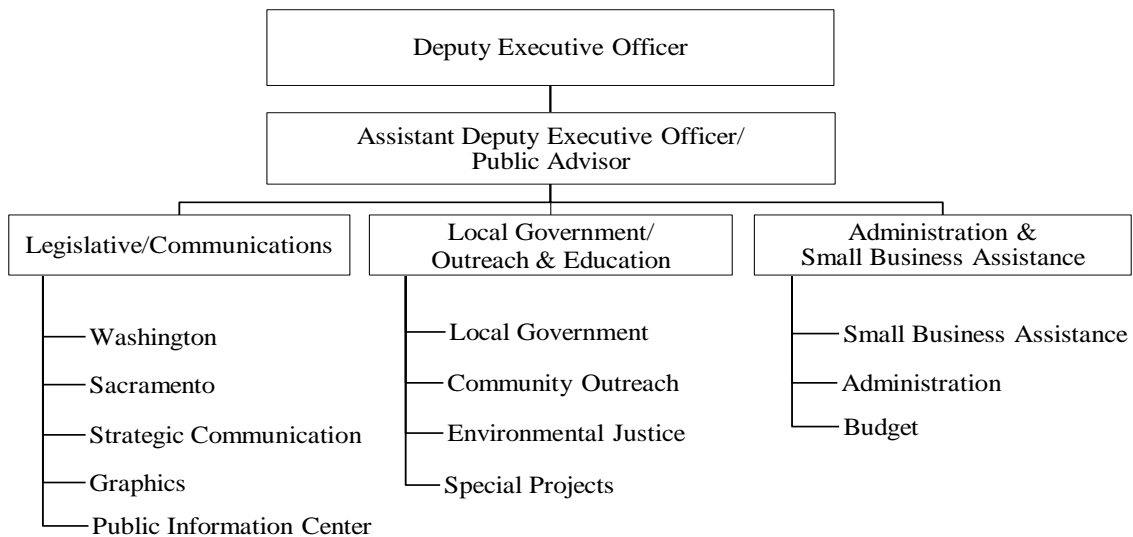
#### **RECENT:**

- During the last legislative session, the District's legislative team did an effective job advocating the District legislative goals.
  - o At the state level, the Governor signed eight of nine bills that the District supported and actively worked to secure their passage through the Legislature. The District defeated legislation that sought to undermine SCAQMD regulatory authority or to be detrimental to clean air. All eight bills that the District opposed were defeated during the legislative process.
  - o At the federal level, LPA continued to advance the agency's legislative agenda and made significant inroads with the U.S. Department of Energy, positioning the SCAQMD in a more favorable position for technology partnerships. Staff effectively initiated relationships with federal offices outside of our jurisdictional delegation (Chicago, IL, Santa Barbara, CA) to create regional and national alliance/partnerships promoting clean technologies and clean air goals.
- Staff coordinated 18 workshops and town hall meetings to address air quality concern in several communities in our jurisdiction.
- The Small Business Assistance Team responded to 2,046 requests for Permit Application Assistance, conducted 17 on-site consultations, processed 102 Fee Review Requests and issued 237 Clearance Letters.
- Staff improved the District's educational outreach through the design and production of collateral materials, including brochures, flyers, web pages, PowerPoint presentations, videos, and signage, for meetings, conferences and the annual Clean Air Awards program.

**ANTICIPATED:**

- Develop and implement a Crisis Communication Plan to improve the agency’s interaction with the public during incidents that generate high volume calls to the 1-800-CUT-SMOG line. The plan will implement protocols to provide callers with timely information through our radio telephone operators, recorded messages, and social media.
- Launch a comprehensive school education and outreach effort that includes a sports campaign component to increase public awareness of the SCAQMD and efforts to protect public health.
- Provide a quarterly legislative update to elected officials by generating an electronic publication highlighting the most current information pertaining to SCAQMD activities for distribution to local, state, and federal elected officials and their staff.
- Improve communication with the Business Community in the area of small business outreach to increase awareness of available programs and services, and provide information that enables business owners and operators to understand and comply with SCAQMD’s rules and regulations.
- Continue to move the SCAQMD’s legislative agenda at the state and federal levels.

**ORGANIZATIONAL CHART:**



**POSITION SUMMARY: 41 FTEs**

Unit	Current (FY 2013-14)	Changes	Proposed (FY 2014-15)
Office Administration	5	-	5
Legislative/Communications	20	-	20
Local Government/Outreach & Education	7	-	7
Administration & Small Business Assistance	9	-	9
Total	41	-	41

**STAFFING DETAIL:**

2013-14 Requested Staffing

<u>Position</u>	<u>Title</u>
2	Air Quality Engineer II
2	Air Quality Inspector II
1	Assistant Deputy Executive Officer/Public Affairs
2	Community Relations Manager
1	Deputy Executive Officer/Public Affairs
4	Graphic Arts Illustrator II
1	Office Assistant
1	Program Supervisor
1	Public Affairs Specialist
7	Radio/Telephone Operator
2	Secretary
2	Senior Administrative Secretary
1	Senior Office Assistant
1	Senior Public Affairs Manager
10	Senior Public Information Specialist
1	Senior Staff Specialist
1	Staff Assistant
<u>1</u>	Supervising Radio/Telephone Operator
41	Total Requested Positions

**Legislative & Public Affairs  
Work Program by Office**

#	Program Code	Program Category	Goal	Program	Activities	FTEs +/-		Revenue Categories
						FY 2013-14	FY 2014-15	
1	35	046	Customer Service and Business Assistance	Admin/Prog Mgmt	Admin Office/Units/SuppCoord Staff	3.02	3.02	1b
2	35	111	Ensure Compliance	Call Center/CUT SMOG	Smoking Vehicle Complaints	8.00	8.00	IX,XV
3	35	126	Customer Service and Business Assistance	Clean Air Connections	Coord of region-wide community group	1.00	1.00	II,XV
4	35	205	Customer Service and Business Assistance	Environmental Education	Curriculum Dev/Project Coord	0.25	0.25	II,IX,XV
5	35	240	Customer Service and Business Assistance	Environmental Justice	Impl Board's EJ Pgrms/Policies	2.00	2.00	II,IV
6	35	260	Customer Service and Business Assistance	Fee Review	Cmte Mtg/Fee-Related Complaint	0.50	0.50	II,III,IV,XV
7	35	280	Policy Support	Advisory Group/Ethnic Comm	GB Ethnic Comm Advisory Group	0.40	0.40	II,IX
8	35	281	Policy Support	Advisory Group/Small Business	SBA Advisory Group Staff Support	0.50	0.50	IV,IX
9	35	283	Policy Support	Governing Board Policy	Brd sup/Respond to GB req	0.55	0.55	1a
10	35	345	Policy Support	Goods Mvmt&Financial Incentive	Goods Movement & Financial Incentives Progr	1.00	1.00	IX
11	35	350	Operational Support	Graphic Arts	Graphic Arts	2.00	2.00	1a
12	35	381	Customer Service and Business Assistance	Interagency Liaison	Interact Gov Agns/Promote SCAQMD	0.15	0.15	1a,XV
13	35	390	Customer Service and Business Assistance	Intergov/Geographic Deployment	Dev/Impl Local Govt Outreach	9.50	9.50	II,IX
14	35	412	Policy Support	Legislation/Federal	Lobbying/Analyses/Tracking/Out	0.25	0.25	1a
15	35	413	Policy Support	Legislation/Exec Office Support	Coord Legis w/ EO, EC, Mgmt	0.25	0.25	1a
16	35	414	Policy Support	Legislation-Effects	Lobbying/Analyses/Tracking/Out	0.80	0.80	1a,IX
17	35	416	Policy Support	Legislative Activities	Supp/Promote/Influence Legis/Adm	0.50	0.50	1a,1b
18	35	491	Customer Service and Business Assistance	Outreach/Business	Chambers/Business Meetings	1.00	1.00	II,IV
19	35	492	Customer Service and Business Assistance	Public Education/Public Events	Pub Events/Conf/Rideshare Fair	1.00	1.00	II,IX,XV
20	35	494	Policy Support	Outreach/Collateral Development	Edits: Brds, Talk shows, Commercl	0.60	0.60	1a,1b
21	35	496	Customer Service and Business Assistance	Outreach/Visiting Dignitary	Tours/Briefings-Dignitary	0.25	0.25	1a
22	35	514	Customer Service and Business Assistance	Permit-Expired Permit Program	Assist w Permit Reinstatement	0.30	0.30	IV
23	35	555	Customer Service and Business Assistance	Public Information Center	Inform public of unhealthy air	1.00	1.00	II,VI,IX
24	35	560	Develop Programs	Public Notification	Public notif of rules/hearings	0.50	0.50	II,VI,IX
25	35	565	Customer Service and Business Assistance	Public Records Act	Comply w Public Req for info	0.10	0.10	1a
26	35	679	Customer Service and Business Assistance	Small Business Assistance	Small Business/Financial Assistance	1.00	1.00	III
27	35	680	Timely Review of Permits	Small Business/Permit Streamln	Asst sm bus to comply/SCAQMD req	3.95	3.95	II,III,IV,XV
28	35	710	Customer Service and Business Assistance	Speakers Bureau	Coordinate/conduct speeches	0.10	0.10	1a
29	35	717	Policy Support	Student Interns	Student Interns	0.10	0.10	1a,1b
30	35	791	Customer Service and Business Assistance	Toxics/AB2588	Outreach/AB 2588 Air Toxics	0.01	0.01	X
31	35	825	Operational Support	Union Negotiations	Official Labor/Mgmt Negotiate	0.01	0.01	1a
32	35	826	Operational Support	Union Steward Activities	Union Steward Activities	0.01	0.01	1a
33	35	855	Operational Support	Web Tasks	Create/edit/review web content	0.40	0.40	1a

<b>Total</b>	41.00	0.00	41.00
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Legislative & Public Affairs Line Item Expenditure						
Major Object / Account # / Account Description		FY 2012-13 Actuals	FY 2013-14 Adopted Budget	FY 2013-14 Amended Budget	FY 2013-14 Estimate *	FY 2014-15 Proposed
<b>Salary &amp; Employee Benefits</b>						
51000-52000	Salaries	\$ 3,216,224	\$ 3,249,309	\$ 3,249,310	\$ 3,215,838	\$ 3,275,613
53000-55000	Employee Benefits	1,707,482	1,754,575	1,754,575	1,779,235	1,827,549
Sub-total Salary & Employee Benefits		\$ 4,923,707	\$ 5,003,884	\$ 5,003,885	\$ 4,995,073	\$ 5,103,161
<b>Services &amp; Supplies</b>						
67250	Insurance	\$ -	\$ -	\$ -	\$ -	\$ -
67300	Rents & Leases Equipment	12,933	6,500	6,500	3,577	6,500
67350	Rents & Leases Structure	10,065	9,000	9,000	9,000	9,000
67400	Household	-	-	-	-	-
67450	Professional & Special Services	1,175,844	1,132,716	1,122,716	1,072,716	1,145,316
67460	Temporary Agency Services	24,108	78,000	78,000	59,727	78,000
67500	Public Notice & Advertising	5,442	26,600	26,600	13,824	26,600
67550	Demurrage	-	-	-	-	-
67600	Maintenance of Equipment	-	9,000	9,000	-	9,000
67650	Building Maintenance	-	-	-	-	-
67700	Auto Mileage	13,958	23,800	23,800	13,958	23,800
67750	Auto Service	-	-	-	-	-
67800	Travel	60,188	43,200	63,200	43,200	43,200
67850	Utilities	-	-	-	-	-
67900	Communications	47,960	45,000	45,000	55,342	45,000
67950	Interest Expense	-	-	-	-	-
68000	Clothing	-	-	-	-	-
68050	Laboratory Supplies	-	-	-	-	-
68060	Postage	68,585	136,800	116,800	93,817	136,800
68100	Office Expense	87,593	41,800	41,800	41,800	41,800
68200	Office Furniture	4,131	-	-	-	-
68250	Subscriptions & Books	14,776	16,700	16,700	16,700	16,700
68300	Small Tools, Instruments, Equipment	-	-	-	-	-
68350	Film	-	-	-	-	-
68400	Gas and Oil	-	-	-	-	-
69500	Training/Conference/Tuition/ Board Exp.	12,624	8,000	18,000	18,000	8,000
69550	Memberships	52,990	25,500	25,500	25,500	25,500
69600	Taxes	-	-	-	-	-
69650	Awards	83,047	49,681	49,681	49,681	49,681
69700	Miscellaneous Expenses	45,218	41,500	41,500	41,052	41,500
69750	Prior Year Expense	-	-	-	-	-
69800	Uncollectable Accounts Receivable	-	-	-	-	-
89100	Principal Repayment	-	-	-	-	-
Sub-total Services & Supplies		\$ 1,719,460	\$ 1,693,797	\$ 1,693,797	\$ 1,557,894	\$ 1,706,397
77000	<b>Capital Outlays</b>	\$ 8,000	\$ -	\$ -	\$ -	\$ -
79050	<b>Building Remodeling</b>	\$ -	\$ -	\$ -	\$ -	\$ -
Total Expenditures		\$ 6,651,167	\$ 6,697,681	\$ 6,697,682	\$ 6,552,967	\$ 6,809,558

\* Estimates based on July 2013 through March 2014 actual expenditures and budget amendments.



**SOUTH COAST  
AIR QUALITY MANAGEMENT DISTRICT**

## **SCIENCE & TECHNOLOGY ADVANCEMENT**

**MATT MIYASATO  
DEPUTY EXECUTIVE OFFICER**

### **DESCRIPTION OF MAJOR SERVICES:**

The Office of Science and Technology Advancement (STA) is responsible for three key areas of operation: monitoring and analysis; technology research, development and implementation; and mobile source policy and regulatory analysis. The Monitoring and Analysis Division (MAD) maintains the SCAQMD's air monitoring network, operates the analytical laboratory and conducts source tests and evaluation, and responds to local community monitoring requests, including meteorological and sampling services as part of the SCAQMD's emergency response program. The Technology Advancement Office (TAO) implements the Clean Fuels Program to commercialize advanced engine control technologies and funding incentives programs such as the Carl Moyer, Lower Emission School Bus, and Proposition 1B Programs. Lastly, the Mobile Source Division (MSD) oversees the implementation of the SCAQMD Clean Fleet Vehicle Rules, provides support in the development of the mobile source control strategy for the AQMP, and provides input and comment on state and federal regulatory activities.

### **ACCOMPLISHMENTS:**

#### **RECENT:**

- Continued implementation of the Carl Moyer, Surplus Off-Road Opt-In for NOx (SOON), Lower-Emission School Bus, and the Proposition 1B-Goods Movement Programs with total funding exceeding \$200 million annually. Implemented the Voucher Incentive Program (VIP) for replacement of on-road trucks on a first-come-first-served basis. Completed implementation of shore power projects at 25 berths at the Ports of Los Angeles, Long Beach, and Hueneme for \$59 million.
- Continued Clean Fuels Program, which is the research, development, demonstration and early deployment program for the SCAQMD. Executed over \$6 million in contracts with \$26 million in total project costs (1:3 leveraging). Projects in key technical areas include heavy-duty electric drive technologies, in-use emissions testing of heavy-duty trucks, and refueling infrastructure for alternative fuels (natural gas, electricity and hydrogen).
- Developed the mobile source strategies for the Final 2012 AQMP. Continued implementation of the SCAQMD Fleet Vehicle Rules, and implementation of incentive programs for old vehicle scrapping, off-road equipment repowers and replacement; replacement of Tier 0 locomotives with Tier 4 locomotives.
- Operated and maintained 41 air monitoring sites resulting in 70,000 valid pollutant data points per month, collection and analysis of 2,500 canisters for ambient VOCs and toxics and over 15,000 filters for components including mass, ions, carbon and metals in support of federal programs including those for NATTS, PAMS, NCORE and PM2.5 speciation. Deployed additional air monitors to address community odor concerns regarding oil reclamation activities, metals near metal finishing, metal recycling, and cement facilities. Conducted air monitoring study in support of Rule 444 and deployed



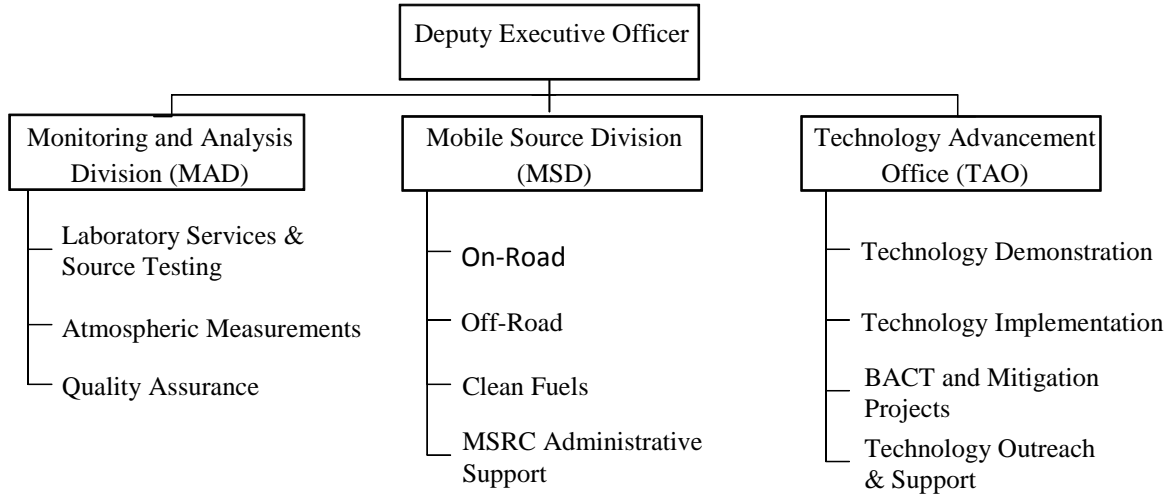
monitors to assess regional PM levels from frost prevention burning in the Coachella Valley. Concluded MATES IV sampling and analysis including conducting MATES IV local area monitoring studies (e.g. LAX and Mira Loma). Staff began new monitoring programs such as near road air monitoring and the hydrogen sulfide network near the Salton Sea. Over 2,100 samples were analyzed for asbestos from demolition sites and glass plates set out based on complaints and concerns about fallout (deposition). Analyzed approximately 500 products for VOC and HAP content, and conducted over 1,050 source test protocol and report evaluations, CEMS certifications, LAP application reviews and Source Test (ST) observations.

- Performed auditing of laboratory test methods in support of federal programs including those for NATTS, PAMS and PM2.5 Speciation; performed field auditing of monitoring stations in support of federal programs including those for NCORE, NATTS, PAMS, Criteria Pollutants, and PM2.5 Speciation; Performed 2011 data certification and review; and approved Criteria and PM2.5 QAPPs.

**ANTICIPATED:**

- Continue the development and demonstration of heavy-duty zero emission cargo transport trucks and a zero emission goods movement corridor utilizing overhead catenary to power heavy-duty hybrid electric trucks near the Ports.
- Continue the implementation of the VIP on a first-come-first-served basis; and solicit for heavy-duty on- and off-road projects under the “Year 16” Carl Moyer and the Proposition 1B-Goods Movement Programs.
- Increase deployment of cleaner construction equipment, locomotives, and on-road heavy-duty vehicles through the continued implementation of funding incentives programs, compliance with SCAQMD Clean Fleet Vehicle Rules, and identification of future mobile source strategies in the Final 2012 AQMP.
- Deploy PM2.5 monitor in the Coachella Valley for assessing potential impacts from CPV Sentinel. Conduct monitoring surveys of drilling, acidizing and fracking processes in Rule 1148.2. Deploy additional near road monitors. The data management system that receives and validates the incoming data from the air monitoring stations and special monitoring locations will be enhanced and staff will continue source test protocol and report evaluations, CEMS certifications, LAP application reviews and ST observations.
- Work with other air districts through CAPCOA for the reauthorization of the AB 923 funds for the Carl Moyer Program until December 31, 2023, with the adoption of SB 11 and AB 8.

**ORGANIZATIONAL CHART:**



**POSITION SUMMARY: 164 FTEs**

Unit	Current (FY 2013-14)	Changes	Proposed (FY 2014-15)
Office Administration	6	-	6
Monitoring & Analysis	108	-	108
Mobile Source Division	14	-	14
Technology Advancement	36	-	36
<b>Total</b>	<b>164</b>	<b>-</b>	<b>164</b>

**STAFFING DETAIL:**

2014-15 Requested Staffing

<u>Position</u>	<u>Title</u>
1	Administrative Secretary
25	Air Quality Chemist
10	Air Quality Engineer II
2	Air Quality Inspector II
20	Air Quality Instrument Specialist I
14	Air Quality Instrument Specialist II
12	Air Quality Specialist
2	Assistant Deputy Executive Officer/Science & Technology Advancement
1	Atmospheric Measurement Manager
1	Clean Fuels Officer
1	Community Relations Manager
5	Contracts Assistant
1	Deputy Executive Officer/Science & Technology Advancement
1	Director of Technology Implementation
4	Laboratory Technician
1	Meteorologist Technician
5	Office Assistant
3	Planning and Rules Manager
3	Principal Air Quality Chemist
3	Principal Air Quality Instrument Specialist
13	Program Supervisor
1	Quality Assurance Manager
5	Secretary
3	Senior Administrative Secretary
6	Senior Air Quality Chemist
3	Senior Air Quality Engineer
8	Senior Air Quality Instrument Specialist
1	Senior Enforcement Manager
1	Senior Office Assistant
1	Senior Public Information Specialist
1	Senior Staff Specialist
2	Staff Assistant
3	Staff Specialist
<u>1</u>	Supervising Air Quality Engineer
164	Total Requested Positions

**Science & Technology Advancement  
Work Program by Office**

#	Program Code	Program Category	Goal	Program	Activities	FTEs		Revenue Categories
						FY 2013-14	+/- FY 2014-15	
1	44	003	Advance Clean Air Technology	AB2766/MSRC	Mob Src Review Comm Prog Admin	1.00	1.00	IX
2	44	004	Advance Clean Air Technology	AB2766/MSRC/Contract Admin	AB2766 Admin Discretionary Prog	3.00	3.00	IX
3	44	009	Develop Programs	AB 1318 Mitigation	AB 1318 Projects Admn/Impl	0.75	0.75	XVII
4	44	012	Advance Clean Air Technology	AQMP/Control Tech Assessment	Tech Supp: Quantify Cost Effec	0.10	0.10	VIII
5	44	015	Ensure Compliance	Acid Rain Program	Acid Rain CEMS Eval/Cert	0.50	0.50	II,IV
6	44	038	Monitoring Air Quality	Admin/Office Mgmt/Monitoring	Overall Program Mgmt/Coord	0.90	0.90	1b
7	44	039	Advance Clean Air Technology	Admin/Office Mgt/Tech Adv	Admin Support/Coordination	0.77	0.77	VIII
8	44	041	Policy Support	Admin/Office Mgmt/Policy Supp	Overall Policy Supp/Mgmt/Coord	0.49	0.49	1b
9	44	042	Ensure Compliance	Admin/Office Mgmt/Compliance	Compliance: Assign/Manage/Supp	0.37	0.37	1b
10	44	043	Develop Rules	Admin/Office Mgmt/Rules	Rules: Assign/Manage/Supp	0.15	0.15	1b
11	44	046	Monitoring Air Quality	Admin/Program Management	STA Program Administration	2.00	2.00	1b
12	44	048	Advance Clean Air Technology	Admin/Prog Mgmt/Tech Advance	Overall TA Program Mgmt/Coord	1.55	1.55	VIII
13	44	052	Operational Support	Admin/Prog Mgmt/Mob Src	Admin: Mobile Source	1.80	1.80	1b
14	44	063	Monitoring Air Quality	Ambient Air Analysis	Analyze Criteria/Tox/Pollutants	11.91	11.91	II,V,IX
15	44	064	Monitoring Air Quality	Ambient Network	Air Monitoring/Toxics Network	18.05	18.85	IV,V,IX
16	44	065	Monitoring Air Quality	Air Quality Data Management	AM Audit/Validation/Reporting	1.00	1.00	II,V,IX
17	44	066	Advance Clean Air Technology	AQIP Marine SCR DPF	AQIP Marine SCR DPF Admin/Impl	0.15	0.15	IX
18	44	067	Monitoring Air Quality	Ambient Lead Monitoring	Lead Monitoring/Analysis/Reporting	0.50	0.50	IV
19	44	069	Develop Programs	AQIP Evaluation	AQIP Contract Admin/Evaluation	0.65	0.65	IX
20	44	072	Ensure Compliance	Arch Ctgs - End User	Sample Analysis/Rpts	1.00	1.00	XVIII
21	44	073	Monitoring Air Quality	Arch Ctgs - Other	Sample Analysis/Rpts	2.00	2.00	XVIII
22	44	081	Monitoring Air Quality	Air Filtration EPA	Air Filtration EPA/Admn/Impl	0.25	0.25	V
23	44	082	Monitoring Air Quality	Air Filtration Other	Air Filtration Other/Admn/Impl	0.50	0.50	XVII
24	44	084	Monitoring Air Quality	Bik Carbon Stdy EPA	EPA Bick Carbon Climate Study	0.00	0.20	XVII
25	44	095	Advance Clean Air Technology	CA Natural Gas Veh Partnership	CA Natural Gas Veh Partnership	0.05	0.05	VIII
26	44	105	Ensure Compliance	CEMS Certification	CEMS Review/Approval	6.15	6.15	III,VI
27	44	130	Advance Clean Air Technology	Clean Fuels/Contract Admin	Admin/Project Supp for TA Cont	3.40	3.40	VIII
28	44	132	Advance Clean Air Technology	Clean Fuels/Mobile Sources	Dev/Impl Mobile Src Proj/Demo	5.30	5.10	VIII
29	44	134	Advance Clean Air Technology	Clean Fuels/Stationary Combust	Dev/Demo Clean Combustion Tech	0.70	0.70	VIII
30	44	135	Advance Clean Air Technology	Clean Fuels/Stationary Energy	Dev/Demo Alt Clean Energy	0.70	0.70	VIII
31	44	136	Advance Clean Air Technology	Clean Fuels/Tech Transfer	Disseminate Low Emiss CF Tech	1.45	1.45	VIII
32	44	151	Monitoring Air Quality	Community Scale Air Toxics Study	EPA-funded airports air monit	1.00	(1.00)	XVII
33	44	175	Ensure Compliance	DB/Computerization	Develop Systems/Database	0.44	0.44	II,IV,VI
34	44	188	Advance Clean Air Technology	DERA FY 13 Veh Repl	DERA Vehicle Repl Admin/Impl	0.00	0.20	XVII
35	44	190	Advance Clean Air Technology	Diesel Projects EPA	Diesel Projects EPA/Admn/Impl	0.11	0.11	V
36	44	240	Monitoring Air Quality	Environmental Justice	Implement Environmental Justice	0.45	0.45	II,IX
37	44	276	Policy Support	Advisory Group/Technology Adva	Tech Adv Advisory Group Supp	0.10	0.10	VIII
38	44	361	Advance Clean Air Technology	HD Trucks DOE ARRA	DOE HD Trucks Admin (ARRA)	2.00	2.00	XVII
39	44	396	Develop Programs	Lawnmower Exchange	Lawn Mower Admin/Impl/Outreach	0.30	0.30	XVII
40	44	410	Policy Support	Legislation	Support Pollution Reduction thru Legislatio	0.50	0.50	IX
41	44	424	Advance Clean Air Technology	LNG Trucks CEC	LNG Trucks Admin CEC	1.00	1.00	IX
42	44	439	Monitoring Air Quality	MATES IV	MATES IV	0.50	(0.50)	VIII
43	44	448	Develop Programs	Mobile Src Strategies-Off Road	CARB Off-Road Mob Src ctrl strategy for SIP	1.00	1.00	XVII

**Science & Technology Advancement  
Work Program by Office**

#	Program Code	Program Category	Goal	Program	Activities	FTEs +/-		Revenue Categories
						FY 2013-14	FY 2014-15	
44	44	Develop Rules	I	Mob Src/SCAQMD Rulemaking	Prepare SCAQMD Mob Src rulemaking proposals	2.00	2.00	IX
45	44	Ensure Compliance	I	Microscopic Analysis	Asbestos/PM/Metals Analysis	3.00	3.00	VI
46	44	Develop Programs	I	Mob Src/CARB/EPA Monitoring	CARB/US EPA Mob Src Fuel Policies	1.50	1.50	IX
47	44	Develop Programs	I	Mob Src/CEC/US DOE Monitoring	CEC/US DOE Mob Src rulemaking proposals	1.00	1.00	IX, XVII
48	44	Advance Clean Air Technology	I	Mob Src: Emiss Inven Method	Rvw CARB/US EPA emissions inven methodology	1.50	1.50	VIII, IX
49	44	Policy Support	I	Mob Src: Greenhs Gas Reduc Meas	Provide comments on mob src portion of AB32	1.39	1.39	XVII
50	44	Develop Rules	I	MS & AQMP Control Strategies	AQMP Control Strategies	0.30	0.30	VIII
51	44	Advance Clean Air Technology	I	Mob Src/C Moyer Adm/Outreach	Carl Moyer: Impl/Admin Grant	5.65	5.65	IX
52	44	Develop Programs	I	Mobile Source Strategies	Implement Fleet Rules	1.00	1.00	VIII
53	44	Advance Clean Air Technology	I	Mob Src/C Moyer Impl/Prg Dev	Moyer/Implement Program Dev	2.80	2.80	IX
54	44	Advance Clean Air Technology	I	VIP Admin	VIP Admin/Outreach/Impl	0.80	0.80	IX
55	44	Monitoring Air Quality	I	NATTS(Natl Air Tox Trends Sta)	NATTS (Natl Air Tox Trends)	1.50	1.50	II, V, IX
56	44	Monitoring Air Quality	I	Near Roadway Mon	Near Roadway Monitoring	1.50	1.50	IV, V, IX
57	44	Advance Clean Air Technology	I	Plug-in Hybrid EV DOE ARRA	DOE Plug-in Hybrid EV Admin (ARRA)	0.75	0.75	V
58	44	Ensure Compliance	I	PM2.5 Program	Est/Operate/Maint PM2.5 Network	4.80	11.30	II, V, IX
59	44	Monitoring Air Quality	I	PM2.5 Program	Analyze PM2.5 Samples	6.00	6.00	II, V, IX
60	44	Monitoring Air Quality	I	PM Sampling Program (EPA)	PM Sampling Program - Addition	10.60	10.60	V
61	44	Monitoring Air Quality	I	PM Sampling Spec	PM Sampling Special Events	0.10	0.10	V
62	44	Monitoring Air Quality	I	Photochemical Assessment	Photochemical Assess & Monitor	3.00	3.00	V, IX
63	44	Develop Programs	I	Prop 1B: Goods Movement	Prop 1B: Goods Movement	5.70	5.70	IX
64	44	Develop Programs	II	Prop 1B: Low Emiss Sch Bus	Prop 1B: Low Emiss Sch Bus	1.00	0.50	IX
65	44	Timely Review of Permits	I	Protocols/Reports/Plans	Eval Test Protocols/Cust Svc	0.10	0.10	III, IV
66	44	Timely Review of Permits	I	Protocols/Reports/Plans	Eval Test Protocols/Compliance	6.15	6.15	IV, VI
67	44	Customer Service and Business Assi	III	Public Records Act	Comply w/ Public Req for Info	0.17	0.17	1a
68	44	Monitoring Air Quality	I	Quality Assurance	Quality Assurance Branch	3.00	3.00	II, V, IX
69	44	Develop Rules	I	Rulemaking/BACT	Dev/Amend BACT Guidelines	2.00	2.00	II
70	44	Develop Rules	I	Rulemaking/Support PRA	Assist PRA w/ Rulemaking	0.05	0.05	II
71	44	Monitoring Air Quality	I	Salton Sea Monit	Mon/Analyze Hydrogen Sulfide	0.25	0.25	XVII
72	44	Advance Clean Air Technology	I	School Bus/Lower Emission Prog	School Bus Program Oversight	0.20	0.50	VIII
73	44	Ensure Compliance	I	Source Testing/Compliance	Conduct ST/Prov Data/Compl	2.25	2.25	VI
74	44	Customer Service and Business Assi	I	Source Testing/Customer Svc	Conduct ST/Prov Data/Cust Svc	0.05	0.05	VI
75	44	Develop Programs	I	ST Methods Development	Eval ST Methods/Vali Data	0.95	0.95	II
76	44	Ensure Compliance	I	ST Sample Analysis/Compliance	Analyze ST Samples/Air Prgms	4.00	4.00	VI
77	44	Develop Programs	I	ST Sample Analysis/Air Program	Analyze ST Samples/Compliance	0.25	0.25	II
78	44	Develop Rules	I	ST Sample Analysis/Air Program	Analyze ST Samples/Rules	0.25	0.25	II
79	44	Ensure Compliance	I	VOC Sample Analysis/Compliance	VOC Analysis & Rptg/Compliance	7.00	7.00	IV, XV
80	44	Develop Rules	I	VOC Sample Analysis/Rules	VOC Analysis & Rptg/Rules	0.25	0.25	II, XV
81	44	Customer Service and Business Assi	I	VOC Sample Analysis/SBA/Other	VOC Analysis & Rptg/Cust Svc	0.50	0.50	VI
82	44	Monitoring Air Quality	II	Spec Monitoring/Emerg Response	Emergency Response	0.50	0.50	II
83	44	Ensure Compliance	I	Special Monitoring	Rule 403 Compliance Monitoring	2.20	2.20	IV, IX, XV
84	44	Timely Review of Permits	I	Permit Processing/Support EAC	Assist EAC w/ Permit Process	0.05	0.05	III
85	44	Advance Clean Air Technology	I	Target Air Shed EPA	Targeted Air Shed Admin/impl	0.15	0.15	XVII
86	44	Advance Clean Air Technology	I	Tech Adv/Commercialization	Assess CFS/Adv Tech Potential	0.25	0.25	VIII
87	44	Advance Clean Air Technology	I	Tech Adv/Non-Combustion	Dev/Demo Non-Combustion Tech	0.10	0.10	VIII
88	44	Ensure Compliance	I	Toxics/AB2588	Eval Protocols/Methods/ST	1.25	1.25	X
89	44	Ensure Compliance	I	Toxics/Engineering	R1401 Toxics/HRA Prot/Rpt Eval	0.05	0.05	X
90	44	Advance Clean Air Technology	I	Transportation Research	Transport Research/Adv Systems	0.50	0.50	VIII
91	44	Monitoring Air Quality	II	TraPac Air Filtr Prg	Admin/Tech Suppt/Reptg/Monitor	1.00	1.00	XVII
92	44	Operational Support	III	Union Negotiations	Labor/Mgmt Negotiations	0.05	0.05	1a
93	44	Operational Support	III	Union Steward Activities	Rep Employees in Grievance Act	0.05	0.05	1a

**Total**      164.00    0.00    164.00

Science & Technology Advancement Line Item Expenditure						
Major Object / Account # / Account Description		FY 2012-13 Actuals	FY 2013-14 Adopted Budget	FY 2013-14 Amended Budget	FY 2013-14 Estimate *	FY 2014-15 Proposed
<b>Salary &amp; Employee Benefits</b>						
51000-52000	Salaries	\$ 14,006,598	\$ 13,695,855	\$ 13,608,401	\$ 13,831,462	\$ 13,924,124
53000-55000	Employee Benefits	6,405,489	6,813,218	6,813,218	\$ 6,702,782	7,207,167
Sub-total Salary & Employee Benefits		\$ 20,412,087	\$ 20,509,073	\$ 20,421,619	\$ 20,534,244	\$ 21,131,291
<b>Services &amp; Supplies</b>						
67250	Insurance	\$ 14,575	\$ -	\$ 23,849	\$ 23,849	\$ -
67300	Rents & Leases Equipment	205,780	16,800	227,826	156,826	16,800
67350	Rents & Leases Structure	156,348	150,900	157,400	157,400	150,900
67400	Household	450	500	500	475	500
67450	Professional & Special Services	1,354,422	92,600	1,361,053	873,560	80,000
67460	Temporary Agency Services	741,257	141,600	748,000	748,000	141,600
67500	Public Notice & Advertising	29,759	37,000	77,500	81,000	37,000
67550	Demurrage	69,084	40,000	73,258	63,258	40,000
67600	Maintenance of Equipment	507,890	180,000	350,927	340,185	180,000
67650	Building Maintenance	33,227	20,000	185,500	77,469	20,000
67700	Auto Mileage	111,742	3,909	93,546	99,320	3,909
67750	Auto Service	-	-	2,000	740	-
67800	Travel	70,761	48,403	118,503	89,014	48,403
67850	Utilities	-	-	64,217	64,217	-
67900	Communications	211,338	189,636	229,636	231,715	189,636
67950	Interest Expense	-	-	-	-	-
68000	Clothing	4,770	4,000	7,254	7,254	4,000
68050	Laboratory Supplies	512,451	270,000	549,682	521,403	270,000
68060	Postage	33,269	22,318	42,318	42,318	22,318
68100	Office Expense	83,283	27,693	79,913	75,913	31,393
68200	Office Furniture	-	-	19,679	16,679	-
68250	Subscriptions & Books	2,780	1,527	4,027	3,060	1,527
68300	Small Tools, Instruments, Equipment	85,530	35,000	207,734	142,892	35,000
68350	Film	-	100	100	-	-
68400	Gas and Oil	-	-	-	-	-
69500	Training/Conference/Tuition/ Board Exp.	4,457	9,000	15,500	15,000	9,000
69550	Memberships	93,034	7,250	94,750	76,819	7,250
69600	Taxes	14,318	7,000	28,628	23,328	7,000
69650	Awards	2,400	2,700	2,700	2,700	-
69700	Miscellaneous Expenses	11,288	3,500	21,500	9,303	2,600
69750	Prior Year Expense	(57,105)	-	-	-	-
69800	Uncollectable Accounts Receivable	-	-	-	-	-
89100	Principal Repayment	-	-	-	-	-
Sub-total Services & Supplies		\$ 4,297,107	\$ 1,311,436	\$ 4,787,500	\$ 3,943,697	\$ 1,298,836
77000	<b>Capital Outlays</b>	\$ 786,615	\$ 60,000	\$ 801,613	\$ 801,613	\$ -
79050	<b>Building Remodeling</b>	\$ -	\$ -	\$ -	\$ -	\$ -
Total Expenditures		\$ 25,495,808	\$ 21,880,509	\$ 26,010,732	\$ 25,279,554	\$ 22,430,127

\* Estimates based on July 2013 through March 2014 actual expenditures and budget amendments.



**SOUTH COAST  
AIR QUALITY MANAGEMENT DISTRICT**

## **ENGINEERING & COMPLIANCE**

**MOHSEN NAZEMI  
DEPUTY EXECUTIVE OFFICER**

### **DESCRIPTION OF MAJOR SERVICES:**

The office of Engineering & Compliance (E&C) is primarily responsible for processing applications for Permits to Construct & Operate, compliance inspections and special services. The permit processing activities involve over 400 major facilities that have been issued Title V Federal Operating permits, almost 300 facilities in the RECLAIM program, and over 27,000 large and small business operations. The compliance staff conducts routine unannounced field inspections to verify compliance with SCAQMD, state and federal rules and regulations, and responds to air quality complaints received. In addition, staff also participate in Emergency Response activities with other agencies, conduct training classes, assist with Economic Development and Business Retention programs, and evaluate and implement Permit Streamlining activities.

### **ACCOMPLISHMENTS**

#### **RECENT:**

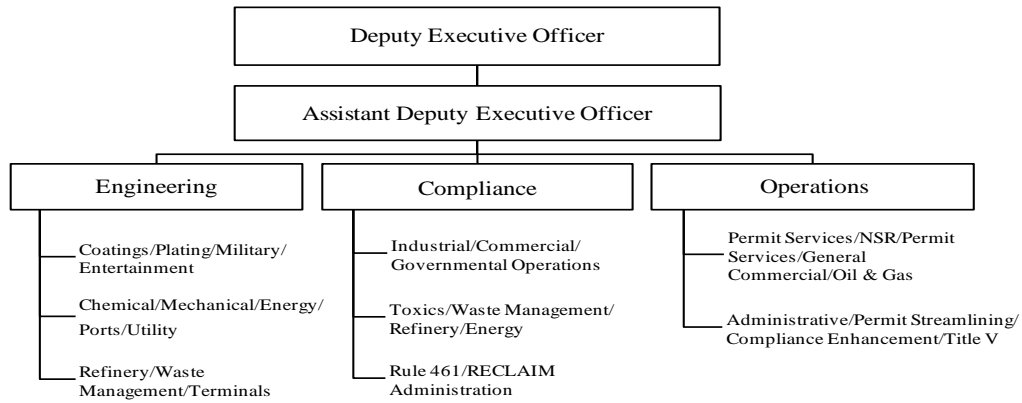
- Processed 8,925 applications for Permits, Plans, ERCs, and timely renewal of TV permits.
- Conducted 25,568 site inspections for compliance determination.
- Conducted 4,098 inspections for equipment registered pursuant to Portable Equipment Registration Program (PERP) and 1,082 asbestos inspections.
- Conducted 72 training classes for businesses, public, and SCAQMD staff.
- Received and processed 8,730 air quality complaints.

#### **ANTICIPATED:**

- Process 8,800 applications for Permits, Plans, ERCs, and timely renewal of TV permits.
- Conduct 22,000 site inspections for compliance determination.
- Conduct 3,500 equipment registered pursuant to Portable Equipment Registration Program (PERP) and 2,200 asbestos inspections.
- Conduct 40 training classes for businesses, public, and SCAQMD staff.
- Respond timely to all air quality complaints.



**ORGANIZATIONAL CHART:**



**POSITION SUMMARY: 306 FTEs**

Unit	Current (FY 2013-14)	Change	Proposed (FY 2014-15)
Administration	13	-	13
Engineering	104	-	104
Compliance	158	-	158
Operations	31	-	31
<b>Total</b>	<b>306</b>	<b>-</b>	<b>306</b>

**STAFFING DETAIL:**

2014-15 Requested Staffing

<u>Position</u>	<u>Title</u>
15	Air Quality Analysis and Compliance Supervisor
91	Air Quality Engineer II
89	Air Quality Inspector II
14	Air Quality Inspector III
2	Air Quality Specialist
1	Assistant Deputy Executive Officer/Engineering & Compliance
2	Data Technician
1	Deputy Executive Officer/Engineering & Compliance
12	Office Assistant
1	Principal Office Assistant
7	Secretary
2	Senior Administrative Secretary
19	Senior Air Quality Engineer
3	Senior Air Quality Engineering Manager
4	Senior Enforcement Manager
20	Senior Office Assistant
5	Staff Specialist
17	Supervising Air Quality Inspector
<u>1</u>	Supervising Office Assistant
306	Total Requested Positions

**Engineering & Compliance  
Work Program by Office**

#	Program Code	Program Category	Goal	Program	Activities	FTEs +/-		Revenue Categories
						FY 2013-14	FY 2014-15	
1	50	038	Customer Service and Business Assistance	I	Admin/Office Management	4.00	4.00	1b
2	50	047	Customer Service and Business Assistance	I	Admin/Operations Support	5.00	5.00	1b
3	50	070	Ensure Compliance	I	CARB PERP Program	7.00	7.00	XIX
4	50	071	Ensure Compliance	I	Arch Cigs - Admin	0.10	0.10	XVIII
5	50	072	Ensure Compliance	I	Arch Cigs - End User	0.10	0.10	XVIII
6	50	073	Ensure Compliance	I	Arch Cigs - Other	4.50	4.50	XVIII
7	50	148	Policy Support	I	Climate Change	0.50	0.50	II,IX
8	50	152	Ensure Compliance	III	Compliance/IM Related Activiti	0.50	0.50	II
9	50	155	Ensure Compliance	I	Compliance Guidelines	0.50	0.50	II
10	50	156	Ensure Compliance	I	Perm Proc/Info to Compliance	3.00	3.00	II,IV
11	50	157	Ensure Compliance	I	Compliance/Special Projects	5.00	5.00	IV
12	50	158	Ensure Compliance	I	Compliance Testing	1.00	1.00	II
13	50	200	Customer Service and Business Assistance	I	Economic Dev/Bus Retention	0.10	0.10	III
14	50	210	Monitoring Air Quality	II	Emergency Response	0.25	0.25	II,XV
15	50	253	Timely Review of Permits	I	ERC Appl Processing	3.50	3.50	III
16	50	260	Customer Service and Business Assistance	III	Fee Review	0.45	0.45	II,III,IV
17	50	276	Policy Support	I	Board Committees	0.25	0.25	1a
18	50	365	Ensure Compliance	I	Hearing Bd/Variations	1.50	1.50	VII
19	50	367	Timely Review of Permits	I	Hearing Board/Appeals	0.50	0.50	III
20	50	375	Ensure Compliance	I	Inspections	79.20	79.20	IV,V,XV
21	50	377	Ensure Compliance	I	Inspections/RECLAIM Audits	23.80	23.80	II,IV
22	50	416	Policy Support	I	Legislative Activities	0.25	0.25	1a
23	50	425	Customer Service and Business Assistance	I	Lobby Permit Services	1.00	1.00	III
24	50	475	Timely Review of Permits	I	NSR Implementation	2.50	2.50	II,III,V
25	50	476	Timely Review of Permits	I	NSR Data Clean Up	0.50	0.50	II
26	50	515	Timely Review of Permits	I	Perm Proc/Non TV/Non RECLAIM	55.30	55.30	III
27	50	517	Timely Review of Permits	I	Permit Services	12.50	12.50	III
28	50	518	Timely Review of Permits	I	RECLAIM Non-Title V	4.50	4.50	III,IV,XV
29	50	519	Timely Review of Permits	I	Perm Proc/Title III (Non TV)	1.00	1.00	III
30	50	520	Customer Service and Business Assistance	I	Perm Proc/Pre-Appl Mtg Outreac	4.00	4.00	III
31	50	521	Timely Review of Permits	I	Perm Proc/Expedited Permit	0.50	0.50	III
32	50	523	Timely Review of Permits	I	Permit Streamlining	3.75	3.75	III
33	50	538	Ensure Compliance	I	Port Comm AQ Enforcement	0.50	0.50	IX
34	50	542	Ensure Compliance	I	Prop 1B:Goods Movement	0.30	0.30	IX
35	50	550	Ensure Compliance	II	Public Complaints/Brea kdowns	10.00	10.00	II,V,V,XV
36	50	565	Customer Service and Business Assistance	III	Public Records Act	0.50	0.50	1a
37	50	605	Ensure Compliance	I	RECLAIM/Admin Support	10.00	10.00	II,III,IV
38	50	607	Timely Review of Permits	I	RECLAIM & Title V	12.65	(0.25)	III
39	50	650	Develop Rules	I	Rulemaking	0.50	0.50	II,XV
40	50	657	Develop Rules	I	Rulemaking/Support PRA	0.50	0.50	II
41	50	678	Ensure Compliance	I	School Siting	1.00	1.00	II
42	50	680	Ensure Compliance	I	Small Business Assistance	0.50	0.50	IV
43	50	690	Customer Service and Business Assistance	I	Source Education	2.80	2.80	III,IV,V,XV

Engineering & Compliance Work Program by Office									
#	Program Code	Program Category	Goal	Program	Activities	FY 2013-14	FTEs +/-	FY 2014-15	Revenue Categories
44	50	728	Timely Review of Permits	Permit Proc/IM Programming	Assist IM: Design/Review/Test	2.00		2.00	II, III, IV
45	50	751	Ensure Compliance	Title III Inspections	Title III Comp/Insp/Follow Up	0.50		0.50	IV
46	50	752	Develop Rules	Title III Rulemaking	Title III Dev/Implement Rules	0.25		0.25	II
47	50	771	Ensure Compliance	Title V Inspections	Title V Comp/Inspect/Follow Up	11.00		11.00	II, IV
48	50	773	Develop Rules	Title V & NSR Rulemaking-Supp	Title V Rules Dev/Amend/Impl	0.25		0.25	II
49	50	774	Timely Review of Permits	TV/Non-RECLAIM	Process Title V Only Permits	18.00		18.00	III
50	50	775	Timely Review of Permits	Title V - Admin	Title V Administration	1.00		1.00	III
51	50	791	Ensure Compliance	Toxics/AB2588	AB2588 Rev Rpts/Risk Redplans	0.00	0.25	0.25	X
52	50	805	Operational Support	Training	Dist/Org Unit Training	6.00		6.00	1b
53	50	825	Operational Support	Union Negotiations	Official Labor/Mgmt Negotiate	0.10		0.10	1a
54	50	826	Operational Support	Union Steward Activities	Rep Employees in Grievance Act	0.10		0.10	1a
55	50	850	Ensure Compliance	VEE Trains	Smoking Trains-Comp/Inspec/FU	0.50		0.50	IX, XV
56	50	855	Operational Support	Web Tasks	Creation/Update of Web Content	0.50		0.50	1a
<b>Total</b>						<b>306.00</b>	<b>0.00</b>	<b>306.00</b>	

Engineering & Compliance Line Item Expenditure						
Major Object / Account # / Account Description		FY 2012-13 Actuals	FY 2013-14 Adopted Budget	FY 2013-14 Amended Budget	FY 2013-14 Estimate *	FY 2014-15 Proposed
<b>Salary &amp; Employee Benefits</b>						
51000-52000	Salaries	\$ 26,637,986	\$ 25,627,092	\$ 25,627,092	\$ 25,382,675	\$ 26,267,107
53000-55000	Employee Benefits	11,862,850	12,380,094	12,380,094	11,976,984	12,995,189
Sub-total Salary & Employee Benefits		\$ 38,500,836	\$ 38,007,185	\$ 38,007,186	\$ 37,359,659	\$ 39,262,296
<b>Services &amp; Supplies</b>						
67250	Insurance	\$ -	\$ -	\$ -	\$ -	\$ -
67300	Rents & Leases Equipment	-	-	-	-	-
67350	Rents & Leases Structure	89,424	92,000	92,000	92,000	92,706
67400	Household	-	-	-	-	-
67450	Professional & Special Services	20,045	5,000	5,000	2,438	5,000
67460	Temporary Agency Services	11,164	60,000	60,000	52,696	50,000
67500	Public Notice & Advertising	34,603	65,000	65,000	63,244	65,000
67550	Demurrage	-	500	500	-	500
67600	Maintenance of Equipment	4,930	21,500	21,500	14,851	21,500
67650	Building Maintenance	-	-	-	-	-
67700	Auto Mileage	11,557	12,000	12,000	12,000	12,000
67750	Auto Service	-	1,000	1,000	-	1,000
67800	Travel	31,162	38,110	38,110	30,639	38,110
67850	Utilities	-	-	-	-	-
67900	Communications	140,044	138,590	138,590	174,001	136,590
67950	Interest Expense	-	-	-	-	-
68000	Clothing	11,033	16,320	16,320	11,033	13,320
68050	Laboratory Supplies	6,626	5,000	5,000	5,000	5,000
68060	Postage	30,348	40,000	40,000	33,797	40,000
68100	Office Expense	78,950	104,300	140,300	184,569	99,594
68200	Office Furniture	500	5,000	5,000	500	2,500
68250	Subscriptions & Books	-	800	800	-	800
68300	Small Tools, Instruments, Equipment	4,535	23,460	23,460	23,460	23,460
68350	Film	-	-	-	-	-
68400	Gas and Oil	-	-	-	-	-
69500	Training/Conference/Tuition/ Board Exp.	15,060	21,400	21,400	22,807	9,900
69550	Memberships	-	1,500	1,500	-	1,500
69600	Taxes	-	-	-	-	-
69650	Awards	-	-	-	-	-
69700	Miscellaneous Expenses	9,156	10,000	10,000	9,156	10,000
69750	Prior Year Expense	-	-	-	-	-
69800	Uncollectable Accounts Receivable	-	-	-	-	-
89100	Principal Repayment	-	-	-	-	-
Sub-total Services & Supplies		\$ 499,136	\$ 661,480	\$ 697,480	\$ 732,192	\$ 628,480
77000	<b>Capital Outlays</b>	\$ -	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
79050	<b>Building Remodeling</b>	\$ -	\$ -	\$ -	\$ -	\$ -
Total Expenditures		\$ 38,999,972	\$ 38,718,665	\$ 38,754,666	\$ 38,141,851	\$ 39,940,776

\* Estimates based on July 2013 through March 2014 actual expenditures and budget amendments.

## SCAQMD Quick Facts

- Created by the 1977 Lewis Air Quality Management Act; amended by 1988 Lewis-Presley Air Quality Management Act (also known as Health and Safety Code 40400).
  - Regional governmental agency (Special District)
- Jurisdiction for comprehensive air pollution control over all of Orange County, all of Los Angeles County except for the Antelope Valley, the non-desert portion of western San Bernardino County and the western and Coachella Valley portion of Riverside County
  - 10,743 Square Miles
  - Boundaries are Pacific Ocean to the west; San Gabriel, San Bernardino and San Jacinto Mountains to the north and east, and the San Diego County line to the south
  - Population of 16,444,162
  - Vehicle Registrations of 12,313,240
- Responsibilities include:
  - Monitoring air quality - 41 air monitoring stations
  - Planning, implementing, and enforcing programs to attain and maintain state and federal ambient air quality standards
    - Developing air quality rules and regulations that regulate stationary source emissions from such facilities as oil refineries, power plants, paint spray booths, incinerators, manufacturing plants, dry cleaners, and service stations
    - Establishing permitting requirements and issuing permits for stationary sources (27,535 operating locations with 74,292 permits)
- Decision-making body is a 13 member Governing Board
  - Total of 10 elected officials with four appointed by the Board of Supervisors from each of the four counties and six appointed by cities within the District
  - Three officials appointed by the Governor, the Speaker of the State Senate, and the Rules Committee of the State Senate

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Operating Indicators by Function  
Last Nine Fiscal Years

<u>Program Category</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
<b>Advance Clean Air Technology</b>									
Contracts awarded	263	180	304	295	292	530	526	556	938
Total Funding awarded	\$ 54,723,323	\$ 79,893,504	\$ 133,603,750	\$ 91,309,725	\$ 89,421,125	\$ 180,669,515	\$ 131,399,287	\$ 82,536,619	\$ 207,181,573
<b>Ensure Compliance with Clean Air Rules</b>									
Inspections	45,702	35,161	35,039	33,742	40,558	33,735	33,560	34,191	32,535
Notices of Violations	2,412	1,759	1,407	1,321	1,908	1,530	1,254	1,211	965
Hearing Board Orders for Abatement	81	61	49	30	36	35	47	93	51
Hearing Board Appeals	23	12	12	22	19	20	2	7	3
<b>Customer Service</b>									
Public Information Requests	5,477	4,956	4,651	3,528	4,962	3,821	3,410	3,543	3,460
Community/Public Meetings attended	92	118	182	145	198	202	190	274	294
Small Business Assistance Contacts	3,641	1,812	2,289	2,680	2,662	2,578	2,497	2,574	2,266
<b>Develop Programs to Achieve Clean Air</b>									
Transportation Plans processed	1,402	1,426	1,502	1,534	1,412	1,372	1,385	1,392	1,371
Emission Inventory Updates	359	229	284	439	586	703	521	530	408
<b>Develop Rules to Achieve Clean Air</b>									
Rules Developed	59	35	24	29	32	15	40	8	20
<b>Monitoring Air Quality</b>									
Samples Analyzed by the Laboratory	34,174	37,889	14,683	31,530	25,400	29,685	28,915	29,520	32,520
Source Testing Analyses/Evaluations/Reviews	706	598	830	794	718	740	1,030	952	1,035
<b>Timely Review of Permits</b>									
Applications Processed	11,459	9,747	9,481	9,599	11,564	9,627	13,044	12,225	14,153
Applications Received-Small Business	-	-	-	-	627	694	798	732	615
Applications Received-All Others	10,996	9,222	8,261	9,297	10,954	10,941	10,769	11,682	11,709
<b>Policy Support</b>									
News releases	34	48	44	51	76	69	64	57	61
Media Calls	1,400	n/a	643	684	334	313	252	520	1,131
Media Inquiries Completed	n/a	268	604	684	334	313	252	520	1,131

## FINANCIAL POLICIES

SCAQMD is required to follow specific sections of the California Health & Safety Code, which guide SCAQMD's overall financial parameters. The Governing Board also provides financial direction to SCAQMD staff through the adoption of various financial-related policies. In addition, the Executive Officer's Administrative Policies and Procedures offer further financial guidance. Below is an overview of the guidelines and procedures for the applicable financial-related policies.

### California Health & Safety Code (CA H&SC)

- District Budget Adoption – CA H&SC §40130

The District shall prepare, and make available to the public at least 30 days prior to public hearing, a summary of its budget and any supporting documents, including, but not limited to, a schedule of fees to be imposed by the district to fund its programs. The district shall notify each person who was subject to fees imposed by the district in the preceding year of the availability of information. The district shall notice and hold a public hearing for the exclusive purpose of reviewing the budget and of providing the public with the opportunity to comment upon the proposed district budget.

- Fees Assessed on Stationary Sources – CA H&SC §40500.1

Fees assessed on stationary sources shall not exceed, for any fiscal year, the actual costs of district programs for the immediately preceding fiscal year with an adjustment not greater than the change in the California Consumer Price Index (CPI), for the preceding calendar year, from January 1 of the prior year to January 1 of the current year. Unless specifically authorized by statute, the total amount of all of the fees collected from stationary sources of emissions in the 1995-96 fiscal year, and in each subsequent fiscal year, shall not exceed the level of expenditure in the 1993-94 fiscal year, except that the total fee amount may be adjusted annually by not more than the percentage increase in the California CPI. Any new state or federal mandate that is applicable to the SCAQMD on and after January 1, 1994 shall not be subject to this section.

- Limitation on Increase in Permit Fees – CA H&SC §40510.5

Existing permit fees shall not increase by a percentage greater than any percentage increase in the California CPI for the preceding calendar year, unless the board makes a finding, based upon relevant information in a rulemaking record, that the fee increase is necessary and will result in an apportionment of fees that is equitable. Any fee increase above CPI shall be phased in over a period of at least two years.



## FINANCIAL POLICIES

### SCAQMD Governing Board Policy

- Rule 320 - Automatic Fee Adjustment

Rule 320 provides that all Regulation III fees, with specified exceptions, are automatically adjusted July 1 of each year by the California Consumer Price Index for the preceding calendar year unless the Governing Board decides not to implement a fee adjustment, or to implement a different adjustment for a given year, either for all fees or for a specified fee or fees. The Executive Officer is directed to prepare annually a socioeconomic impact of the effect of the fee adjustment for review by stakeholders and the Governing Board and to hold a public hearing on the automatic fee adjustment to receive any public comments. Public comments and any responses, along with recommendations by the Budget Advisory Committee, are to be forwarded to the Governing Board by April 15 of each year.

- Unreserved Fund Balance Policy

The Unreserved Fund Balance Policy, adopted by the Board in June 2005, states that the Unreserved Fund Balance in the General Fund should be maintained at a minimum of 15 percent of revenues.

- Annual Investment Policy

The Annual Investment Policy sets forth the investment guidelines for all general, special revenue, trust, agency and enterprise funds of the South Coast Air Quality Management District (SCAQMD). The purpose of this policy is to ensure all of SCAQMD's funds are prudently invested to preserve principal and provide necessary liquidity, while earning a market average rate of return. The SCAQMD Annual Investment Policy conforms to the California Government Code as well as customary standards of prudent investment management.

The objectives of the policy, in priority order, are Safety of Principal, Liquidity, and Market Rate of Return. The policy establishes and defines investable funds, authorized instruments, credit quality requirements, maximum maturities and concentrations, collateral requirements, and qualifications of brokers, dealers, and financial institutions doing business with or on behalf of the SCAQMD.

The policy provides the Governing Board, the Treasurer, the Chief Financial Officer, and the Investment Oversight Committee with set duties and responsibilities to execute the policy.

## FINANCIAL POLICIES

- Treasury Operations Contingency Plan and Procedures

The Treasury Operations Contingency Plan and Procedures states the course of action that may be implemented by the SCAQMD to protect the safety and liquidity of the SCAQMD funds and to protect SCAQMD from disruptions to ongoing operations if: 1) the financial stability of Los Angeles County may jeopardize SCAQMD funds invested through the Los Angeles County Treasurer; and/or 2) the Los Angeles County Treasurer, as Treasurer of SCAQMD, can no longer provide the treasury services currently provided in a satisfactory manner.

Under authority granted by Resolution 97-32, the Executive Officer, upon recommendation of the Chief Financial Officer and concurrence of the Administrative Committee, can appoint either the Chief Financial Officer or Controller as Acting Treasurer to immediately begin implementing the defined procedures to safeguard SCAQMD funds.

- Budget Advisory Committee

Established by the SCAQMD Governing Board, the Budget Advisory Committee serves in an advisory capacity to the SCAQMD on budgeting and financial planning matters. The committee, made up of members from the business and environmental community, provides additional insight during the annual budget process by reviewing and commenting on the proposed draft budget.

- Administrative Code

The Administrative Code of Rules and Procedures prescribes the responsibilities, conduct and specified reimbursements of SCAQMD employees and SCAQMD Board members. Sections include, but are not limited to mileage reimbursement, travel expenses, tuition reimbursement, professional licenses and memberships, and bilingual pay.

- Procurement Policy and Procedure

The Procurement Policy and Procedure provides the guidelines for the contracting and/or purchasing of services, material, equipment, supplies and fixed assets (i.e. capital outlays) by the SCAQMD under the direction of the Manager of the Procurement Section. These guidelines include, but are not limited to, purchasing methods, bidding procedures, signature authorization levels, fixed asset acquisition and disposition, and publication requirements for advertised procurements.

Procedures are in place to ensure that all businesses including minority business enterprises, women business enterprises, disabled veteran business enterprises and small

## FINANCIAL POLICIES

businesses have a fair and equitable opportunity to compete for and participate in SCAQMD contracts and that SCAQMD utilizes, when necessary, the most highly qualified outside consultants/contractors to carry out the organization's responsibilities. SCAQMD Executive Officer, Deputy/Assistant Deputy Executive Officers, Legal Counsel, the Procurement Section, and staff all have responsibilities to execute the Procurement Policy and Procedure.

### Executive Officer Administrative Policies and Procedures

- Travel

The Travel Policy provides guidance on allowable travel expenses, travel advances, and documentation requirements.

- Fixed Assets and Controlled Items

The Fixed Assets and Controlled Items policy provides guidance on the receipt, transfer, inventory, accountability, and disposal of fixed assets and controlled items.

- Purchasing of Non-Consultant Services and Supplies

The Purchasing of Non-Consultant Services and Supplies policy provides guidance in implementing the purchase of non-consultant services and supplies as addressed in Section IV of the SCAQMD Procurement Policy and Procedure document.

## BUDGET GLOSSARY

<b>Adopted Budget</b>	The annual budget for the General Fund that has been approved by SCAQMD's Governing Board.
<b>Amended Budget</b>	The adopted budget plus any modifications approved by SCAQMD's Governing Board during the fiscal year.
<b>Appropriation</b>	A specific amount of money authorized by SCAQMD's Governing Board which permits the SCAQMD to incur obligations and to make expenditures of resources.
<b>Budget Advisory Committee</b>	A committee made up of representatives from the business and environmental communities who review and provide feedback on SCAQMD's financial performance and proposed draft budget.
<b>Budgetary Basis of Accounting</b>	A form of accounting used in the budget where encumbered amounts are recognized as cash expenditures.
<b>Balanced Budget</b>	A budget in which planned expenditures do not exceed planned revenues.
<b>Capital Asset</b>	Tangible asset with an initial individual cost of \$5,000 or more and a useful life of at least three years or intangible assets with an individual cost of \$5,000 or more and a useful life of at least one year.
<b>Capital Outlays</b>	Expenditures for capital assets; A Major Object, or classification of expenditures, within SCAQMD's budget.
<b>CPI-Based Fee Increase</b>	Increases to fees (emission, annual operating, permit processing, hot spots, area sources, transportation, source test/analysis, and Hearing Board) based on the change in the Consumer Price Index for the preceding calendar year as reported for California Department of Finance—All Urban Consumer Series. This is in accordance with the California Health and Safety Code §40510.5.
<b>Debt Service</b>	The cost to cover the repayment of interest and principal on a debt for a particular period of time.
<b>Debt Structure</b>	The make-up of long-term debt. SCAQMD's long-term debt has been taken on to fund building and pension obligations.
<b>Designation</b>	Undesignated Fund Balance that has been set aside for specific purposes by actions of SCAQMD's Governing Board.

## BUDGET GLOSSARY

<b>Encumbrance</b>	An amount of money committed for the payment of goods and services that have not yet been received or paid for.
<b>Expenditures</b>	Charges incurred for goods and services.
<b>Fee Schedule</b>	The State Legislature has authorized air districts to levy fees to support industry related programs which improve air quality. The schedule of fees levied by SCAQMD is approved by SCAQMD's Governing Board as part of the annual budget process. (Also see Regulation III.)
<b>Fiscal Year</b>	A period of 12 consecutive months selected to be the budget year. SCAQMD's fiscal year runs from July 1 to June 30.
<b>FTE</b>	Full Time Equivalent; A measure of the level of staffing. One FTE equates to 2,080 hours of paid time within a 12 month period.
<b>Fund Balance</b>	The accumulation of revenues less expenditures within a fund for a specific year. SCAQMD's fund balance is broken out into Reserves, Designations and Undesignated Fund Balance. In accordance with GASB-54, the fund balance is further defined as Committed, Nonspendable, and Assigned.
<b>General Fund</b>	The primary operating fund for SCAQMD where costs and revenues associated with the daily operations of SCAQMD are accounted for.
<b>Grant</b>	A sum of money given by an organization for a particular purpose. SCAQMD's grants which provide funding to the General Fund are primarily received from the Environmental Protection Agency (EPA), the Department of Homeland Security (DHS), and the Department of Energy (DOE).
<b>Major Object</b>	A term representing the classification of SCAQMD's annual budget into three categories: Salary and Employee Benefits, Services and Supplies, and Capital Outlays.
<b>Mobile Source Revenues</b>	Revenues received from motor vehicle registrations and from the administration of motor vehicle programs aimed at reducing air pollution from motor vehicles.
<b>Pension Obligation Bonds (POBs)</b>	A method of financing used by SCAQMD to refinance its obligations to its employees' pension fund.

## BUDGET GLOSSARY

<b>Proposed Draft Budget</b>	The annual budget that has been drawn up by SCAQMD and made available to the public for review but not yet presented to its Governing Board for approval.
<b>Regulation III</b>	The rule that establishes the fee rates and schedules associated with permitting, annual renewals, emissions and other activities that help fund most of SCAQMD's regulatory programs and services. (Also see Fee Schedule.)
<b>Reserves</b>	Funding within the Fund Balance that is set aside for a specific future use and not available for any other purpose.
<b>Revenue</b>	Monies the SCAQMD receives as income. SCAQMD's revenue is mainly from fees charged to control or regulate emissions.
<b>SBCERA</b>	San Bernardino County Employment Retirement System manages the retirement plan for SCAQMD employees.
<b>Salaries and Employee Benefits</b>	Expenditures for Salary expenses and employee, retirement and insurance benefits. It is a Major Object, or classifications of expenditures, within SCAQMD's budget.
<b>Services and Supplies</b>	Expenditures for items and services needed for the daily operations of the SCAQMD including professional services, utilities, office expenses, maintenance, and debt service. It is a Major Object, or classifications of expenditures, within SCAQMD's budget.
<b>Special Revenue Fund</b>	A fund used to account for revenues and expenditures from specific sources earmarked for specific purposes. SCAQMD's main operating fund is its General Fund; All other funds are designated as Special Revenue Funds. The SCAQMD does not budget in Special Revenue Funds.
<b>State Subvention</b>	Assistance provided by the state for a specific purpose. The state of California provides assistance to air districts in recognition that they perform mandated functions such as compliance assistance, planning, and rule development that should be covered by state funding sources.
<b>Stationary Source Fees</b>	Revenues collected from emission fees, permit fees, and annual operating fees to support projects for improving air quality.
<b>Transfer In/Out</b>	A transfer of funds between different funds within SCAQMD. A transfer of cash from the General Fund to a Special Revenue Fund would be a Transfer Out for the General Fund and a Transfer In for the Special Revenue Fund.

## BUDGET GLOSSARY

**Undesignated Fund Balance** Funding within the Fund Balance that is not designated for a specific purpose and can only be used upon approval of SCAQMD's Governing Board.

**Work Programs** Activities carried out by SCAQMD staff. Work Programs are classified into nine Work Program Categories according to the nature of the activity being performed.

# Air Quality Historical Timeline



Photo courtesy of Los Angeles Times Collection, Department of Special Collections, UCLA Library

First recognized episodes of smog occur in Los Angeles in the summer of 1943.

1943

1950

Orange County APCD established.



1966



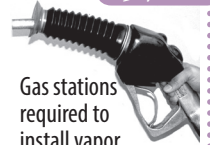
California adopts first automobile tailpipe emission standards in the nation.

1970

Federal Clean Air Act is enacted, establishing the basic U.S. program for controlling air pollution.



1978



Gas stations required to install vapor recovery "boots" on gas nozzles.

1947

Los Angeles County Air Pollution Control District (APCD) established—the first of its kind in the nation.



1957

San Bernardino and Riverside County APCDs formed.



California Air Resources Board (CARB) holds its first meeting with Dr. Arie J. Haagen-Smit as its first chairman.

U.S. EPA, created in 1970, adopts first national air quality standards.

1971

SCAQMD formed through merger of Los Angeles, Orange, Riverside and San Bernardino APCDs.



1968

1977

1984



California's Smog Check program takes effect.

1989

SCAQMD adopts first Air Quality Management Plan to show attainment of clean air standards.



California Global Warming Solutions Act of 2006 (AB 32) enacted to establish first ever comprehensive program to reduce greenhouse gases.

2006

SCAQMD adopts the nation's first phase-out of the toxic chemical perchloroethylene (or "perc") used at dry cleaners.

2002



2014-2027

Projected achievement of current air quality health standards in South Coast air basin.



2008

SCAQMD adopts Climate Change Policy.

1990

Federal Clean Air Act Amendments of 1990 enacted. Established new programs aimed at curbing urban ozone, toxic emissions, and vehicle emissions.

The Carl Moyer Program established to reduce mobile source emissions.

1998

1993

RECLAIM (REgional Clean Air Incentives Market) emissions trading program adopted.



2003

SCAQMD Mow Down Air Pollution Electric Lawnmower Exchange Program begins.



2011

Federal agencies and the State of California establish single timeframe for corporate average fuel economy (CAFE) and greenhouse gas standards for the next generation of cars and light-duty trucks.



SCAQMD establishes ridesharing requirements for region's employers.

1987





**South Coast  
Air Quality Management District**

21865 Copley Drive  
Diamond Bar, CA 91765-4178

[www.aqmd.gov](http://www.aqmd.gov)



South Coast  
**AQMD**

South Coast Air Quality Management District

# Technology Advancement Office



# Clean Fuels Program 2013 Annual Report and 2014 Plan Update

March 2014



# South Coast Air Quality Management District

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Assembly Speaker Appointee

### ***County Representatives***

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Supervisor, Los Angeles County

Shawn Nelson  
Supervisor, Orange County

Josie Gonzales  
Supervisor, San Bernardino County

John J. Benoit\*\*  
Supervisor, Riverside County

### ***State Representatives***

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Senate Rules Committee Appointee

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San Bernardino County Cities

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City of Los Angeles

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Los Angeles County, Eastern Region

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Orange County Cities

Ben Benoit  
Mayor Pro Tem, City of Wildomar  
Riverside County Cities

### ***Executive Officer***

Barry R. Wallerstein, D.Env.

---

\*Technology Committee Members

\*\*Technology Committee Chairman



*South Coast Air Quality Management District  
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## EXECUTIVE SUMMARY

The South Coast Air Quality Management District (SCAQMD) is the air pollution control agency for all of Orange County and the urban portions of Los Angeles, Riverside and San Bernardino counties. This region, which encompasses all of the South Coast Air Basin plus small portions of the Mojave Desert and Salton Sea Air Basins, historically experiences the worst air quality in the nation due to the natural geographic and atmospheric conditions of the region coupled with the high population density and associated mobile and stationary source emissions. Recognizing this challenge, in 1988 the state established the SCAQMD's Clean Fuels Program (along with establishment of the Technology Advancement Office), which affords the SCAQMD the ability to fund the development, demonstration and accelerated deployment of clean technologies. For over 20 years, using funding received through a \$1 motor vehicle registration fee, the Clean Fuels Program has encouraged, fostered and supported technologies such as hydrogen and fuel cells, natural gas engines and infrastructure, battery electric vehicles, plug-in hybrid electric vehicles and related fueling infrastructure. The SCAQMD continues to support a wide variety of technologies, in different stages of maturity, to provide a continuum of emission reductions and health benefits over time.

The Clean Fuels Program is implemented as a public-private partnership in conjunction with private industry, technology developers, academic institutions, research institutions and government agencies.

The overall strategy of the SCAQMD's Clean Fuels Program is based in large part on technology needs identified through the Air Quality Management Plan (AQMP) process and the SCAQMD Board's directives to protect the health of residents in Southern California, which encompasses approximately 16.8 million people (nearly half the population of California). The AQMP is the long-term "blueprint" that defines:

- the basin-wide emission reductions needed to achieve federal ambient air quality standards;
- the regulatory measures to achieve those reductions;
- the timeframes to implement these proposed measures; and
- the technologies required to meet these future proposed regulations.

The 2012 AQMP identifies the need for 200 tons/day oxides of nitrogen (NO<sub>x</sub>) reductions to be adopted by 2020 for full implementation by 2023 and in large part focuses control measures on transportation technologies and cleaner fuels. Moreover, the SCAQMD is currently only one of two regions in the nation recognized as an extreme ozone nonattainment area (the other is San Joaquin Valley). This is especially noteworthy because the largest contributor to ozone is NO<sub>x</sub> emissions, and mobile sources (on- and off-road as well as aircraft and ships) contribute to more than three-fourths of the NO<sub>x</sub> emissions in this region. These emission reduction needs are further identified in a joint SCAQMD, California Air Resources Board (CARB) and San Joaquin Air Pollution Control District effort, "Vision for Clean Air: A Framework for Air Quality and Climate Control Planning."<sup>1</sup> The overwhelming hurdles to reduce ozone and NO<sub>x</sub> will require the Clean Fuels Program to encourage and accelerate advancement of transformative transportation technologies and commercialization of progressively lower-emitting vehicles and fuels. The Program must also remain flexible to address the needs which will be identified during the current planning process for the 2016 AQMP which will focus on addressing ozone standards. Furthermore, volatile organic compounds (VOCs) and fine particulate matter (PM<sub>2.5</sub>) produced from mobile sources must also be addressed. The NO<sub>x</sub> and VOC emission sources of greatest concern to this region are heavy-duty on-road and off-road vehicles as well as to a lesser extent light- and medium-duty on-road vehicles. And while it is anticipated that the

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<sup>1</sup> [http://www.arb.ca.gov/planning/vision/docs/vision\\_for\\_clean\\_air\\_public\\_review\\_draft.pdf](http://www.arb.ca.gov/planning/vision/docs/vision_for_clean_air_public_review_draft.pdf)

2014 standard for PM<sub>2.5</sub> will be attained for this region, it is contingent upon compliance and implementation of existing and proposed rules and regulations.

In recent years, it has become increasingly clear that the effect of containers through the Ports of Los Angeles and Long Beach and the subsequent movement of goods throughout the region not only have a dramatic impact on air quality but also the quality of life to the communities along the major goods movement corridors. In recognition of these impacts, the SCAQMD has initiated a concerted effort in the last couple of years to actively develop and demonstrate zero and near-zero emissions goods movement technologies, such as electric trucks, plug-in hybrid trucks with all-electric range, zero emission container transport technologies, trucks operating from wayside power including catenary technology and heavy-duty technologies.

The prioritization of these types of projects as well as potential technologies which assist with their further development and deployment are emphasized in the 2014 Plan Update portion of the report. The 2013 Annual Report highlights the projects contracted during the previous calendar year and reflects the current status of the program.

## 2013 Annual Report

During Calendar Year (CY) 2013 the SCAQMD executed 45 new contracts, projects or studies and modified 3 continuing projects adding additional dollars toward research, development, demonstration and deployment (RDD&D) of alternative fuel and clean fuel technologies. Table 2 (page 24) lists these 48 projects or studies, which are further described in this report. The SCAQMD Clean Fuels Program contributed approximately \$7.5 million in partnership with other governmental organizations, private industry, academia and research institutes, and interested parties, with total project costs of nearly \$23.3 million. Table 3 (page 26) provides information on outside funding received into the Clean Fuels Fund (approximately \$2 million in 2013) as cost-share for the contracts executed in CY 2013. Table 4 (page 26) provides a comprehensive summary of federal and state revenue awarded to the SCAQMD during CY 2013 (\$15.8 million) for projects to be included within the Clean Fuels Program or which align well with and are complementary to the Clean Fuels Program. Table 5 (page 27) provides a comprehensive summary of federal and state revenue awarded to SCAQMD during CYs 2009 through 2012 (nearly \$111 million); some of these projects were undertaken as part of the Clean Fuels Program, while some of the revenue was recognized into other special funds but similar to those reflected in Table 4 align well and are complementary to the Clean Fuels Program.

The projects or studies executed in 2013 addressed a wide range of issues and opportunities with a diverse mix of advanced technologies. The following core areas of technology advancement include:

- Electric and Hybrid Vehicle Technologies and Related Infrastructure (emphasizing electric and hybrid electric trucks and zero emission container transport technologies)
- Hydrogen and Mobile Fuel Cell Technologies and Infrastructure
- Engine Systems (particularly heavy-duty natural gas engines for truck and rail applications)
- Fueling Infrastructure and Deployment (predominantly compressed and liquid natural gas)
- Fuels and Emission Studies
- Health Impacts Studies
- Stationary Clean Fuels Technology (including renewables)
- Emission Control Technologies
- Outreach and Technology Transfer

During CY 2013, the SCAQMD supported a variety of projects and technologies, ranging from near-term to long-term research, development, demonstration and deployment activities. This “technology portfolio” strategy provides the SCAQMD the ability and flexibility to leverage state and federal

funding while also addressing the specific needs of the South Coast Air Basin (Basin). Projects in CY 2013 included continued development and demonstration of electric and hybrid technologies with an emphasis on zero emission goods movement technologies, development and demonstration of heavy-duty natural gas engines and vehicles and development and demonstration of hydrogen technologies and infrastructure.

As of January 1, 2014, there were 124 open contracts in the Clean Fuels Program; these are summarized in Appendix B.

Twenty four research, development, demonstration and deployment projects or studies and 13 technology assessment and transfer contracts were completed in 2013, as listed in Table 6 (page 51). Appendix C comprises two-page summaries of the technical projects completed in 2013. In accordance with California Health and Safety Code Section 40448.5.1(d), this report must be submitted to the state legislature by March 31, 2014, after approval by the SCAQMD Governing Board.

## 2014 Plan Update

Every year TAO staff re-evaluates the Clean Fuels Program (Program) to craft a Plan Update which essentially serves to re-calibrate the compass. The Program continually seeks to support the deployment of lower-emitting technologies. The design and implementation of the Program Plan must balance the needs in the various technology sectors with technology readiness, emissions reduction potential and co-funding opportunity. The SCAQMD Program is significant, especially during these economically tough times when both public and private funding available for technology research and development are limited. However, since national and international activities affect the direction of technology trends, the real challenge for the SCAQMD is to identify project or technology opportunities in which its available funding can make a significant difference in deploying progressively cleaner technologies in the Basin. The SCAQMD employs a number of outreach and networking activities to overcome this challenge, ranging from intimate involvement with state and federal collaboratives, partnerships and industrial coalitions to issuing Program Opportunity Notices to essentially throw out a wide net to solicit project ideas and concepts and Requests for Information to determine the state of various technologies and what is needed to advance those technologies.

As mentioned, the overall strategy is based in large part on technology needs identified in the SCAQMD's AQMP and the SCAQMD Governing Board's directives to protect the health of residents in the Basin. The NO<sub>x</sub>, volatile organic compounds (VOC) and PM emission sources of greatest concern are heavy-duty on-road vehicles, light-duty on-road vehicles and off-road equipment.

The Plan Update includes projects to develop, demonstrate and commercialize a variety of technologies, from near term to long term, that are intended to provide solutions to the emission control needs identified in the 2012 AQMP. While modest NO<sub>x</sub> and PM<sub>2.5</sub> reductions will be necessary to meet the federal PM<sub>2.5</sub> standards by 2014, significant NO<sub>x</sub> and PM<sub>2.5</sub> reductions will be necessary to meet the federal 8-hour ozone standard of 80 ppb by 2023 and 75 ppb by 2032; the 1-hour ozone standard of 0.125 ppm by 2022, which must be met as a result of a 2012 court case even though EPA had previously revoked this standard; and the newly revised federal annual PM<sub>2.5</sub> standard of 12 µg/m<sup>3</sup>. Given the need for these significant reductions over the next 10-20 year timeframe, mid- and longer-term alternative fuels, hybrid, electric and fuel cell based technologies are emphasized. Several of the technology areas of focus include:

- reducing emissions from port-related activities, such as cargo handling equipment and container movement technologies, including demonstration and deployment of zero emission cargo container movement systems;

- mitigating criteria pollutant increases from renewable fuels, such as low-blend ethanol and high-blend biodiesel;
- increased activities in electric, hybrid, battery and plug-in hybrid technologies across light-, medium- and heavy-duty platforms; and
- production of transportation fuels and energy from renewable biowaste sources.

Table 7 lists the potential projects across the core technologies identified in this report. Potential projects for 2014 total more than \$16.4 million, with anticipated leveraging of nearly \$76 million. The proposed projects may also be funded by revenue sources other than the Clean Fuels Program, especially VOC and incentive projects.

# CLEAN FUELS PROGRAM 2013 ANNUAL REPORT

## Program Background

The Basin, which comprises the Los Angeles, Orange, San Bernardino and Riverside Counties, has the worst air quality in the nation due to a combination of factors, including high vehicle population, high vehicle miles traveled within the Basin and geographic and atmospheric conditions favorable for photochemical oxidant (smog) formation. Due to these challenges, the state legislature enabled the SCAQMD to implement the Clean Fuels Program to accelerate the implementation and commercialization of clean fuels and advanced technologies in the Basin. In 1999, state legislation was passed which amended and extended the Clean Fuels Program. Specifically, as stated in the California Health and Safety Code (H&SC) section 40448.5.1(d), the SCAQMD must submit, on or before March 31 of each year, to the Legislature an annual report that includes:

1. A description of the core technologies that the SCAQMD considers critical to ensure attainment and maintenance of ambient air quality standards and a description of the efforts made to overcome barriers to commercialization of those technologies;
2. An analysis of the impact of the SCAQMD's Clean Fuels Program on the private sector and on research, development and commercialization efforts by major automotive and energy firms, as determined by the SCAQMD;
3. A description of projects funded by the SCAQMD, including a list of recipients, subcontractors, co-funding sources, matching state or federal funds and expected and actual results of each project advancing and implementing clean fuels technology and improving public health;
4. The title and purpose of all projects undertaken pursuant to the Clean Fuels Program, the names of the contractors and subcontractors involved in each project and the amount of money expended for each project;
5. A summary of the progress made toward the goals of the Clean Fuels Program; and
6. Funding priorities identified for the next year and relevant audit information for previous, current and future years covered by the project.

## 2013 Overview

This report summarizes the progress of the SCAQMD Clean Fuels Program for CY 2013. This SCAQMD program co-sponsors projects to develop and demonstrate zero, near-zero and low emission clean fuels and advanced technologies and to promote commercialization and deployment of promising or proven technologies in Southern California. These projects are conducted through public-private partnerships with industry, technology developers, academic and research institutes and local, state and federal agencies.

During the period between January 1 and December 31, 2013, the SCAQMD executed 45 new contracts, projects or studies and modified 3 continuing projects adding additional dollars during CY 2013 that support clean fuels and advanced zero, near-zero and low emission technologies. The SCAQMD Clean Fuels Program contribution for these projects was approximately \$7.5 million, with total project costs of more than \$23 million. These projects address a wide range of issues with a diverse technology mix. This report highlights achievements and summarizes project costs of the SCAQMD Clean Fuels Program in this period. The report also provides information on outside funding received into the Clean Fuels Fund (approximately \$2 million) as

cost-share for contracts executed in this period as well as funds awarded to the SCAQMD for projects to be included in the Clean Fuels Program or which align well and are complementary to the Clean Fuels Program (\$15.8 million in 2013). A comprehensive summary update on the nearly \$111 million in federal and state funding awarded to the SCAQMD between 2009 and 2012, again for projects that were included as part of the Clean Fuels Program or which align well and are complementary with the Clean Fuels Program, is also provided. The SCAQMD will continue to pursue federal and state funding opportunities in 2014 to amplify leverage.

## The Need for Advanced Technologies & Clean Fuels

Achieving federal and state clean air standards in Southern California will require emission reductions from both mobile and stationary sources beyond those expected using current technologies. The need for advanced technologies and clean fuels is best illustrated by Figure 1 below, which identifies NO<sub>x</sub> emissions by category and identifies just how far those emissions must be reduced to meet federal standards by 2023 and 2032.

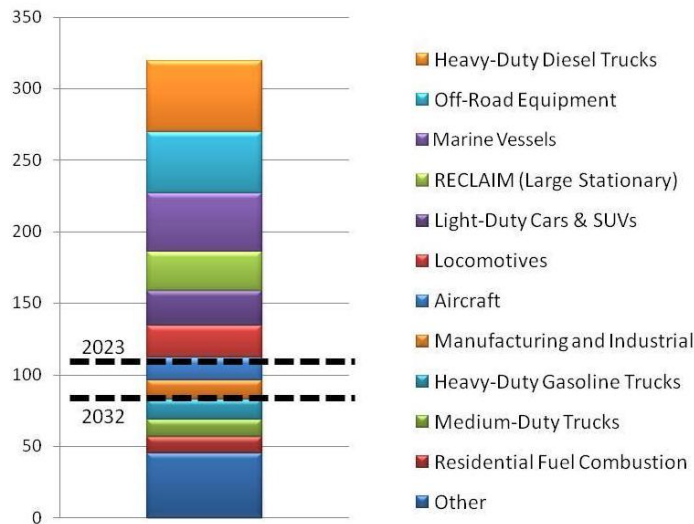


Figure 1: 2013 NO<sub>x</sub> Emissions by Category

Additionally, the following piechart reflects NO<sub>x</sub> contributors by sector, sharply illustrating the impact of mobile sources on air quality and why the 2012 AQMP calls for the reduction of 200 tons/day of NO<sub>x</sub> by 2020 as well as why this region is recognized as an extreme ozone nonattainment area.

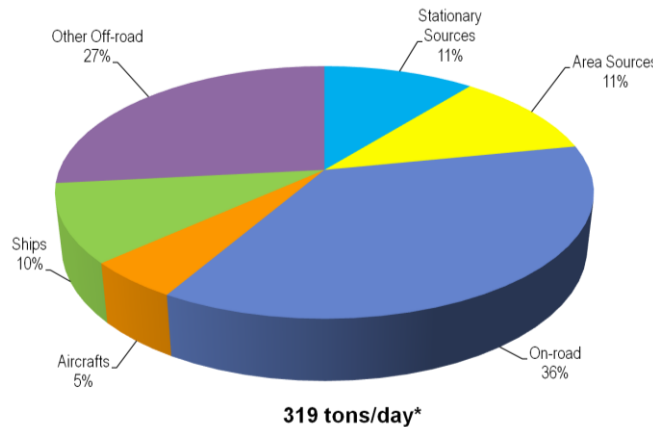


Figure 2: NO<sub>x</sub> Contributors by Sector

To fulfill long-term emission reduction targets, the 2012 AQMP relies on a mix of currently available technology as well as the expedited development and demonstration of advanced technologies that are not yet ready for commercial use. Significant reductions are anticipated from implementation of advanced control technologies for both on-road and off-road mobile sources. In addition, the air quality standards for ozone (0.08 ppm, 8-hour average) and fine particulate matter, promulgated by the U.S. Environmental Protection Agency (U.S. EPA) in 1997 and 2006, are projected to require additional long-term control measures for both NO<sub>x</sub> and VOC. The 2012 AQMP's estimate of needed NO<sub>x</sub> reductions will require the SCAQMD Clean Fuels Program to encourage and accelerate advancement of cleaner, transformative transportation technologies that can be used as control strategies in the AQMP.

Recent health studies also indicate a greater need to reduce NO<sub>x</sub> emissions and toxic air contaminant emissions. More importantly, the CARB listed diesel exhaust emissions as a toxic air contaminant in 1998. Subsequently, in 1999, the SCAQMD completed the Multiple Air Toxics Exposure Study (MATES-II) and found that diesel combustion sources (primarily from heavy-duty vehicles) contribute approximately 70 percent to the estimated potential cancer risk from air toxics in the Basin. A follow-on study, MATES-III, in which air quality sampling was initiated in spring 2004 and ended in 2006, was undertaken to evaluate air toxic exposure trends, expand the list of known air toxics and assess local impacts from industrial, commercial and mobile sources. The results have shown a decrease in stationary emitted air toxics and gasoline related air toxics, but continued high levels of emissions from diesel engine sources. The MATES-III report was finalized in spring 2008. Although results showed an overall decrease in toxics exposures throughout the basin, there were localized areas that had increased risk, most notably around the Ports of Los Angeles and Long Beach. This increased risk is likely a result of uncontrolled diesel emissions from goods movement activities, specifically emissions from trucks and cargo handling equipment, locomotives and marine vessels. A MATES IV study was launched in 2012, and while the goal of MATES IV, like the prior studies, will be to assess air toxic levels, update risk characterization, and determine gradients from selected sources, MATES IV has an added ultrafine PM and black carbon monitoring component as well. It is anticipated that a draft report on the findings will be available by mid-2014.

Greenhouse gas (GHG) emissions and petroleum dependency arising from the heavy use of conventional technologies continue to be a concern and focal point for state and federal government as well as the general public. In response to these concerns, the federal government has launched several programs (the Hydrogen, Fuel Cells and Infrastructure Technologies Program and the FreedomCAR and Vehicle Technologies Program) to investigate and develop increased efficiency and alternative fuel (including hydrogen) technologies. Independently, the State has adopted goals to reduce long-term dependence on petroleum-based fuels (AB 2076) and the transition to alternative fuels based on life-cycle analyses (AB 1007).

The Global Warming Solutions Act of 2006 (AB 32) requires California's greenhouse gas emissions to be capped at 1990 levels by 2020. The 2007 Low-Carbon Fuel Standard (LCFS) for transportation fuels will necessitate increased research into alternatives to oil and traditional fuels. And in September 2008, SB 375 was adopted requiring CARB to set regional targets reducing GHG's from cars and light trucks by 2020 and 2035 and directs regional planning agencies to develop land-use strategies to meet the targets. In 2012 California Governor Brown also set a California target for reductions of GHG emissions from the transportation sector of 80 percent less than 1990 levels by 2050 and called for establishment of benchmarks for the penetration of zero emission vehicles and infrastructure for 2015, 2020 and 2025. Governor Brown's FY 2013-14 state budget also consolidates programs funding bicycle, pedestrian and mitigation projects to fund high-priority projects that reduce GHGs consistent with SB 375 objectives. The budget also



identifies areas for AB 32 cap-and-trade proceeds including reducing transportation emissions and energy efficiency projects for the electricity and commercial/residential energy sector.

To achieve the goals established by these landmark efforts, in 2012 CARB adopted a LEV III program for Model Year (MY) 2015 to 2025 light- and medium-duty vehicles, amended the Zero Emission Vehicle Regulation and amended the Clean Fuels Outlet requirements. These tighter standards for passenger cars and light- and medium-duty trucks will require reduced tailpipe emissions and nearly no evaporative emissions. CARB also proposed new requirements for zeroemission vehicles lowering the threshold requirement, which means automakers must begin producing zero emission vehicles by 2016. To achieve the Governor's Executive Order, CARB envisions that 80 percent of vehicles must be all electric, battery electric, hydrogen and/or fuel cell by 2050. In late 2011 CARB also adopted amendments to low-sulfur marine fuel requirements to extend the nautical zone and loosened cargo handling equipment and transportation refrigeration regulations because sufficient retrofit technologies aren't available in the marketplace. In 2011 the Federal government adopted fuel economy and GHG emissions standards for medium- and heavy-duty vehicles for MYs 2014-2018 and propose to move forward with Tier 3 levels for light- and medium-duty trucks and tighter criteria pollutant standards for passenger vehicles.

In summary, advanced, energy efficient and renewable technologies are needed not only for attainment, but also to protect the health of those who reside within the SCAQMD's jurisdiction; to reduce long-term dependence on petroleum-based fuels; and to support a more sustainable energy future. Conventional strategies and traditional supply and consumption need to be retooled in order to achieve the federal air quality goals. To help meet this need for advanced, clean technologies, the SCAQMD Governing Board continues to aggressively carry out the Clean Fuels Program and promote alternative fuels through its Technology Advancement Office (TAO).

This Program is intended to assist in the rapid development and deployment of progressively lower-emitting technologies and fuels through innovative public-private partnership. Since its inception, SCAQMD's TAO has co-funded projects in cooperative partnerships with private industry, technology developers, academic and research institutions and local, state and federal agencies. The following sections describe funding, core technologies and advisory oversight of the Clean Fuels Program.

## Program Funding

The Clean Fuels Program is established under California H&SC Sections 40448.5 and 40512 and Vehicle Code Section 9250.11. This legislation establishes mechanisms to collect revenues from mobile and stationary sources to support the program objectives and identifies the constraints on the use of funds. In 2008, these funding mechanisms were reauthorized under SB 1646 (Padilla), which removed the funding sunset of January 1, 2010, and established the five percent administrative cap instead of the previous cap of two-and-half percent.

The Program is funded through a \$1 fee on motor vehicles registered in the SCAQMD. Revenues collected from these motor vehicles must be used to support mobile source projects. Stationary source projects are funded by an emission fee surcharge on stationary sources emitting more than 250 tons of pollutants per year within the SCAQMD. For CY 2013 the funds available through each of these mechanisms were as follows:

- Mobile sources (DMV revenues) \$12,433,490
- Stationary sources (emission fee surcharge) \$275,708

The SCAQMD Clean Fuels Program also receives grants and cost-sharing revenue contracts from various agencies, on a project-specific basis, that supplement the SCAQMD program. Historically, such cooperative project funding revenues have been received from CARB, the CEC, the U.S. EPA, the U.S. Department of Energy (DOE) and the U.S. Department of Transportation (DOT). These supplemental revenues depend in large part on the originating agency, its budgetary and planning cycle and the specific project or intended use of the revenues. Table 3 (page 26) lists supplemental grants and revenues totaling more than \$2 million for contracts executed in CY 2013. Table 4 (page 26) lists federal and state revenue totaling more than \$15.8 million awarded to the SCAQMD in 2013 for projects that will be part of the Clean Fuels Program or align well and complement the Clean Fuels Program.

The final and perhaps most significant funding source can best be described as an indirect source, i.e., funding not directly received by the SCAQMD. This indirect source is the cost-sharing provided by private industry and other public and private organizations. Historically, the Technology Advancement Office has been successful in leveraging its available public funds with \$3 to \$4 of outside funding for each \$1 of SCAQMD funding. For 2013, excluding ARRA and other one-time federal opportunities, one-time settlement funds and incentive funding, the Clean Fuels Program leveraged each \$1 to slightly more than \$3 of outside funding. Through these public-private partnership, the SCAQMD has shared the investment risk of developing new technologies along with the benefits of expedited development and commercial availability, increased end-user acceptance, reduced emissions from the demonstration projects and ultimately increased use of clean technologies in the Basin. The SCAQMD's Clean Fuels Program has also avoided duplicative efforts by coordinating and jointly funding projects with major funding agencies and organizations. The major funding partners for 2013 are listed in Table 1 (page 14).

## Core Technologies

Given the diversity of sources that contribute to the air quality problems in the Basin, there is no single technology or "Silver Bullet" that can solve all of the problems. A number of technologies are required and these technologies represent a wide range of applications, with full emissions benefit "payoffs," i.e., full commercialization and mass deployment occurring at different times. The broad technology areas of focus – the "Core Technologies" – for the Clean Fuels Program are as follows:

- Electric and Hybrid Vehicle Technologies and Infrastructure (emphasizing electric and hybrid electric trucks and zero emission container transport technologies)
- Hydrogen and Fuel Cell Technologies and Infrastructure
- Infrastructure and Deployment (predominantly compressed and liquid natural gas)
- Engine Systems (particularly heavy-duty natural gas engines for truck and rail applications)
- Emission Control Technologies
- Fuels/Emissions Studies
- Health Impacts
- Stationary Clean Fuels Technologies

The SCAQMD continually seeks to support the deployment of lower-emitting technologies. The Clean Fuels Program is shaped by two basic factors:

1. Low and zero emission technologies needed to achieve clean air standards in the Basin; and

2. Available funding to support technology development within the constraints imposed by that funding.

The SCAQMD strives to maintain a flexible program to address dynamically evolving technologies and the latest progress in the state of the technology. Although the SCAQMD program is significant, especially at a time when both public and private funding available for technology research and development are limited, national and international activities affect the direction of technology trends. As a result, the SCAQMD program must be flexible in order to leverage and accommodate these changes in state, national and international priorities. This is especially true given the current economic climate which while in the beginnings of recovery remains sluggish. The ultimate challenge for the SCAQMD is to identify project or technology opportunities in which its available funding can make a difference in achieving progressively cleaner air in the Basin. While employing a number of creative outreach and networking activities to try to overcome these challenges, SCAQMD's Technology Advancement Office annually develops a comprehensive plan to encourage and accelerate the development and demonstration of cleaner technologies. This comprehensive plan (referred to as the 2014 Plan Update within this document) essentially re-calibrates the Clean Fuels Program for the upcoming year.

Historically, mobile source projects have targeted low emission developments in automobiles, transit buses, medium- and heavy-duty trucks and non-road applications. These vehicle-related efforts have focused on advancements in engine design, electric power-trains and energy storage/conversion devices (e.g., fuel cells and batteries); and implementation of clean fuels (e.g., natural gas, propane and hydrogen) including their infrastructure development. Stationary source projects have included a wide array of advanced low NO<sub>x</sub> technologies and clean energy alternatives such as fuel cells, solar power and other renewable energy systems.

Specific projects are selected for co-funding from competitive solicitations, cooperative agency agreements and unsolicited proposals. Criteria considered in project selection include emissions reduction potential, technological innovation, potential to reduce costs and improve cost effectiveness, contractor experience and capabilities, overall environmental impact or benefit, commercialization and business development potential, cost sharing and consistency with program goals and funding constraints. The core technologies for the SCAQMD programs that meet both the funding constraints as well as 2012 AQMP needs for achieving clean air are briefly described below.

### **Electric and Hybrid Vehicle Technologies and Infrastructure**

There has been an increased level of activity and attention on electric and hybrid vehicles due to a confluence of factors, including the highly successful commercial introductions of hybrid passenger vehicles and more recently electric vehicles by almost all of the automakers, volatility in oil prices and increased public attention on global warming. In January 2012, CARB adopted the California Zero Emission Vehicle (ZEV) III requirements and amended the ZEV and Clean Fuels Outlet (CFO) regulations. There are alternative strategies allowed to comply with the ZEV regulation, including producing battery electric vehicles, plug-in hybrid electric vehicles (PHEVs), and hydrogen-fueled internal combustion engine (ICE) vehicles.

As a result, there is now a window of opportunity to leverage state and federal activities in the development and deployment of technologies that can accelerate advanced electric and hybrid technologies, including PHEV, medium- and heavy-duty hybrid vehicle deployment, energy storage technologies, development of medium- and heavy-duty hybrid emission certification cycles, battery durability testing and establishment of driver use patterns. Such technology

developments, if successful, are considered *enabling* because they can be applied to a variety of fuels (e.g., gasoline, natural gas, ethanol and hydrogen) and propulsion systems (e.g., ICEs and fuel cells). Electric and hybrid technologies are also being explored to address one of the SCAQMD's 2013 and 2014 priorities, which is to continue demonstration and deployment of zero emission cargo container movement technologies.

## **Infrastructure and Deployment**

A key element for the widespread acceptance and resulting increased use of alternative fueled vehicles is the availability of the supporting refueling infrastructure. The refueling infrastructure for gasoline and diesel fuel is well established and accepted by the driving public. Alternative, clean fuels such as alcohol-based fuels, propane, hydrogen, hydrogen-natural gas mixtures and even electricity are much less available or accessible, whereas natural gas has recently become more readily available in light of fracking technologies being employed to access the abundant shale gas deposits throughout North America. Nonetheless, to realize emissions reduction benefits, alternative fuel infrastructure must be developed in tandem with the growth in alternative fueled vehicles. The objectives of the SCAQMD are to expand the infrastructure to support zero and near-zero emission vehicles through the development, demonstration and installation of alternative fuel vehicle refueling technologies. However, this category is predominantly targeted at compressed and liquid natural gas infrastructure and deployment, with the related infrastructure for electric and hybrid and hydrogen and fuel cell included within their technology category.

## **Hydrogen and Fuel Cell Technologies and Infrastructure**

Most of the automobile manufacturers have conceded that mass commercial introduction of fuel cell vehicles (FCVs) are likely to be delayed due to the cost, durability and infrastructure issues associated with hydrogen fueling. A survey of the major automakers conducted by the California Fuel Cell Partnership (CaFCP) estimates that there will be approximately 53,000 fuel cell vehicles by 2017, if sufficient hydrogen infrastructure is available. The SCAQMD continues to support the infrastructure required to refuel these demonstration fuel cell vehicles, but is also actively engaged in finding alternatives to the costly and potential longer term fuel cell power plant technology. As mentioned previously, plug-in hybrid technology could help enable fuel cells by reducing the capacity, complexity and cost of the fuel cell vehicle system. Further bridging technologies being investigated are hybrid or plug-in hybrid hydrogen ICE vehicles and hydrogen-CNG blended ICE vehicles.

## **Emission Control Technologies**

This broad category refers to technologies that could be deployed on existing mobile sources, aircraft, locomotives, marine vessels, farm and construction equipment, cargo handling equipment, industrial equipment, and utility and lawn-and-garden equipment. The in-use fleet comprises the majority of emissions, especially the older vehicles and non-road sources, which are typically uncontrolled and unregulated, or controlled to a much lesser extent than on-road vehicles. The authority to develop and implement regulations for retrofit on-road and non-road mobile sources lies primarily with the U.S. EPA and CARB and to a lesser extent with the SCAQMD.

Low emission and clean-fuel technologies that appear promising for on-road mobile sources should be effective at reducing emissions from a number of non-road sources. For example, immediate benefits are possible from particulate traps, selective catalytic reduction (SCR) and

emulsified fuels that have been developed from diesel applications. Clean fuels such as natural gas, propane, hydrogen and hydrogen-natural gas mixtures may also provide an effective option to reduce emissions from some non-road applications. Reformulated gasoline, ethanol and alternative diesel fuels, such as biodiesel and gas-to-liquid (GTL), also show promise when used in conjunction with advanced emissions controls and new engine technologies. The CARB, U.S. EPA and the SCAQMD have also promulgated regulations that lower the sulfur content of diesel fuels, which provides a direct fuel related PM reduction and improves the efficiency of particulate reduction aftertreatment devices.

## **Engine Systems**

Medium- and heavy-duty on-road vehicles contributed approximately 36 percent of the Basin's NO<sub>x</sub> based on 2007 AQMP data. More importantly, on-road heavy-duty diesel engines contributed almost 60 percent of the on-road mobile source PM<sub>2.5</sub>, which has known toxic effects. These figures notably do not include the significant contribution from off-road mobile sources. In fact, CARB's off-road 2006 emission model estimates that diesel-powered off-road construction equipment alone emits 120 tons per day of NO<sub>x</sub> and 7.5 tons per day of PM emissions in the Basin. Clearly, significant emission reductions will be required from mobile sources, especially from the heavy-duty sector, to attain the federal clean air standards.

The use of alternative fuels in heavy-duty vehicles can provide significant reductions in NO<sub>x</sub> and particulate emissions. The current NO<sub>x</sub> emissions standard for heavy-duty engines is 0.2 g/bhp-hr. The SCAQMD, along with various local, state and federal agencies, continues to support the development and demonstration of alternative fueled heavy-duty engine technologies, using compressed natural gas (CNG) and liquefied natural gas (LNG), for applications in heavy-duty transport trucks, transit and school buses, rail operations, and refuse collection and delivery vehicles to meet future federal emission standards.

## **Stationary Clean Fuel Technologies**

Given the limited funding available to support low emission stationary source technology development, this area has historically been limited in scope. To gain the maximum air quality benefits in this category, higher polluting fossil fuel-fired electric power generation needs to be replaced with clean renewable energy resources or other advanced near zero-emission technologies, such as solar, wind, geo-thermal energy, bio-mass conversion and stationary fuel cells. Although combustion sources are lumped together as stationary, the design and operating principles vary significantly and thus also the methods and technologies for control of their emissions. Included in the stationary category are boilers, heaters, gas turbines and reciprocating engines. Boilers and heaters vary in size, heat input, process conditions and operating ranges. Gas turbines vary greatly in size and application and are typically natural gas-fired with add-on controls to clean up the flue gas. Stationary ICEs can be either rich-burn or lean-burn. The core technologies for this category focus on using advanced combustion processes, development of catalytic add-on controls, alternative fuels and technologies and stationary fuel cells in novel applications.

## **Program Review**

In 1990, the SCAQMD initiated an annual review of its technology advancement program by an external panel of experts. That external review process has evolved, in response to SCAQMD policies and legislative mandates, into two external advisory groups. The Technology Advancement Advisory Group (one of six standing Advisory Groups that make up the SCAQMD

Advisory Council) is made up of stakeholders representing industry, academia, regulatory agencies, the scientific community and environmental impacts. The Technology Advancement Advisory Group serves to:

- Coordinate the SCAQMD program with related local, state and national activities;
- Review and assess the overall direction of the program; and
- Identify new project areas and cost-sharing opportunities.

In 1999, the second advisory group was formed as required by SB 98 (Alarcon). Under H&SC Section 40448.5.1(c), this advisory group must comprise 13 members with expertise in clean fuels technology and policy or public health and appointed from the scientific, academic, entrepreneurial, environmental and public health communities. This legislation further specified conflict-of-interest guidelines prohibiting members from advocating expenditures towards projects in which they have professional or economic interests. The objectives of the SB 98 Clean Fuels Advisory Group are to make recommendations regarding projects, plans and reports, including approval of the required annual report prior to submittal to the SCAQMD Governing Board. Also in 1999, in light of the formation of the Clean Fuels Advisory Group, the SCAQMD also revisited the charter and membership of the Technology Advancement Advisory Group to ensure their functions would complement each other.

On an as-needed basis, changes to the composition of the Clean Fuels Advisory Group are reviewed by the SCAQMD Board while changes to the Technology Advancement Advisory Group are reviewed by the SCAQMD Board's Technology Committee. In 2012 membership changes were considered and approved by the SCAQMD Board on May 4, 2012. Subsequent membership changes to both advisory groups will be considered by the SCAQMD Board and its Technology Committee, respectively, as part of consideration of the 2013 Annual Report and 2014 Plan Update. The current proposed members of the SB 98 Clean Fuels Advisory Group and Technology Advancement Advisory Group are listed in Appendix A.

The review process of the Clean Fuels Program now includes at least two full-day retreats of the two Advisory Groups, review by other technical experts, review by the Technology Committee of the SCAQMD Governing Board, a public hearing of the Annual Report and Plan Update before the full SCAQMD Governing Board and finally submittal of the Annual Report to the Legislature by March 31 of every year.

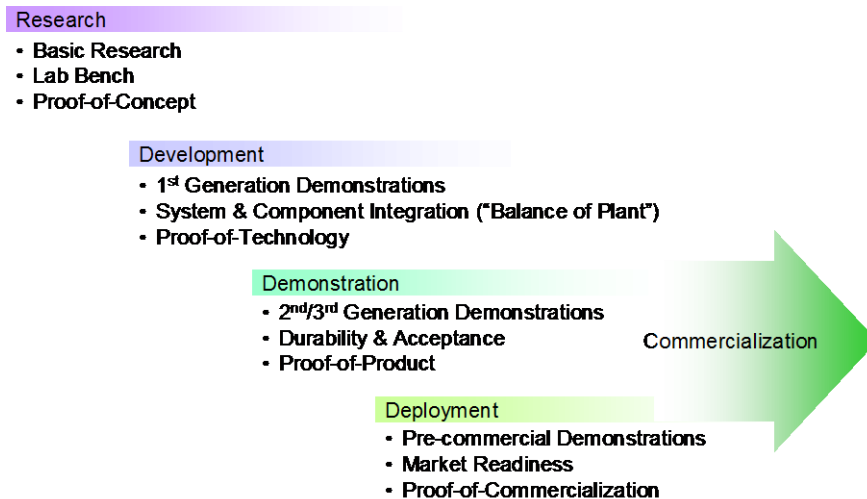


## PROGRAM STRATEGY AND IMPACT

### Scope and Benefits of the Clean Fuels Program

To reap the maximum emissions benefits from any technology, widespread deployment and thus end-user acceptance must occur. The product manufacturers must overcome technical and market barriers to ensure a competitive and sustainable business. Unfortunately, the time needed to overcome these barriers can be long and the costs high, which tends to discourage both manufacturers and end-users from considering advanced technologies. A combination of real-world demonstrations, education, outreach and regulatory impetus and incentives is necessary to catalyze new, clean technologies. The Clean Fuels Program addresses these needs by co-funding research, development, demonstration and deployment projects to share the risk of emerging technologies with their developers and eventual users.

Figure 3 provides a conceptual design of the wide scope of the Clean Fuels Program. As mentioned in the Core Technologies section, various stages of technology projects are funded not only to provide a portfolio of emissions technology choices but to achieve emission reduction benefits in the nearer as well as over the longer term.



**Figure 3: Stages of Clean Fuels Program Projects**

Due to the nature of these advanced technology research, development, demonstration and deployment projects, the benefits are difficult to quantify since their full emission reduction potential may not be realized until sometime in the future, or perhaps not at all if displaced by superior technologies. Nevertheless, a good indication of the impact and benefits of the Clean Fuels Program overall is provided by this selective list of sponsored projects that have resulted in commercialized products or helped to advance the state-of-the-technology.

- CNG Engine Development for Heavy-Duty Vehicles
  - Emission Solutions: 7.6L (NG)
  - Cummins Westport: C8.3L (CNG, LNG), B5.9L (CNG) L10 (CNG), ISL G 8.9L (CNG, LNG)
  - Westport Power: ISX 15L (LNG), Westport GX 15 L (dual fuel)
  - Detroit Diesel: Series 60G (CNG/LNG), Series 50G (CNG/LNG);



- John Deere: 6068 (CNG), 6081 (CNG);
  - Mack: E7-400G (LNG); and
  - Clean Air Partners/Power Systems (Caterpillar): 3126B (Dual Fuel), C-10 (Dual Fuel), C-12 (Dual Fuel).
- Fuel Cell Development and Demonstrations
- Ballard Fuel Cell Bus (first of its kind);
  - ISE/ThunderPower Fuel Cell Bus;
  - Sunline Transit Agency Advanced Fuel Cell Bus projects;
  - Commercial Stationary Fuel Cell Demonstration with UTC and SoCalGas (first of its kind); and
  - Orange County Sanitation District hydrogen and combined heat and power generation from biogas using molten carbonate fuel cell technology.
- Electric and Hybrid Electric Vehicle Development and Demonstrations
- EPRI hybrid vehicle evaluation study;
  - Hybrid electric vehicle demonstrations with SCE, UC Davis and AC Propulsion;
  - Plug-in Hybrid Electric Van with EPRI, DaimlerChrysler and SCE;
  - Hybrid electric delivery trucks with Azure Dynamics, NREL and FedEx;
  - Plug-in hybrid work truck with Odyne Systems;
  - Proterra battery electric transit bus and fast charging system;
  - Municipal battery electric utility truck;
  - South Bay City Council of Governments' electric vehicle project;
  - EVI/UPS electric truck; and
  - TransPower battery electric heavy-duty truck
- Aftertreatment Technologies for Heavy-Duty Vehicles
- Johnson Matthey and Engelhard trap demonstrations on buses and construction equipment; and
  - Johnson Matthey SCRT and SCCRT NO<sub>x</sub> and PM reduction control devices on heavy-duty on-road trucks.

SCAQMD played a leading or major role in the development of these technologies, but their benefits could not have been achieved without all stakeholders (i.e., manufacturer, end-users and government) working collectively to overcome the technology, market and project-specific barriers encountered at every stage of the research, development, demonstration and deployment process.

## Overcoming Barriers

Commercialization and implementation of advanced technologies come with a variety of real-world challenges and barriers. These include project-specific issues as well as general technology concerns.

### Technology Implementation Barriers

- Viable commercialization path
- Technology price/performance parity with conventional technology
- Consumer acceptance

### Project-Specific Issues

- Identifying a committed demonstration site
- Overall project cost and cost-share using public monies
- Securing the fuel

- Fuel availability/convenience issues
- Certification, safety and regulatory barriers
- Quantifying emissions benefits
- Sustainability of market and technology
- Identifying and resolving real & perceived safety issues
- Quantifying the actual emissions benefits
- Viability of the technology provider

Other barriers include reduced or shrinking research budgets, infrastructure and energy uncertainties and risks, sensitivity to multi-media environmental impacts and the need to find balance between environmental needs and economic constraints. The SCAQMD seeks to address these barriers by establishing relationships through unique public-private partnerships with key stakeholders; e.g., industry, end-users and other government agencies with a stake in developing clean technologies. Partnerships that involve all the key stakeholders have become essential to address these challenges in bringing advanced technologies from development to commercialization.

Each of these stakeholders and partners contributes more than just funding. Industry, for example, can contribute technology production expertise as well as the experience required for compatibility with process operations. Academic and research institutes bring state-of-the-technology knowledge and testing proficiency. Governmental and regulatory agencies can provide guidance in identifying sources with the greatest potential for emissions reduction, assistance in permitting and compliance issues, coordinating of infrastructure needs and facilitation of standards setting and educational outreach. Often, there is considerable synergy in developing technologies that address multiple goals of public and private bodies regarding the environment, energy and transportation.

## Strategy and Impact

The SCAQMD actively seeks additional partners for its program through participation in various working groups, committees and task forces. This participation has resulted in coordination of the SCAQMD program with a number of state and federal government organizations, including CARB, CEC, U.S. EPA and U.S. DOE and several of its national laboratories. Coordination also includes the AB 2766 Discretionary Fund Program administered by the Mobile Source Air Pollution Reduction Review Committee (MSRC), various local air districts, National Association of Fleet Administrators (NAFA), major local transit districts and local gas and electric utilities. The list of organizations with which the SCAQMD coordinates research and development activities also includes organizations specified in H&SC Section 40448.5.1(a)(2).

In addition, the SCAQMD holds periodic meetings with several organizations specifically to review and coordinate program and project plans. For example, the SCAQMD staff meets with CARB staff to review research and development plans, discuss project areas of mutual interest, avoid duplicative efforts and identify potential opportunities for cost-sharing. Periodic meetings are also held with industry-oriented research and development organizations, such as the Manufacturers of Emission Controls Association (MECA), the California Fuel Cell Partnership (CaFCP), the California Stationary Fuel Cell Collaborative and the California Natural Gas Vehicle Partnership (CNGVP). The coordination efforts with these various stakeholders have resulted in a number of co-sponsored projects.

Descriptions of some of the key contracts executed in CY 2013 are provided in the next section of this report. It is noteworthy that most of the projects are co-sponsored by various funding organizations and include the active involvement of manufacturers. Such partnerships are essential to address commercialization barriers and to help expedite the implementation of

advanced low emission technologies. Table 1 below lists the major funding agency partners and manufacturers actively involved in SCAQMD projects for this reporting period. It is important to note that, although not listed, there are many other technology developers, small manufacturers and project participants who make important contributions critical to the success of the SCAQMD program. These partners are identified in the more detailed 2013 Project Summaries (beginning page 31) contained within this report.

**Table 1: SCAQMD Major Funding Partners in CY 2013**

<b>Research Funding Organizations</b>	<b>Major Manufacturers/Providers</b>
California Air Resources Board	Ports of Los Angeles & Long Beach
California Energy Commission	Southern California Gas Company
U.S. & California Departments of Transportation	University of California Riverside/ CE-CERT
U.S. Department of Energy	West Virginia University
U.S. Environmental Protection Agency	

The following two subsections broadly address the SCAQMD’s impact and benefits by describing specific examples of accomplishments and commercial—or near-commercial—products supported by the Clean Fuels Program in CY 2013. Such examples are provided in the following sections on Technology Advancement’s Research, Development and Demonstration projects and Technology Deployment and Commercialization efforts.

### ***Research, Development and Demonstration***

Important examples of the impact of the SCAQMD research and development coordination efforts are: (a) development of hybrid system for Class 7 heavy-duty vehicle applications; (b) development and demonstration of catenary Class 8 trucks; and (c) development, integration and demonstration of heavy-duty natural gas engines and vehicles.

#### **Develop Hybrid System for Class 7 Heavy-Duty Vehicle Applications**

The Capstone project will develop a Class 7 series hybrid refrigeration truck. The series hybrid refrigeration truck will feature up to ten miles of zero “tailpipe” emissions driving, as well as provide auxiliary electric power to the refrigeration unit; thereafter, switching to ultra-low emission series hybrid drive for full purpose duties after the battery has been depleted. The series hybrid drive system includes a diesel-fueled microturbine which is anticipated to yield emissions that are significantly below CARB 2010 standards.

The technology used on this truck is an electric drive series hybrid truck with a microturbine serving as the range extender or auxiliary power unit. The series hybrid architecture allows the electric motor to provide the full motive propulsion force for the vehicle, using on-board energy stored in a lithium ion battery that will be charged from the grid. The electrical energy stored in the on-board battery will also be used to power the refrigeration system for the box unit that will be installed on the vehicle. Upon breaching the battery’s lower state of charge threshold, the microturbine generator will be used to provide power to the vehicle’s DC bus to maintain the battery’s lower state of charge threshold, which will extend the driving range and refrigeration capabilities of the vehicle. The figure below shows a simplified diagram of the major components.

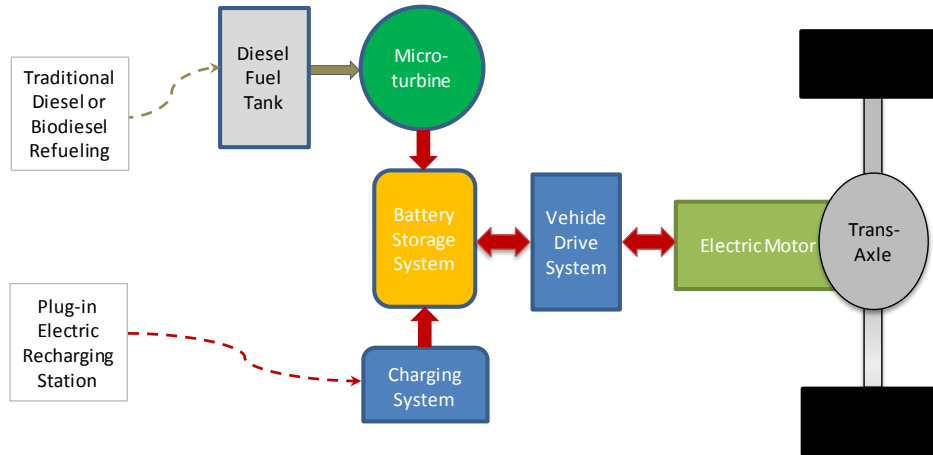


Figure 4: Diagram of the Microturbine Generator's Major Components

The battery storage system in this series hybrid drive system can be recharged or maintained in three ways:

- Utility Power – by plugging the vehicle into the utility grid. The vehicle therefore has some “battery only” range that depends on the size of the battery storage and the drive cycle.
- Microturbine – acting as a range extender, the microturbine can be turned on to recharge the batteries while the vehicle is in use, thereby significantly extending the utilization of the vehicle compared to relying only on the battery storage system.
- Regenerative Braking – the motor and vehicle drive system are able to pass power both to the wheels to propel the truck, but also take power from the wheels to recover a significant amount of the vehicle momentum during braking. Capturing this braking energy can have a significant impact on overall vehicle efficiency, especially in Pickup and Delivery drive cycles that involve a moderate amount of stop and go.

The electric drive system is well suited for trucks with significant auxiliary loads; such as the refrigeration truck being built for this project. The photo below shows the prototype Class 7 hybrid truck with key drive components installed, but prior to the installation of the refrigeration box unit that will be demonstrated as part of this program.

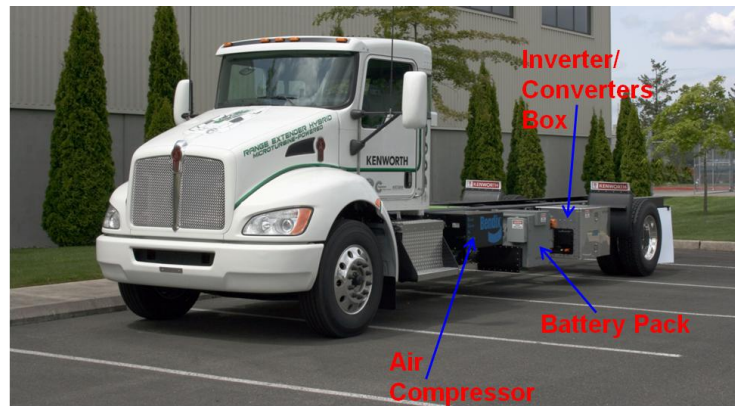


Figure 5: Prototype Class 7 Hybrid Truck

### **Develop and Demonstrate Catenary Class 8 Trucks**

The electrification of transportation technologies has the potential to significantly reduce criteria pollutant and greenhouse gas emissions. This can provide substantial benefits to communities, neighborhoods and school areas where these vehicles operate. The TransPower “ElecTruck” drive system is a zero emission solution that eliminates 100% of the harmful emissions produced by road vehicles, at the point of operation. TransPower has selected port trucks as its initial target market because of the high potential for environmental benefits if these vehicles can be converted to electric propulsion.

TransPower will demonstrate two zero emission battery electric Class 8 truck at the Ports of Los Angeles and Long Beach and intermodal facilities. TransPower will integrate electric drive components into two Class 8 trucks. One truck will be used as a static test vehicle to test new components, and the other will be placed into revenue service carrying cargo containers at the Ports of Los Angeles and Long Beach to intermodal facilities. The battery-electric drive system will utilize high-power drive motors and inverters and energy will be stored in high-energy lithium battery packs. The revenue service vehicle will be operated by a leading drayage firm and closely monitored under real-world operating conditions. In parallel with the initial demonstration, TransPower will work with a subcontractor to develop a power converter using new high-frequency silicon insulated gate bipolar transistors and liquid-cooled heat sinks, leapfrog technologies that offer significant potential benefits including size and weight reductions that will eliminate the need for a separate battery charger.

The “ElecTruck” project has two overarching objectives: (1) to demonstrate a superior electric drive technology for heavy-duty trucks, and (2) to use this demonstration project as a springboard for rapid commercialization of a modular electric drive system. TransPower’s strategy is to develop and demonstrate a reliable electric propulsion system for heavy-duty vehicles and be the first to market with a system sufficiently reliable and cost-effective for everyday use in large trucks. The initial focus will be on the port drayage market, where vehicles have short operating range requirements and where environmental concerns are forcing the ports and others to offer substantial incentives for adoption of clean vehicle technology.



**Figure 6: TransPower Truck at Facility in Poway, CA**

In July 2010, TransPower received a \$1 million grant from the California Energy Commission (CEC), which TransPower and its partners will match with \$1 million in cash and in-kind contributions. This will enable development of the new integrated converter-charger and a high-energy battery pack, and testing of these components in a static test truck.

### **Develop, Integrate and Demonstrate Heavy-Duty Natural Gas Engines and Vehicles**

The SCAQMD Board adopted a series of clean fuel fleet rules to reduce mobile source emissions within the SCAQMD’s regulatory jurisdiction. The fleet rules require certain public entities and special districts, such as air, water, sanitation and school districts, with fifteen or more heavy-duty vehicles to acquire CARB-certified alternative-fueled heavy-duty vehicles when adding new vehicles or forming a new fleet. These rules have helped to advance natural gas engine technology and to expand the natural gas engine market into a wider range of heavy-duty vehicle

applications. Specifically, on-road natural gas engines are now being used on a limited basis as an alternative to diesel engines in transit, refuse and goods movement applications. While the number of natural gas engines has grown, there is still a need to develop natural gas engines in the 11- to 14-liter range to fill the wide array of fleet applications currently served solely by diesel engines. As such, the SCAQMD has been working with NREL, the CEC and Southern California Gas Company (SoCalGas) to accelerate the development, integration and demonstration of natural gas engines ranging in sizes from 11 to 14 liters suitable for transit, refuse and goods movement applications. In 2011, the Board awarded a contract to U.S. DOE's NREL for \$3,055,000 to develop, integrate and demonstrate three different heavy-duty natural gas engines. The three engines will be used in refuse, transit and Class 8 heavy-duty truck applications and comply with the U.S. EPA 2010 heavy-duty emissions standards of 0.01 g/bhp-hr PM and 0.2 g/bhp-hr NO<sub>x</sub>. The contract, executed in the form of modification to NREL's CRADA, was executed in 2013.



**Figure 7: Heavy-Duty Engine**

The first project is with Cummins Westport, Inc. (CWI) to develop and optimize a spark-ignited 11.9-liter ISX12 G CNG engine suitable for refuse and Class 8 applications. CWI successfully completed the project, with development of the ISX12 G engine as a spark-ignited, stoichiometric, cooled exhaust gas recirculation (SI-EGR), natural gas engine certified to the EPA/CARB heavy-duty on-highway 2013 emission standards. CWI commercially launched the ISX12 G engine with ratings up to 350 HP and 1450 lb-ft beginning in mid-April 2013, and with ratings up to 400 HP and 1450 lb-ft in August 2013. This engine is targeted at regional haul tractor and vocational (e.g. refuse collection, concrete mixer) truck customers. The ISX12 G engine also meets EPA greenhouse gas legislated requirements and Engine Manufacturer's Diagnostics (EMD+) certification. The ISX12 G engine met final certification (including Deterioration Factor) at:

- 0.15 g/bhp-hr NO<sub>x</sub> for both EPA and CARB (vs. 0.20 limit)
- 0.03 g/bhp-hr NMHC for both EPA and CARB (vs. 0.14 limit)
- 8.4 g/bhp-hr (EPA) and 8.7g/bhp-hr (CARB) CO (vs. 15.5 limit)
- 0.001 g/bhp-hr (EPA) and 0.003 g/bhp-hr (CARB) PM (vs. 0.01 limit)

The ISX12 G engine is now available as a factory-installed option in a number of Class 8 truck and tractor models from different OEMs including Autocar, Freightliner, Kenworth, Mack, Peterbilt and Volvo.

The second project is Emissions Solutions, Inc., (ESI) to develop engine hardware and controls to convert a 13-liter Navistar diesel engine to a CNG engine. This project has been discontinued because ESI is no longer in business.

Finally, the third project is with Southwest Research Institute (SwRI) to convert an 11-liter Doosan lean-burn engine to a stoichiometric engine and integrate it into a refuse chassis. This project is on-going with an anticipated completion date in 2015.

## Technology Deployment and Commercialization

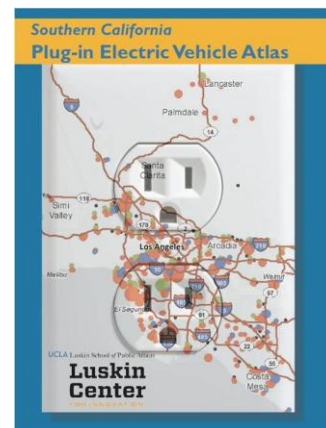
One function of the Clean Fuels Program is to help expedite the deployment and commercialization of low and zero emission technologies and fuels needed to meet the requirements of the AQMP control measures. In many cases, new technologies, although considered “commercially available,” require assistance to fully demonstrate the technical viability to end-users and decision-makers.

The following projects contracted during the CY 2013 reporting period illustrate the impact of the SCAQMD’s technology deployment and commercialization efforts.

### California PEV Readiness Planning

DOE’s Clean Cities Program awarded California \$1 million for PEV infrastructure planning, one of 16 awards nationwide out of a total of \$8.5 million made through the Clean Cities’ Community Readiness and Planning for PEV and Charging Infrastructure. A statewide partnership with SCAQMD, BAAQMD, PEVC, Clean Cities Coalitions in California and other regional entities enabled the state of California to work together towards PEV readiness, with this joint effort being led by SCAQMD. The statewide partnership consisted of six regional collaborations, many of which also received CEC funding on Regional Plans to Support PEV Readiness, designed to support DOE Clean Cities Program funding for PEV infrastructure planning. The South Coast region received three CEC planning grants to support subregional studies by the Coachella Valley Association of Governments, South Bay Cities Council of Governments, and Western Riverside Council of Governments.

The California PEV Readiness Project advanced the state of PEV readiness in California by creating six regional PEV infrastructure plans for the South Coast, Bay Area, San Diego, Sacramento, Central Coast, and San Joaquin Valley regions, and a statewide PEV readiness guidelines document. The California PEV Readiness Collaborative created a PEV readiness toolkit to assist local government agencies in becoming PEV ready. There were six education outreach workshops to communicate the benefits of PEV readiness to local communities. These project elements helped to ensure a unified statewide approach to planning and implementing critical PEV infrastructure activities to support the California PEV market.



**Figure 8: South Coast PEV Atlas of Deployed EV Infrastructure**

As part of the California PEV Readiness Project, the UCLA Luskin Center was engaged by SCAG to develop the South Coast PEV readiness plan through a competitive RFP process. The UCLA Luskin Center has significant expertise on PEV readiness issues and has authored several policy documents, including the PEV market in Los Angeles and addressing challenges to installing infrastructure in multi-unit dwellings. The Southern California PEV Readiness Plan was the winner of the 2013 Planning Excellence Award by the Los Angeles section of the American Planning Association. This supplemental project, executed in 2013 at the request of SCAG, was to develop additional PEV readiness elements for the South Coast PEV readiness plan for the DOE Clean Cities grant, including an analysis of barriers of required and optional PEV readiness elements such as permitting and inspection, training and education, workplace and fleet charging, and multi-unit dwelling charging. It also provides a much needed analysis of two challenge areas

identified by the California PEV Collaborative in multi-unit dwelling and workplace charging, for which two new working groups have been created.

### **Develop Hydrogen Network Investment Plan**

California has committed to transition the light-duty vehicle fleet to electric drive, including both “plug-in” battery electric vehicles (BEVs) and fuel cell electric vehicles (FCEVs), in order to meet long term greenhouse gas, air quality and energy diversity goals. FCEVs, which run on hydrogen gas, are widely accepted as a critical component of this transition. They alone provide the same performance, range and utility as gasoline vehicles, while reducing greenhouse emissions between 50-100 percent, depending on how the hydrogen is made. The leading automakers have committed to fuel cell technology and have announced plans to commercialize FCEVs in the 2015 to 2017 timeframe. The remaining barrier is fueling infrastructure - stations need to be built in advance of the cars to enable automakers to sell the cars to consumers.

State government is providing leadership of the hydrogen transition in many ways, including having provided grants covering 65% of capital costs (up to \$1.5 million per station), in the hope that this will be sufficient to attract these investors. Private stakeholders have not responded to the CEC grant program at the scale or timeframe needed to provide sufficient coverage for the early market FCEV launch. The latest grant solicitation was undersubscribed, and previously awarded stations are taking a long time to open. The Hydrogen Network Investment Plan (HNIP) attempts to explain why. The findings are based on 18 months of detailed stakeholder interaction and lessons from a financial model built by Energy Independence Now (EIN) to understand the economic impacts of a variety of incentives under a range of plausible market scenarios and determine what is needed to stimulate investment in the hydrogen network. Discussion with potential investors show that uncertainty remains high and confidence low, and that funding alone cannot compensate for the current uncertainty about when a large scale, FCEV market will emerge. Given the high operating costs of stations, early station investors face possible long, negative financial cash flows as they wait for cars to appear, capital costs-aside. At the same time, automakers fear these stations might close before they have time to get cars to market.

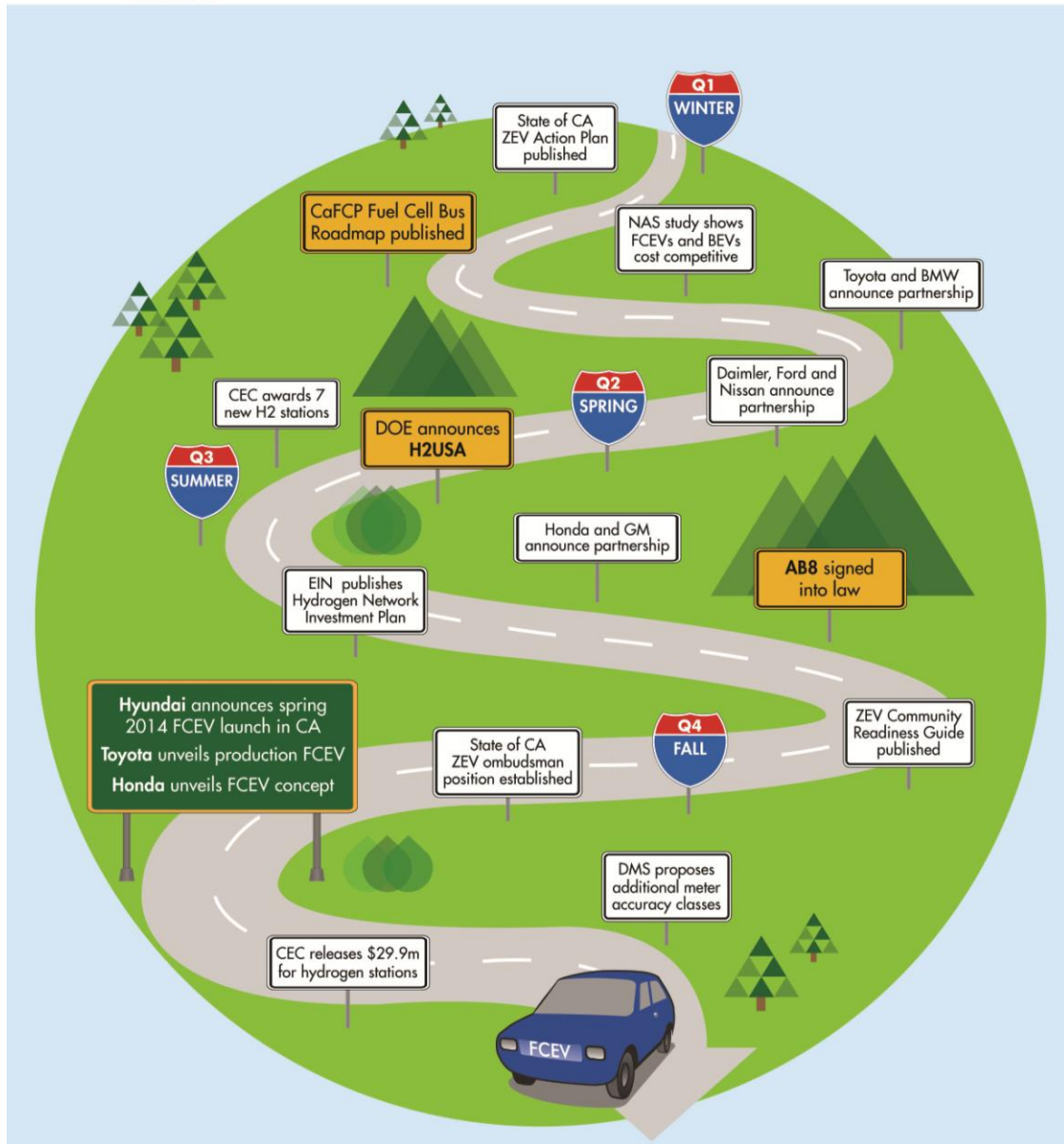
To neutralize both of these risks, the HNIP shows how the government could modify its grant program to share in the financial risk of market delays, including the addition of market assurance grants (MAGs), regular payments that would support operations and maintenance expenses until they can be covered by revenues from hydrogen sales. MAGs can be a difference maker if investors see a credible pathway and plan to reach long-term FCEV success.

Even with significant capital cost-share and downside protection such as MAG grants, it remains unclear if the government can attract appropriate “first-movers” into this sector, namely entities that want to build and operate dozens of stations on a long-term basis. Some investors suggest that this market is one where a “fast-follower” will be more successful, gaining market share by building bigger and better stations with much greater market certainty once cars are on the road. To counter this problem, the state needs to explore what kind of “upside” it can create for early investors, in the form of non-monetary, strategic advantages that come from being a government-backed first mover. Unless the government can bring these investors off the sideline or increase investment of existing participants, early market investment may remain stalled.





## 2013 Hydrogen & Fuel Cell Progress Update



**Figure 9: Giant Steps Forward in 2013 for Fuel Cell Electric Vehicles and Hydrogen Stations**

It is anticipated that Phase 2 of this effort will begin in 2014. Phase 2 would refine the draft HNIP and coordinate with government and industry to build the hydrogen market and participation and influence hydrogen infrastructure deployment.

## 2013 FINANCIAL SUMMARY

The SCAQMD Clean Fuels Program supports clean fuels and technologies that appear to offer the most promise in reducing emissions, promoting energy diversity, and in the long term, providing cost-effective alternatives to current technologies. In order to address the wide variety of pollution sources in the Basin and the need for reductions now and in the future, using revenue from a \$1 motor vehicle registration fee (see Program Funding on page 4), the SCAQMD seeks to fund a wide variety of projects to establish a diversified technology portfolio to proliferate choices with the potential for different commercial maturity timing. Given the evolving nature of technology and changing market conditions, such a representation is only a “snapshot-in-time,” as reflected by the projects approved by the Governing Board.

As projects are approved by the Governing Board and executed into contracts throughout the year, the finances may change to reflect updated information provided during the contract negotiation process. As such, the following represents the status of the Clean Fuels Fund as of December 31, 2013.

### Funding Commitments by Core Technologies

The SCAQMD continued its successful leveraging of public funds with outside investment to support the development of advanced clean air technologies. During the period January 1 through December 31, 2013, a total of 48 contracts, projects or studies that support clean fuels were executed or amended, as shown in Table 2 (page 24). The major technology areas summarized are: hybrid/electric technologies, infrastructure and deployment, fuels/emission studies, emission control technologies, hydrogen technology and infrastructure, mobile fuel cell technologies, engine systems, stationary clean fuel technologies, health impacts studies, outreach and technology transfer. The distribution of funds based on technology area is shown graphically in Figure 10 (page 22). This wide array of technology support represents the SCAQMD’s commitment to researching, developing, demonstrating and deploying potential near-term and longer-term technology solutions.

The project commitments that were contracted or purchased for the 2013 reporting period are shown below with the total projected project costs:

• SCAQMD Clean Fuels Fund Contribution	\$7,542,654
• Total Cost of Clean Fuels Projects	\$23,263,776

Each year, the SCAQMD Governing Board approves funds to be transferred to the General Fund Budget for Clean Fuels administration. For 2013, the Board transferred \$800,000 for workshops, conferences, co-sponsorships and outreach activities as well as postage, supplies and costs for special conferences. Only the funds committed by December 31, 2013, are included within this report. Any portion of the Clean Fuels Funds not spent by the end of Fiscal Year 2013-14 ending June 30, 2014, will be returned to the Clean Fuels Fund.

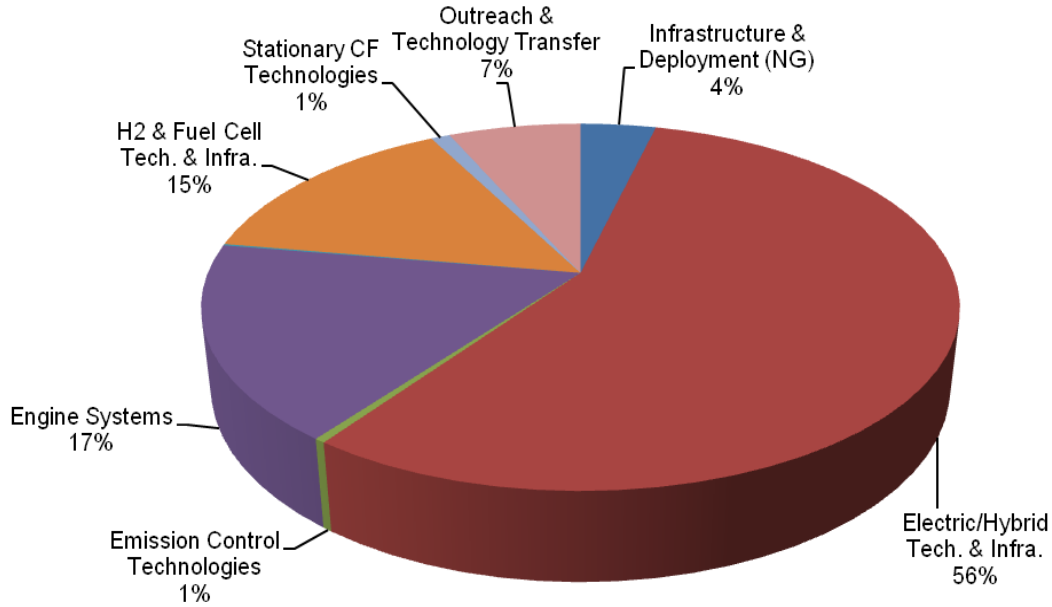
Partially included within the SCAQMD contribution are supplemental sponsorship revenues from various organizations that support these technology advancement projects. This supplemental revenue for pass-through contracts executed in 2013 totaling \$2,040,750 is listed within Table 3 (page 26) for contract.

Appendix B lists the 124 Clean Fuels Fund contracts that were open and active as of January 1, 2014.

For Clean Fuels executed and amended contracts, projects and studies in 2013, the average SCAQMD contribution is approximately 32 percent of the total cost of the projects, identifying

that each dollar from the SCAQMD was leveraged with more than three dollars of outside investment.

During 2013, the distribution of funds for SCAQMD executed contracts, purchases and contract amendments with additional funding for the Clean Fuels Program totaling approximately \$7.5 million are shown in Figure 10 below.



**Figure 10: Distribution of Funds for Executed Clean Fuels Projects  
CY 2013 (\$7.5 million)**

Table 2 (page 26) provides a breakdown of these \$7.5 million awards. Table 3 (page 26) provides information on outside funding recognized and received into the Clean Fuels Fund (approximately \$2 million) for contracts executed in CY 2013. Additionally, the SCAQMD continued to seek funding opportunities and Table 4 (page 26) lists the additional \$15,810,828 awarded in 2013 for projects that will be implemented as part of the Clean Fuels Program or which align well or are complementary to the Clean Fuels Program. Table 5 (page 27) provides a comprehensive summary and project status of the nearly \$111 million in federal and state revenue awarded (including awards made through the American Recovery and Reinvestment Act) to SCAQMD from 2009 and 2012.

## Review of Audit Findings

State law requires an annual financial audit after the closing of each SCAQMD’s fiscal year. The financial audit is performed by an independent Certified Public Accountant selected through a competitive bid process. For the fiscal year ended June 30, 2013, the firm of Simpson and Simpson, CPAs conducted the financial audit. As a result of this financial audit, a Comprehensive Annual Financial Report (CAFR) was issued. There were no adverse internal control weaknesses with regard to SCAQMD financial statements, which include the Clean Fuels Program revenue and expenditures. Simpson and Simpson CPAs gave the SCAQMD an “unqualified opinion,” the highest obtainable. Notably, the SCAQMD has achieved this rating on all prior annual financial audits.

## **Project Funding Detail by Core Technologies**

The 48 new and continuing contracts, projects and studies that received SCAQMD funding in 2013 are summarized in Table 2 together with the funding authorized by the SCAQMD and by the collaborating project partners.

**Table 2: Contracts Executed or Amended (w/\$) between January 1 & December 31, 2013**

Contract	Contractor	Project Title	Start Term	End Term	AQMD \$	Project Total \$
<b>Infrastructure and Deployment</b>						
12853	Rainbow Disposal Company, Inc.	Upgrade CNG Fueling Station	03/08/13	12/31/18	200,000	400,000
13401	Nite-Hawk Sweepers LLC	Demonstrate Natural Gas-Powered Parking Lot Sweepers	08/28/13	12/31/15	90,000	200,000
<b>Fuels/Emissions Studies</b>						
13451	Energy Solutions	Perform Passenger Vehicle Tire Efficiency Study	06/28/13	12/27/13	10,000	16,000
<b>Emission Control Technologies</b>						
13407	Chaffey Joint Union High School District	Demonstrate Diesel Particulate Filter Technology on Two Diesel School Buses	05/18/13	03/31/14	30,000	45,000
<b>Electric/Hybrid Technologies &amp; Infrastructure</b>						
11615	Parker Hannifin	Develop & Demonstrate Up to Four Heavy-Duty Hydraulic Hybrid Vehicles	01/18/13	12/31/14	250,000	2,000,000
13058	Capstone Turbine Corporation	Develop Microturbine Series Hybrid System for Class 7 Heavy-Duty Vehicle Applications	08/12/13	11/30/14	360,000	1,210,000
13149	University of California, Los Angeles	Develop South Coast PEV Readiness Plan	01/18/13	06/30/14	32,000	63,500
13404	Penske Honda of Ontario	Lease Two Honda Fit Electric Vehicles for Three Years	05/02/13	05/01/16	31,307	31,307
13410	Selman Chevrolet Company	Lease Three 2013 Chevrolet Volt Extended-Range Electric Vehicles for Three Years	04/03/13	04/02/16	41,084	41,084
Various	Various	Install & Upgrade EV Charging Infrastructure (Administer SoCalEV Infrastructure Project)	01/01/13	06/30/15	840,750	840,750
13426	Transportation Power, Inc.	Develop & Demonstrate Catenary Class 8 Trucks (1 Electric & 1 CNG Platform)	06/07/13	06/06/16	2,617,887	3,182,795
13429	Longo Toyota	Lease One Toyota RAV4 Electric Vehicle for Three Years	04/19/13	04/18/16	19,618	19,618
13439	City of Carson	MOU for Catenary Zero Emission Goods Movement Project	10/01/13	09/30/16	0	0
Purchase Order	ATVLS, Inc.	Install Electric Vehicle Chargers	02/13/13	02/13/13	19,985	19,985
Purchase Order	Clean Fuel Connection, Inc.	Install Electric Vehicle Chargers	01/29/13	02/20/13	17,389	17,389
<b>Engine Systems</b>						
13168	National Renewable Energy Laboratory	Develop, Integrate & Demonstrate Heavy-Duty Natural Gas Engines and Vehicles	05/22/13	12/31/15	1,300,000	1,300,000
<b>Mobile Fuel Cell Technologies</b>						
10501	American Honda Motor Company, Inc.	Lease One Clarity Fuel Cell Vehicle for Three Years	01/21/10	09/11/13	5,232	5,232

**Table 2: Contracts Executed or Amended (w/\$) between January 1 & December 31, 2013**

<b>Contract</b>	<b>Contractor</b>	<b>Project Title</b>	<b>Start Term</b>	<b>End Term</b>	<b>AQMD \$</b>	<b>Project Total \$</b>
<b>Mobile Fuel Cell Technologies (cont'd)</b>						
13155	Fletcher Jones Motor Cars Inc. (Mercedes-Benz)	Lease Two F-Cell Fuel Cell Vehicles for Two Years	02/08/13	02/08/15	30,397	30,397
14054	Bevilacqua-Knight, Inc.	Participate in California Fuel Cell Partnership for Calendar Year 2013 and Provide Support for Regional Coordinator	01/01/13	12/31/13	137,800	1,676,800
14139	Hyundai America Technical Center Inc.	No-Cost Lease of Fuel Cell Vehicle for Two Years	12/13/13	12/12/15	0	0
<b>Hydrogen Technologies &amp; Infrastructure</b>						
10061	Hydrogenics Corporation	Maintenance & Data Management for the SCAQMD Hydrogen Fueling Station	10/30/09	01/31/15	100,000	100,000
11150	Hydrogen Frontier, Inc.	Maintain & Operate City of Burbank Hydrogen Fueling Station	11/24/10	01/23/16	275,000	275,000
13259	Air Products and Chemicals, Inc.	Hydrogen Station Operation & Maintenance for Five Cities Hydrogen Program	03/26/13	09/25/14	300,000	300,000
13400	Energy Independence Now	Develop Hydrogen Network Investment Plan	04/05/13	01/04/15	50,000	130,000
14067	University of California, Irvine	Develop Hydrogen Storage Capability for the Gas-Blending Facility	12/31/13	07/16/15	200,000	688,000
Purchase Order	Gas Technology Institute	Hydrogen Quality Sampling Adaptor Repair	04/02/13	04/02/13	1,125	1,125
<b>Stationary Clean Fuel Technologies</b>						
13078	University of California, Riverside	Steam Hydrogasification Reaction Demonstration to Generate Substitute Natural Gas from Biomass Waste	03/07/13	06/07/14	72,916	922,130
<b>Outreach &amp; Technology Transfer</b>						
12486	ICF Resources LLC	Technical Assistance with Goods Movement and Zero Emission Transportation Technologies	09/24/13	09/23/15	50,000	50,000
13256	Three Squares Inc.	Develop, Initiate & Implement Clean Vehicle Outreach Project	01/05/13	12/31/13	21,500	21,500
13408	University of California, Irvine	Demonstrate Building Integration of Electric Vehicles, Photovoltaics and Stationary Fuel Cells	09/30/13	09/29/15	150,000	270,000
Transfer	Transfer from Clean Fuels	Participation in California Natural Gas Vehicle Partnership for Fiscal Years 2012-13 and 2013-14	03/01/13	03/01/13	25,000	160,000
Direct Pay	Transportation Research Board	Participation for CY 2013 Membership in Transportation Research Board and Support Minority Student Fellows Program	01/01/13	12/31/13	37,500	4,000,000
Direct Pay	Various	Cosponsor 15 Conferences, Workshops & Events, plus 1 Membership	Various	Various	226,164	5,246,164

**Table 3: Supplemental Revenue Grants Received into Clean Fuels Fund (31)**

Revenue Agreement #	Revenue Source	Project Title	Contractor	SCAQMD Contract #	Award Total \$
#A00909413 (#13443)	U.S. EPA	Develop & Demonstrate Catenary Class 8 Trucks-1 Electric & 1 CNG Platform	Transportation Power Inc.	#13426	500,000
#5660020940/#11722	Southern California Gas Company (augments U.S. DOE funding to NREL)	Develop, Integrate & Demonstrate Heavy-Duty Natural Gas Engines and Vehicles	National Renewable Energy Laboratory	#13168	500,000
#12152	CEC AB 118 Program	Upgrade CNG Fueling Station	Rainbow Disposal Company Inc.	#12853	200,000
#13462	CEC ARV-10-045	Install & Upgrade EV Charging Stations (Administer SoCalV Infrastructure Project)	SoCalEV Regional Collaborative Members	#13418-21, et al	840,750
Table 3 lists revenue <u>recognized</u> by SCAQMD into the Clean Fuels Fund (31) <u>only</u> if the pass-through contract was executed during the reporting CY (2013).					<b>\$2,040,750</b>

**Table 4: Summary of Federal & State Funding Awarded between Jan. 1 & Dec. 31, 2013**

Awarding Entity or Program	Award Date	Purpose	Contractors	Award Total \$/Fund
U.S. EPA A00909413	05/09/13	Develop & Demonstrate Catenary Class 8 Trucks-1 Electric & 1 CNG Platform (Revenue Agreement #13443 - Executed; Project Officer-J.Impullitti) – Project in progress	Transportation Power Inc.	500,000/ Clean Fuels Fund
CEC	04/05/13	Construct One Mile of Catenary System and Develop & Demonstrate Diesel Catenary Hybrid Electric Class 8 Truck (\$1.6M Revenue Agreement #14024 - Executed 08/23/13; \$1.4M supplemental revenue agreement pending; Project Officer - J.Impullitti) – Contract under negotiation	Siemens Industry Inc.	3,000,000/ Clean Fuels Fund
CEC AB 118 Program	06/07/13	Refurbish & Upgrade Existing, Publicly Accessible Hydrogen Fueling Stations (Revenue Agreement #13468 - Executed 08/08/13; Project Officer – L.Watkins) – Awards pending	TBD	6,690,828/ Fund 63
Bay Area AQMD (thru U.S. DOE/ Clean Cities Program)	09/06/13	Alternative Fuel Infrastructure Planning (Revenue Agreement #14148 – Executed 01/09/14; Project Officer – P.Kwon) – Contracts pending execution	5 Contractors	320,000/ Fund 17
CEC AB 118 Program	09/06/13	Installation of DC Fast Charging Network (Revenue Agreement #14051 – Executed 11/11/13; Project Officer – P.Kwon) – Contracts pending execution	CFCI and Three Squares	300,000/ Clean Fuels Fund
CEC	10/04/13	Develop, Integrate & Demonstrate Ultra-Low Emission Natural Gas Engines for On-Road Heavy-Duty Vehicles (Revenue Agreement – not yet received; Project Officer – J.Cox) – Contracts pending execution	Cummins Westport Inc. and Cummins Inc.	4,000,000/ Clean Fuels Fund
Southern California Gas Company	10/04/13	Develop, Integrate & Demonstrate Ultra-Low Emission Natural Gas Engines for On-Road Heavy-Duty Vehicles (Revenue Agreement #14146 – Pending execution; Project Officer – J.Cox)	Same as above	1,000,000/ Clean Fuels Fund
Table 4 provides a comprehensive summary of revenue <u>awarded</u> to SCAQMD during the reporting CY (2013) if it will be considered part of, or complementary to, the Clean Fuels Program, regardless of whether the pass-through contract has been executed.				<b>\$15,810,828</b>

**Table 5: Update of Federal & State Funding Awarded between Jan. 1, 2009 & Dec. 31, 2012**

<b>Awarding Entity or Program</b>	<b>Award Date</b>	<b>Purpose</b>	<b>Contractors</b>	<b>Award Total \$</b>
U.S. EPA/DERA Program DE 96085601	02/03/09	Retrofit 200 Heavy-Duty Trucks with Diesel Particulate Filters (Revenue Agreement #09320 – Executed 02/18/09; Project Officer – A.Oshinuga) – All trucks retrofitted	11 Contractors	1,000,000/ Clean Fuels Fund
City of Los Angeles (POLB/POLA)	03/06/09	Install LNG Fueling Station at the Ports (Revenue Agreement #09349 – Executed 01/19/10; Project Officer – L.Watkins) – Station in operation	California Cartage Co.	532,500/ Clean Fuels Fund
U.S. EPA DE 83420301	04/28/09	Develop & Demonstrate SCRT® for NO <sub>x</sub> and PM Emissions Control (Revenue Agreement #09405 - Executed 06/02/09; Project Officer – J.Cox) – Project complete	Johnson Matthey, Inc.	900,000/ Clean Fuels Fund
CARB (from U.S. EPA/DERA Program) G08-DE-02	05/22/09	Placement of up to 43 aftertreatment devices (retrofit traps) on public school buses operating on diesel fuel (Revenue Agreement #G-08-DE-02 – Executed 05/22/09; Project Officer – R.George) – Project complete	3 School Districts	898,000/ Fund 33
U.S. EPA/DERA Program (Emerging Technologies) 2A 83442501 2A 83442101	08/31/09	Implement program to optimize and demonstrate selective catalytic regenerating and selective catalytic continuously regenerating technologies on on-road heavy-duty diesel trucks (Revenue Agreements #10064 & #10063 - Executed 10/20/09; Project Officer – J.Cox) - Project complete	Johnson Matthey Inc.	4,000,000/ Clean Fuels Fund
U.S. EPA/DERA Program EM-00T16601	09/25/09	Implement Heavy-Duty Diesel Drayage Truck Replacement Program (Revenue Agreement #10119 – Executed 10/28/09; Project Officer – A.Oshinuga) - Project complete	Various	7,500,000/ Fund 81
DOE Transportation Electrification Program DE-EE0002549	12/14/09	Develop U.S. manufactured next-generation batteries and electric vehicles and to fully integrate plug-in hybrid electric vehicle systems for 378 medium-duty utility and delivery trucks and shuttle buses (Revenue Agreement #10193 - Executed 03/25/10; Project Officer – J.Cox) – Project in progress	Electric Power Research Institute	45,443,332/ Fund 50
DOE Clean Cities Program DE-EE0002562	12/18/09	Expansion of an LNG corridor from Ontario to Las Vegas, which would include both vehicles and infrastructure and be implemented in conjunction with the UPS (Revenue Agreement #10467 - Executed 03/04/10; Project Officer – L.Watkins) – Project in progress	4 Contractors	5,591,611/ Fund 51
DOE Clean Cities Program DE-EE0002547	12/18/09	Implement a natural gas drayage truck replacement program (Revenue Agreement #10480 - Executed 1/26/10; Project Officer – V.White) – 219 trucks replaced	Various	9,408,389/ Fund 81
DOE Clean Cities Petroleum Reduction Technologies	12/31/09	Purchase of CNG Taxicabs and Shuttle Vans (Revenue Agreement #10739 – Executed 11/12/10; Project Officer – P.Barroca) – Partially complete	3 Contractors	500,000/ Clean Fuels Fund
CARB AB 118 AQIP Program	02/05/10	Purchase of cordless electric lawn mowers (Revenue Agreement #10592 – Executed 2/4/10; Project Officer – S.Singeetham) – Project complete	Neuton and Black & Decker	816,000/ Fund 27



**Table 5: Update of Federal & State Funding Awarded between Jan. 1, 2009 & Dec. 31, 2012  
(cont'd)**

<b>Awarding Entity or Program</b>	<b>Award Date</b>	<b>Purpose</b>	<b>Contractors</b>	<b>Award Total \$/Fund</b>
DOE Clean Cities Program DE-EE0002545	03/12/10	Ontario LNG Station Upgrade (Revenue Agreement #10685 - Executed 05/07/10; Project Officer – L.Watkins) – Pass-through contract pending	UPS	150,000/ Fund 01
U.S. EPA EM 00T34701	04/21/10	Truck Replacement (diesel to diesel and diesel to zero emission), install shorepower to two ships, demonstrate a combined diesel particulate filter and selective catalytic reduction system on two tugboat engines (Revenue Agreement #10707 – Executed 05/06/10; Project Officer – A.Oshinuga) – Projects in progress	4 Contractors	3,600,000/ Fund 32 & Clean Fuels Fund (\$1.4M)
U.S. EPA DE-83468501	06/23/10	Demonstrate Emerging Technologies Advanced Maritime Emissions Controls (Revenue Agreement #11030 – Executed 07/23/10; Project Officer – R.Carlson) – Project complete	ACTI	1,500,000/ Fund 17
U.S. EPA DE 00T37701	06/30/10	National Clean Diesel Program – School Bus Replacement (Revenue Agreement #11029 - Executed 07/16/10; Project Officer – R.George) – Deliverables complete0	11 School Districts	1,065,465/ Fund 33
Southern California Gas Company	07/09/10	Develop Prototype Natural-Gas-Fired, Fan-Type Central Furnaces with Reduced NOx Emissions (Revenue Agreement #11539 – Executed 12/10/10; Project Officer – A.Baez) – Projects partially complete	4 Contractors	447,737/ Fund 27
CEC ARV-09-003	09/02/10	Develop U.S. manufactured next-generation batteries and electric vehicles and to fully integrate plug-in hybrid electric vehicle systems for 378 medium-duty utility and delivery trucks and shuttle buses (Revenue Agreement #11043 - Executed 09/02/10; Project Officer – J.Cox) – Project in progress	Electric Power Research Institute	5,000,000/ Fund 50
San Joaquin Valley Air Pollution Control District	10/01/10	Develop Prototype Natural-Gas-Fired, Fan-Type Central Furnaces with Reduced NOx Emissions (Revenue Agreement #11195 – Executed 10/29/10; Project Officer – A.Baez) – Projects partially complete	4 Contractors	50,000/ Fund 27
CEC AB118 Program	09/10/10	Alternative and Renewable Fuel and Vehicle Technology Program – Construct & Install 10 NG Fueling Station (Revenue Agreement #12152 –Executed 11/08/11; Project Officer – L.Watkins) – Partially complete	6-7 Contractors	2,600,000/ Clean Fuels Fund
CEC AB118 Program	09/10/10	Alternative and Renewable Fuel and Vehicle Technology Program – Construct & Install One NG Fueling Station (Revenue Agreement #12286 –Executed 02/22/12; Project Officer – L.Watkins) – Pass-through contract pending	UPS	300,000/ Clean Fuels Fund
CEC ARV-09-002	10/07/10	Implement LNG Drayage Truck Replacement Program (Revenue Agreement #11040 - Executed 10/07/10); Project Officer – V.White) – 132 trucks replaced	Various	5,142,000/ Fund 81

**Table 5: Update of Federal & State Funding Awarded between Jan. 1, 2009 & Dec. 31, 2012  
(cont'd)**

<b>Awarding Entity or Program</b>	<b>Award Date</b>	<b>Purpose</b>	<b>Contractors</b>	<b>Award Total \$/Fund</b>
CARB AB 118 AQIP Program G10-AQIP-09	04/05/11	Purchase Cordless Electric Lawnmowers (Revenue Agreement #11595 – Executed 04/05/11; Project Officer – S.Singeetham) – Projects complete	4 Contractors	494,314/ Fund 27
U.S. EPA Clean Air Technology Initiative Program A 00909411	12/15/10	Demonstrate Battery Electric Heavy-Duty Trucks & Install Air Filtration Systems at Schools or Community Centers (Revenue Agreement #11530 – Executed 01/11/11; Project Officers – J.Impullitti & P.Kwon) – Projects partially complete	TransPower and IQAir North America	400,000/ Fund 17
Southern California Gas Company	04/22/11	Natural Gas-Powered Vehicle Training and Safety and Fuel Cylinder Inspection Program (Revenue Agreement #11617 – Executed 6/23/11; Project Officer – P.Barroca) – Projects in progress	CSA America Inc. and San Diego Community College on behalf of ATTE	67,100/ Clean Fuels Fund
U.S. EPA Targeted Air Shed Grant EM-83493501	07/14/11	Yard Equipment Exchange Program (Residential and Commercial); and Boiler and Process Heater Efficiency Upgrades to Demonstrate Reductions in Ozone and PM2.5 Air Pollution in LA-San Bernardino Nonattainment Areas (Revenue Agreement #11598 – Executed 3/25/11; Project Officer – S.Singeetham) - Projects partially complete	Various	1,270,000/ Fund 17
CEC ARV-10-045	05/20/11	Install & Upgrade EV Charging Infrastructure Stations (Administer the SoCalEV Infrastructure Project to Install Up to 315 EV Chargers throughout Southern California (Revenue Agreement #12295 – Executed 03/22/12; Project Officer – P.Kwon) – Projects in progress	SoCalEV Regional Collaborative Members	840,750/ Clean Fuels Fund
CARB AB 118 AQIP G10-AQIP-10	08/10/11	Demonstrate Combined DPF and SCR Technologies on Marine Vessels (Revenue Agreement #12022 – Executed 08/10/11; Project Officer – R.Carlson) – Project in progress	Hug Engineering	439,000/ Fund 27
U.S. DOE Clean Cities Program E-EE0005588	09/26/11	Plug-In Electric Vehicle Infrastructure Planning (Revenue Agreement #12167 – Executed 11/12/11; Project Officer – P.Kwon) – Projects complete	7 Contractors	1,000,000/ Fund 60
Southern California Gas Company 5660020940 (augmenting U.S.DOE funding to NREL)	06/24/11	Develop, Integrate & Demonstrate Heavy-Duty Natural Gas Engines and Vehicles (Revenue Agreement #11722 – Executed 06/24/11; Project Officer – A.Oshinuga) – Project in progress	National Renewable Energy Laboratory	500,000/ Clean Fuels Fund
California Department of Transportation 07-6373R	06/15/11	Replace Existing Heavy-Duty Diesel Trucks with New Heavy-Duty Natural Gas Trucks (Revenue Agreement #11458 – Executed 07/12/11; Project Officer – A.Oshinuga)- Projects in progress	Various	1,799,612/ Fund 81

**Table 5: Update of Federal & State Funding Awarded between Jan. 1, 2009 & Dec. 31, 2012  
(cont'd)**

<b>Awarding Entity or Program</b>	<b>Award Date</b>	<b>Purpose</b>	<b>Contractors</b>	<b>Award Total \$/Fund</b>
Ports of Los Angeles & Long Beach	10/07/11	In-Use Emissions Testing & Demonstration of Retrofit Technology of On-Road Heavy-Duty Engines (Revenue Agreement #12877 – Executed 07/20/12; Project Officer –	WVU and UCR/CE-CERT	281,006/ Clean Fuels Fund
DOE DE-FC26-08NT06812	Orig: 9/30/08 Current: 07/01/12	Plug-In Hybrid Electric Urban Delivery Truck Technology Demonstration (Revenue Agreement #09160 – Executed 10/22/08; Project Officer – J.Cox) – Project in	Volvo Technology of America, Inc.	984,000/ Fund 61
CEC AB 118 Program	07/25/12	Construct CNG Fueling Station I in Murrietta (Revenue Agreement # 13034- Executed 09/09/12; Project Officer – L.Watkins) – Pass-through contract pending	Southern California Gas Company	217,000/ Clean Fuels Fund
U.S. EPA/DERA DE-00T96201-1	09/11/12	Replace 50 Medium Heavy-Duty Diesel Trucks with New Full Electric Battery-Powered Medium Heavy-Duty Vehicles (Revenue Agreement #13153 – Executed 10/30/12; Project Officer – B.Choe) – Pass-through contract pending	Electric Vehicle International Inc.	1,045,993/ Fund 17
DOE Vehicle Technologies Program DE-EE0005961	09/28/12	Develop, Demonstrate and Deploy at least 13 Class 8 Battery Electric Heavy-Duty Trucks and Fuel Cell Hybrid Electric Trucks (Revenue Agreement #13082 – Executed 10/30/12; Project Officer – B.Choe) – Project in progress	5 Contractors	4,169,000/ Fund 61
CARB AB 118 AQIP Program	Orig:7/8/11 Current: 12/07/12	Demonstrate the commercial use of cordless zero-emission lawn and garden equipment (Revenue Agreement #12018 – Executed 8/10/11; Project Officer – S.Singeetham) –	Mean Green	51,667/ Fund 27
<p><i>Table 5 provides a comprehensive summary of revenue awarded to SCAQMD during CYs 2009 through 2012, if it is part of, or complementary to, the Clean Fuels Program, regardless of whether the pass-through contract has been executed and regardless of which special fund the revenue was recognized into.</i></p>				<b>\$110,876,746</b>

## Project Summaries by Core Technologies

The following represents summaries of the contracts, projects and studies executed or amended with additional dollars in 2013. They are listed in the order found in Table 2 by category and contract number. The summaries provide the project title, contractors and subcontractors, SCAQMD cost-share, co-sponsors and their respective contributions, contract term and a description of the projects as required by H&SC Section 40448.5.1(d).

### **Infrastructure and Deployment**

#### **12853: Upgrade CNG Fueling Station**

Contractor: Rainbow Disposal Company, Inc.	SCAQMD Cost-Share	\$ 200,000
	Cosponsor:	
	Rainbow Disposal Company, Inc.	200,000
Term: 03/08/13 – 12/31/18	Total Cost	\$ 400,000

Rainbow Disposal has operated a public access CNG fueling station in Huntington Beach for many years. As the number of CNG vehicles has grown so has the utilization of the station. The ability to adequately service all of the customers from that area has diminished so that there are now waiting lines of up to 30 minutes. To upgrade Rainbow Disposal's existing CNG station, the SCAQMD applied for infrastructure funding through CEC's AB 118 Program and was awarded \$200,000, which was recognized into the Clean Fuels Fund, as noted in the incoming revenue table (Table 3). The upgrade includes the addition of a second, larger compressor and dispenser in order to meet the demand of Rainbow Disposal's growing natural gas fleet.

#### **13401: Demonstrate Natural Gas-Powered Parking Lot Sweeper Vehicles**

Contractor: Nite-Hawk Sweepers LLC	SCAQMD Cost-Share	\$ 90,000
	Cosponsors:	
	Nite-Hawk Sweepers LLC	42,000
	Go Natural CNG	60,000
	ProSales	3,500
	Haaker Equipment	3,500
	Isuzu	1,000
Term: 08/28/13 – 12/31/15	Total Cost	\$ 200,000

Parking lot sweeper vehicles are typically classified as medium-duty vehicles (less than 14,000-lbs gross vehicle weight rating or GVWR), and although many parking lot sweepers provide service to public entities, their weight classification and their vocation (non-street sweeping activities), exempts them from SCAQMD Fleet Rule 1186.1 and Rule 1186 (combined, these two Rules ensure that the cleanest vehicles are being used in the SCAQMD for street sweeping activities). The number of parking lot sweepers operating in this region is estimated between 500 to 700 and can accrue as many as 60,000 miles annually, representing a significant amount of emissions in this region. Parking lot sweeper vehicles range from a converted pick-up truck to

more sophisticated chassis conversions and operate on conventional fuel such as gasoline or diesel. This project is to demonstrate a CNG-powered prototype parking lot sweeper that will be built by Nite-Hawk Sweepers LLC based in Seattle, WA, using an Isuzu NPR-HD chassis, powered by a 6.0L GM spark-ignited engine that will be converted to dedicated CNG using a conversion system developed by Go Natural CNG based in Utah that will operate under a CARB Experimental Permit. Demonstration is expected to commence in May 2014. The vehicle will be demonstrated to both public and private parties over a two-year period. The project is expected to result in CARB certification for converting this vehicle to operate on dedicated natural gas as well as commercial availability of a dedicated natural gas powered parking lot sweeper vehicle.

**Fuels/Emission Studies**

**13451: Perform Passenger Vehicle Tire Efficiency Study**

Contractor: Energy Solutions	SCAQMD Cost-Share	\$ 10,000
	Cosponsor:	
	Energy Solutions	6,000
Term: 06/28/13 – 12/27/13	Total Cost	\$ 16,000

This study was to identify how low rolling resistance passenger vehicle replacement tires could provide a significant opportunity to reduce air pollutants and carbon dioxide while saving consumers fuel and money. Across the United States, passenger vehicle tires are being replaced with tires less efficient than those originally installed by the factory. This is, in part, likely due to passenger vehicle tires not having a standardized labeling system that allows consumers to easily identify lower rolling resistance tires, the higher upfront cost of fuel efficient tires and lack of outreach and education on the longer term payback of using more efficient tires. This study would review the air quality and greenhouse gas benefits of increasing the sales of fuel efficient tires. A 4% increase in overall efficiency of the vehicle was used when fuel efficient tires were evaluated over the average replacement tire. Using this efficiency assumption, and applying it to passenger vehicles in the Basin for model year 2010 and older needing replacement tires, the study projected a reduction of 1,500 tons of ozone precursors (612 VOC, 715 NO<sub>x</sub>) and a CO<sub>2</sub> reduction of 1.6 million tons. The study also reviewed the cost benefits to consumers and emissions from implementing an incentive program buy down program for purchasing higher efficiency tires.

**Emission Control Technologies**

**13407: Demonstrate Diesel Particulate Filter Technology on Two Diesel School Buses**

Contractor: Chaffey Joint Union High School District	SCAQMD Cost-Share	\$ 30,000
	Cosponsor	
	Chaffey Joint Union High School District	15,000
Term: 05/28/13 – 03/31/14	Total Cost:	\$ 45,000

Chaffey Joint Union High School District (Chaffey) previously received funding to retrofit diesel school buses with Cleaire Horizon diesel particulate filters (DPFs). Within a year of installation, the buses equipped with hydraulic electronic unit injector (HEUI) engines began to experience

higher rates of engine-related problems than normal including fuel injector failures, oil leaks, turbocharger failures and loss of power. These engine problems were attributed to high back pressure caused by plugged Horizon DPFs. The objective of this project was to evaluate two alternate DPF technologies and determine if one would be better suited to the Chaffey buses and provide better bus operation and less maintenance.

### **Electric/Hybrid Technologies & Infrastructure**

#### **11615: Develop & Demonstrate Up to Four Heavy-Duty Hydraulic Hybrid Vehicles**

Contractor: Parker Hannifin	SCAQMD Cost-Share	\$ 250,000
	Cosponsors:	
	California Energy Commission	750,000
	Parker Hannifin	354,000
	Coca-Cola Company	515,000
	Freightliner	131,000
Term: 01/18/13 – 12/31/14	Total Cost	\$ 2,000,000

Parker Hannifin proposes to partner with Coca-Cola, Daimler Trucks North America, Inc., Freightliner Truck Division, Cummins, Inc. and the FEV Group to design, integrate, rollout and field test up to four hybrid hydraulic beverage delivery tractors used by Coca-Cola Enterprises on urban delivery routes within the South Coast Air Basin. The stop-and-go driving associated with urban delivery routes will allow a hydraulic hybrid-equipped vehicle to capture a significant amount of braking energy that would have otherwise been wasted as heat through the vehicles friction brakes. The Parker Hannifin hydraulic hybrid drive system is designed to recover brake energy and store it for later use using hydraulic accumulators instead of chemical energy storage systems used in hybrid electric systems today. Upon braking, the hydraulic hybrid system allows vehicle inertia to be converted and stored as high pressure energy within hydraulic accumulators. Accumulated energy is then made available for use when the vehicle is next accelerated, to supplement or displace the power that would otherwise be supplied by the diesel engine.

#### **13058: Develop Microturbine Series Hybrid System for Class 7 Heavy-Duty Vehicle Applications**

Contractor: Capstone Turbine Corporation	SCAQMD Cost-Share	\$ 360,000
	Cosponsors:	
	Capstone, Kenworth & Costco	850,000
Term: 08/23/13 – 11/30/14	Total Cost	\$ 1,210,000

Kenworth and Capstone Turbine Corporation (Capstone) are working to advance the development of their microturbine generator (MTG) hybrid on a Class 7 refrigeration truck chassis and demonstrate the potential benefits of the drive system architecture in a real-world application. The proposed vehicle will utilize a series hybrid electric drive system that will afford it up to 10 miles of all-electric driving range. After the vehicle breaches the battery's lower state of charge threshold, an on-board MTG will be utilized to provide extended range driving beyond the initial 10 miles. The vehicle is expected to be deployed within Costco's fleet to evaluate its operational and performance benefits.

**13149: Develop South Coast PEV Readiness Plan**

Contractor: University of California, Los Angeles	SCAQMD Cost-Share	\$ 32,000
	Cosponsor:	
	SCAG	\$31,500
Term: 01/18/13 – 06/30/14	Total Cost	\$ 63,500

As part of a \$1,000,000 grant received by SCAQMD from the DOE Clean Cities program for PEV readiness, \$200,000 went towards funding the UCLA Luskin Center to create a South Coast PEV Readiness Plan. The UCLA Luskin Center was engaged by SCAG to develop the South Coast PEV Readiness Plan through a competitive RFP process. The UCLA Luskin Center has significant expertise on PEV readiness issues and has authored several policy documents, including one on the PEV market in Los Angeles and addressing challenges to installing infrastructure in multi-unit dwellings. The Southern California PEV Readiness Plan was the winner of the 2013 Planning Excellence Award by the Los Angeles section of the American Planning Association. This project is to develop additional PEV readiness elements for the South Coast PEV Readiness Plan for the DOE Clean Cities grant, including an analysis of barriers of required and optional PEV readiness elements such as permitting and inspection, training and education, workplace and fleet charging, and multi-unit dwelling charging. It will also provide a much needed analysis of two challenge areas identified by the California PEV Collaborative in multi-unit dwelling and workplace charging, for which two new working groups have been created. Using funds from a U.S. DOE grant, SCAG cosponsored the additional elements, along with the SCAQMD.

**13404: Lease Two Honda Fit Electric Vehicles for Three Years**

Contractor: Penske Honda of Ontario	SCAQMD Cost-Share	\$ 31,307
Term: 05/02/13 – 05/01/16	Total Cost	\$ 31,307

The SCAQMD leased two Honda Fit EVs from Penske Honda due to limited supply in stock. Honda plans to lease the Fit EV to approximately 1,100 customers over a two-year period to residents of California, Oregon, New York, New Jersey, Connecticut, Massachusetts, Maryland and Rhode Island. The AC induction motor provides 123 hp with a top speed of 90 mph, and there are three drive modes - normal, econ and sport. The U.S. EPA estimated range is 82 miles using a 20 kWh, air-cooled Li-Ion battery pack. The Fit EV is 700 pounds heavier than the gasoline version, and cargo capacity is reduced slightly from 57 to 50 cubic feet in a 5-passenger hatchback.

**13410: Lease Three 2013 Chevrolet Volt Extended-Range Electric Vehicles for Three Years**

Contractor: Selman Chevrolet Company	SCAQMD Cost-Share	\$ 41,084
Term: 04/03/13 – 04/02/16	Total Cost	\$ 41,084

The SCAQMD is leasing three additional 2013 Chevrolet Volt extended-range electric vehicles (also known as plug-in hybrid electric vehicles or PHEVs) to add to its demonstration fleet of

advanced technology vehicles, which are operated to increase public awareness of clean vehicle technologies and for display at public outreach events. PHEVs are vehicles with an all-electric, zero-emission range, followed by an efficient, gasoline-burning hybrid mode. The 2013 Volt has a zero-emission range of 38 miles, which can meet the needs of most trips so that the Volt can operate for extended periods of time without starting the engine. Upon depleting the zero-emission mode, the gasoline-burning “range extending” hybrid mode would allow drivers to take longer trips. Previously, SCAQMD leased two 2013 Chevy Volts for \$31,373, making the Chevy Volt one of the most cost-effective PEVs.

**Variou s:      Install & Upgrade EV Charging Infrastructure (Administer SoCalEV Infrastructure Project)**

Contractor: Various	SCAQMD Cost-Share	\$ 840,750
Term: 01/01/13 – 06/30/15	Total Cost	\$ 840,750

State, federal and local funds are currently being invested to support battery EV, plug-in hybrid EV and charging infrastructure. And while Southern California has an established network of public charging for EVs, the infrastructure is mostly obsolete. Consequently, in 2010, on behalf of the Southern California Electric Vehicle (SoCalEV) Regional Collaborative, the LADWP applied for and was awarded \$840,750 by the CEC to install public EV infrastructure at key Southern California locations. LADWP, however, asked the SCAQMD to administer the project. The funds were recognized into the Clean Fuels Fund, as noted in the incoming revenue table (Table 3), and in 2013 the SCAQMD executed the first half dozen of up to 30 agreements with members of the SoCalEV Regional Collaborative to install as well as upgrade existing public EV charging infrastructure at key Southern California locations. Data will also be collected on charger utilization, charging use patterns, operating costs, electricity used and real world electric range of EVs.

**13426: Develop & Demonstrate Catenary Class 8 Trucks (1 Electric & 1 CNG Platform)**

Contractor: Transportation Power, Inc.	SCAQMD Cost-Share	\$ 2,617,887
	Cosponsor:	
	Transportation Power, Inc. (in-kind)	564,908
Term: 06/07/13 – 06/06/16	Total Cost	\$ 3,182,795

Transportation Power, Inc. (TransPower) has contracted to deliver two trucks equipped with overhead catenary accessibility. The first truck is an existing vehicle that utilizes a battery electric drive system and will be converted to operate on the catenary system. The second truck will be designed and developed as a purpose built CNG-hybrid electric truck to incorporate TransPower’s electric drive system on a major OEM chassis. TransPower will integrate pantographs and associated components into both vehicles. TransPower will perform design, development and testing of new components that enable trucks using their electric drive architecture to acquire and convert power from overhead catenary lines (similar to those used by metro rail lines). The U.S. EPA also supported this project in the amount of \$500,000, with their pass-through funds recognized into the Clean Fuels Fund, as noted in the incoming revenue table (Table 3). The contract with TransPower is part of a larger project being undertaken by the



SCAQMD, which will include development and demonstration of additional vehicles and construction of one mile of a catenary system along Alameda to develop and demonstrate a catenary zero emissions goods movement system.

#### **13429: Lease One Toyota RAV4 Electric Vehicle for Three Years**

Contractor: Longo Toyota	SCAQMD Cost-Share	\$ 19,618
Term: 04/19/13 – 04/18/16	Total Cost	\$ 19,618

The SCAQMD leased one Toyota Rav4 EV from Longo Toyota which provided the lowest of three bidders. Toyota plans to produce 2,500 Rav4 EVs for model years 2012, 2013 and 2014, using 41.8 kWh LiIon battery packs with 10 kW onboard chargers provided by Tesla Motors, integrated in Fremont, California. The AC induction motor provides 154 hp at 2,800 rpm. The U.S. EPA estimated range is 103 miles for this EV. There is also an extended charge mode that provides about a 120 mile range and a sport mode that increases torque from 218 lb.-ft to 273 lb.-ft. The Rav4 EV is 470 pounds heavier than the gasoline version but no interior space is lost. It seats 5 adults or provides 73 cubic feet of cargo volume behind the front seat with fold flat rear seats.

#### **13439: MOU for Catenary Zero Emission Goods Movement Project**

Contractor: City of Carson	SCAQMD Cost-Share	\$ 0
Term: 10/01/13 – 09/30/16	Total Cost	\$ 0

Development and demonstration of zero emissions technologies for goods movement is one of SCAQMD's top priorities. In April 2013 the Board approved a project to develop and demonstrate a catenary zero emissions goods movement system. The project includes construction of one mile of catenary system and development and demonstration of diesel and CNG catenary hybrid electric class 8 trucks and integration of a catenary pantograph system on an existing battery electric class 8 truck. The one mile of catenary system will be constructed along Alameda Street from E. Lomita Blvd to the Dominguez channel in Carson, in coordination with the Ports of Los Angeles and Long Beach. This no-cost MOU between the City of Carson and SCAQMD facilitates the City of Carson's participation and assistance with permitting and the CEQA process.

#### **Purchase Order: Install Electric Vehicle Chargers**

Contractor: ATVLS, Inc.	SCAQMD Cost-Share	\$ 19,985
Term: 02/13/13 – 02/13/13	Total Cost	\$ 19,985

This project provided funds for the demonstration of Level 2 electric vehicle charging infrastructure from several manufacturers including Coulomb Technologies, ECOtality and Clipper Creek. Two chargers were installed at the Coachella Valley Association of Governments' facility in Palm Desert as part of SCAQMD's Fleet Demonstration Program.

#### **Purchase Order: Install Electric Vehicle Chargers**

Contractor: Clean Fuel Connection, Inc.	SCAQMD Cost-Share	\$ 17,389
Term: 01/29/13 – 02/20/13	Total Cost	\$ 17,389

This project provided funds for the demonstration of Level 2 electric vehicle charging infrastructure from several manufacturers including Coulomb Technologies, ECOtality and Clipper Creek. Charging infrastructure was placed at two SCAQMD Board Member residences as part of SCAQMD's Fleet Demonstration Program.

## **Engine Systems**

### **13168: Develop, Integrate & Demonstrate Heavy-Duty Natural Gas Engines**

Contractor: National Renewable Energy Laboratory	SCAQMD Cost-Share	\$ 1,300,000
Term: 05/22/13 – 12/31/15	Total Cost	\$ 1,300,000

The SCAQMD Board adopted a series of clean fuel fleet rules to reduce mobile source emissions within the SCAQMD's regulatory jurisdiction. The fleet rules require certain public entities and special districts, such as air, water, sanitation and school districts, with fifteen or more heavy-duty vehicles to acquire CARB-certified alternative-fueled heavy-duty vehicles when adding new vehicles or forming a new fleet. These rules have helped to advance natural gas engine technology and to expand the natural gas engine market into a wider range of heavy-duty vehicle applications. Specifically, on-road natural gas engines are now being used on a limited basis as an alternative to diesel engines in transit, refuse and goods movement applications. While the number of natural gas engines has grown, there is still a need to develop natural gas engines in the 11- to 14-liter range to fill the wide array of fleet applications currently served solely by diesel engines. As such, the SCAQMD has been working with NREL, the CEC and Southern California Gas Company (SoCalGas) to accelerate the development, integration and demonstration of natural gas engines ranging in sizes from 11 to 14 liters suitable for transit, refuse and goods movement applications. In 2011, the Board awarded a contract to U.S. DOE's NREL for \$3,055,000 to develop, integrate and demonstrate three different heavy-duty natural gas engines. The three engines will be used in refuse, transit and Class 8 heavy-duty truck applications and comply with the U.S. EPA 2010 heavy-duty emissions standards of 0.01 g/bhp-hr PM and 0.2 g/bhp-hr NO<sub>x</sub>. The first project is with Cummins Westport to develop and optimize a spark-ignited 11.9-liter CNG engine suitable for refuse and Class 8 application, and has been fully executed under a Cooperative Research and Development Agreement (CRADA) between SCAQMD and NREL. SoCalGas supported this first project with Cummins Westport in the amount of \$500,000, with their pass-through funds recognized into the Clean Fuels Fund, as noted in the incoming revenue table (Table 3). The CRADA will be modified again at a later date to include the remaining two projects.

## **Mobile Fuel Cell Technologies**

### **10501: Lease One Clarity Fuel Cell Vehicle for Three Years**

Contractor: American Honda Motor Company, Inc.	SCAQMD Cost-Share	\$ 5,232
Term: 01/21/10 – 09/11/13	Total Cost	\$ 5,232

The Executive Officer approved a short-term extension of the lease contract with Honda for the 2009 Honda Clarity FCX. The Clarity has been in the SCAQMD demonstration fleet and is primarily used at outreach events and public meetings to demonstrate state-of-the-art hydrogen fuel cell vehicles.

**13155: Lease Two F-Cell Fuel Cell Vehicles for Two Years**

Contractor: Fletcher Jones Motor Cars Inc. (Mercedes-Benz)	SCAQMD Cost-Share	\$ 30,397
Term: 02/08/13 – 02/08/15	Total Cost	\$ 30,397

The SCAQMD leased two Mercedes F-Cell fuel cell vehicles from Fletcher Jones MotorCars which is conveniently located near the UC Irvine hydrogen fueling station. SCAQMD previously demonstrated Mercedes A-class (smaller) F-Cell vehicles from 2005 to 2009. Mercedes plans to demonstrate about 200 F-Cells as part of this pilot program in the US and Europe. This new B-Class F-Cell provides 136 hp and a top speed of 106 mph. Range is improved to about 200 miles compared to the previous A-Class version when refueling at a higher pressure of 700 bar. The vehicle will be placed into our alternative fuel vehicle fleet to demonstrate new clean fuel vehicles to public and private organizations to promote zero- and low-emission technologies.

**14054: Participate in California Fuel Cell Partnership for Calendar Year 2013 and Provide Support for Regional Coordinator**

Contractor: Bevilacqua-Knight, Inc.	SCAQMD Cost-Share	\$ 137,800
	Cosponsors:	
	8 automakers; 6 government agencies; 1 fuel cell provider; and 19 associate members	1,539,000
Term: 01/01/13 – 12/31/13	Total Cost	\$ 1,676,800

The SCAQMD has been a member of the California Fuel Cell Partnership (CaFCP) since 2000. The CaFCP and its members are demonstrating fuel cell passenger cars and transit buses with associated hydrogen fueling infrastructure in California. Since the CaFCP is a voluntary collaboration, each participant contracts with Bevilacqua-Knight, Inc. (BKI) for their portion of CaFCP administration. For Calendar Year 2013 the SCAQMD contributed \$87,800 for its membership participation and up to \$50,000, along with office space at SCAQMD Headquarters, to provide support for the CaFCP Regional Coordinator.

**13059: No-Cost Lease of Fuel Cell Vehicle for Two-Years**

Contractor: Hyundai America Technical Center Inc.	SCAQMD Cost-Share	\$ 0
Term: 12/13/13 – 12/12/15	Total Cost	\$ 0

SCAQMD has been working with Hyundai America Technical Center Inc. to become a partner in their fuel cell vehicle demonstration program. In 2013 Hyundai approached the SCAQMD and requested its participation in the on-road testing of their new fuel cell electric vehicle. The on-road testing program is being funded by a grant from the U.S. DOE. Hyundai provides fuel cell vehicles in-kind as their cost-share to secure U.S. DOE funding. This no-cost lease with Hyundai will allow the SCAQMD to participate in the development of this technology and demonstrate its effectiveness. The vehicle will be placed into our alternative fuel vehicle fleet to demonstrate new clean fuel vehicles to public and private organizations to promote low-emission technologies.

## **Hydrogen Technologies & Infrastructure**

### **10061: Maintenance & Data Management for the SCAQMD Hydrogen Fueling Station**

Contractor: Hydrogenics Corporation	SCAQMD Cost-Share	\$ 100,000
Term: 10/30/09 – 01/31/15	Total Cost	\$ 100,000

The SCAQMD, in partnership with Hydrogenics Corporation, installed a hydrogen generation and fueling station at SCAQMD Headquarters. This system uses electrolysis of water to produce the hydrogen and includes the capability to produce backup electrical power using a hydrogen-powered internal combustion engine. This system has been used extensively by the SCAQMD hydrogen-powered vehicle fleet and other hydrogen vehicles for other demonstration programs throughout Southern California. The hydrogen fuel quality has been tested and shown to meet the needs of fuel cell vehicle manufacturers and of the SCAQMD. SCAQMD has become a vital location as part of the California Hydrogen Highway network. In order to continue maintenance and data management of the existing SCAQMD hydrogen station, an amendment of the contract with Hydrogenics Corporation was required. This contract extends beyond the original scope of the project and will ensure the station is maintained while plans are made for the station's upgrade.

### **11150: Maintain & Operate City of Burbank Hydrogen Fueling Station**

Contractor: Hydrogen Frontier, Inc.	SCAQMD Cost-Share	\$ 275,000
Term: 11/24/10 – 01/23/16	Total Cost	\$ 275,000

The City of Burbank hydrogen fueling station was one of the original stations under the Five Cities Hydrogen Program. Pursuant to a DOE Program, the original electrolyzer station was removed and a new steam methane reformer (SMR) based station was installed. When the DOE project was completed, the SCAQMD in partnership with the CARB and NREL funded the ongoing operation of the station. The station has now become an important connector station for all FCVs in Southern California and is now fueling up to 60 kg per day. This amendment provides funding to continue operation and maintenance as well as pay for increased costs associated with utility services (electricity and natural gas) for this station. This contract extends beyond the original scope of the project and will ensure that the station is maintained and will meet the increased demand for hydrogen fuel.

### **13259: Hydrogen Station Operation & Maintenance for Five Cities Hydrogen Program**

Contractor: Air Products and Chemicals, Inc.	SCAQMD Cost-Share	\$ 300,000
Term: 03/26/13 – 09/25/14	Total Cost	\$ 300,000

Air Products and Chemicals, Inc. (APCI) designed and constructed five hydrogen fueling stations under the Five Cities Hydrogen Program, which included three electrolyzers and two mobile fuelers. APCI has provided operation, repair and general maintenance services for the stations since the program began. This contract is to continue ongoing maintenance and operation including equipment repair or replacement for another two years for electrolyzer stations located

in the cities of Santa Monica and Riverside plus a mobile fueler in the City of Santa Ana. The Ontario Station was dismantled and shut down and operation and maintenance of the City of Burbank station was taken over by Hydrogen Frontier, Inc.

#### **13400: Develop Hydrogen Network Investment Plan**

Contractor: Energy Independence Now	SCAQMD Cost-Share	\$ 50,000
	Cosponsors:	
	Energy Independence Now	15,000
	California Fuel Cell Partnership	25,000
	Daimler	15,000
	Toyota	25,000
Term: 04/05/13 – 01/04/15	Total Cost	\$ 130,000

California does not have a clear plan to open and maintain the early commercial hydrogen fueling infrastructure needed to launch the fuel cell electric vehicle (FCEV) market. The CaFCP Roadmap clearly establishes the need for 68 hydrogen stations by the beginning of 2016 to reach California's early market potential for FCEVs. It does not, however, define how to get there. Initially, the success of the Roadmap completely depended upon the CEC's oversubscribed AB 118 Program, which even using optimistic assumptions, would provide for only about half of these stations by 2016. While Assembly Bill 8, which was chaptered in September 2013, dedicates additional funding to build up to 100 hydrogen stations, the Roadmap target can only be achieved with a clear plan on how the additional stations will be financed, including evaluating the evolving market dynamics and potential incentive options. To develop and outline a methodology on how to move forward, Energy Independence Now, in conjunction with the CaFCP and its partners, will develop a Hydrogen Network Investment Plan (HNIP) that will include a pathway for Market Assurance Grant (MAG) implementation, operating guidelines and the next steps for implementation of a proposed funding mechanism to administer these grants, ultimately leading to complement CEC grants.

#### **14067: Develop Hydrogen Storage Capability for the Gas-Blending Facility**

Contractor: University of California, Irvine	SCAQMD Cost-Share	\$ 200,000
	Cosponsors:	
	U.S. Department of Energy	134,000
	California Energy Commission	241,000
	NFCRC	53,000
	Air Products & Chemicals, Inc.	60,000
Term: 12/31/13 – 07/16/15	Total Cost	\$ 688,000

Hydrogen fuel cell vehicles have zero emissions, and hydrogen blended with other fuels, such as natural gas, has shown the potential to reduce emissions in mobile and stationary combustion sources. Hydrogen and natural gas blends may provide a near-term opportunity to displace petroleum-based fuels while reducing emissions. Testing of distributed generation devices,

including microturbines and fuel cells, on different blends of hydrogen is a focus of the U.S. DOE and CEC. This project will develop hydrogen storage capability for a gas blending facility at UCI's Advanced Power and Energy Program. It will enable the study of hydrogen and hydrogen/natural gas blends for distributed generation applications. The capacity will be 100,000 cu.ft. of compressed hydrogen stored at 2,200 psi. This capacity will allow the continuous operation of 30 kW of distributed generation devices given a normal hydrogen delivery schedule and intermittent operation of a 250 kW distributed generation on an aggressive delivery schedule.

**Purchase Order: Hydrogen Quality Sampling Adaptor Repair**

Contractor: Gas Technology Institute	SCAQMD Cost-Share	\$ 1,125
Term: 04/02/13 – 04/02/13	Total Cost	\$ 1,125

The SCAQMD performs hydrogen quality sampling at demonstration hydrogen stations demonstrated in its jurisdiction including the one maintained at SCAQMD Headquarters. The apparatus used to perform the sampling began leaking, creating a safety hazard and contamination concern. A purchase order was issued for, and payment made to, GTI to repair the sampling apparatus.

**Stationary Clean Fuel Technologies**

**13078: Steam Hydrogasification Reaction Demonstration to Generate Substitute Natural Gas from Biomass Waste**

Contractor: University of California, Riverside	SCAQMD Cost-Share	\$ 72,916
	Cosponsors:	
	California Energy Commission	649,214
	Synergy, Inc. (in-kind)	200,000
Term: 03/07/13 – 06/07/14	Total Cost	\$ 922,130

Utilization of renewable energy sources, including biomass waste, has the potential to make a significant contribution in providing sustainable power and transportation fuel for the future. Steam Hydrogasification Reaction (SHR) is a thermo-chemical process, developed by the University of California, Riverside, to convert carbonaceous matter in biomass waste into methane in a hydrogen rich environment. The SHR process is capable of generating product gas with 90% or higher methane content in a cost effective and efficient manner. It is also capable of handling wet feedstocks without drying, providing an attractive and viable solution to utilize wet sludge and green waste in lieu of landfill disposal. The objectives of this project are to demonstrate the SHR technology in a Process Demonstration Unit using biosolids comingled with food waste and green waste to produce Substitute Natural Gas and to provide preliminary modeling evaluation and design for a five ton-per-day pilot plant for the next phase.

## **Outreach and Technology Transfer**

### **12486: Technical Assistance with Goods Movement and Zero-Emission Transportation Technologies**

Contractor: ICF Resources LLC	SCAQMD Cost-Share	\$ 50,000
Term: 09/24/13 – 09/23/15	Total Cost	\$ 50,000

The Clean Fuels Program supports projects to research, develop, demonstrate, and deploy technologies to accelerate commercialization of clean, new technologies. Due to constant and rapid changes in technologies and the sheer breadth of the potential projects, staff occasionally requires input from experts and practitioners in the field to aid in selecting and establishing projects for funding through the Clean Fuels Program as well as the many incentive programs the SCAQMD administers. ICF International is a leading technology firm with over 40 years of experience and will provide technical assistance with goods movement technologies, alternative fuels, and zero-emission transportation technologies under this contract. ICF has worked as a prime contractor for local, state and federal agencies and has extensive expertise in the areas of fuels and transportation related issues.

### **13256: Program and Technical Assistance for Clean Vehicle Outreach and Senior Clean Air Fair**

Contractor: Three Squares, Inc.	SCAQMD Cost-Share	\$ 21,500
Term: 01/05/13 – 12/31/13	Total Cost:	\$ 21,500

Three Square's Inc. (TSI) developed a customized content management system (CMS) for the Clean Air Choices vehicle comparison calculator. The CMS allows SCAQMD staff to update the vehicles by model year, emission factors and vehicle costs. Only the lowest emission vehicles are included in the database. TSI also prepared custom outreach materials to promote the vehicle calculator and staffed three outreach events where the program was highlighted.

### **13408: Demonstrate Building Integration of Electric Vehicles, Photovoltaics and Stationary Fuel Cells**

Contractor: University of California, Irvine	SCAQMD Cost-Share	\$ 150,000
	Cosponsor:	
	University of California, Irvine	120,000
Term: 09/30/13 – 09/29/15	Total Cost	\$ 270,000

U.C. Irvine's Advanced Power and Energy Program will demonstrate building integration of plug-in electric vehicles, photovoltaics and stationary fuel cells with the electrical grid. The CEC through its AB 118 Program recently awarded U.C. Irvine \$120,000 for installation of new Level 2 chargers at multiple locations on campus, and the SCAQMD was asked to partner on this project. Information from these new chargers can be included in this modeling effort, with two to three chargers to be installed near the Multipurpose Science and Technology Building integrated into the building controls. U.C. Irvine will integrate existing computer models for solar photovoltaic, high-temperature fuel cells, electric grid operation and PEV operations, with operational data collected from their existing 95 kW photovoltaic solar system, new and existing

on-campus EVSE and a recently co-funded molten carbonate fuel cell to explore the integration of PEV charging and distributed energy generation.

**Transfer: Participate in California Natural Gas Vehicle Partnership**

Contractor: Transfer from Clean Fuels	SCAQMD Cost-Share	\$ 25,000
	Cosponsors:	
	CNGVP Participating Members	135,000
Term: 03/01/13 – 03/01/13	Total Cost	\$ 160,000

The California Natural Gas Vehicle Partnership (CNGVP) was formed to accelerate the development of advanced natural gas vehicle technologies to provide a benchmark for lowering emissions from petroleum-based engines and to provide a pathway to future fuel cell use in the next two decades. The SCAQMD spearheaded the formation of this strategic alliance, which comprises state and federal air quality, transportation and energy agencies, vehicle and engine manufacturers, fuel providers, and transit and refuse hauler organizations. Partnership Steering Committee members contribute monies to fund specific projects intended to achieve the goal of the Partnership. In March 2013 the SCAQMD approved \$25,000 for the SCAQMD's participation in the Steering Committee for the next two years.

**Direct Pay: Participation for CY 2013 Membership in Transportation Research Board and Support of Minority Student Fellows Program**

Contractor: Transportation Research Board	SCAQMD Cost-Share	\$ 37,500
	Cosponsors:	
	SCAQMD's Legislative & Public Affairs Office	32,500
	Participating Members	3,930,000
Term: 01/01/13 – 12/31/13	Total Cost	\$ 4,000,000

In 2013 the SCAQMD supported the Transportation Research Board (TRB) by participating as a member and sponsoring TRB's 2013 Minority Student Fellowship Program. The mission of the TRB is to promote innovation and progress in transportation through research. In an objective and interdisciplinary setting, TRB facilitates the sharing of information on transportation practice and policy by researchers and practitioners; stimulates research and offers research management services that promote technical excellence; provides expert advice on transportation policy and programs; and disseminates research results broadly and encourages their implementation. TRB's varied activities annually engage more than 7,000 engineers, scientists, and other transportation researchers and practitioners from the public and private sectors and academia, all of whom contribute their expertise in the public interest by participating on TRB committees, panels and task forces. TRB is one of six major divisions of the National Research Council (NRC) - a private, nonprofit institution that is jointly administered by the National Academy of Sciences, the National Academy of Engineering and the Institute of Medicine - and is the principal operating agency of the National Academies in providing services to the government, the public and the scientific and engineering communities. The TRB Executive Committee, whose members are appointed by the chairman of NRC, exercises oversight responsibility for the Board's



programs and activities. Members include senior transportation industry executives, top officials of public-sector transportation agencies, and distinguished researchers from academia. Sponsors and affiliates provide support for TRB core programs and activities. Sponsors are the major source of financial support for TRB’s core technical activities. Federal, state, and local government agencies and professional societies and organizations that represent industry groups are eligible to be TRB sponsors. TRB’s annual expenditures for program activities exceed \$90 million.

**Direct Pay: Cosponsor 15 Conferences, Workshops & Events plus 1 Membership**

Contractor: Various	SCAQMD Cost-Share	\$ 226,164
	Cosponsors:	
	Various	5,020,000
Term: 01/01/13 – 12/31/13	Total Cost	\$ 5,246,164

The SCAQMD regularly participates in and hosts or cosponsors conferences, workshops and events. These funds provide support for the 15 conferences, workshops and events sponsored throughout 2013 as follows: The Women in Green Forum (Southern California & Washington DC); 2013 Asilomar Conference on Transportation & Energy Policy; Electric Drive Transportation Association Campaign and 2013 Conference; February 2013 Clean Fuel Advisory Group Participation Fees; 2013 Mobile Source Air Toxics Workshop; 2013 Real World Vehicle Emissions Workshop; PEMS Conference; 2013 ICEPAG; Act Expo 2013 Washington DC; 6<sup>th</sup> Symposium on Global Emerging Environmental Challenges and Government; Plug-In 2013; 2013 SoCal Energy Summit; 2013 Life Cycle Analysis of Transportation Fuels Workshop; 2013 Santa Monica AltCar Expo & Conference; and 2013 LA Auto Show Sponsorship. Membership for 2013 to support the Electric Drive Transportation Association is also included.

## PROGRESS AND RESULTS IN 2013

### Key Projects Completed

A large number of emission sources contribute to the air quality problems in the South Coast Air Basin. Given the diversity of these sources, there is no single technology or “silver bullet” that can solve all of the region’s problems. Accordingly, the SCAQMD continues to support a wide range of advanced technologies, addressing not only the diversity of emissions sources, but also the time frame to commercialization of these technologies. Projects co-funded by the SCAQMD’s Clean Fuels Program include emission reduction demonstrations for both mobile and stationary sources, although legislative requirements limit the use of available funds primarily to on-road mobile sources.

Historically, mobile source projects have targeted low-emission technology developments in automobiles, transit buses, medium- and heavy-duty trucks and off-road applications. These vehicle-related efforts have focused on: 1) advancements in engine design, electric power trains, energy storage/conversion devices (e.g., fuel cells and batteries); and 2) implementation of clean fuels (e.g. natural gas, propane and hydrogen) including their infrastructures. Stationary source projects have included a wide array of advanced low NO<sub>x</sub> technologies and clean energy alternatives, such as fuel cells, solar power and other renewable energy systems.

Table 6 (page 51) provides a list of 37 projects and contracts completed in 2013. Summaries of the completed technical projects are included in Appendix C. Selected projects which represent a range of key technologies from near-term to long-term are highlighted below.

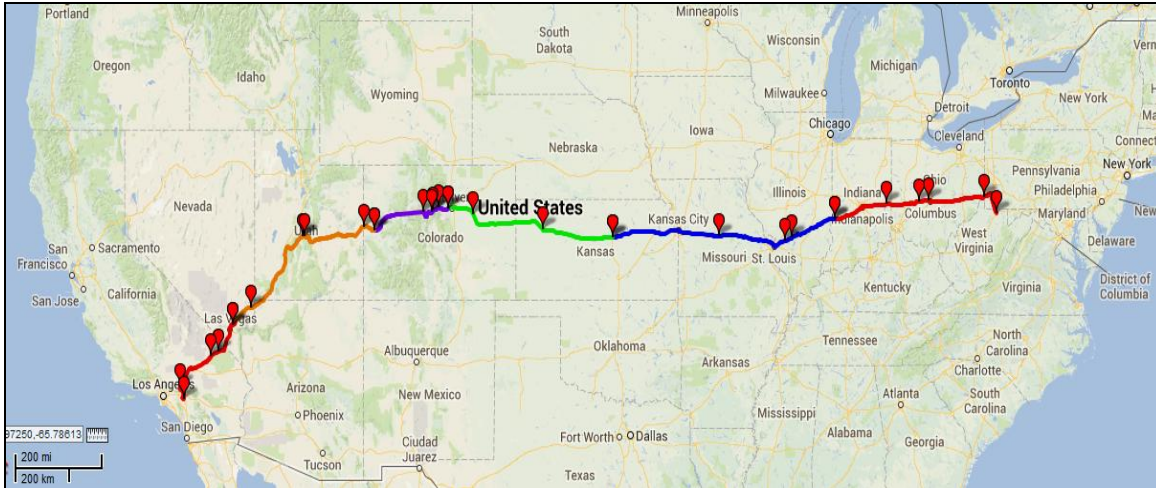
#### **In-Use Emissions Testing & Demonstration of Retrofit Technology for On-Road Heavy-Duty Engines**

On-road heavy-duty engines are now subject to the 2010 U.S. EPA emissions standards of 0.01 g/bhp-hr PM and 0.20 g/bhp-hr NO<sub>x</sub>. Some engine manufacturers are using emissions credits which allow them to produce a mixture of engines certified at, below, or above 0.20 g/bhp-hr NO<sub>x</sub>. While recent limited-scale studies have shown reduced NO<sub>x</sub> and PM emissions from trucks powered by 2010 compliant engines, other studies indicate a potential increase in some exhaust emissions. As such, additional studies are required to assess the impact of the technologies on emissions from engines used in a variety of applications, particularly since the number of these engines will continue to increase in the future.

In December 2010 and October 2011, the Board awarded contracts to WVU and CE-CERT to conduct in-use emissions testing of 24 MY 2007-2012 heavy-duty vehicles from different vocations and fueling technologies and, if needed, to evaluate emission reduction potential of retrofit technologies for ammonia emission from a heavy-duty natural gas engine. The study also involve the in-use characterization of NO<sub>x</sub> and GHG emissions from a MY 2011 heavy-duty MACK diesel vehicle equipped with DPF and SCR during a long-haul operation across the country. The Mack truck was used to transport WVU transportable emissions measurement system across the country while continuously measuring emission through a 40 CFR Part 1065 compliant CVS system for over a 2,500-mile route between Morgantown, WV, and Riverside, CA.



Figure 11: Portable In-Use Emissions Mobile Unit



**Figure 12: 2,500-Mile Route of In-Use Emissions Study**

The test vehicle vocation included goods movement, refuse truck, transit bus and school bus applications. The test matrix involved five natural gas and four dual-fuel (natural gas and diesel) vehicles to be chassis dynamometer tested by WVU, eight diesel and two propane vehicles to be tested by CE-CERT and five diesel vehicles to be tested by both WVU and CE-CERT for inter laboratory comparison. The engine technologies and vocations of vehicles tested by WVU and CE-CERT are shown below.

**Figure 13: Vehicle test matrix of engine technologies and vehicle vocations**

Engine/Technology	Vehicle Vocation/Number of Vehicle			
	Transit	School Bus	Refuse	Goods Movement
I. Natural gas engine with three-way catalyst	1 <sup>1</sup>	-	1 <sup>1</sup>	3 <sup>1</sup>
II. High pressure diesel injection (HPDI) engine with EGR and DPF at 0.8g NO <sub>x</sub>		-	-	3 <sup>1</sup>
III. HPDI engine with EGR, DPF, and SCR at 0.2g NO <sub>x</sub>				1 <sup>1</sup>
IV. Diesel engine certified at 1.2g NO <sub>x</sub>		-	1 <sup>2</sup>	1 <sup>3</sup> +2 <sup>2</sup>
V. Propane and diesel school bus	-	2 <sup>2</sup>	-	-
VI. Propane engine certified at or below 0.2g NO <sub>x</sub>			1 <sup>2</sup>	
VII. Diesel Engine certified above 0.2g NO <sub>x</sub> w/o SCR		-	1 <sup>3</sup> +	1 <sup>3</sup> +1 <sup>2</sup>
VIII. Diesel Engine certified at or below 0.2g NO <sub>x</sub> w/SCR		-	1 <sup>3</sup> +1 <sup>2</sup>	1 <sup>3</sup> +2 <sup>2</sup>

<sup>1</sup> WVU test vehicles; <sup>2</sup> CE-CERT test vehicles; <sup>3</sup> Round-robin test vehicles

The in-use emissions results showed that the three-way catalyst equipped stoichiometric natural gas vehicles emitted significantly lower distance-specific NO<sub>x</sub> emissions than comparable SCR equipped diesel vehicles over all applications. The stoichiometric fuel-air-ratio strategy contributed to a sustained NO<sub>x</sub> reduction activity by the three-way catalyst, unlike the SCR technology that is affected by vehicle operation that results in exhaust temperature lower than 250 degrees Celsius. For example, stoichiometric natural gas vehicles emitted 91% lower distance-specific NO<sub>x</sub> emissions than a SCR equipped diesel vehicles over a near-dock driving cycle characterized by extended idle and creep operation. The SCR catalyst activity profile suggested

the after-treatment system to be active less than 40% of the time during all types of drayage operations. The dual-fuel natural gas vehicle exhibited a SCR catalyst activity profile similar to that of the diesel technology vehicles. However, the lower in-cylinder NO<sub>x</sub> formation due to dual-fuel combustion resulted in an overall reduction in NO<sub>x</sub> emissions compared to SCR equipped diesel vehicles. Similarly, the natural gas refuse vehicle emitted 20% lower NO<sub>x</sub> emissions than a comparable SCR equipped diesel refuse vehicle. The PM emissions from both natural gas engines and diesel engines equipped with DPF were close to the detection limits of the gravimetric method.

The activity of the three-way catalyst contributes to the formation of ammonia, and as a result, the stoichiometric natural gas vehicles were characterized by ammonia emissions close to 1 g/mi over all driving cycles. N<sub>2</sub>O emissions were observed only during the warm-up period of the three-way catalyst. No significant ammonia emissions were detected from SCR equipped diesel vehicles.

In conclusion, emissions comparison between stoichiometric natural gas vehicles and SCR equipped diesel vehicles show the three-way catalyst after-treatment system to be superior in NO<sub>x</sub> reduction compared to SCR system. Since, the TWC is dependent on the control of air-fuel ratio close to stoichiometric rather than exhaust temperature characteristics, the activity of the TWC is extended even to idle and creep mode operation. Therefore, natural gas engines can be viewed as better alternatives to modern diesel technology in certain applications such as refuse trucks and port drayage trucks that are characterized by extended idle and creep. The fuel range limitation of stoichiometric natural gas vehicle may limit its operation to smaller geographical coverage. However, the dual-fuel HPDI vehicles with the lean-burn technology provided the same range advantage of a diesel vehicle with a relatively lower NO<sub>x</sub> emissions profile.

The cross-country study showed that the NO<sub>x</sub> conversion efficiency of the SCR after-treatment system to be on an average 83-88% during the course of the test campaign. Sustained temperatures of greater than 250 Deg C contributed to high SCR activity at highway driving conditions. One of the shortcomings of the cross-country study was the lack of high traffic densities in major sections of the route. Therefore the effect of extended idling and stop-and-go traffic on SCR activity was seldom noticed. A one hour duration of a "high NO<sub>x</sub>" event observed in the state of Kansas contributed to close 92% of the total NO<sub>x</sub> emitted during a 5 hour duration micro trip. The "high NO<sub>x</sub>" event can be attributed to SCR regeneration strategies adopted by OEM to burn adsorbed hydrocarbons and or prevent urea crystallization.

### **Demonstrate Quick Charge Infrastructure for Electric Buses**

Transit buses are ideal applications for advanced, alternative energy technologies that address criteria pollutant and green house gas emissions because they operate in highly visible, congested areas where air quality is a problem. Electric zero emission transit buses address these problems. Traditionally, the range and charging needs of batteries have been barriers to employ battery-powered buses in large-scale applications. Additionally, the weight of traditional buses has made it difficult to feasibly incorporate a battery with sufficient power and energy storage capacity into coach designs. By using a smaller battery that can be charged quickly and repeatedly, the bus weight and cost can be reduced. The keys to quick charge electric bus technology are the utilization of a quick-charge battery and quick-charge infrastructure. The battery must be able to retain its energy reserve and charging profile over many charge-discharge cycles and be quick-charged in ten minutes or less. The quick charge infrastructure must be able to deliver a large amount of energy in a short period of time, and operate safely without human intervention because of the high voltage and associated heavy cables.

Foothill Transit replaced three diesel buses with Ecoliner electric buses with quick-charge capability and quick-charge infrastructure on an existing route from the City of La Verne to the

City of Pomona. The 35-foot Ecoliner bus carries 37 passengers and is powered by a 75 kW hr battery. Funding from SCAQMD supported the charging technology, charging station and supplemental charging components associated with the Ecoliner buses. The charging system connects to the bus from overhead. The charging



**Figure 14: Foothill Transit's Electric Bus Charging in Pomona**

station includes the architectural and engineering design, the installation and construction of the charging station for the three buses. The benefits of this proprietary technology are a safe automated charging system that will perform without human intervention.

All three Ecoliner buses are running in daily revenue service on line 291 from La Verne to Pomona. The three buses have accumulated nearly 175,000 in-service miles and Proterra data collection indicates overall energy efficiency is as good as or better than initially expected. Foothill Transit became the first transit agency in the U.S. to use on-route charge electric buses, and they plan to purchase an additional 12 buses from Proterra to completely electrify the 291 route between La Verne and Pomona and use 3 of the 12 in other routes within their territory.

### **Demonstrate Advanced Fuel Cell Bus**

Fuel cell buses have been successfully demonstrated in recent years in California, across the United States and Canada. The SCAQMD has long sponsored the development and deployment of fuel cell bus technologies because these heavy-duty vehicles have zero-tailpipe emissions, help establish hydrogen refueling infrastructure, and operate in congested urban areas providing the greatest outreach potential through ridership. The next step in the development of this clean air technology is commercialization. The intent of American Fuel Cell Bus (AFCB) project was the development of a newly designed fuel cell bus with a North American chassis, as well as domestically sourced fuel cell and drive components.

The AFBC achieved an 83% average availability starting from the clean point established at the beginning of March, 2012 through the end of December, 2012. Following the clean point, bus availability in six out of the ten months was above the target of 85%. During the demonstration phase the American Fuel Cell Bus experienced occasional anomalies which included several component failures. In each case the issues were promptly addressed by the IPT. In general the issues that were encountered were fairly “low-tech” in nature.



**Figure 15: American Fuel Cell Bus In Service SunLine Transit**

The project brought together a newly formed team of world class companies to apply their products and expertise to develop a first of its kind 40' heavy duty, zero emissions, fuel cell bus. The American Fuel Cell bus project favorably addressed many of the challenges currently facing the introduction of fuel cell technology and met the goals for the project that were established at the onset. The

project advanced the pathway to commercialization and addressed challenges of cost competitiveness, reliability, durability, integration and manufacturing. With SunLine Transit at both the project leadership and the operational ends of the project, the team forged a blueprint on how to deliver and operate reliable, American built, zero emission technology in the transit world. The project independently verified the frequent claim that Hydrogen powered, fuel cell technology is indeed “proving out”. The relatively “low tech” nature of the issues encountered during demonstration period suggest that the major technological hurdles of fuel cell powered transit have been substantially addressed. Additionally key enabling technologies including fully electrified accessories and reliable fueling infrastructure have also been advanced. The average availability of the bus exceeded the availability of the CNG reference fleet and availability is expected to improve as the integration is refined. This suggests that the technology has matured and will continue to mature to a level that supports larger scale deployments. The performance, reliability, maintenance and operating cost of the American Fuel Cell Bus is stable and approaching an affordability point that enables transit properties to consider applying for funds to deploy fuel cell buses or to support a larger centralized deployment.

### Natural Gas Infrastructure & Deployment

The AQMP identifies the use of alternative clean fuels in mobile sources as a key attainment strategy, and the importance of natural gas refueling infrastructure cannot be overemphasized if the region is to realize large-scale deployment of alternative fuel technologies. Natural gas vehicles have lower emissions than gasoline and significantly lower than their diesel counterparts and represent the cleanest internal combustion engine powered vehicles available in today’s market. Consequently, amongst the mixed portfolio of technical priorities within the Clean Fuels Program is the continued emphasis on the installation, maintenance and expansion of natural gas infrastructure throughout the Basin including the Ports. In 2013 three significant natural gas infrastructure contracts, which are representative of the natural gas refueling infrastructure the Clean Fuels Program encourages and supports, were completed and closed as follows:

1) In 2008 the City of San Bernardino built a nearly \$2 million LNG-L/CNG station including a 15,000 gallon LNG bulk storage tank at its City municipal service yard. The station has now been operating successfully for five years, fueling their 75 vehicle, and ever growing, natural gas fleet with throughput in 2013 of more than 85,000 gallons of natural gas.

2) Also in 2008 the Los Angeles Unified School District built a \$1.3 million time- and fast-fill CNG station at its Sun Valley Bus Garage. The station has now been operating successfully for five years, fueling their 100 plus CNG school bus fleet with throughput in 2012 of nearly one-half million DGE of natural gas.

3) In 2012 Border Valley Trading and its development partner Hey Day Farms, which are exporters of agri-products, built a \$2.5 million LNG fueling station including a 6,000 gallon fueling unit in Palm Springs. The station has been operating successfully, fueling their 40 heavy-duty LNG trucks with throughput for the first quarter exceeding 37,000 GGEs. In the near future they plan to expand storage and fueling capabilities at this station.



**Figure 16: City of San Bernardino’s East Valley Regional Fueling Facility**

Recognizing the importance of natural gas infrastructure, the SCAQMD actively pursues outside funding to supplement its own Clean Fuels Program dollars in this core technology. Table 5 is a comprehensive summary of federal and state revenue awarded to the SCAQMD from 2009 to 2012 and includes several natural gas infrastructure projects this agency is administering to fill critical gaps in natural gas infrastructure. One representative example is the DOE Clean Cities award the SCAQMD received to expand the LNG corridor from Ontario to Las Vegas, which included not only the installation of a publicly accessible LNG fueling station in Las Vegas but also the purchase of 48 heavy-duty LNG tractors for operation by UPS. The Clean Fuels Program Plan Update for 2014 continues to emphasize natural gas infrastructure and deployment projects, allocating 8% of the \$16.4 million of potential projects.

**Table 6: Projects Completed between January 1 & December 31, 2013**

<b>Contract</b>	<b>Contractor</b>	<b>Project Title</b>	<b>Date</b>
<b><i>Infrastructure and Deployment</i></b>			
07149	City of San Bernardino	Purchase & Install New Public Access LNG-L/CNG Fueling Station at City Municipal Service Yard	Dec-13
08271	Los Angeles Unified School District	Purchase & Install New CNG Fueling Station at Sun Valley Bus Garage	Dec-13
11559	Ace Parking Management	Purchase & Deploy Six CNG Cutaway Shuttle Vans	Jul-13
12273	Border Valley Trading	Construct New LNG Fueling Station in Palm Springs	Jul-13
12386	Agility Fuel Systems	Demonstrate Natural Gas-Powered Police Vehicle	Jun-13
<b><i>Fuels/Emission Studies</i></b>			
08320	University of Denver	Remote Sensing Measurements of On-Road Emissions from Heavy-Duty Diesel Vehicles	Dec-13
08321	Environmental Systems Products	Remote Sensing Measurements of On-Road Emissions from Heavy-Duty Diesel Vehicles	Dec-13
11611	West Virginia University Research Corporation	In-Use Emissions Testing & Demonstrate Retrofit Technology for On-Road Heavy-Duty Engines	Oct-13
11612	University of California, Riverside/CE-CERT	In-Use Emissions Testing & Demonstrate Retrofit Technology for On-Road Heavy-Duty Engines	Aug-13
12154	University of California, Riverside	Identify Cellulosic Biomass Feedstocks	Oct-13
13451	Energy Solutions	Passenger Vehicle Tire Replacement Efficiency Study	Dec-13
<b><i>Emission Control Technologies</i></b>			
08246	Griffith Construction Company	Showcase: Demonstrate NO <sub>x</sub> and PM Emission Control Technology on Diesel-Powered Construction Equipment	Dec-13
10069	Johnson Matthey, Inc.	Develop & Demonstrate Selective Catalytic Regeneration Technology for NO <sub>x</sub> and PM Emissions Control on Heavy-Duty Trucks	Oct-13
12485	California State University Long Beach Foundation	CSULB CEERS Student Education Study to Assess the Effects of a Humid Air System with an Exhaust Scrubber on Diesel Emissions	Mar-13
<b><i>Electric/Hybrid Technologies &amp; Infrastructure</i></b>			
99109†	Toyota Motor Credit Corporation	Lease Two Toyota RAV4 Electric Vehicles	Feb-13
09345	South Bay Cities Council of Governments	Demonstrate Medium-Speed Neighborhood Electric Vehicles	Apr-13



**Table 6: Projects Completed between January 1 & December 31, 2013(cont'd)**

<b>Contract</b>	<b>Contractor</b>	<b>Project Title</b>	<b>Date</b>
<b><i>Electric/Hybrid Technologies &amp; Infrastructure (cont'd)</i></b>			
10738	Foothill Transit	Demonstrate Quick Charge Infrastructure for Electric Buses	Jun-13
12024	ECotality North America	Upgrade & Install Electric Charging Infrastructure	May-13
<b><i>Mobile Fuel Cell Technologies</i></b>			
10501†	American Honda Motor Company	Lease a Clarity Fuel Vehicle for Three Years	Jul-13
10650	SunLine Transit Agency	Demonstrate Advanced Fuel Cell Bus (American Fuel Cell Bus)	Jun-13
10714	University of California, Irvine	Develop Fuel Cell Gas-Turbine Hybrid System for On-Board Locomotive Applications	Dec-13
13113	Bevilacqua-Knight, Inc.	Participate in California Fuel Cell Partnership for Calendar Year 2012 & Provide Support for Regional Coordinator	Jan-13
14054	Bevilacqua-Knight, Inc.	Participate in California Fuel Cell Partnership for Calendar Year 2013 & Provide Support for Regional Coordinator	Dec-13
<b><i>Health Impacts Studies</i></b>			
09307†	California Air Resources Board	In-Vehicle Air Pollution Exposure Measurement and Modeling	Jun-13
<b><i>Outreach and Technology Transfer</i></b>			
02308†	Sperry Capital, Inc.	Evaluate Financial Stability of Potential Contractors	Dec-13
04049†	Engine, Fuel and Emissions Engineering, Inc.	Technical Assistance for Alternative Fuels Engine Technology	Apr-13
05126†	St. Croix Research	Technical Assistance for Development, Outreach & Commercialization of LNG, CNG and Hydrogen Fuels	Mar-13
07314†	Engine, Fuel and Emissions Engineering, Inc.	Technical Assistance with Advanced Heavy-Duty and Off-Road Technologies	Dec-13
09255†	Stan Lisiewicz	Technical Assistance with Caltrans	Dec-13
10056†	San Diego Miramar College (Advanced Transportation Technology & Energy, San Diego Community College District)	Enhanced Training Technology Program	Dec-13
10662†	Gladstein, Neandross & Associates	Technical Assistance for Implementation of Proposition 1B Goods Movement and Truck Replacement Program	Dec-13
10700†	TIAX LLC	Technical Assistance for Advanced, Low- and Zero-Emissions Mobile and Stationary Source Technologies	May-13

**Table 6: Projects Completed between January 1 & December 31, 2013 (cont'd)**

<b>Contract</b>	<b>Contractor</b>	<b>Project Title</b>	<b>Date</b>
<b><i>Outreach and Technology Transfer (cont'd)</i></b>			
12313†	CSA America Inc.	CNG Fuel System Inspection Certification Courses	May-13
13256	Three Squares Inc.	Develop, Initiate and Implement Clean Vehicle Outreach Project	Dec-13
13268†	California Hydrogen Business Council	Platinum Membership Renewal for 2012	Jun-13
13414†	Three Squares Inc.	Cosponsor The Women in Green Forum in Southern California & Washington, D.C.	Nov-13
13415†	University of California, Davis, Office of Research	Cosponsor the Asilomar 2013 Conference on Transportation & Energy Policy	Dec-13

†Two-page summary reports (as provided in Appendix C) are not required for level-of-effort technical assistance contracts, leases or cosponsorships; or it was unavailable at time of printing this report.



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## **CLEAN FUELS PROGRAM 2014 PLAN UPDATE**

The Clean Fuels Program, which was first created in 1988, along with establishment of the SCAQMD's Technology Advancement Office (TAO), continually seeks to support the development and deployment of zero and near-zero emission technologies over a broad array of applications and spanning near- and long-term implementation. Planning has been and remains an ongoing activity for the program, which must remain flexible to address evolving technologies and the latest progress in the state-of-the-technology as well as new research and data. Every year the SCAQMD re-evaluates its Clean Fuels Program and crafts a Plan Update to essentially re-calibrate its compass for the upcoming CY. This comprehensive document is the Plan Update for 2014.

### **Technology Funding Priorities for 2014**

The past few years have been especially difficult for technology partnering due to the dramatic global economic downturn, which shifted national research and development priorities and opportunities. On the other hand, the SCAQMD was able to take advantage of the opportunities presented by the American Recovery and Reinvestment Act (ARRA), securing nearly \$111 million in ARRA funds and other federal and state funding opportunities from 2009 to 2012. The SCAQMD continued this trend in 2013 by securing additional federal and state funding totaling \$15.8 million. Some of the projects implemented with these funds will be administered as part of the Clean Fuels Program, while others, which align well with and are complementary to the Clean Fuels Program, will be implemented under other SCAQMD programs. Nonetheless, the challenge for the SCAQMD continues to be how to identify project or technology opportunities in which its available funding can encourage and accelerate the commercialization and deployment of progressively cleaner technologies in the Basin.

To overcome these challenges, the SCAQMD continued to expand its outreach and networking activities. These efforts not only include continued participation on numerous and varied collaborative and working groups, reaching out to technology developers as well as other funding agencies, and releasing Program Opportunity Notices to essentially throw out a wide net to solicit project ideas and concepts, but over the last few years the SCAQMD has also hosted a variety of technology forums, such as the one in November 2013 on near-road mitigation measures and technologies, and released Requests for Information to determine the state of various technologies. As a result, the SCAQMD's Technology Advancement Office has developed this comprehensive plan for accelerating the development, demonstration and deployment of cleaner technologies.

The overall strategy of the SCAQMD's Clean Fuels Program is based in large part on technology needs identified through the AQMP process and the SCAQMD Board's directives to protect the health of residents of Southern California, which encompasses approximately 16.8 million people (nearly half the population of California). The AQMP is the long-term "blueprint" that defines the basin-wide emission reductions needed to achieve ambient air quality standards by 2014, 2023 and 2032, the regulatory measures to achieve those reductions, the timeframes to implement these proposed measures and the technologies or types of technologies required to meet these future federal standards.

The 2012 AQMP identifies the need for 200 tons/day NO<sub>x</sub> reductions to be adopted by 2020 for full implementation by 2023 and in large part focuses control measures on transportation

technologies and cleaner fuels. Moreover, the SCAQMD is currently only one of two regions in the nation recognized as an extreme ozone nonattainment area (the other is San Joaquin Valley). This is especially noteworthy because the largest contributor to ozone is NO<sub>x</sub> emissions, and mobile sources (on- and off-road as well as aircraft and ships) contribute to more than three-fourths of NO<sub>x</sub> emissions in this region. These emission reduction needs are further identified in a joint SCAQMD, California Air Resources Board (CARB) and San Joaquin Valley Air Pollution Control District effort, “Vision for Clean Air: A Framework for Air Quality and Climate Change Planning.”<sup>2</sup> The overwhelming hurdles to reduce ozone and NO<sub>x</sub> will require the Clean Fuels Program to encourage and accelerate advancement of transformative technologies and commercialization of progressively lower-emitting vehicles and fuels. The Program must also remain flexible to address the needs which will be identified in the current planning process for the 2016 AQMP which will focus on addressing ozone standards. Furthermore, volatile organic compounds (VOCs) and fine particulate matter (PM<sub>2.5</sub>) produced from mobile sources must also be addressed. The NO<sub>x</sub> and VOC emission sources of greatest concern to this region are heavy-duty on-road and off-road vehicles as well as to a lesser extent light- and medium-duty on-road vehicles. And while it is anticipated that the 2014 standard for PM<sub>2.5</sub> will be attained for this region, it is contingent upon compliance and implementation of existing and proposed rules and regulations.

In addition to providing for specific control measures based on known technologies and control methods, the Clean Air Act has provisions for more general measures based on future, yet-to-be-developed technologies. These “black box” measures are provided under Section 182(e)(5) of the Clean Air Act for regions that are extreme non-attainment areas, such as the South Coast Basin. The technologies that are developed and demonstrated in the Clean Fuels Program can serve as control measures for the “black box.”

In recent years, it has become increasingly clear that the effect of containers through the Ports of Los Angeles and Long Beach and the subsequent movement of goods throughout the region not only have a dramatic impact on air quality but also the quality of life to the communities along the major goods movement corridors. In recognition of these impacts, the SCAQMD has initiated a concerted effort in the last few years to actively pursue development of zero and near-zero emissions goods movement technologies, such as electric trucks, plug-in hybrid trucks with all-electric range, trucks operating from wayside power including overhead catenary technology and near-zero heavy-duty technologies. The prioritization of these types of projects as well as potential technologies which assist with their further development and deployment remain a strong emphasis of the 2014 Plan Update.

This 2014 Plan Update includes projects to develop, demonstrate and commercialize a variety of technologies, from near-term to long-term, that are intended to provide solutions to the emission control measures identified in the 2012 AQMP and to address the increasing challenges this region is facing to meet air quality standards, including new and changing federal requirements such as the new 2032 ozone standard in addition to the current 2023 standard, implementation of new technology measures, and the continued development of economically sound compliance approaches. The scope of projects in the 2014 Plan Update also needs to remain sufficiently flexible to address new challenges and proposed methodologies that are identified in the 2012 AQMP as well as the upcoming 2016 AQMP. The results of the fourth Multiple Air Toxics Exposure Study (MATES IV), which should be available mid-2014, may also affect future funding direction. This follow-up study is intended to update emissions inventory of toxic air contaminants and conduct a regional modeling effort to characterize risk across the Basin, including measuring ultrafine particle and black carbon concentrations. Finally, given the

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<sup>2</sup> [http://www.arb.ca.gov/planning/vision/docs/vision\\_for\\_clean\\_air\\_public\\_review\\_draft.pdf](http://www.arb.ca.gov/planning/vision/docs/vision_for_clean_air_public_review_draft.pdf)

increasing call for action by the federal government to reduce carbon and greenhouse gases (e.g., President Obama's Climate Action Plan released in June 2013), the co-benefits of technologies should also be considered.

Within each technical area, there exists a range of projects that represent near-term to long-term efforts. The SCAQMD Clean Fuels Program tends to support development, demonstration and technology commercialization efforts, or deployment, rather than fundamental research. The general time-to-product for these efforts, from long-term to near-term, is described below.

- Technology *development* projects are expected to begin during 2014 with durations of about two years. Additional field demonstrations to gain long-term verification of performance, spanning up to two years, may also be needed prior to commercialization. Certification and ultimate commercialization would be expected to follow. Thus, development projects identified in this plan are expected to result in technologies ready for commercial introduction as soon as 2017. Projects are also proposed that may involve the development of emerging technologies that are considered longer term and, perhaps higher risk, but with significant emission reduction potential. Commercial introduction of such long-term technologies would not be expected until 2019 or later.
- More mature technologies, those ready to begin field *demonstration* in 2014, are expected to result in a commercial product in the 2015-2016 timeframe. Technologies being field demonstrated generally are in the process of being certified. The field demonstrations provide a controlled environment for manufacturers to gain real-world experience and address any end-user issues that may arise prior to the commercial introduction of the technology. Field demonstrations provide real-world evidence of a technology's performance to help allay any concerns by potential early adopters.
- *Deployment* or technology commercialization efforts focus on increasing the utilization of clean technologies in conventional applications. It is often difficult to transition users to a non-traditional technology or fuel, even if such a technology or fuel offers significant societal benefits. As a result, one of government's roles is to support and offset any incremental cost to help accelerate the transition and use of the cleaner technology. The increased use and proliferation of these cleaner technologies often depends on this initial support and funding as well as efforts intended to increase confidence of stakeholders that these technologies are real, cost-effective in the long term and will remain applicable.

## Technical Priorities (Core Technologies)

The SCAQMD program maintains flexibility to address dynamically evolving technologies incorporating the latest progress. Over the years, the SCAQMD has provided funding for projects for a wide variety of low and zero emission projects. In order to meet the upcoming 2014 PM<sub>2.5</sub> and 2023 8-hour ozone standards, the areas of zero and near-zero emission technologies need to be emphasized and this effort can be seen in the following sections and in the proposed funding distribution in Figure 17. The major technical program areas are identified below with specific project categories discussed in more detail in the following sections. The technology areas identified reflect the staff's forecast for upcoming projects and needs within the basin but is not intended to be considered a budget.

Not all project categories will be funded, due to cost-share constraints, focus on the control measures identified in the 2012 AQMP and the availability of suitable projects. The technical areas identified below are clearly appropriate within the context of the current air quality challenges and opportunities for technology advancement. Within these areas there is significant opportunity for SCAQMD to leverage its funds with other funding agencies to expedite the

implementation of cleaner alternative technologies in the Basin. A concerted effort is also made to form private partnerships to further leverage funds. In fact, the SCAQMD historically has leveraged its funds \$1 for every \$3-\$4 of total project costs.

It should be noted, however, that these priorities may shift during the year in keeping with the diverse and flexible “technology portfolio” approach. Changes in priority may occur to (1) capture opportunities such as cost-sharing by the state government, the federal government, or other entities, or (2) address specific technology issues which affect residents within the SCAQMD’s jurisdiction. The following technical areas are listed by current SCAQMD priorities based on the goals for 2014.

### ***Electric/Hybrid Technologies & Infrastructure***

If the region hopes to meet the federal standards for PM<sub>2.5</sub> and ozone, a primary focus must be on zero and near-zero emission technologies. A leading strategy to achieve these goals is the wide-scale implementation of electric drive systems for all applicable technologies. With that in mind, the SCAQMD seeks to support projects to address the main concerns regarding cost, battery lifetime, travel range, charging station infrastructure and manufacturer commitment. Integrated transportation systems can encourage further reduction of emissions by matching the features of electric vehicles (zero emissions, zero start-up emissions, limited range) to typical consumer demands for mobility by linking them to transit.

The development and deployment of zero emission goods movement systems remains one of the top priorities for the SCAQMD to support a balanced and sustainable growth in the port complex. The SCAQMD continues to work with our regional partners, in particular the Ports of Los Angeles and Long Beach, the Southern California Association of Governments (SCAG) and Los Angeles County Metropolitan Transportation Association (LACMTA), to identify technologies which could be beneficial to and garner support from all stakeholders. Specific technologies include zero emission trucks (using batteries and/or fuel cells), near-zero emission trucks with all-electric range using wayside power (catenary or roadbed electrification), locomotives with near-zero emissions (e.g., 90% below Tier 4), electric locomotives using battery tender cars and catenary, and linear synchronous motors for locomotives and trucks.

There is a high level of interest from major automobile manufacturers for hybrid-electric technologies in light-, medium- and heavy-duty applications as well as off-road equipment. In particular, there are increasing numbers of diesel- and gasoline-fueled hybrid-electric vehicles and multiple models of light-duty plug-in hybrid and battery electric vehicles (BEVs). Such vehicles offer the benefits of higher fuel economy and range as well as lower emissions. Hybrid electric technology is not limited to gasoline and diesel engines and can be coupled with natural gas engines, microturbines and fuel cells for further emission benefits. Additionally, continued advancements in the light-duty arena, which while there are commercially available product is not yet mainstream technology, may have applications for medium- and heavy-duty vehicles. Opportunities to develop and demonstrate technologies that could enable expedited widespread use of electric and hybrid-electric vehicles in the Basin include the following:

- development and demonstration of hybrid and electric technologies for goods movement, e.g., series hybrids with all electric range and trolley trucks on catenary wayside power;
- evaluation and demonstration of light-, medium- and heavy-duty plug-in hybrid electric vehicles;
- development and demonstration of CNG hybrid vehicle;
- demonstration of full performance and niche application battery electric vehicles;

- demonstration of integrated programs that make best use of electric drive vehicles through interconnectivity between fleets of electric vehicles and mass transit, and web-based reservation systems that allow multiple users;
- demonstration of heavy-duty battery electric vehicles;
- demonstration of heavy-duty hybrid vehicles including hydraulic and series hybrid concepts;
- development of streamlined implementation procedures to prepare and accelerate EV market penetration and commercialization; and
- demonstration and installation of EV infrastructure to support the electric and hybrid-electric vehicle fleets currently on the roads or soon entering the market, and to reduce cost, improve convenience and integrate with renewable energy and building demand management strategies (e.g., vehicle-to-grid or vehicle-to-building functionality).

### ***Engine Systems***

Natural gas engines are experiencing huge market growth due to the low cost of fuel. In order to achieve the emission reductions required for the South Coast Air Basin, the internal combustion engines (ICEs) used in the heavy-duty sector will require emissions much lower, i.e., 90% than the 2010 standards. Future projects will support the development, demonstration and certification of engines that can achieve these massive emissions reductions using an optimized systems approach. Specifically, these projects are expected to target the following:

- development of ultra-low emissions natural gas engines for heavy-duty vehicles;
- continued development and demonstration of alternative fuel medium-duty and heavy-duty engines and vehicles;
- development and demonstration of clean alternative fuel engines for off-road applications;
- evaluation of alternative engine systems such as compressed air propulsion and hydraulic plug-in hybrid vehicles; and
- development and demonstration of engine systems that employ advance fuel or alternative fuels, engine design features, improved exhaust or recirculation systems, and aftertreatment devices.

### ***Hydrogen & Fuel Cell Technologies & Infrastructure***

The SCAQMD supports hydrogen infrastructure and fuel cell technologies as one option in our technology portfolio and is dedicated to assisting federal and state government programs to deploy fuel cell vehicles (FCVs) by supporting the required refueling infrastructure.

SCAQMD works closely with the California Fuel Cell Partnership (CaFCP) to further the commercialization of fuel cells for transportation and install the required hydrogen refueling infrastructure. In mid-2012 the CaFCP published a roadmap describing the first network of commercial hydrogen stations in California, calling for 68 hydrogen fueling stations in cluster communities at specific destinations by 2016. Calendar Years 2015-2017 are a critical timeframe for the introduction of FCVs. Since stations need one to two years lead time for permitting and construction, plans for stations need to be initiated now. Coordination with the Division of Measurement Standards also needs to occur to establish standardized measurements for hydrogen refueling. In addition, new business models and funding besides grants for construction need to be explored to enable the station operations to remain solvent during the early years until vehicle numbers ramp up.

The California Energy Commission (CEC) based its recent AB 118 hydrogen funding strategy on CaFCP's roadmap as well as the University of California, Irvine's Advanced Power and Energy



Program. In late 2012 the CEC issued a \$28.6 million Program Opportunity Notice for hydrogen fuel infrastructure, and in mid-2013 SCAQMD was awarded a \$6.7 million award to implement the upgrade and refurbishment of existing hydrogen fueling stations to ensure legacy stations continue operation as FCVs become available in the market. Additionally, in September 2013 the Governor signed Assembly Bill 8 providing significant funding for hydrogen stations, which will greatly assist in making further inroads toward expanding the hydrogen infrastructure network in California. The SCAQMD will work closely with state agencies to implement these programs and continue efforts to upgrade and refurbish existing hydrogen infrastructure.

The 2014 Plan Update identifies key opportunities while clearly leading the way for pre-commercial demonstrations of original equipment manufacturer (OEM) vehicles. Future projects may include the following:

- development and demonstration of hydrogen-natural gas vehicles for medium- and heavy-duty applications as well as stationary power applications;
- continued development and demonstration of distributed hydrogen production and refueling stations, including energy stations with electricity and hydrogen co-production and higher pressure (10,000 psi) hydrogen dispensing;
- development and demonstration of cross-cutting fuel cell applications (e.g. plug-in hybrid fuel cell vehicles);
- development and demonstration of fuel cells in off-road, locomotive and marine applications;
- demonstration of fuel cell vehicles in controlled fleet applications in the Basin; and
- develop and implement strategies with government and industry to build participation in the hydrogen market including certification and testing of hydrogen as a commercial fuel to create a business case for investing.

### ***Infrastructure and Deployment (NG)***

The importance of refueling infrastructure cannot be overemphasized for the realization of large deployment of alternative fuel technologies. Significant demonstration and commercialization efforts funded by the Clean Fuels Program as well as other local, state and federal agencies are underway to: 1) support the upgrade and buildup of public and private infrastructure projects, 2) expand the network of public-access and fleet fueling stations based on the population of existing and anticipated vehicles, and 3) put in place infrastructure that will ultimately be needed to accommodate transportation fuels with very low gaseous emissions.

Compressed and liquefied natural gas (CNG and LNG) refueling stations are being positioned to support both public and private fleet applications. Upgrades and expansions are also needed to refurbish or increase capacity for some of the stations installed five years ago as well as standardize fueling station design, especially to ensure growth of alternative fuels throughout the South Coast Air Basin and beyond. Funding has been provided at key refueling points for light-, medium- and heavy-duty natural gas vehicle users traveling from the local ports, along I-15 and The Greater Interstate Clean Transportation Corridor (ICTC) Network.

Active participation in the development of NFPA fire and safety codes and standards, cost and economics of the new fuels, public education and training and emergency response capability are just a few areas of the funded efforts that have overcome public resistance to these new technologies. Some of the projects expected to be developed and co-funded for infrastructure development are:

- Development and demonstration of renewable natural gas as a vehicle fuel from renewable feedstocks and biowaste;

- Development and demonstration of advanced, cost effective methods for manufacturing synthesis gas for conversion to renewable natural gas;
- Deployment of natural gas home refueling appliances for light-duty vehicles;
- Enhancement of safety and emissions reduction from LNG refueling equipment;
- Expansion of fuel infrastructure, fueling stations, and equipment; and
- Expansion of infrastructure connected with existing fleets, public transit, and transportation corridors.

### ***Emission Control Technologies***

Although engine technology and engine systems research is required to reduce the emissions at the combustion source, post-combustion cleanup methods are also needed to address the current installed base of on-road and off-road technologies. Existing diesel emissions can be greatly reduced with aftertreatment controls such as particulate matter (PM) traps and catalysts, as well as lowering the sulfur content or using additives with diesel fuel. Gas-to-Liquid (GTL) fuels, formed from natural gas or other hydrocarbons rather than petroleum feedstock and emulsified diesel, provide low emission fuels for use in diesel engines. As emissions from engines become lower and lower, the lubricant contributions to VOC and PM emissions become increasingly important. The most promising of these technologies will be considered for funding, specifically:

- evaluation and demonstration of new emerging liquid fuels, including alternative and renewable diesel and GTL fuels;
- development and demonstration of advanced aftertreatment technologies for mobile applications (including diesel particulate traps and selective catalytic reduction catalysts);
- development and demonstration of low-VOC and PM lubricants for diesel and natural gas engines; and

### ***Emissions, Fuels and Health Impacts Studies***

The monitoring of pollutants in the Basin is extremely important, especially when focused on (1) a particular sector of the emissions inventory (to identify the responsible technology) or (2) exposure to pollution (to assess the potential health risks). Recent studies indicate that smoggy areas can produce irreversible damage to children's lungs. This information highlights the need for further emissions and health studies to identify the emissions from high polluting sectors as well as the health effects resulting from these technologies.

Over the past few years, the SCAQMD has funded emission studies to evaluate the impact of tailpipe emissions of biodiesel and ethanol fueled vehicles mainly focusing on criteria pollutants and greenhouse gas (GHG) emissions. These studies showed that biofuels, especially biodiesel, can contribute to higher NO<sub>x</sub> emissions while reducing other criteria pollutant emissions. Furthermore, despite recent advancements in toxicological research related to air pollution, the relationship between particle chemical composition and health effects is still not completely understood, especially for biofuels. Therefore, the SCAQMD has recently funded studies to investigate the physical and chemical composition and toxicological potential of tailpipe PM emissions from biodiesel and ethanol fueled vehicles to better understand their impact on public health. Studies will continue in 2014 to further investigate the toxicological potential of emissions, such as ultrafines and vapor phase substances, and to determine whether other substances such as volatile or semi-volatile organic compounds are being emitted in lower mass emissions that could pose harmful health effects.

In recent years, there has also been an increased interest both at the state and national level on the use of alternative fuels including biofuels to reduce petroleum oil dependency, GHG emissions

and air pollution. In order to sustain and increase biofuel utilization, it is essential to identify feedstocks that can be processed in a more efficient, cost-effective and sustainable manner. One such fuel staff is interested in pursuing is dimethyl ether (DME). This synthetic fuel can be made from renewable natural gas resources and has characteristics similar to gas-to-liquids fuels, i.e., high cetane, zero aromatics and negligible particulate matter. Volvo has announced they will commercialize class 8 trucks using DME in 2015, and staff would like to ensure these trucks have lower NO<sub>x</sub> than the existing standard.

Some areas of focus include:

- demonstration of remote sensing technologies to target different high emission applications and sources;
- studies to identify the health risks associated with ultrafines and ambient particulate matter including their composition to characterize their toxicity and determine specific combustion sources;
- in-use emissions studies using biofuels including DME to evaluate in-use emission composition;
- in-use emissions studies to determine the impact of new technologies, in particular PEVs on local air quality as well as the benefit of telematics on emissions reduction strategies; and
- lifecycle energy and emissions analyses to evaluate conventional and alternative fuels.

### ***Stationary Clean Fuel Technologies***

Although stationary source emissions are small compared to mobile sources in the South Coast Air Basin, there are areas where cleaner fuel technology can be applied to reduce NO<sub>x</sub>, VOC and PM emissions. For example, inspections suggest there is a large population of small ICE generators within the Basin that are operating outside their permit limits due to poor maintenance, deliberate tuning for different performance, operation outside equipment design or changes in fuel quality. Cleaner, more robust distributed generation technologies exist that could be applied to not only improve air quality, but enhance power quality and reduce electricity distribution congestion.

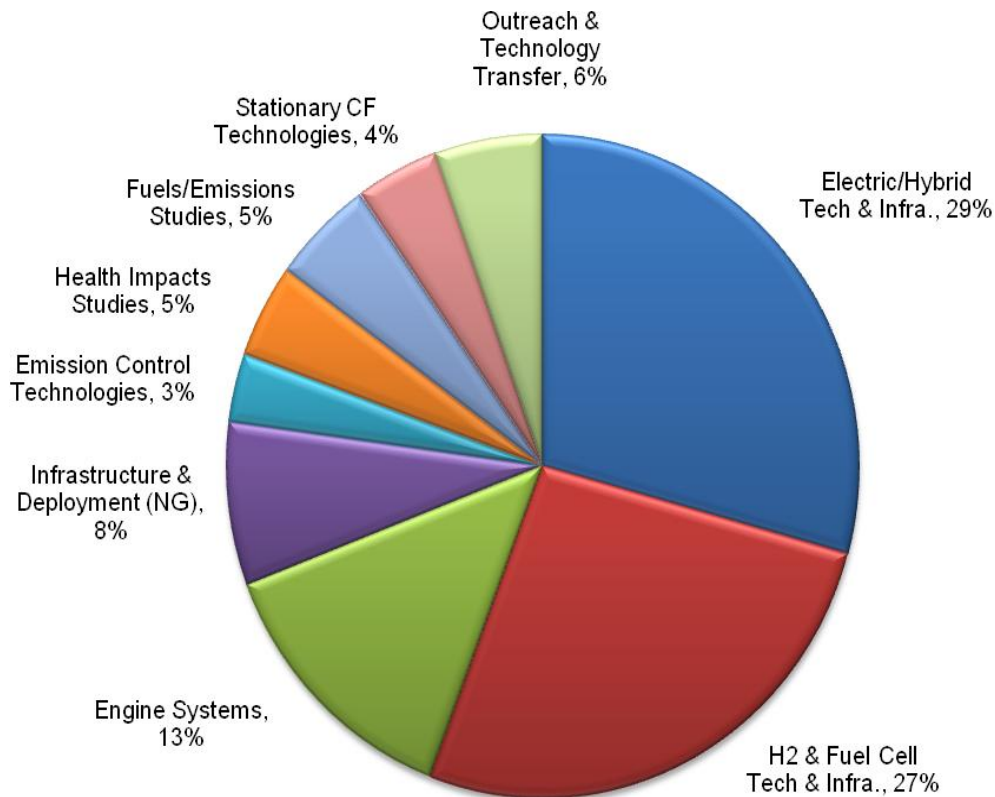
The use of renewable feedstocks for energy production is a viable and necessary strategy to provide sustainable power for future needs while reducing greenhouse gas emissions and achieving domestic energy diversity. One of the projects that the SCAQMD recently supported in this effort was a bench scale demonstration project using a steam hydrogasification process to produce natural gas from biomass and biosolid (sewage sludge) feedstocks. Steam Hydrogasification Reaction (SHR) has been developed to produce various forms of energy products from carbonaceous resources. SHR is capable of handling wet feedstocks like sludge, does not require expensive oxygen plants and has been demonstrated to be most efficient and cost-effective compared to other conventional gasification technologies. This project successfully demonstrated that the SHR process coupled with a water-gas shift (WGS) reactor can produce natural gas containing up to 90% methane.

Projects conducted under this category may include:

- development and demonstration of reliable, low emission stationary technologies (e.g., low NO<sub>x</sub> burners, fuel cells or microturbines);
- exploration of renewables as a source for cleaner stationary technologies; and
- evaluation, development and demonstration of advanced control technologies for stationary sources.

## Target Allocations to Core Technology Areas

Figure 17 below presents the potential allocation of available funding, based on SCAQMD projected program costs of nearly \$16.4 million for all potential projects. The expected actual project expenditures for 2014 will be less than the total SCAQMD projected program cost since not all projects will materialize. The target allocations are based on balancing technology priorities, technical challenges and opportunities discussed previously and near-term versus long-term benefits with the constraints on available SCAQMD funding. Specific contract awards throughout 2014 will be based on this proposed allocation, the quality of proposals received and evaluation of projects against standardized criteria and ultimately SCAQMD Governing Board approval.



**Figure 17: Projected Cost Distribution for Potential SCAQMD Projects 2014 & Beyond (\$16.4M)**



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## PROGRAM PLAN UPDATE FOR 2014

This section presents the Clean Fuels Program Plan Update for 2014. The proposed projects are organized by program areas and described in further detail, consistent with the SCAQMD budget, priorities and the best available information. Although not required, this Plan also includes proposed projects that may be funded by revenue sources other than the Clean Fuels Program, specifically related to VOC and incentive projects.

Table 7 summarizes potential projects for 2014 as well as the redistribution of SCAQMD costs in some areas as compared to 2013. The funding allocation continues the focus toward development and demonstration of zero and near-zero emission technologies including the infrastructure for such technologies. However, while the SCAQMD had over the last couple of years emphasized electric and hybrid-electric technologies, the intent is to allow the projects in this core technology area to achieve some progress while the Program is slightly re-calibrated to focus on the current federal and state activity in hydrogen and fuel cells and the anticipated roll out of fuel cell vehicles in the next couple of years. Additionally, a significant heavy-duty engine project was recently funded so some emphasis has been adjusted in light of that project currently getting underway as well as awards over the last couple of years in other technology areas, both those made by SCAQMD as well as state and federal awards. The funding allocations continue to align well with the SCAQMD's FY 2013-14 Goals and Priority Objectives. Overall, the Program is designed ensure a broad portfolio of technologies and leverage state and federal efforts.

Each of the proposed projects described in this Plan, once fully developed, will be presented to the SCAQMD Governing Board for approval prior to contract initiation. This development reflects the maturity of the proposed technology, identification of contractors to perform the projects, host site participation, securing sufficient cost-sharing to complete the project and other necessary factors. Recommendations to the SCAQMD Governing Board will include descriptions of the technology to be demonstrated and in what application, the proposed scope of work of the project and the capabilities of the selected contractor and project team, in addition to the expected costs and expected benefits of the projects as required by H&SC 40448.5.1.(a)(1). Based on communications with all of the organizations specified in H&SC 40448.5.1.(a)(2) and review of their programs, the projects proposed in this Plan do not appear to duplicate any past or present projects.

### Funding Summary of Potential Projects

The remainder of this section contains the following information for each of the potential projects summarized in Table 7.

**Proposed Project:** A descriptive title and a designation for future reference.

**Expected SCAQMD Cost:** The estimated proposed SCAQMD cost share as required by H&SC 40448.5.1.(a)(1).

**Expected Total Cost:** The estimated total project cost including the SCAQMD cost share and the cost share of outside organizations expected to be required to complete the proposed project. This is an indication of how much SCAQMD public funds are leveraged through its cooperative efforts.

**Description of Technology and Application:** A brief summary of the proposed technology to be developed and demonstrated, including the expected vehicles, equipment, fuels, or processes that could benefit.

**Potential Air Quality Benefits:** A brief discussion of the expected benefits of the proposed project, including the expected contribution towards meeting the goals of the AQMP, as required by H&SC 40448.5.1.(a)(1). In general, the most important benefits of any technology research, development

and demonstration program are not necessarily realized in the near term. Demonstration projects are generally intended to be proof-of-concept for an advanced technology in a real-world application. While emission benefits, for example, will be achieved from the demonstration, the true benefits will be seen over a longer term, as a successfully demonstrated technology is eventually commercialized and implemented on a wide scale.

**Table 7: Summary of Potential Projects for 2014**

<b>Proposed Project</b>	<b>Expected SCAQMD Cost \$</b>	<b>Expected Total Cost \$</b>
<b>Electric/Hybrid Technologies &amp; Infrastructure</b>		
Demonstrate Light-Duty Plug-In Hybrid & Battery Electric Vehicles and Infrastructure	500,000	1,000,000
Develop and Demonstrate Medium- and Heavy-Duty Hybrid Vehicles and Infrastructure	1,000,000	3,000,000
Demonstrate Alternative Energy Storage	300,000	2,000,000
Develop and Demonstrate Electric Container Transport Technologies	3,000,000	5,000,000
Subtotal	\$4,800,000	\$11,000,000
<b>Engine Systems</b>		
Develop and Demonstrate Advanced Alternative Fuel Medium- and Heavy-Duty Engines and Vehicles	2,000,000	20,000,000
Develop and Demonstrate Alternative Fuel and Clean Conventional Fueled Light-Duty Vehicles	200,000	1,500,000
Subtotal	\$2,200,000	\$21,500,000
<b>Hydrogen and Fuel Cell Technologies and Infrastructure</b>		
Develop and Demonstrate Operation and Maintenance Business Case Strategies for Hydrogen Stations	350,000	4,000,000
Develop and Demonstrate Distributed Hydrogen Production and Fueling Stations	2,000,000	6,000,000
Develop and Demonstrate Fuel Cell Vehicles	2,000,000	6,000,000
Subtotal	\$4,350,000	\$16,000,000
<b>Infrastructure and Deployment (NG)</b>		
Deploy Natural Gas Vehicles in Various Applications	500,000	2,000,000
Develop, Maintain & Expand Natural Gas Infrastructure	300,000	2,000,000
Demonstrate Natural Gas Manufacturing and Distribution Technologies Including Renewables	500,000	7,000,000
Subtotal	\$1,300,000	\$11,000,000
<b>Emission Control Technologies</b>		
Develop and Demonstrate Advanced Aftertreatment Technologies	300,000	5,000,000
Demonstrate On-Road Technologies in Off-Road and Retrofit Applications	250,000	1,000,000
Subtotal	\$550,000	\$6,000,000
<b>Fuels/Emission Studies</b>		
In-Use Emissions Studies for Advanced Technology Vehicle Demonstrations	500,000	1,000,000
Conduct Emissions Studies on Biofuels and Alternative Fuels	100,000	1,300,000



**Table 7: Summary of Potential Projects for 2014 (cont'd)**

<b>Proposed Project</b>	<b>Expected SCAQMD Cost \$</b>	<b>Expected Total Cost \$</b>
<b>Fuels/Emission Studies (cont'd)</b>		
Identify and Demonstrate In-Use Fleet Emissions Reduction Technologies & Opportunities	250,000	2,000,000
Subtotal	\$850,000	\$4,300,000
<b>Health Impacts Studies</b>		
Evaluate Ultrafine Particle Health Effects	250,000	3,000,000
Conduct Monitoring to Assess Environmental Impacts	250,000	1,000,000
Assess Sources and Health Impacts of Particulate Matter	250,000	300,000
Subtotal	\$750,000	\$4,300,000
<b>Stationary Clean Fuel Technologies</b>		
Develop and Demonstrate Reliable, Low Emission Monitoring Systems and Test Methods	250,000	500,000
Develop and Demonstrate Clean Stationary Technologies	250,000	750,000
Develop and Demonstrate Renewables-Based Energy Generation Alternatives	200,000	1,000,000
Subtotal	\$700,000	\$2,250,000
<b>Outreach and Technology Transfer</b>		
Assessment and Technical Support of Advanced Technologies and Information Dissemination	500,000	800,000
Support for Implementation of Various Clean Fuels Vehicle Incentive Programs	400,000	400,000
Subtotal	\$900,000	\$1,200,000
<b>TOTALS FOR POTENTIAL PROJECTS</b>	<b>\$16,400,000</b>	<b>\$77,550,000</b>

## Technical Summaries of Potential Projects

### ***Electric/Hybrid Technologies & Infrastructure***

**Proposed Project:** Demonstrate Light-Duty Plug-In Hybrid & Battery Electric Vehicles and Infrastructure

**Expected SCAQMD Cost:** \$500,000

**Expected Total Cost:** \$1,000,000

**Description of Technology and Application:**

All of the major automobile manufacturers are currently developing and commercializing hybrid-electric vehicles, which now come in a variety of fuel economy and performance options. These commercial hybrid EVs integrate a smaller internal combustion engine, battery pack and electric drive motors to improve fuel economy (e.g., Chevy Volt) or performance (e.g., Lexus RX400h).

The SCAQMD has long supported the concept of using increased battery power to allow a portion of the driving cycle to occur in all-electric mode for true zero emission miles. This battery dominant strategy is accomplished by incorporating an advanced battery pack initially recharged from the household grid or EV chargers. This “plug-in” hybrid EV strategy allows reduced emissions and improved fuel economy. In 2009, CARB adopted Plug-In Hybrid Electric Vehicle Test Procedure Amendments and Aftermarket Parts Certification and several automobile manufacturers have announced demonstration or early production plans of “blended” plug-in hybrid electric, extended-range electric vehicles (E-rEV), or highway capable battery electric vehicles (BEVs). Electric utilities refer to PHEVs, E-rEVs and BEVs as plug-in electric drive vehicles (PEVs) and are working with automakers to support PEVs. The recent adoption of revised recommended practice SAE J1772 will enable vehicles to charge from 120V (Level 1) or 240V (Level 2) using a common conductive connector overnight or in a few hours. Japan has adopted a Fast DC charging standard that could charge a passenger car in 30 minutes or less, and demonstrations will help provide data to adopt a recommended practice in the U.S.

Integrated programs can interconnect fleets of electric drive vehicles with mass transit via web-based reservation systems that allow multiple users. These integrated programs can match the features of EVs (zero emissions, zero start-up emissions, short range) to typical consumer demands for mobility in a way that significantly reduces emissions of pollutants and greenhouse gases.

At recent auto shows, automakers have displayed concept plug-in fuel cell vehicles. Development and demonstration of dual fuel, zero emission vehicles could expand the acceptance of battery electric vehicles and accelerate the introduction of fuel cells in vehicle propulsion.

This project category is to develop and demonstrate: 1) various PEV architectures; 2) anticipated costs for such architectures; 3) customer interest and preferences for each alternative; 4) prospective commercialization issues and strategies for various alternatives; 5) integration of the technologies into prototype vehicles and fleets; 6) infrastructure (especially in conjunction with the DOE and the Los Angeles Department of Water & Power) to demonstrate the potential clean air benefits of these types of vehicles; and 7) support for local government outreach and charging installation permit streamlining.

**Potential Air Quality Benefits:**

The 2012 AQMP identifies zero- or near-zero emitting vehicles as a key attainment strategy. HEV technologies have the potential to achieve near-zero emissions but with the range of a conventional gasoline-fueled vehicle, a factor expected to enhance consumer acceptance. Given the variety of PEV systems under development, it is critical to determine the true emissions and performance of PEVs. Demonstration of optimized prototypes would enhance the deployment of near-ZEV and ZEV technologies.

Expected benefits include the establishment of criteria for emissions evaluations, performance requirements, customer acceptability of the technology, etc. This will help both regulatory agencies and OEMs to expedite introduction of near-zero and zero-emitting vehicles in the South Coast Basin, which is a high priority of the AQMP.

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**Proposed Project:** Develop and Demonstrate Medium- and Heavy-Duty Hybrid Vehicles and Infrastructure

**Expected SCAQMD Cost:** \$1,000,000

**Expected Total Cost:** \$3,000,000

**Description of Technology and Application:**

Hybrid technologies have gained momentum in the light-duty sector with commercial offerings by most all of the automobile manufacturers. Unfortunately, the medium- and heavy-duty platforms are where most emissions reductions are required, especially for the in-use fleet due to low turnover. This project category is to investigate the use of hybrid technologies to achieve similar performance as the conventional fueled counterparts while achieving both reduced emissions and improved fuel economy. Development and validation of emission test procedures is needed, but is complicated due to the low volume and variety of medium- and heavy-duty vehicles.

Platforms to be considered include utility trucks, delivery vans, shuttle buses, transit buses, waste haulers, construction equipment, cranes and other off-road vehicles. Innovations that may be considered for demonstration include: advancements in the auxiliary power unit, either ICE or other heat engine; battery-dominant hybrid systems utilizing off-peak re-charging, with advanced battery technologies such as lithium-ion; and hydraulic energy storage technologies where applicable. Alternative fuels are preferred in these projects, e.g., natural gas, LPG, hydrogen, GTL and hydrogen-natural gas blends, but conventional fuels such as gasoline, clean diesel, or even biodiesel may be considered if the emissions benefits can be demonstrated as equivalent or superior to alternative fuels. Both new designs and retrofittable technologies and related charging infrastructure will be considered.

Federal recovery act funding combined with state and local support has accelerated the development and demonstration of medium-duty plug-in hybrid electric truck platforms. Analysis of project data and use profiles will help optimize drive systems, target applications for early commercialization and fill gaps in product offerings.

**Potential Air Quality Benefits:**

The 2012 AQMP identifies zero- or near-zero emitting vehicles as a key attainment strategy. Hybrid technologies have the potential to redirect previously wasted kinetic energy into useable vehicle power. This proposed project category will evaluate various hybrid systems and fuel combinations to identify their performance and emissions benefits. Given the variety of hybrid systems under development, it is critical to determine the true emissions and performance of these prototypes, especially if both emissions and fuel economy advantages are achieved.

Expected benefits include the establishment of criteria for emissions evaluations, performance requirements and customer acceptability of the technology. This will help both regulatory agencies and OEMs to expedite introduction of near-zero emitting vehicles in the South Coast Basin, which is a high priority of the AQMP.

**Proposed Project:** Demonstrate Alternative Energy Storage

**Expected SCAQMD Cost:** \$300,000

**Expected Total Cost:** \$2,000,000

**Description of Technology and Application:**

The SCAQMD has been involved in the development and demonstration of energy storage systems for electric and hybrid-electric vehicles, mainly Lithium ion chemistry battery packs. Over the past few years, additional technology consisting of nickel sodium chloride, lithium-ion and lithium iron phosphate batteries have shown robust performance. Other technology manufacturers have also developed energy storage devices including flywheels, hydraulic systems and ultracapacitors. Energy storage systems optimized to combine the advantages of ultracapacitors and advanced batteries could yield further benefits. This project category is to apply these advanced storage technologies in vehicle platforms to identify best fit applications, demonstrate their viability (reliability, maintainability and durability), gauge market preparedness and provide a pathway to commercialization.

The long-term objective of this program is to decrease fuel consumption and resulting emissions without any changes in performance compared to conventional vehicles. This program will support several projects for development and demonstration of different types of low emission hybrid vehicles using advanced energy strategies and conventional or alternative fuels. The overall net emissions and fuel consumption of these types of vehicles are expected to be much lower than traditional engine systems. Both new and retrofit technologies will be considered.

**Potential Air Quality Benefits:**

Certification of low emission vehicles and engines and their integration into the Basin's transportation sector is a high priority under the 2012 AQMP. This program is expected to develop alternative energy storage technologies that could be implemented in medium- and heavy-duty trucks, buses and other applications. Benefits will include proof of concept for the new technologies, diversification of transportation fuels and lower emissions of criteria, toxic pollutants and greenhouse gases.

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**Proposed Project:** Develop and Demonstrate Electric Container Transport Technologies

**Expected SCAQMD Cost:** \$3,000,000

**Expected Total Cost:** \$5,000,000

**Description of Technology and Application:**

Advanced transportation systems can be used to transfer cargo containers from ports to both local and “distant” intermodal facilities, thereby significantly reducing emissions from on-road trucks and locomotives and also reducing traffic congestion in local transportation corridors. Such systems could be stand-alone systems that use magnetic levitation (maglev), linear synchronous motors or linear induction motors on dedicated guideways. A more near-term design could use existing roadways that are electrified with catenary electric lines or linear electric motors to move containers on modified trucks equipped to run on electricity. In both scenarios, containers are transported relatively quietly and without direct emissions. The footprints for such systems are similar to conventional rail systems but have reduced impact on adjacent property owners including noise and fugitive dust. These systems can even be built above or adjacent to freeways or on elevated guideways. These container freight systems are not designed to carry any operators on the guideways, where the over-the-roadway system may require the operator to actively control the transport of the containers.

One of the container transportation concepts the SCAQMD is actively pursuing is the eHighway catenary hybrid truck system by Siemens Mobility. Siemens and their partners have developed a catenary system and hybrid electric trucks to utilize the catenary for zero emission transport of containers. The hybrid drive system will extend the operating range of the truck beyond the all-electric range of the catenary system, thus enabling the truck to perform regional drayage operations and bridge gaps in catenary infrastructure as it is deployed on a regional level. The proposed Siemens pantograph system will allow for seamless connection and disconnection from the catenary wires. When entering the catenary system corridor, the pantograph system will verify the presence of catenary lines and allow the driver to raise the pantograph from within the cab of the truck. Upon leaving the catenary system, the pantograph automatically retracts and the truck switches to on-board power systems. The on-board power systems could be a range of technologies, including batteries, fuel cells, or internal combustion engines. In addition, SCAQMD is administering a project to develop and demonstrate zero emission drayage trucks for goods movement operations, consisting of three different battery electric truck technologies and a fuel cell hybrid electric truck platform. This project is funded by a \$4.2 million award from Department of Energy to promote the deployment of zero emission cargo transport technologies. These trucks can be also upfitted to connect to wayside power via a catenary or LSM system in the future.

In addition to these technologies, there are other options for electric container applications such as dual-mode locomotives, hybrid electric technologies with battery storage, a battery tender car, magnetic levitation, and fuel cell propulsion system. This program will evaluate all available technology options to determine whether their systems can be successfully developed and deployed, financially viable, and reliably operated on a long-term basis.

**Potential Air Quality Benefits:**

On-road heavy-duty diesel truck travel is an integral part of operations at the ports moving cargo containers into the Basin and beyond. The 2012 AQMP proposes to reduce emissions from this

activity by modernizing the fleet and retrofitting NO<sub>x</sub> and PM emission controls on older trucks. An alternative approach, especially for local drayage to the nearby intermodal facilities, is to use advanced container transport systems that use electric propulsion for the containers on fixed guideways or modified trucks able to operate on electricity which will eliminate local diesel truck emissions. The emission benefits have not yet been estimated because the fate of the displaced trucks has not been determined.

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## **Engine Systems**

**Proposed Project:** Develop and Demonstrate Advanced Alternative Fuel Medium- and Heavy-Duty Engines and Vehicles

**Expected SCAQMD Cost:** \$2,000,000

**Expected Total Cost:** \$20,000,000

### **Description of Technology and Application:**

The objective of this proposed program is to support development and certification of near commercial prototype low emission heavy-duty alternative fuel engine technologies and demonstration of these technologies in on-road vehicles. The NO<sub>x</sub> emissions target for this program area is 0.2 g/bhp-hr and lower and the PM emissions target is below 0.01 g/bhp-hr. To achieve these targets, an effective emission control strategy must employ advance fuel or alternative fuels, engine design features, improved exhaust or recirculation systems, and aftertreatment devices that are optimized using a system approach. This program is expected to result in several projects, including:

- demonstration of advanced engines in medium-duty and heavy-duty vehicles;
- development of durable and reliable retrofit technologies to convert engines and vehicles from petroleum fuels to alternative fuels; and
- anticipated fuels for these projects include but are not limited to CNG, LNG, LPG, emulsified diesel and GTL fuels. The program proposes to expand field demonstration of these advanced technologies in various vehicle fleets operating with different classes of vehicles.

The use of alternative fuel in heavy-duty trucking applications has been demonstrated in certain local fleets within the Basin. These vehicles typically require 200-300 horsepower engines. Higher horsepower alternative fuel engines are beginning to be introduced. However, vehicle range, lack of experience with alternative fuel engine technologies and limited selection of appropriate alternative fuel engine products have made it difficult for more firms to consider significant use of alternative fuel vehicles. For example, in recent years, several large trucking fleets have expressed interest in using alternative fuels. However, at this time the choice of engines over 350 HP or more is limited. Continued development of cleaner dedicated natural gas or other alternative fuel engines such as natural gas-hydrogen blends over 350 HP would increase availability to end-users and provide additional emission reductions.

### **Potential Air Quality Benefits:**

This program is intended to expedite the commercialization of low emission alternative fuel heavy-duty engine technology in California, both in the Basin and in intrastate operation. The emission reduction benefit of replacing one 4.0 g/bhp-hr heavy-duty engine with a 0.2 g/bhp-hr engine in a vehicle that consumes 10,000 gallons of fuel per year is about 1400 lb/yr of NO<sub>x</sub>. Clean alternative fuels, such as natural gas, or natural gas blends with hydrogen can also reduce heavy-duty engine particulate emissions by over 90 percent compared to current diesel technology. This program is expected to lead to increased availability of low emission alternative fuel heavy-duty engines. Fleets can use the engines and vehicles emerging from this program to comply with SCAQMD fleet regulations.



**Proposed Project:** Develop and Demonstrate Alternative Fuel and Clean Conventional Fueled Light-Duty Vehicles

**Expected SCAQMD Cost:** \$200,000

**Expected Total Cost:** \$1,500,000

**Description of Technology and Application:**

Although new conventional fueled vehicles are much cleaner than their predecessors, not all match the lowest emissions standards often achieved by alternative fuel vehicles. This project would assist in the development, demonstration and certification of both alternative-fueled and conventional-fueled vehicles to meet the strictest emissions requirements by the state, e.g., SULEV for light-duty vehicles. The candidate fuels include CNG, LPG, ethanol, GTL, clean diesel, bio-diesel and ultra low-sulfur diesel, and compressed air technologies. The potential vehicle projects may include:

- certification of CNG light-duty sedans and pickup trucks used in fleet services;
- resolution of higher concentration ethanol (E-85) affect on vehicle fueling system (“permeation issue”);
- certification of E85 vehicles to SULEV standards;
- assessment of “clean diesel” vehicles, including hybrids and their ability to attain SULEV standards; and
- assessment of compressed air technologies.

Other fuel and technology combinations may also be considered under this category.

**Potential Air Quality Benefits:**

The 2012 AQMP identifies the use of alternative clean fuels in mobile sources as a key attainment strategy. Pursuant to AQMP goals, the SCAQMD has in effect several fleet rules that require public and certain private fleets to purchase clean-burning alternative-fueled vehicles when adding or replacing vehicles to their vehicle fleets. This program is expected to lead to increased availability of low emission alternative-and conventional-fueled vehicles for fleets as well as consumer purchase.

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## **Hydrogen and Fuel Cell Technologies & Infrastructure**

**Proposed Project:** Develop and Demonstrate Operation and Maintenance Business Case Strategies for Hydrogen Stations

**Expected SCAQMD Cost:** \$350,000

**Expected Total Cost:** \$4,000,000

### **Description of Technology and Application:**

California regulations require automakers to place increasing numbers of zero emission vehicles into service every year. By 2050, CARB projects that 87% of light-duty vehicles on the road will be zero emission battery and fuel cell vehicles with fuel cell electric becoming the dominant powertrain.

In mid-2012 the CaFCP published a roadmap describing the first network of commercial hydrogen stations in California. The roadmap states that by 2016, 68 hydrogen fueling stations in cluster communities and at specific destinations will provide coverage for the first 20,000 FCEV owners in California. Stakeholders estimate 37 stations will be funded and operating in 2015, leaving a gap of 31 needed stations. The cost for these 31 stations is estimated to be approximately \$65 million. The cost-estimates for these stations were based on a “cash-flow” analysis whereby the state would ensure the station operators would not be financially penalized for opening a hydrogen station. This model, however, makes assumptions based on a fuel retailers’ perspective, including the station operator is able to secure financing, the size of stations, the cost of rent for the land and other factors. The analysis did not identify, however, the implementation of such a system.

This project category would evaluate the actual implementation of a “cash-flow” system, the willingness of banks to grant loans, the strategy to assess the cash-flow “gap”, and other implementation challenges for such a system.

### **Potential Air Quality Benefits:**

The 2012 AQMP identifies the use of alternative fuels and zero emission transportation technologies as necessary to meet federal air quality standards. One of the major advantages of Fuel Cell vehicles (FCEVs) is the fact that they use hydrogen, a fuel that can be domestically produced from a variety of resources such as natural gas, solar, wind and biomass. The technology and means to produce hydrogen fuel to support FCEVs are available now. The deployment of large numbers of FCEVs, which is an important strategy to attain air quality goals, requires a well planned and robust hydrogen fueling infrastructure. This SCAQMD program with additional funding from other entities will provide the hydrogen fueling infrastructure that is necessary in the South Coast Air Basin. The deployment of FCEVs and the development of the necessary fueling infrastructure will lead to substantial reductions in NO<sub>x</sub>, VOC, CO, PM and toxic air contaminants from vehicles.

**Proposed Project:** Develop and Demonstrate Distributed Hydrogen Production and Fueling Stations

**Expected SCAQMD Cost:** \$2,000,000

**Expected Total Cost:** \$6,000,000

**Description of Technology and Application:**

Alternative fuels, such as hydrogen and the use of advanced technologies, such as fuel cell vehicles, are necessary to meet future clean air standards. A key element in the widespread acceptance and resulting increased use of alternative fuel vehicles is the development of an infrastructure to support the refueling of vehicles, cost-effective production and distribution and clean utilization of these new fuels.

A major challenge to the entry and acceptance of direct-hydrogen fuel cell vehicles is the limited number of hydrogen refueling sites. This program would support the development and demonstration of hydrogen refueling technologies. Proposed projects would address:

- *Fleet and Commercial Refueling Stations:* Further expansion of the hydrogen fueling network based on retail models, providing renewable generation, adoption of standardized measurements for hydrogen refueling, other strategic refueling locations and increased dispensing pressure of 10,000 psi and compatibility with existing CNG stations may be considered.
- *Energy Stations:* Multiple-use energy stations that can produce hydrogen for fuel cell vehicles or for stationary power generation are considered an enabling technology with the potential for costs competitive with large-scale reforming. System efficiency, emissions, hydrogen throughput, hydrogen purity and system economics will be monitored to determine the viability of this strategy for hydrogen fueling infrastructure deployment and as a means to produce power and hydrogen from renewable feedstocks (biomass, digester gas, etc.).

*Home Refueling Appliances:* Home refueling/recharging is an attractive advancement for alternative clean fuels due to the limited conventional refueling infrastructure. Similar to the natural gas home refueling appliance currently commercially available, this project would evaluate a hydrogen home refueler for cost, compactness, performance, durability, emission characteristics, ease of assembly and disassembly, maintenance and operations. Other issues such as building permits, building code compliance and UL ratings for safety would also be evaluated.

It is estimated that approximately 50,000 fuel cell vehicles will be deployed by 2017 in California and the majority of these vehicles will be in the South Coast Air Basin. To provide fuel for these vehicles, the hydrogen fueling infrastructure needs to be significantly increased. SCAQMD will seek additional funding from CEC and CARB to construct and operate hydrogen fueling stations.

**Potential Air Quality Benefits:**

The 2012 AQMP identifies the use of alternative clean fuels in mobile sources as a key attainment strategy. Pursuant to AQMP goals, the SCAQMD has in effect several fleet rules that require public and certain private fleets to purchase clean-burning alternative-fueled vehicles when adding or replacing vehicles to their vehicle fleets. Fuel cell vehicles constitute the cleanest alternative-fuel vehicles today. Since hydrogen is a key fuel for fuel cell vehicles, this program would address some of the barriers faced by hydrogen as a fuel and thus assist in accelerating its acceptance and ultimate commercialization. In addition to supporting the immediate deployment of the demonstration fleet, expanding the hydrogen fuel infrastructure should contribute to the

market acceptance of fuel cell technologies in the long run, leading to substantial reductions in NO<sub>x</sub>, VOC, CO, PM and toxic compound emissions from vehicles.

**Proposed Project:**     Develop and Demonstrate Fuel Cell Vehicles

**Expected SCAQMD Cost:**     \$2,000,000

**Expected Total Cost:**         \$6,000,000

**Description of Technology and Application:**

This proposed project would support the demonstration of promising fuel cell technologies for applications using direct hydrogen with proton exchange membrane (PEM) fuel cell technology. Battery fuel cell hybrids are another potential technology being mentioned by battery experts as a way of reducing costs and enhancing performance of fuel cell vehicles.

With the implementation of the California Hydrogen Highway Network, supplemented by the existing and planned hydrogen refueling stations in the Southern California area, pre-production vehicles are planned for demonstration in controlled fleets, such as local cities, transit authorities and airports. Some of these pre-production vehicles include light-duty trucks as well as small to full size transit and shuttle buses. Fleets are useful demonstration sites because economies of scale exist in central refueling, in training skilled personnel to operate and maintain the vehicles, in the ability to monitor and collect data on vehicle performance and for manufacturer technical and customer support. These vehicles could include hybrid-electric vehicles powered by fuel cells and equipped with batteries capable of being charged from the grid and even supplying power to the grid. This category may include projects in the following applications:

**On-Road:**

- Light-Duty Vehicles
- Transit Buses
- Shuttle Buses
- Medium- & Heavy-Duty Trucks  
(Utility or Other)

**Off-Road:**

- Vehicle Auxiliary Power Units
- Construction Equipment
- Lawn and Garden Equipment
- Cargo Handling Equipment

**Potential Air Quality Benefits:**

The 2012 AQMP identifies the need to implement zero emission vehicles. SCAQMD adopted fleet regulations require public and some private fleets within the Basin to acquire alternatively fueled vehicles when making new purchases. In the future, such vehicles could be powered by zero emission fuel cells operating on hydrogen fuel. The proposed projects have the potential to accelerate the commercial viability of fuel cell vehicles. Expected immediate benefits include the establishment of zero- and near-zero emission proof-of-concept vehicles in numerous applications. Over the longer term, the proposed projects could help foster wide-scale implementation of zero emission fuel cell vehicles in the Basin. The proposed projects could also lead to significant fuel economy improvements, manufacturing innovations and the creation of high-tech jobs in Southern California, besides realizing the air quality benefits projected in the AQMP.

## ***Infrastructure and Deployment (NG)***

**Proposed Project:** Deploy Natural Gas Vehicles in Various Applications

**Expected SCAQMD Cost:** \$500,000

**Expected Total Cost:** \$2,000,000

### **Description of Technology and Application:**

Natural gas vehicles (NGVs) have been very successful in reducing emissions in the South Coast Air Basin due to the deployment of fleets and heavy-duty vehicles utilizing this clean fuel. In order to maintain the throughput, utility and commercial potential of the natural gas infrastructure and the corresponding clean air benefits, deploying additional models of NGVs in existing applications are needed. This technology category seeks to support the implementation of early-commercial vehicles in a wide variety of applications, such as taxis, law enforcement vehicles, shuttle buses, delivery vans, transit buses, waste haulers, class 8 tractors and off-road equipment such as construction vehicles and yard hostlers.

### **Potential Air Quality Benefits:**

Natural gas vehicles have inherently lower engine criteria pollutant emissions than conventional vehicles, especially in the heavy-duty applications where older diesel engines are being replaced. Incentivizing these vehicles in city fleets, goods movement applications and transit bus routes help to reduce the local emissions and exposure to nearby residents. Natural gas vehicles also can have lower greenhouse gas emissions and increase energy diversity depending on the feedstock and vehicle class. Deployment of additional NGVs is in agreement with SCAQMD's AQMP as well as the state's Alternative Fuels Plan as part of AB 1007 (Pavley).

**Proposed Project:** Develop, Maintain & Expand Natural Gas Infrastructure

**Expected SCAQMD Cost:** \$300,000

**Expected Total Cost:** \$2,000,000

**Description of Technology and Application:**

This program would support the development, maintenance and expansion of natural gas fueling station technologies and incorporate advancing concepts to increase the overall number of such fueling stations in strategic locations throughout the Basin including the Ports, reduce the cost of natural gas equipment, standardize fueling station design and construction and help with the implementation of SCAQMD's fleet rules. As natural gas fueling equipment begins to age or has been placed in demanding usage, components begin to age and deteriorate. This program offers an incentive to facilities to replace worn-out equipment or to upgrade existing fueling and/or garage and maintenance equipment to offer increased fueling capacity to public agencies, private fleets and school districts.

**Potential Air Quality Benefits:**

The AQMP identifies the use of alternative clean fuels in mobile sources as a key attainment strategy. NGVs have significantly lower emissions than gasoline vehicles and represent the cleanest internal combustion engine powered vehicles available today. The project has the potential to significantly reduce the installation and operating costs of NGV refueling stations, besides improving the refueling time. While new or improved NGV stations have an indirect emissions reduction benefit, they help facilitate the introduction of low emission, NGVs in private and public fleets in the area, which have a direct emissions reduction benefit. The increased exposure and fleet and consumer acceptance of NGVs would lead to significant and direct reductions in NO<sub>x</sub>, VOC, CO, PM and toxic compound emissions from mobile sources. Such increased penetration of NGVs will provide direct emissions reductions of NO<sub>x</sub>, VOC, CO, PM and air toxic compounds throughout the Basin.

**Proposed Project:** Demonstrate Natural Gas Manufacturing and Distribution Technologies Including Renewables**Expected SCAQMD Cost:** \$500,000**Expected Total Cost:** \$7,000,000**Description of Technology and Application:**

Lack of sufficient statewide LNG production results in increased fuel costs and supply constraints. The cost of transporting LNG from production facilities out-of-state increases the fuel cost anywhere from 15 to 20 cents per gallon of LNG and subjects users to the reliability of a single supply source. High capital costs prevent construction of closer, large scale liquefaction facilities. Small-scale, distributed LNG liquefaction systems may provide 25 percent lower capital costs than conventional technology per gallon of LNG produced. Because these smaller plants can be sited near fleet customers, costs for transporting the LNG to end users are much lower than those for remote larger plants. Beyond these cost reductions, the smaller plants offer key benefits of much smaller initial capital investment and wider network of supply than the larger plant model. Renewable feed stocks including landfill gas, green waste and waste gases can be processed to yield LNG or CNG.

Industry and government agree that LNG promises to capture a significant share of the heavy-duty vehicle and engine market. LNG is preferred for long distance trucking as it provides twice the energy per unit volume as CNG. This translates to longer driving ranges and lower-weight vehicle fuel storage.

The main objectives of this project are to investigate, develop and demonstrate:

- commercially viable methods for converting renewable feed stocks into CNG or LNG (e.g., production from biomass);
- economic small-scale natural gas liquefaction technologies;
- utilization of various gaseous feed stocks locally available;
- commercialize incentives for fleets to site, install and use LNG and L/CNG refueling facilities; and
- strategic placement of LNG storage capacity sufficient to provide supply to users in the event of a production outage.

**Potential Air Quality Benefits:**

The SCAQMD relies on a significant increase in the penetration of zero- and low emission vehicles in the South Coast Basin to attain federal clean air standards by 2014, 2023 and 2032. This project would help develop a number of small-scale liquefaction technologies that can reduce LNG costs to be competitive with diesel fuel. Such advances are expected to lead to greater infrastructure development. This would make LNG fueled heavy-duty vehicles more available to the commercial market leading to direct reductions in NO<sub>x</sub>, PM and toxic compound emissions.



## **Emission Control Technologies**

**Proposed Project:** Develop and Demonstrate Advanced Aftertreatment Technologies

**Expected SCAQMD Cost:** \$300,000

**Expected Total Cost:** \$5,000,000

### **Description of Technology and Application:**

There are a number of aftertreatment technologies which have shown substantial emission reductions in diesel engines. These technologies include diesel particulate filters (DPFs), oxidation catalysts, selective catalytic reduction (SCR) systems and NO<sub>x</sub> adsorbers. This project category is to develop and demonstrate these aftertreatment technologies alone or in tandem with an alternative fuel to produce the lowest possible PM, ultrafine particles, nanoparticles, NO<sub>x</sub>, CO, carbonyl and hydrocarbon emissions in retrofit and new applications. With the increasing focus on zero- and near-zero emission goods movement technologies, this category should examine idle reduction concepts and technologies that can be employed at ports and airports.

Possible projects include advancing the technologies for on-road retrofit applications such as heavy-duty line-haul diesel engines, street sweepers, waste haulers and transit buses. Applications for non-road may include construction equipment, yard hostlers, gantry cranes, locomotives, marine vessels, ground support equipment and other similar industrial applications. Potential fuels to be considered in tandem are low-sulfur diesel, emulsified diesel, biodiesel, gas-to-liquids, hydrogen and natural gas. This project category will also explore the performance, economic feasibility, viability (reliability, maintainability and durability) and ease-of-use to ensure a pathway to commercialization.

### **Potential Air Quality Benefits:**

The transfer of mature emission control technologies, such as DPFs and oxidation catalysts, to the off-road sector is a potentially low-risk endeavor that can have immediate emissions reductions. Further development and demonstration of other technologies, such SCR and NO<sub>x</sub> adsorbers, could also have NO<sub>x</sub> reductions of up to 90%.

**Proposed Project:** Demonstrate On-Road Technologies in Off-Road and Retrofit Applications**Expected SCAQMD Cost:** \$250,000**Expected Total Cost:** \$1,000,000**Description of Technology and Application:**

Heavy-duty on-road engines have demonstrated progress in meeting increasingly stringent Federal and state requirements. New heavy-duty engines have progressed from 2 g/bhp-hr NO<sub>x</sub> in 2004 to 0.2 g/bhp-hr NO<sub>x</sub> in 2010, which is an order of magnitude decrease in just six years. Off-road engines, however, have considerably higher emissions limits depending on the engine size. For example, Tier-3 standards for heavy-duty engines require only 3 g/bhp-hr NO<sub>x</sub>. There are apparent opportunities to implement cleaner on-road technologies in off-road applications. There is also an opportunity to replace existing engines in both on-road and off-road applications with the cleanest available technology. Current regulations require a repower (engine exchange) to only meet the same emissions standards as the engine being retired. Unfortunately, this does not take advantage of recently developed clean technologies.

Exhaust gas cleanup strategies, such as SCR, electrostatic precipitators, baghouses and scrubbers, have been used successfully for many years on stationary sources. The exhaust from the combustion source is routed to the cleaning technology, which typically requires a large footprint for implementation. This large footprint has made installation of such technologies on some mobile sources prohibitive. However, in cases where the mobile source is required to idle for long periods of time, it may be more effective to route the emissions from the mobile source to a stationary device to clean the exhaust stream.

Projects in this category will include utilizing proven clean technologies in novel applications, such as:

- demonstrating certified LNG and CNG on-road engines in off-road applications including yard hostlers, switcher locomotives, gantry cranes, waste haulers and construction equipment;
- implementing lower emission engines in repower applications for both on-road and off-road applications; and
- application of stationary best available control technologies, such as SCR, scrubbers, baghouses and electrostatic precipitators, to appropriate on- and off-road applications, such as idling locomotives, marine vessels at dock and heavy-duty line-haul trucks at weigh stations.

**Potential Air Quality Benefits:**

The transfer of mature emission control technologies, such as certified engines and SCR, to the non-road and retrofit sectors offers high potential for immediate emissions reductions. Further development and demonstration of these technologies will assist in the regulatory efforts which could require such technologies and retrofits.

## **Fuels/Emission Studies**

**Proposed Project:** In-Use Emissions Studies for Advanced Technology Vehicle Demonstrations

**Expected SCAQMD Cost:** \$500,000

**Expected Total Cost:** \$1,000,000

### **Description of Technology and Application:**

Hybrid electric, hybrid hydraulic, plug-in electric hybrid and pure EVs will all play a unique role in the future of transportation. Each of these transportation technologies has attributes that could provide unique benefits to different transportation sectors. Identifying the optimal placement of each transportation technology will provide the co-benefits of maximizing the environmental benefit and return on investment for the operator.

The environmental benefit for each technology class will be highly duty-cycle and application specific. Identifying the attributes of a specific application or drive cycle that would take best advantage of a specific transportation technology would speed the adoption and make optimal use of financial resources in the demonstration and deployment of a technology. The adoption rates would be accelerated since the intelligent deployment of a certain technology would ensure that a high percentage of the demonstration vehicles showed positive results. These positive results would spur the adoption of this technology in similar applications, as opposed to negative results derailing the further development or deployment of a certain technology.

The proposed project would conduct a characterization of application specific drive cycles to best match different transportation technologies to specific applications. The potential emissions reductions and fossil fuel displacement for each technology in a specific application would be quantified on a full-cycle basis. This information could be used to develop a theoretical database of potential environmental benefits of different transportation technologies when deployed in specific applications.

### **Potential Air Quality Benefits:**

The development of an emissions reduction database, for various application specific transportation technologies, would assist in the targeted deployment of new transportation technologies. This database coupled with application specific vehicle miles traveled and population data would assist in intelligently deploying advanced technology vehicles to attain the maximum environmental benefit. These two data streams would allow vehicle technologies to be matched to an application that is best suited to the specific technology, as well as selecting applications that are substantial enough to provide a significant environmental benefit. The demonstration of a quantifiable reduction in operating cost through the intelligent deployment of vehicles will also accelerate the commercial adoption of the various technologies. The accelerated adoption of lower emitting vehicles will further assist in attaining SCAQMD's air quality goals.

**Proposed Project:** Conduct Emissions Studies on Biofuels and Alternative Fuels**Expected SCAQMD Cost:** \$100,000**Expected Total Cost:** \$1,300,000**Description of Technology and Application:**

The use of biofuels can be an important strategy to reduce petroleum dependency, air pollution and greenhouse gas emissions. Biofuels are in fact receiving increased attention due to national support and state activities resulting from AB 32, AB 1007 and the Low-Carbon Fuel Standard. With an anticipated increase in biofuel use, it is the objective of this program to further analyze these fuels to better understand their benefits and impacts not only on greenhouse gases but also on air pollution and associated health effects.

In various diesel engine studies, replacement of petroleum diesel fuel with biodiesel fuel has demonstrated reduced PM, CO and air toxics emissions. Biodiesel also has the potential to reduce greenhouse gas emissions because it can be made from renewable feedstocks, such as soy and canola. However, certain blends of biodiesel have a tendency to increase NO<sub>x</sub> emissions, which exacerbates the ozone and PM<sub>2.5</sub> challenges faced in the Basin. In addition, despite recent advancements in toxicological research in the air pollution field, the relationship between biodiesel particle composition and associated health effects is still not completely understood.

Ethanol is another biofuel that is gaining increased national media and state regulatory attention. CARB has recently amended the reformulated gasoline regulation to further increase the ethanol content to 10% as a means to increase the amount of renewable fuels in the state. It is projected that the state's ethanol use will increase from 900 million gallons in 2007 to 1.5 billion gallons by 2012 as a result. As in the case of biodiesel, ethanol has demonstrated in various emission studies to reduce PM, CO and toxic emissions; however, the relationship between particle composition and associated health effects from the combustion of ethanol is not well understood either.

DME is another fuel which requires evaluation of in-use emissions, especially NO<sub>x</sub>, in light of Volvo's announcement that they will commercialize class 8 trucks using DME in 2015. The impact of natural gas fuel composition on emissions from heavy-duty trucks and transit buses is also being studied.

In order to address these concerns on potential health effects associated with biofuels, namely biodiesel and ethanol blends, this program will investigate the physical and chemical composition and associated health effects of tailpipe PM emissions from light- to heavy-duty vehicles burning biofuels in order to ensure public health is not adversely impacted by broader use of these fuels. This program also supports future studies to identify mitigation measures to reduce NO<sub>x</sub> emissions for biofuels. Additionally, a study of emissions from well-to-wheel for the extraction and use of shale gas might be considered.

**Potential Air Quality Benefits:**

If biodiesel and biodiesel blends can be demonstrated to reduce air pollutant emissions with the ability to mitigate any NO<sub>x</sub> impact, this technology will become a viable strategy to assist in meeting air pollutant standards as well as the goals of AB 32 and the Low-Carbon Fuel Standard. The use of biodiesel is an important effort for a sustainable energy future. Emission studies are critical to understanding the emission benefits and any tradeoffs (NO<sub>x</sub> impact) that may result from using this alternative fuel. With reliable information on the emissions from using biodiesel and biodiesel blends, the SCAQMD can take actions to ensure the use of biodiesel will obtain air pollutant reductions without creating additional NO<sub>x</sub> emissions that may exacerbate the Basin's ozone problem.

**Proposed Project:** Identify and Demonstrate In-Use Fleet Emissions Reduction Technologies and Opportunities

**Expected SCAQMD Cost:** \$250,000

**Expected Total Cost:** \$2,000,000

**Description of Technology and Application:**

New technologies, such as alternative fueled heavy-duty engines, are extremely effective at reducing emissions because they are designed to meet the most stringent emissions standards while maintaining vehicle performance. In addition, many new vehicles are now equipped with telematics enabling motorists to obtain transportation information such as road conditions to avoid excessive idling and track information about the vehicle maintenance needs, repair history, tire pressure and fuel economy. Telematics have been shown to reduce emissions from new vehicles. Unfortunately, the in-use fleet lacks telematic systems--particularly heavy-duty engines in trucks, buses, construction equipment, locomotives, marine vessels and cargo handling equipment--have fairly long working lifetimes (up to 20 years due to remanufacturing in some cases). Even light-duty vehicles routinely have lifetimes exceeding 200,000 miles and 10 years. And it is the in-use fleet, especially the oldest vehicles, which are responsible for the majority of emissions.

This project category is to investigate near-term emissions control technologies which can be economically applied to reduce emissions from the in-use fleet. The first part of the project is to identify and conduct proof-of-concept demonstrations of feasible candidate technologies, such as:

- remote sensing for heavy-duty vehicles;
- annual testing for high mileage vehicles (>100,000 miles);
- replace or upgrade emissions control systems at 100,000 mile intervals;
- on-board emission diagnostics with remote notification;
- low-cost test equipment for monitoring and identifying high emitters;
- test cycle development for different class vehicles (e.g. four wheel drive SUVs);
- electrical auxiliary power unit replacements; and
- development, deployment and demonstration of smart vehicle telematic systems

The second phase of the project is to validate the technology or strategy on a larger demonstration project over a longer period of time.

**Potential Air Quality Benefits:**

Many of the technologies identified can be applied to light-duty and heavy-duty vehicles to identify and subsequently remedy high-emitting vehicles in the current fleet inventory. Estimates suggest that 5 percent of existing fleets account for up to 80 percent of the emissions. Identification of higher emitting vehicles would assist with demand-side strategies, where higher emitting vehicles have correspondingly higher registration charges.

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## **Health Impacts Studies**

**Proposed Project:** Evaluate Ultrafine Particle Health Effects

**Expected SCAQMD Cost:** \$250,000

**Expected Total Cost:** \$3,000,000

### **Description of Technology and Application:**

Reducing diesel exhaust from vehicles has become a high priority in the South Coast Air Basin since CARB identified the particulate phase of diesel exhaust as a surrogate for all of the toxic air contaminant emitted from diesel exhaust. Additionally, recent health studies indicate that the ultrafine portion of particulate matter may be more toxic on a per-mass basis than other fractions. Several technologies have been introduced and others are under development to reduce diesel emissions. These include among others low-sulfur diesel fuel, particulate matter traps and heavy-duty engines operating on alternative fuel such as CNG and LNG. Recent studies have shown that control technologies applied to mobile sources have been effective in reducing the mass of particulates emitted. However, there is also evidence that the number of ultrafine particles on and near roadways has increased, even while the mass of particulates has decreased. To have a better understanding of changes in ultrafine particulate emissions from the application of the new technologies and the health effects of these emissions, an evaluation and comparison of ultrafine particulate matter and the potential impacts on community exposures are necessary.

In this program, measurements and chemical composition of ultrafine particulates will be done, as well as studies conducted to characterize their toxicity. The composition of the particulates can further be used to determine the contribution from specific combustion sources. Additionally, engine or chassis dynamometer testing may be conducted on heavy-duty vehicles to measure, evaluate and compare ultrafine particulate matter, PAH and other relevant toxic emissions from different types of fuels such as CNG, low-sulfur diesel, etc. These tests may also include comparisons with the application of particulate matter retrofit traps. This program needs to be closely coordinated with the development of technologies for alternative fuels, aftertreatment and new engines in order to determine the health benefits of such technologies.

### **Potential Air Quality Benefits:**

The AQMP for the South Coast Basin relies on significant penetration of low emission vehicles to attain federal clean air standards. Reduction of particulate emissions from the combustion of diesel and other fuels is a major priority in achieving these standards. This project would help to better understand the nature and amount of ultrafine particulates generated by different types of fuels and advanced control technologies as well as provide information on potential health effects of ultrafine particles. Such an understanding is important to assess the emission reduction potentials and health benefits of these technologies. In turn, this will have a direct effect on the policy and regulatory actions for commercial implementation of alternative fuel vehicles in the Basin.

**Proposed Project:** Conduct Monitoring to Assess Environmental Impacts

**Expected SCAQMD Cost:** \$250,000

**Expected Total Cost:** \$1,000,000

**Description of Technology and Application:**

Facilities, buildings, structures, or highways which attract mobile sources of pollution are considered “indirect” sources. Ambient and saturation air monitoring near sources such as ports, airports, rail yards, distribution centers and freeways is important to identify the emissions exposure to the surrounding communities and provide the data to then conduct the health impacts due to these sources. This project category would identify areas of interest and conduct ambient air monitoring, conduct emissions monitoring, analyze the data and assess the health impacts from mobile sources. The projects would need to be at least one year in duration in order to properly assess the air quality impacts in the area.

**Potential Air Quality Benefits:**

The proposed project will assist in the evaluation of adverse public health impacts associated with mobile sources. The information will be useful in (a) determining whether indirect sources have a relatively higher impact on residents living in close proximity; and (b) providing guidance to develop some area-specific control strategies in the future should it be necessary.

**Proposed Project:** Assess Sources and Health Impacts of Particulate Matter**Expected SCAQMD Cost:** \$250,000**Expected Total Cost:** \$300,000**Description of Technology and Application:**

Previous studies of ambient levels of toxic air contaminants, such as the MATES series of studies, have found that diesel exhaust is the major contributor to health risk from air toxics. Analyses of diesel particulate matter in ambient samples have been based on measurements of elemental carbon. While the bulk of particulate elemental carbon in the South Coast Air Basin is thought to be from combustion of diesel fuels, it is not a unique tracer for diesel exhaust.

The MATES III study collected particulate samples at ten locations in the South Coast Air Basin. Analysis of particulate bound organic compounds was utilized as tracers to estimate levels of ambient diesel particulate matter as well as estimate levels of particulate matter from other major sources. Other major sources that were taken into consideration include automobile exhaust, meat charbroiling, road dust, wood smoke and fuel oil combustion. Analyzing for organic compounds and metals in conjunction with elemental carbon upon collected particulate samples was used to determine contributing sources.

The measurement of organic compounds as tracers from specific sources is a technique that has been used in numerous source apportionment studies and published within the scientific literature. The resulting data on levels of tracers can be evaluated using Chemical Mass Balance Models and other source apportionment techniques, such as Positive Matrix Factorization, to estimate source contributions to particulate matter. The resulting estimates of ambient diesel particulate matter can then be used to assess potential health risks.

In mid-2012 the SCAQMD initiated MATES IV which includes an air monitoring program, an updated emissions inventory of toxic air contaminants and a regional modeling effort to characterize risk across the Basin. This follow-on study, for which results should be available mid-2014, continues to focus on the carcinogenic risk from exposure to air toxics, but will not estimate mortality or other health effects from particulate exposures, as in previous studies. Instead, MATES IV will measure ultrafine particle concentrations and assess human exposure to ultrafines and black carbon near sources such as airports, freeways, rail yards, busy intersections and warehouse operations. This project category would include other related studies, such as toxicity assessment based on age, source (heavy-duty, light-duty engines) and composition (semi-volatile or non-volatile fractions) to better understand the health effects and potential community exposures.

**Potential Air Quality Benefits:**

Results of this work will provide a more robust, scientifically sound estimate of ambient levels of diesel particulate matter as well as levels of particulate matter from other significant combustion sources. This will allow a better estimation of potential exposures to and health effects from toxic air contaminants from diesel exhaust in the South Coast Air Basin. This information in turn can be used to determine the health benefits of promoting clean fuel technologies.



## **Stationary Clean Fuel Technologies**

**Proposed Project:** Develop and Demonstrate Reliable, Low Emission Monitoring Systems and Test Methods

**Expected SCAQMD Cost:** \$250,000

**Expected Total Cost:** \$500,000

### **Description of Technology and Application:**

Currently, the inability of air/fuel ratio control (AFRC) systems to keep rich-burn engines in compliance contributes significantly to air pollution in the basin. Reliable, low-cost emission monitoring systems are needed for small-to-intermediate size combustion devices, including stationary engines, boilers, heaters, furnaces and ovens that are not large enough to justify a continuous emission monitoring system (CEMS). This class of combustion device is often permitted on the basis of a single demonstration or periodic demonstrations of NO<sub>x</sub> and CO emissions meeting SCAQMD rule requirements or a RECLAIM concentration limit. However, SCAQMD-unannounced tests on engines and boilers have found that in many cases NO<sub>x</sub> and/or CO levels have increased significantly above levels that have been initially or periodically demonstrated due to equipment malfunction and/or inadequate operator attention. It is suspected that the same may be true of heaters, furnaces and ovens.

Demonstrations of newer technologies in recent years could result in a commercially viable alternative to CEMs that is both reliable and feasible in terms of lower costs. For example, manufacturers of flue gas analyzers have, in recent years, developed low-cost multi-gas analyzers suitable for portable or stack-mounted use. Some preliminary testing of a new type of AFRC, which uses a different type of O<sub>2</sub> sensor known as a wide-band O<sub>2</sub> sensor, is another alternative that can be analyzed. Another technical approach might be to deploy technology utilizing the O<sub>2</sub> signature of a post-catalyst O<sub>2</sub> sensor and additional control concepts being developed by manufacturers. Since an underlying problem has been that engine, catalyst and AFRC manufacturers have developed systems independently, a system being co-developed to perform continuous diagnostics to assist operators in keeping rich-burn engines in compliance is possibly another alternative for demonstration.

### **Potential Air Quality Benefits:**

Stationary engines, boilers, heaters, furnaces and ovens account for approximately 11 percent of total NO<sub>x</sub> emissions and about 6 percent of total CO emissions. There has been a long-standing compliance problem with rich-burn IC engines in the basin and evidence indicates that many of these devices are operating with NO<sub>x</sub> and/or CO emissions above levels required in their permits. Projects could potentially reduce a significant class of NO<sub>x</sub> and CO emissions that are in excess of the assumptions in the AQMP and further enhance SCAQMD's ability to enforce full-time compliance.

**Proposed Project:** Develop and Demonstrate Clean Stationary Technologies**Expected SCAQMD Cost:** \$250,000**Expected Total Cost:** \$750,000**Description of Technology and Application:**

Stationary sources, including VOC sources such as large printing facilities and furniture manufacturers, have become cleaner and cleaner due to the regulatory requirements for low emissions and the advancements in technology to meet those requirements. Best Available Control Technology (BACT) regulations, however, are only required for new, modified, or relocated sources. This project category is to develop and demonstrate new technologies that can provide emissions reductions in new installations or as retrofit modifications. Possible technology examples include:

- low NO<sub>x</sub> technologies (burners and ICEs);
- low-Btu gas technologies (e.g., digester, landfill, or dairy gases);
- alternative fuels and hydrogen blends;
- alternative diesel fuels (emulsified, gas-to-liquids, biodiesel with aftertreatment);
- low emission refinery flares;
- catalytic combustion;
- cost-effective fuel cell and fuel cell hybrid distributed generation;
- fumes-to-fuel technology to replace thermal oxidizers and capture VOC emissions for electricity generation while ensuring no emission of air toxics; and
- boiler optimization design and strategies to improve efficiencies.

Depending on the technology, a proof-of-concept project, demonstration, or pre-commercial deployment would be considered to garner further information on the technology. Issues to investigate include viability (reliability, maintainability and durability) of the technology, cost-effectiveness and operator ease-of-use in order to assess commercialization.

**Potential Air Quality Benefits:**

The SCAQMD has a substantial number of older, small, stationary source technologies within its jurisdiction. Since these devices are not subject to continuous emissions monitoring system requirements, evidence suggests that these devices may not be operating at their permitted NO<sub>x</sub>, CO, hydrocarbon and PM emissions levels. Replacing these devices with cleaner and more reliable technologies or technology/fuel combinations can have dramatic reductions in all of these criteria pollutants. VOC emission reductions may also be achieved at larger stationary VOC sources to achieve the new federal ozone and PM<sub>2.5</sub> standards.

**Proposed Project:** Develop and Demonstrate Renewables-Based Energy Generation Alternatives

**Expected SCAQMD Cost:** \$200,000

**Expected Total Cost:** \$1,000,000

**Description of Technology and Application:**

The objective of this proposed program is to support the development and demonstration of clean energy, renewable alternatives in stationary and mobile applications. The technologies to be considered include thermal, photovoltaic and other solar energy technologies; wind energy systems; energy storage and conservation; biomass conversion; and other renewable energy and recycling technologies. Innovative solar technologies, such as solar thermal air conditioning and photovoltaic-integrated roof shingles, are of particular interest. Also, in the agricultural sections of the Basin, wind technologies could potentially be applied to drive large electric motor-driven pumps to replace highly polluting diesel-fired pumps. Besides renewable technologies, electrolyzer technology could be used to generate hydrogen, a clean fuel. Hydrogen, when used in regular engines, can substantially reduce tail-pipe emissions, while in fuel cells the emissions are reduced to zero.

The project is expected to result in pilot-scale production demonstrations, scale-up process design and cost analysis, overall environmental impact analysis and projections for ultimate clean fuel costs and availability. This program is expected to result in several projects addressing technological advancements in these technologies that may improve performance and efficiency, potentially reduce capital and operating costs, enhance the quality of natural gas generated from renewable sources for injection into natural gas pipelines, improve reliability and user friendliness and identify markets that could expedite the implementation of successful technologies.

**Potential Air Quality Benefits:**

The 2012 AQMP identifies the development and ultimately the implementation of non-polluting power generation. To gain the maximum air quality benefit, polluting fossil fuel-fired electric power generation needs to be replaced with clean renewable energy resources or other advanced zero emission technologies, such as hydrogen fuel cells, particularly in a distributed generation context.

The proposed program is expected to accelerate the implementation of advanced zero emission energy sources. Expected benefits include directly reducing the emissions by the displacement of fossil generation; proof-of-concept and potential viability for such zero emission power generation systems; increased exposure and user acceptance of the new technology; reduced fossil fuel usage; and the potential for increased use, once successfully demonstrated, with resulting emission benefits, through expedited implementation. These technologies would also have a substantial influence in reducing global warming emissions.

## ***Outreach and Technology Transfer***

**Proposed Project:** Assessment and Technical Support of Advanced Technologies and Information Dissemination

**Expected SCAQMD Cost:** \$500,000

**Expected Total Cost:** \$800,000

### **Description of Project:**

This program supports the assessment of clean fuels and advanced technologies, their progress towards commercialization and the dissemination of information on demonstrated technologies. The objective of this program is to expedite the transfer of technology developed as a result of Technology Advancement Office projects to the public domain, industry, regulatory agencies and the scientific community. This program is a fundamental element in the SCAQMD's outreach efforts to expedite the implementation of low emission and clean fuels technologies and to coordinate these activities with other organizations.

This program may include the following:

- technical review and assessment of technologies, projects and proposals;
- support for alternative fuel refueling and infrastructure;
- advanced technology curriculum development, mentoring and outreach to local schools;
- emissions studies and assessments of zero emission alternatives;
- advanced technology vehicle demonstrations;
- preparation of reports, presentations at conferences, improved public relations and public communications of successful demonstrations of clean technologies;
- participation in and coordination of workshops and various meetings;
- support for training programs related to fleet operation, maintenance and refueling of alternative fuel vehicles;
- publication of technical papers, reports and bulletins; and
- production and dissemination of information, including web sites.

These objectives will be achieved by consulting with industry, scientific, health, medical and regulatory experts and co-sponsoring related conferences and organizations, resulting in multiple contracts. In addition, an ongoing outreach campaign will be conducted to encourage decision-makers to voluntarily switch to alternatively fueled vehicles and train operators to purchase, operate and maintain these vehicles and associated infrastructure.

### **Potential Air Quality Benefits:**

SCAQMD adopted fleet regulations requiring public and private fleets within the Basin to acquire alternatively fueled vehicles when making new purchases. Expected benefits of highlighting success stories in the use of advanced alternatively fueled vehicles could potentially expedite the acceptance and commercialization of advanced technologies by operators seeking to comply with the provisions of the recently adopted SCAQMD fleet rules. The resulting future emissions benefits will contribute to the goals of the AQMP.

**Proposed Project:** Support for Implementation of Various Clean Fuels Vehicle Incentive Programs

**Expected SCAQMD Cost:** \$400,000

**Expected Total Cost:** \$400,000

**Description of Project:**

This program supports the implementation of zero emission vehicle incentive programs, the Carl Moyer incentives program and the school bus incentives program. Implementation support includes application approval, grant allocation, documentation to the CARB, verification of vehicle registration and other support as needed. Information dissemination is critical to successful implementation of a coordinated and comprehensive package of incentives. Outreach will be directed to vehicle dealers, individuals and fleets.

**Potential Air Quality Benefits:**

As described earlier, the SCAQMD will provide matching funds to implement several key incentives programs to reduce diesel emissions in the Basin. Furthermore, the SCAQMD recently adopted fleet regulations requiring public and private fleets within the Basin to acquire alternatively fueled vehicles when making new purchases. Expected benefits of highlighting zero emission vehicle incentives could potentially expedite the acceptance and commercialization of advanced technologies by operators seeking to comply with the provisions of the recently adopted SCAQMD fleet rules. The resulting future emissions benefits will contribute to the goals of the AQMP. The school bus program and the Carl Moyer incentives program will also reduce large amounts of NO<sub>x</sub> and PM emissions in the basin in addition to reducing toxic air contaminants.

**Appendix A**  
**SCAQMD Advisory Groups**



## Technology Advancement Advisory Group

*Dr. Matt Miyasato, Chair .....	SCAQMD
*Patricia Ochoa .....	Coalition for Clean Air
*Alberto Ayala.....	California Air Resources Board
Patrick Davis.....	U.S. Department of Energy
Dr. John Froines.....	Professor Emeritus University of California, Los Angeles
Gretchen Hardison .....	Los Angeles Department of Water and Power; Chair of Technical Advisory Committee of the Mobile Source Air Pollution Reduction Review Committee
*Ed Kjaer .....	Southern California Edison
Philip J. Hodgetts .....	Clean Air Now
Randall Lewis .....	Lewis Group of Companies
Tim Olson .....	California Energy Commission
*Pending .....	Western States Petroleum Association
Cherif Youssef .....	Southern California Gas Company

\*Newly appointed members



## SB 98 Clean Fuels Advisory Group

- \*Dr. Matt Miyasato, Chair ..... SCAQMD
- Robert Bienenfeld ..... American Honda Motor Company Inc
- Dr. Blair Folsom ..... Independent Consultant in Combustion Technology
- Dr. Mridul Gautam..... West Virginia University, Adjunct Professor, &  
University of Nevada-Reno
- Dr. Fritz Kalhammer ..... Independent Consultant in Energy and Process  
Technology
- Dr. Melanie Marty ..... California Environmental Protection Agency,  
Office of Environmental Health Hazard Assessment
- Dr. Wayne Miller ..... University of California, Riverside,  
College of Engineering, Center for Environmental  
Research and Technology
- Dr. Vernon Roan..... University of Florida, Professor Emeritus
- Dr. Scott Samuelson..... University of California, Irvine,  
Combustion Laboratory/National Fuel Cell  
Research Center
- Dr. Robert Sawyer ..... Sawyer Associates
- \*Kevin Walkowicz..... National Renewable Energy Laboratory
- Dr. Nicholas Vanderborgh ..... Independent Consultant in Fuel Cell Technologies
- Michael Walsh ..... Independent Consultant in Motor Vehicle Pollution  
Control

\*Newly appointed members

## **Appendix B**

### **Open Clean Fuels Contracts as of January 1, 2014**



Contract	Contractor	Project Title	Start Term	End Term	SCAQMD \$	Project Total \$
<b>Infrastructure and Deployment</b>						
05250	Downs Commercial Fueling, Inc.	Purchase & Install New L/CNG Fueling System at Commercial Fueling Station in Temecula	11/04/05	04/30/14	\$203,137	\$833,333
06028	Consolidated Disposal Service, LLC	Purchase & Install CNG Fueling System at Long Beach Waste Transfer Station	11/23/05	07/31/14	222,038	740,127
06042	University of California Los Angeles	Upgrade Existing CNG Public Access Station with Dispenser & Card Reader	09/05/06	12/31/16	15,921	31,842
06084	Clean Energy	Upgrade Existing LNG Facility to L/CNG at Riverside County Waste Management Dept's Aqua Mansa Facility in Riverside	04/13/06	02/28/16	120,000	400,000
06091	City of Whittier	Purchase & Install New Public Access CNG Fueling Station at City Yard	03/18/06	12/31/16	150,000	450,000
07051	City of Pasadena	Purchase & Install New Public Access CNG Fueling Station	12/28/06	09/01/14	165,000	550,000
07153	Foothill Transit	Purchase & Install New Public Access CNG Refueling Station in Irwindale	11/02/09	06/30/16	250,000	3,350,000
07243	City of Commerce	Purchase & Install New Public Access L/CNG Station	05/16/07	12/31/15	250,000	1,300,000
07244	SunLine Transit Agency	Upgrade Existing Public Access CNG Stations in Thousand Palms & Indio	04/04/07	04/30/14	90,000	180,000
07245	USA Waste of California, Inc., dba L.A. Metro	Purchase & Install New LNG Production Facility using Landfill Gas from Altamont Landfill in Livermore	07/11/08	12/31/14	300,000	13,000,000
07246	USA Waste of California, Inc., dba L.A. Metro	Purchase & Install New LNG Storage Tank at Long Beach LNG Refueling Station	12/24/08	06/30/17	200,000	440,000
07320	Orange County Transportation Authority	Install New CNG Station in the City of Santa Ana	12/21/07	03/31/16	350,000	5,841,729
08043	University of California Los Angeles	Public Access CNG Refueling Station Upgrade for UCLA Transportation	05/02/08	12/31/16	140,000	350,000
08044	Beaumont Unified School District	Install Limited Access CNG Refueling Station	03/05/09	12/31/16	288,000	615,994
08098	Redlands Unified School District	Purchase & Install New CNG Refueling Station	01/25/08	04/30/17	525,000	700,000
08101	Pupil Transportation Cooperative	Upgrade Existing Public Access CNG Station	01/04/08	06/30/14	187,154	300,000
09165	California Cartage Company	Deployment of 2010 Emissions Standards Compliant LNG Trucks	10/31/08	07/31/16	358,000	11,880,000
09218	Rim of the World Unified School District	Install Mountain Safety Equipment on Five New CNG School Buses	01/05/10	12/31/16	65,850	65,850
09364	Rim of the World Unified School District	Construct & Install a CNG Fueling Station	12/30/10	12/31/14	257,000	425,000
10034	California Cartage Company	Install LNG Fueling Station at the Ports	01/26/10	11/01/14	532,500	1,065,000
10054	Applied LNG Technologies Inc.	Upgrade & Perform Emergency Repairs of L/CNG Refueling Facility	10/30/09	12/31/14	113,359	226,719

Contract	Contractor	Project Title	Start Term	End Term	SCAQMD \$	Project Total \$
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**Infrastructure and Deployment (cont'd)**

10055	Waste Management Collection & Recycling	New Public Access CNG Refueling Station in Santa Ana	12/11/09	12/31/14	250,000	1,622,558
10067	Rim of the World Unified School District	Install Mountain Safety Equipment on Seven New CNG School Buses	12/21/09	12/31/16	92,190	92,190
11548	Mansfield Gas Equipment Systems, Inc.	Buydown Incentive Program for CNG Home Refueling Appliance "Phil"	09/07/12	06/30/14	60,000	356,000
11561	Supershuttle International	Purchase and Convert 20 Gasoline-Powered Passenger Vans to CNG-Powered Passenger Shuttle Vans	06/01/11	10/31/14	464,900	954,600
12135	Placentia-Yorba Linda Unified School District	Upgrade CNG Fueling Station	11/18/11	11/30/17	60,000	60,000
12259	A-1 Alternative Fuel Systems	Demonstrate Natural Gas-Powered Police Vehicle	04/20/12	10/19/14	65,000	65,000
12267	West Covina Unified School District	Upgrade CNG Fueling Facility	10/12/12	12/31/17	60,000	60,000
12851	Clean Energy	Construct Two LNG Fueling Stations	10/05/12	12/31/18	400,000	3,018,118
12852	City of Corona	Construct Public Access CNG Fueling Stations	10/12/12	12/31/18	200,000	618,429
12853	Rainbow Disposal Company, Inc.	Upgrade CNG Fueling Station	03/08/13	12/31/18	200,000	400,000
12854	Waste Management, Inc.	Upgrade LNG Fueling Station at Baldwin Park Facility	08/17/12	12/31/18	300,000	1,588,100
13401	Nite-Hawk Sweepers LLC	Demonstrate Natural Gas-Powered Parking Lot Sweepers	08/28/13	12/31/15	90,000	200,000

**Fuels/Emission Studies**

07236	National Renewable Energy Laboratory	Investigate the Role of Lubricating Oil on PM Emissions from Vehicles	03/23/07	12/30/15	200,000	446,887
10066	National Renewable Energy Laboratory	CRADA – Loan of 70 MPa Hydrogen Quality Sampling Apparatus to SCAQMD	11/02/09	12/30/15	0	0
10722	University of California Riverside/CE-CERT	Re-Establish Testing Facility & Quantify PM Emission Reductions from Charbroiling Operations	08/06/10	04/30/14	60,000	276,000

**Emission Control Technologies**

10696	Johnson Matthey, Inc.	Optimize & Demonstrate SCRT for NO <sub>x</sub> and PM Emissions Control	07/09/10	12/31/14	300,000	2,818,449
10697	Johnson Matthey, Inc.	Optimize & Demonstrate SCCRT for NO <sub>x</sub> and PM Emissions Control	07/09/10	12/31/14	300,000	2,818,449
12113	Southern Counties Terminals dba Griley Air Freight	Retrofit Three Heavy-Duty Diesel Trucks with Diesel Particulate Filters	10/13/11	03/31/14	15,000	45,000
12114	South Bound Express, Inc.	Retrofit Three Heavy-Duty Diesel Trucks with Diesel Particulate Filters	10/13/11	03/31/14	15,000	54,623
12118	National Ready Mixed Concrete	Retrofit 13 Heavy-Duty Diesel Trucks with Diesel Particulate Filters	10/13/11	03/31/14	65,000	239,806
12120	Standard Concrete Products	Retrofit 40 Heavy-Duty Diesel Trucks with Diesel Particulate Filters	10/13/11	03/31/14	200,000	596,665
12121	Challenge Dairy Products, Inc.	Retrofit Three Heavy-Duty Diesel Trucks with Diesel Particulate Filters	11/18/11	03/31/14	15,000	46,845

Contract	Contractor	Project Title	Start Term	End Term	SCAQMD \$	Project Total \$
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**Emission Control Technologies (cont'd)**

12122	Bear Trucking, Inc.	Retrofit One Heavy-Duty Diesel Truck with Diesel Particulate Filter	10/14/11	03/31/14	5,000	13,555
12123	RRM Properties	Retrofit 107 Heavy-Duty Diesel Trucks with Diesel Particulate Filters	10/06/11	03/31/14	535,000	1,481,067
12124	Gaio Trucking, Inc.	Retrofit Nine Heavy-Duty Diesel Trucks with Diesel Particulate Filters	09/28/11	03/31/14	40,000	147,261
12125	Spragues Ready Mix	Retrofit Four Heavy-Duty Diesel Trucks with Diesel Particulate Filters	10/14/11	03/31/14	20,000	62,953
12150	Puritech US, LLC	Retrofit Four Heavy-Duty Diesel Trucks with Diesel Particulate Filters	02/14/12	06/30/14	72,000	172,000
12175	RRM Properties	Retrofit Seven Heavy-Duty Diesel Trucks with Diesel Particulate Filters	12/08/11	03/31/14	35,000	84,812
12186	Pipeline Carriers Inc.	Retrofit 25 Heavy-Duty Diesel Trucks with Diesel Particulate Filters	12/16/11	03/31/14	50,000	182,300
13407	Chaffey Joint Union High School District	Demonstrate Diesel Particulate Filter Technology on Two Diesel School Buses	05/18/13	03/31/14	30,000	45,000

**Electric/Hybrid Technologies & Infrastructure**

08063	Quantum Fuel Systems Technologies Worldwide, Inc.	Develop & Demonstrate 20 Plug-In Hybrid Electric Vehicles	01/22/08	12/15/14	2,165,613	2,885,266
08219	A123Systems Inc.	Develop & Demonstrate Ten Plug-In Hybrid Electric Vehicles	06/05/09	06/04/15	622,667	962,667
11204	AC Propulsion	Develop & Demonstrate Electric Drive Conversion for Fleet Vehicles	12/24/10	11/30/14	300,000	755,767
11606	Odyne Systems, LLC	Develop and Demonstrate Plug-In Hybrid Electric Drive System for Medium- and Heavy-Duty Vehicles	07/08/11	09/30/15	494,000	2,599,000
11614	Transportation Power, Inc.	Demonstrate Battery Electric Heavy-Duty Trucks	07/08/11	09/30/14	196,505	2,616,275
11615	Parker Hannifin Corporation	Develop & Demonstrate Up to Four Heavy-Duty Hydraulic Hybrid Vehicles	01/18/13	12/13/14	250,000	2,000,000
11725	Puente Hills Nissan	Lease of Three Nissan Leaf Vehicles for 39 Months	05/27/11	08/26/14	60,222	82,722
12020	Coulomb Technologies	Install Electric Charging Infrastructure	10/05/12	04/04/14	70,000	70,000
12028	Electric Vehicle International, Inc.	Demonstrate and Replace UPS Diesel Delivery Trucks with Zero-Emission Medium-Duty Trucks	09/09/11	09/08/17	1,400,000	4,872,000
12825	BMW of Monrovia	Lease Two BMW ActiveE Electric Vehicles for Two Years	03/23/12	03/22/14	31,065	31,065
12862	Volvo Technology of America, Inc.	Develop Class 8 Plug-In Hybrid Heavy-Duty Vehicle	12/07/12	12/31/14	1,200,000	2,400,000
12889	BMW of Monrovia	Lease Two BMW ActiveE Electric Vehicles for Two Years	03/23/12	03/22/14	31,065	31,065
13042	South Bay City Council of Governments	Demonstrate Medium-Speed Electric Vehicles	11/02/12	05/01/15	320,000	528,078
13058	Capstone Turbine Corporation	Develop Microturbine Series Hybrid System for Class 7 Heavy-Duty Vehicle Applications	08/12/13	11/30/14	360,000	1,210,000

Contract	Contractor	Project Title	Start Term	End Term	SCAQMD \$	Project Total \$
<b>Electric/Hybrid Technologies &amp; Infrastructure (cont'd)</b>						
13149	University of California, Los Angeles	Develop South Coast PEV Readiness Plan	01/18/13	06/30/14	32,000	63,500
13251	Selman Chevrolet Company	Lease Two 2012 or Newer Chevrolet Volt Extended-Range Electric Vehicles for Three Years	11/28/12	05/01/15	31,375	31,375
13404	Penske Honda of Ontario	Lease Two Honda Fit Electric Vehicles for Three Years	05/02/13	05/01/16	31,307	31,207
13410	Selman Chevrolet Company	Lease Three 2013 Chevrolet Volt Extended-Range Electric Vehicles for Three Years	04/03/13	04/02/16	41,084	41,084
13418	City of Claremont	SoCalEV Infrastructure MOA to Install & Upgrade EV Charging Infrastructure	08/29/13	12/15/14	0	0
13419	California State University, Los Angeles	SoCalEV Infrastructure MOA to Install & Upgrade EV Charging Infrastructure	08/05/13	12/15/14	0	0
13420	University of California, Irvine	SoCalEV Infrastructure MOA to Install & Upgrade EV Charging Infrastructure	08/28/13	12/15/14	0	0
13421	County of Los Angeles	SoCalEV Infrastructure MOA to Install & Upgrade EV Charging Infrastructure	09/06/13	12/15/14	0	0
13426	Transportation Power, Inc.	Develop & Demonstrate Catenary Class 8 Trucks (1 Electric & 1 CNG Platform)	06/07/13	06/06/16	2,617,887	3,182,795
13429	Longo Toyota	Lease One Toyota RAV4 Electric Vehicle for Three Years	04/19/13	04/18/16	19,618	19,618
13439	City of Carson	MOU for Catenary Zero Emission Goods Movement Project	10/01/13	09/30/16	0	0

**Engine Systems**

13168	National Renewable Energy Laboratory	Develop, Integrate & Demonstrate Heavy-Duty Natural Gas Engines and Vehicles	05/22/13	12/31/15	1,300,000	1,300,000
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**Mobile Fuel Cell Technologies**

13155	Fletcher Jones Motor Cars Inc. (Mercedes-Benz)	Lease Two F-Cell Fuel Cell Vehicles for Two Years	02/08/13	02/08/15	30,397	30,397
14139	Hyundai America Technical Center Inc.	No-Cost Lease of Fuel Cell Vehicle for Two Years	12/13/13	12/12/15	0	0

**Hydrogen Technologies and Infrastructure**

04185	Quantum Fuel Systems Technologies Worldwide	Develop & Demonstrate Hydrogen Internal Combustion Engine Vehicles	10/18/04	04/30/14	2,353,000	3,328,631
10046	Air Products and Chemicals Inc.	Develop & Demonstrate Renewable Hydrogen Energy and Refueling Station	12/21/09	11/21/14	750,000	8,436,735
10061	Hydrogenics Corporation	Maintenance & Data Management for the AQMD Hydrogen Refueling Station	10/30/09	1/31/15	468,000	468,000

Contract	Contractor	Project Title	Start Term	End Term	SCAQMD \$	Project Total \$
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**Hydrogen Technologies and Infrastructure (cont'd)**

11150	Hydrogen Frontier, Inc.	Maintain & Operate City of Burbank Hydrogen Fueling Station	11/24/10	01/23/16	475,000	1,635,000
10482	California State University Los Angeles	Install and Demonstrate PEM Electrolyzer, Providing Hydrogen Fueling for Vehicles and Utilizing the Technology in the Engineering Technology Curriculum at the University	03/04/11	10/03/17	250,000	1,662,000
11555	University of California Los Angeles	Construct Hydrogen Fueling Infrastructure	12/07/12	12/31/19	400,000	2,589,990
12075	Linde, LLC	Expand Hydrogen Fueling Infrastructure	11/02/12	11/02/18	250,000	2,732,177
13146	California State University Los Angeles	Lease of One Toyota Prius Hydrogen-Fueled Vehicle	11/08/12	03/31/14	0	0
13259	Air Products and Chemicals, Inc.	Hydrogen Station Operation & Maintenance for Five Cities Hydrogen Program	03/26/13	09/25/14	300,000	300,000
13400	Energy Independence Now	Develop Hydrogen Station Investment Plan	04/05/13	01/04/15	50,000	130,000
14067	University of California, Irvine	Develop Hydrogen Storage Capability for the Gas-Blending Facility	12/31/13	07/16/15	200,000	688,000

**Health Impacts Studies**

11527	University of Southern California	Conduct Study on Sources, Composition, Variability and Toxicological Characteristics of Ultrafine Particles in Southern California	07/24/11	07/24/14	470,969	470,969
12197	University of California Riverside/CE-CERT	Health Effects of PM Particles from Heavy-Duty Biodiesel-Fueled Vehicles	01/13/12	03/31/14	207,500	207,500
12208	University of California Riverside/CE-CERT	Determine the Physical and Chemical Composition and Associated Health Effects of Tailpipe PM Emissions	01/21/12	07/19/14	175,000	1,375,000
12865	University of California Los Angeles	Develop Quantitative Cellular Assays for Use in Understanding the Chemical Basis of Air Pollutant Toxicity	06/08/12	07/07/14	368,457	368,457

**Stationary Clean Fuels Technology**

09303	Permacy Solar	Install 40kW (AC) Crystalline Silicon System at AQMD HQs	01/30/09	01/29/15	387,162	387,162
09304	Solar Integrated Technologies Inc.	Install Turnkey Rooftop 40 kW Building Integrated Photovoltaic System	12/20/08	12/19/14	390,695	390,695
10723	Eastern Municipal Water District	Retrofit Digester Gas Engine with NO <sub>x</sub> Tech Aftertreatment Emission Control Technology	03/16/12	06/15/15	85,000	889,000
11208	Long Beach Unified School District	Air Filtration MOA	12/02/10	12/01/14	0	0



Contract	Contractor	Project Title	Start Term	End Term	SCAQMD \$	Project Total \$
<b>Stationary Clean Fuels Technology (cont'd)</b>						
13030	University of California Irvine	Demonstrate 300 kW Molten Fuel Cell with Exhaust-Fired Absorption Chiller	10/12/12	04/11/15	257,500	257,500
13078	University of California, Riverside	Steam Hydrogasification Reaction Demonstration to Generate Substitute Natural Gas from Biomass Waste	03/07/13	06/07/14	72,916	922,130

**Outreach and Technology Transfer**

00069	Walsh Consulting	Technical Assistance Relating to the Use of Alternative Fuels in Mobile Sources	02/17/00	02/28/14	35,000	35,000
05128	Mid-Atlantic Research Institute LLC	Development, Outreach & Commercialization of Advanced Heavy-Duty and Off-Road Technologies	08/08/05	03/31/15	40,000	40,000
07060	Don Breazeale and Associates, Inc.	Technical Assistance Related to Air Quality Impacts of Regional Goods Movement	11/15/06	05/31/14	58,000	58,000
07062	The Tioga Group, Inc.	Technical Assistance Related to Air Quality Impacts of Regional Goods	12/19/06	11/30/14	58,000	58,000
07129	Breakthrough Technologies Institute, Inc.	Technical Assistance with Fuel Cell Technology	12/01/06	03/31/14	40,000	40,000
08210	Sawyer Associates	Technical Assistance on Mobile Source Control Measures and Future Consultation on TAO Activities	02/22/08	02/28/14	25,000	25,000
09252	JWM Consulting Services	Technical Assistance with Review & Assessment of Advanced Technologies, Heavy-Duty Engines, and Conventional & Alternative Fuels	12/20/08	06/30/14	30,000	30,000
09337	Mark Weekly, CPA	Follow-Up Assessment of AQMD's Compliance with Special Revenue Funds	03/03/09	01/31/15	35,000	35,000
11028	Martin Kay	Technical Assistance on Stationary Source Control Measures & Future Consultation on TAO Activities	08/04/10	12/31/15	40,000	40,000
11182	Tech Compass	Technical Assistance with Alternative Fuels, Fuel Cells, Emissions Analysis & Aftertreatment Technologies	11/19/10	12/31/14	75,000	75,000
11484	Gladstein, Neandross & Associates, LLC	Develop and Implement Two Customer Centers to Provide Education and Outreach to Truck Owners and Operators	01/27/11	01/31/15	150,000	150,000
12093	TIAX LLC	Technical Assistance with Low- and Zero-Emission Vehicles, Fuel Cells and Fueling Infrastructure	04/06/12	04/05/14	75,000	75,000
12380	The Tioga Group	Technical Assistance Related to Emissions, Advanced Technologies and Goods Movement	04/13/12	04/30/14	25,000	25,000
12381	Integra Environmental Consulting Inc.	Technical Assistance Related to Emission Inventories, Goods Movement and Off-Road Sources	04/06/12	04/30/14	25,000	25,000

Contract	Contractor	Project Title	Start Term	End Term	SCAQMD \$	Project Total \$
<b>Outreach and Technology Transfer (cont'd)</b>						
12453	Tech Compass	Technical Assistance with Alternative Fuels, Fuel Cells, Emissions Analysis and Aftertreatment Technologies	06/21/12	05/30/14	75,000	75,000
12486	ICF Resources LLC	Technical Assistance with Goods Movement and Zero Emission Transportation Technologies	09/24/13	09/23/15	50,000	50,000
12604	Joseph C. Calhoun, P.E., Inc.	Technical Assistance with Low- and Zero-Emission Vehicles, Technology and Emissions Analysis	06/01/12	12/31/14	20,000	20,000
13081	Burnett & Burnette	Technical Assistance for Advanced, Low- and Zero-Emissions Mobile and Stationary Source Technologies	11/01/12	04/30/14	40,000	40,000
13194	Clean Fuel Connection Inc.	Technical Assistance with Alternative Fuels, Renewable Energy and Electric Vehicles	12/07/12	12/06/14	30,000	30,000
13198	Gladstein, Neandross & Associates, LLC	Technical Assistance with Alternative Fuels, Emissions Analysis and On-Road Sources	12/14/12	12/13/14	75,000	75,000
13256	Three Squares Inc.	Develop, Initiate & Implement Clean Vehicle Outreach Project	01/05/13	12/31/13	21,500	21,500
13408	University of California, Irvine	Demonstrate Building Integration of Electric Vehicles, Photovoltaics and Stationary Fuel Cells	09/30/13	09/29/15	150,000	270,000
13414	Three Squares Inc.	Cosponsor 2013 The Women in Green Forum (Southern California & Wash DC)	05/27/13	11/30/13	25,000	400,000
13415	University of California Davis, Office of Research	Cosponsor the 2013 Asilomar Conference on Transportation & Energy Policy	06/28/13	12/31/13	30,000	100,000



## **Appendix C**

### **Final Reports for 2013**



SCAQMD Contract #07149

December 2013

## Purchase & Install New Public Access LNG-L/CNG Fueling Station at City Municipal Service Yard

### Contractor

City of San Bernardino

### Cosponsors

City of San Bernardino  
MSRC/AB 2766 Discretionary Fund  
SANBAG  
SCAQMD

### Project Officer

Larry Watkins

### Background

The SCAQMD has adopted various rules and regulations requiring municipalities that operate fleets of medium and heavy-duty trucks to purchase less polluting vehicles that operate on alternative fuels such as CNG and LNG. Thus, the City of San Bernardino (City) began purchasing LNG and CNG vehicles when fleet expansion vehicles were needed. After an analysis of labor and fuel expended driving to offsite fueling locations, it became apparent that the City needed to build a local LNG-CNG fueling station. Consequently, the City applied for and received funding assistance from the SCAQMD to build one.

### Project Objectives

The objectives of this project were to:

- Establish an initial regional fueling station capable of meeting the short-term fueling needs of LNG-CNG vehicles operating under the fleet rules within the metro San Bernardino area; and
- Develop a fueling facility to support the City's planned deployment of LNG refuse trucks.

### Technology Description

The LNG-L/CNG fueling station was built based on proven technology. The project included installation of a 15,000 gallon LNG bulk storage tank, a single dispenser with a submerged multi-

function pump and CNG ground storage containers with 36,000 standard cubic feet capacity.



Figure 1: East Valley Regional Fueling Facility

### Status

EFS West was awarded the contract for the construction, start-up and commissioning of the LNG-L/CNG fueling station. On October 23, 2006, EFS West ordered the major equipment considering the long lead time for the LNG tank. The contractor also provided final site and mechanical design engineering. Final plans and calculations were submitted to the City Building Department for plan check and in May 2007 the plans were approved.

On June 6, 2007, EFS West mobilized the field crew and began site clearing. The foundation were complete on June 26. On July 23 the 15,000 gallon LNG tank, the three CNG tanks and the mechanical equipment arrived and were set in place. During the next month the multifunction pump and CNG pump skids were installed, the piping was welded and other related components were installed.

Preparing for the first testing, on September 24, 2007, the LNG tank was filled with liquid nitrogen for cooling and testing purposes. The system was pressure tested and inspected by the Fire Engineering consultant. Tests continued and during the month of October the manufacturer programming and station specific mechanical

engineering was done. The first load of LNG was delivered in November and the station was able to pump LNG and produce CNG but the system was not automatic. The City’s subcontractor made adjustments and reprogrammed the controller. The system was improved and on November 30 the City and its consultant reviewed the station, approving all but a few items. The remaining items were tested in December and the station was placed into full operation.

The Notice of Completion for the City of San Bernardino East Valley Regional LNG-L/CNG Fueling Facility was filed on March 27, 2008. While the station was commissioned in March 2008, the City had to provide five years of annual reporting including throughput to the SCAQMD under this contract.

**Results**

The development of this LNG-L/CNG infrastructure has achieved the following:

- Reduced air pollution emissions.
- Reduced diesel consumption
- Provided a vital LNG infrastructure link along the ICTC
- Provided a City LNG fueling site to operate its heavy-duty trucks
- Allowed for the expanded market penetration of additional clean fuel, natural gas vehicles along the ICTC and
- Allowed CNG users an additional location where they can fuel their vehicles

The City’s fleet has increased to 26 LNG heavy-duty refuse trucks and 21 CNG vehicles. This displaced more than 75,000 gallons of diesel fuel in the first six months of station use.

**Benefits**

In one year the City of San Bernardino’s initial 20 LNG waste hauling trucks reduced an estimated 18,110 pounds of PM and NO<sub>x</sub> emissions annually and displaced consumption of diesel by more than 130,000 gallons a year. The City plans to purchase additional natural gas vehicles through the normal replacement cycle and by 2012 the City plans to have 43 LNG trucks and 32 CNG vehicles in its fleet.

**Issues**

There was a prolonged problem with false alarms that stopped station operation and an ongoing

problem with the multi-function pump that disables the CNG production. The multi-function pump problem is related to fine tuning, according to EFS West; Nexgen/Chart the mechanical subcontractor is continuing to make adjustments to the station’s controller and multi-function pump. The false alarms have been addressed. The City and EFS West have decided to handle this as a warranty issue because the City has had beneficial use of the station for some time.

**Project Costs**

The cost of the project was \$1,919,912, more than \$550,000 over the original projected cost, due mainly to the increase in world materials costs. The City was able to secure additional CMAQ funding of \$91,186 from SANBAG and utilize some of the City’s Sewer and Refuse funds. Cost-share for this project was as follows:

SANBAG CMAQ Funds	\$1,003,859
City of San Bernardino	531,192
SCAQMD Contract #07149 (CF\$)	164,861
SCAQMD Contract #03100 (R1309.1)	143,208
MSRC/AB 2766 Discretionary Fund	76,792
<b>Final Project Total</b>	<b>\$1,919,912</b>

**Commercialization and Application**

The LNG-L/CNG fueling station process is an available, proven technology. There are many installations in California, and 12 stations in the Los Angeles Metropolitan Area alone. These installations are typically for specific fleet owners, some allowing public use and others remaining private. With pressure from government agencies, environmental groups and the relative cost of diesel fuel, the use of LNG fuel will likely increase dramatically in the future.

**Summary and Conclusions**

With the construction of the City of San Bernardino LNG-L/CNG Fueling Station, the City and the larger community will benefit greatly from the availability of alternative fuels. The San Bernardino Valley area now has a location to fuel both LNG and CNG vehicles.

Initial fuel use is estimated to be approximately 275,000 LNG gallons per year. Once the City operates a full complement of natural gas vehicles, the City’s fleet alone will require a minimum of 1.8 million LNG gallons annually.

## Purchase & Install New CNG Fueling Station at Sun Valley Bus Garage

### Contractor

Los Angeles Unified School District (LAUSD)

### Cosponsors

LAUSD  
SCAQMD

### Project Officer

Larry Watkins

### Background

CARB has identified diesel exhaust particulates and over 40 chemical components associated with particulates as human carcinogens and toxic air contaminants. In 1998 CARB adopted a resolution identifying replacement of all pre-1977 diesel school buses with alternative fuel buses. Additionally, the 2007 AQMP relies on the expedited implementation of advanced technologies and clean-burning fuels in Southern California to achieve air quality standards. In light of these facts, coupled with LAUSD's growing natural gas fleet, LAUSD applied for and received funding assistance from the SCAQMD to build a new time- and fast-fill CNG station.

### Project Objective

LAUSD's project objective was installation of facilities for CNG fueling and maintenance and the expansion of the natural gas fueling infrastructure needed to support LAUSD'S school bus fleet fueling needs. Specifically, this contract provided funding assistance to construct and operate a new time- and fast-fill CNG station at LAUSD's Sun Valley Bus Garage, located at 11247 Sherman Way, Sun Valley, California.

The successful implementation of LAUSD's school bus replacement program will provide less polluting and safer school transportation for school children. In addition, the program maximizes potential emission benefits in high diesel and high PM10 exposure areas, thus also

enhancing the objectives of the Environmental Justice and Children's Health Initiatives adopted by the LAUSD Board. Without the use and expansion of clean fuel CNG buses by local school districts, the economic burden may severely increase the risk and exposure of children to toxic diesel particulate matter and smog-forming pollutants.

The new station will provide fuel for LAUSD's existing CNG fleet as well as the 40 CNG buses on order plus an additional 30 buses to be purchased over the next three years.

### Technology Description

The new CNG fueling station included installation of a compressor skid (280 SCFM or equivalent) with 150 HP electric motor; storage vessels with 20,000 SCF at 4000 PSI capacity; 20-dual hose time-fill posts; 40 hoses and nozzles capable of fueling vehicles at 3,600 PSI; and a single Xebec gas dryer.

### Status

The fueling station became operational on August 11, 2008. Throughput for the first three quarters of operation exceeded 90,000 gasoline gallon equivalents. Unanticipated issues that arose during construction included:

1. Weaver Electric refusing to agree to the Project Stabilization Agreement to employ union labor with the use of union funds; the outcome of this issue involved Weaver Electric being assessed a \$51,000 fine and having to use LAUSD employees and funds for the project.
2. Gas service that should have remained at 20-22 psi on the compressor was 33 psi; the increased gas pressure required the purchase and installation of a high volume gas regulator to reduce pressure to normal.

Once commissioned, LAUSD had to provide the SCAQMD five years of annual reporting including throughput through 2013 under this Contract.





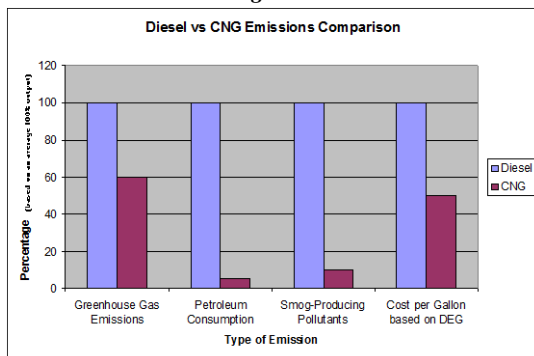
Figure 1: CNG Compressor

## Results

As a result of the installation of the new CNG fueling station, several positive results occurred.

- A decrease in emissions including greenhouse gases, carbon dioxide, nitrogen oxides, particulate matter, and toxic and carcinogenic pollutants.
- Imported diesel fuel will not be consumed and an equivalent number of cleaner CNG gallons, which are locally produced, will be consumed.
- Operation and maintenance requirements of the new technology will decrease by over 50% based on fewer carbon emissions from bus fleets. CNG engines last longer, produce less carbon emissions and require less frequent maintenance.

Figure 2



## Benefits

In addition to increased efficiency of fueling LAUSD's CNG fleet, project benefits include (based on research assumptions): 30-40% less greenhouse gas emissions (greenhouse gas carbon dioxide); natural gas provides a reduction in petroleum consumption by almost 100% from the level of gasoline; 60-90% less smog-producing pollutants including nitrogen oxides, particulate

matter and toxic and carcinogenic pollutants; over 85% of natural gas is domestically produce and the cost of natural gas is over 30% less than the cost of diesel fuel (per gallon, based on a diesel equivalent gallon).

Diesel fuel consumption compared to CNG consumption for the number of gallons per year shows that an average savings of 2 million gallons of imported diesel fuel is saved per year with the use of CNG, which also increases savings by an estimated \$12 million plus annually over the cost of diesel fuel.

## Project Costs

The initial budget for this project was estimated at a total of \$1,747,000 but actual project costs came under budget at \$1,342,119. The final project cost-share was as follows:

SCAQMD Contract #08271	\$380,203
SCAQMD's Lower-Emission School Bus Replacement Program	\$536,520
LAUSD	\$425,396
<b>Total Project Costs</b>	<b>\$1,342,119</b>

## Commercialization and Applications

Anticipated and potential applications of the CNG fuel station includes saving money, a decrease in the carbon footprint from the bus fleet from diesel fuel and a decrease in many other major air pollutants.

Projects to further improve the CNG fuel station are Phase II of the project which includes the purchase of a minimum of 60 CNG buses, but potentially over 100 buses total, and construction of more CNG fuel stations district-wide.

The cost of compressed natural gas should remain table due to local production.

## Purchase & Deploy Six CNG Cutaway Shuttle Vans

### Contractor

Ace Parking Management

### Cosponsors

Ace Parking Management

SCAQMD

U.S. Dept. of Energy

### Project Officer

Phil Barroca

### Background

In 2009, the SCAQMD Board recognized funding from the U.S. Department of Energy Clean Cities Petroleum Reduction Technologies for the Transportation Sector, and also provided match funds of \$750,000 from the Clean Fuels Fund for alternative fuel-powered airport ground transportation projects.

### Project Objective

The project objective was to increase the use of alternative-fuel and reduce petroleum dependency in the on-road transportation sector through the deployment of natural gas fueled airport ground transportation vehicles operating in the South Coast Air Basin. This project, which increased co-funding from Ace Parking Management, was to purchase and deploy (for a minimum of two years) six Ford E-450 cutaway passenger vehicles converted to operate exclusively on CNG.

### Technology Description

The project involves the purchase of six new 2011 model year Ford E-450 cutaway vehicles, equipped with OEM installed gasoline-powered engines. The Ford engine has 6.8L of displacement and a V-10 cylinder configuration. The vehicle has a gross vehicle weight rating (GVWR) of 14,500-lbs. The engine is converted to dedicated CNG-power with a CARB-certified conversion system manufactured by BAF

Technologies. The vehicle is fitted with 29 gasoline gallon equivalents (GGE) of fuel capacity, comprised of two 14.5 GGE CNG tanks that are positioned in the rear of the vehicle and replacing the OEM gasoline tank.

### Status

All six Ford E-450 Cutaway vehicles were purchased and converted to dedicated CNG with the CARB certified BAF conversion system. The vehicles were deployed to the Los Angeles area to provide ground transportation shuttle service between Los Angeles International Airport and remote parking structures and commenced operation in the fourth quarter of 2011. Per DOE requirements, the project required quarterly reports on both fuel usage and mileage for each vehicle. All six vehicles reported usage for four consecutive quarters (one year), and four vehicles provided usage data for a total of seven consecutive quarters. Two vehicles were removed from service in the fourth quarter of 2012, and all six vehicles were removed from operation at, or near the end of, the second quarter of 2013. The company was contacted to provide an explanation for discontinued use of the vehicles and they explained the company had to cease operating at the existing parking facility in the Los Angeles area, but is expected to resume operation in the second quarter of 2014 at a new location servicing the Los Angeles Airport.



Figure 1: Ford E-450 Cutaway with 6.8L V-10

## **Results**

During the seven quarter period in which all or most of the vehicles were in continuous operation, the vehicles collectively amassed 511,000 miles and displaced more than 102,000 gallons of gasoline. The vehicles averaged 2,600 miles per quarter and consumed an average of 520 GGE of fuel, resulting in a fuel consumption rate of 5 miles per gallon.

The 2011 Ford E-450 cutaway is classified as a heavy-duty vehicle with a GVWR greater than 14,000-lbs. Based on CARB Executive Orders and the certified emissions for both the Ford OEM version of this vehicle and the BAF CNG version of this vehicle, the CNG-powered vehicle emits 35% less emissions in terms of hydrocarbon and NO<sub>x</sub> emissions.

## **Benefits**

Relative to its gasoline-powered counterpart, the CNG version of this vehicle is 35% cleaner in hydrocarbon and NO<sub>x</sub> emissions. The vehicles are also helping to displace the use of petroleum based fuels. The full benefits of this program are yet to be determined as the project was unexpectedly halted at the end of the second quarter of 2013 but is expected to produce increased benefits over the full life of these vehicles. Based on full-life projections of 200,000 to 300,000 miles per vehicle, these six vehicles collectively will displace the use of 240,000 to 360,000 gallons of gasoline over the lifetime.

## **Project Costs**

The total project cost for vehicle purchase and conversion to dedicated CNG was \$501,350. The total funding award to this project was \$96,200, comprising \$25,500 from the DOE and \$70,700 from the SCAQMD.

## **Commercialization and Applications**

The technology utilized in this project has been successfully demonstrated. The expected outcome of this project is to increase awareness and viability of using alternative fuel vehicles and to promote the use of non-petroleum based fuel sources.

## Construct New LNG Fueling Station in Palm Springs

### Contractor

Border Valley Trading

### Cosponsors

Border Valley Trading  
California Energy Commission  
MSRC/AB 2766 Discretionary Fund  
SCAQMD

### Project Officer

Larry Watkins

### Background

Border Valley Trading (BVT) and its development partner, Hay Day Farms (HDF), are exporters of agri-products with daily round trips originating in Brawley and Blythe, with deliveries to the Ports of Los Angeles and Long Beach.

In 2008, in response to the local air district directives and San Pedro Port's clean truck program, both companies began transitioning their fleet operations from diesel to LNG.

Because SunLine's Thousand Palms LNG facility closed soon after BVT and HDF converted their fleets, they decided to construct LNG fueling infrastructure to support their own fleet needs (Phase 1), with the goal of expanding the facility (phase 2).

### Project Objective

The project objective was to construct a new LNG fueling station in Palm Springs. The site, located at 670 West Garnet Road in the City of Palm Springs, was chosen because it was a logistically key location on the I-10.

With financial assistance from the SCAQMD and CEC, BVT initiated phase 1, which included site acquisition and grading, paving, wall and fencing construction, laying concrete, and installing electric control and security lighting as well as drainage and installation of a 6,000 gallon "Quick

Response Station" (QRS) LNG fueling unit including associated controls and appurtenances.

Phase 2 incorporated forward planning and phased development to provide for expanded fueling infrastructure in support of other truck operators seeking LNG fueling alternatives along the east-west Phoenix to LA and the south-north Imperial County to LA trips.

### Technology Description

The technology used for this station was a 6,000 gallon QRS LNG portable fueling unit. The station saturates the entire contents of the storage tank immediately upon refill. This automatically occurs when the offload operator changes the selector switch from "offload" to "dispense" and variable saturation set points between 25 and 100 psig can be selected. Saturation is accomplished by circulating LNG through an ambient vaporizer and back into the tank. Once saturated, LNG is dispensed via a suitable cryogenic pump.

### Status

BVT has completed the phase 1 site development and installation of the QRS fueling unit in early 2012. An operational permit was issued on March 20, 2012. Fueling capability was initially limited to a manual mode at the start of operation. An initial challenge included data connectivity of a point-of-sale (POS) system to the fuel flow metering system included with the QRS unit. After several months of diagnostics, GreenFIX America completed the installation and connection of a state-of-the art POS system that auto logs throughput and allows truck operators to purchase fuel through the use of special purchase cards (BVT and HDF) or credit cards. Working with GreenFIX America, and the support of USLandLink and the other subcontractors, BVT successfully installed the LNG fueling unit to support 40 clean burning trucks. Phase 2, which includes expanded storage and fueling capabilities, is scheduled to begin in 2013.

Throughput measured at the Palm Springs site for the first four months of operation is as follows:

<b>Actual LNG Throughput</b>		
<b>Year</b>	<b>LNG Gallons Dispensed</b>	<b>Gasoline Gallon Equivalent</b>
June 2012*	7,500	5,035
July 2012*	10,000	6,715
August 2012	19,300	12,950
September 2012	19,300	12,950
<b>TOTAL</b>	<b>57,100</b>	<b>37,650</b>

Recent work has also included vapor recovery systems to capture methane blow-off or “boil-off” which will be collected and pressurized for CNG use at 3,600 psi. Several loads of CNG have been dispensed at this location to a local CNG operator (CV Ice) making deliveries to the Yucca and Morongo basin areas.



Figure 1: LNG Storage Tank

**Results**

BVT is now successfully operating an LNG fueling facility in support of 40 LNG trucks. The direct and immediate benefit is the reduction of NO<sub>x</sub>, PM and GHG emissions. The attached table provides a representation of the reductions:

	Border Valley		HayDay		TOTAL	
	NO <sub>x</sub>	PM	NO <sub>x</sub>	PM	NO <sub>x</sub>	PM
<b>Criteria Pollutant Emission Reduction Calculation</b>						
Annual Fuel Consumption (LNG gallons)	40,040	40,040	41,470	41,470	81,470	81,470
Annual Fuel Consumption (dgc)	23,553	23,553	24,394	24,394		
<b>Annual Emission Reductions (tons/year)</b>	<b>1.83</b>	<b>0.037</b>	<b>1.895</b>	<b>0.038</b>	<b>3.73</b>	<b>0.75</b>

**Benefits**

The conversion of 40 heavy-duty trucks from diesel to LNG is achieving a significant reduction of emissions within the SCAQMD’s jurisdiction as well as the Greater Southern California area.

The Palm Springs facility has the opportunity to bridge one small gap; however, continued support of clean energy programs and infrastructure remains essential to help stimulate the industry. Affordable fueling opportunities remain limited along the interstates resulting in reluctance in the private sector to convert diesel to natural gas.

**Project Costs**

The actual costs for phase 1 were about 10-15% higher than estimated. These costs included fire and gas detection as well as integrating a POS system with the data collector on the QRS fueling unit. BVT and its partner HDF made significant business investments in developing the Palm Springs LNG fueling facility. A summary of final project costs is as follows:

<b>Phase 1</b>	
BVT	\$472,570
HDF	\$472,565
SCAQMD	\$251,865
<b>Phase 2</b>	
BVT	\$325,000
HDF	\$325,000
CEC	\$500,000
MSRC/AB Discretionary Fund	\$150,000
<b>Total Project Costs</b>	<b>\$2,497,000</b>

This investment was made both as a commitment to cleaner burning fuel and the environment, but also as an opportunity to reduce long-term operational costs through fuel savings. The SCAQMD’s support to help pay for site development costs has been critical to the project.

**Commercialization and Applications**

Phase 1 of the Palm Springs site will support 40 heavy-duty trucks making round trips from Imperial County and east Riverside County to the Ports of Los Angeles and Long Beach. This initial investment provided a strategic location to provide LNG fuel where very limited and difficult to access options existed. It will provide a return on cost (key to any private business activity) through the cost savings of fuel and re-fuel efficiencies based on location. This return, roughly 7 years, is based on the cost of LNG fuel at roughly 60% the price of diesel. The commitment by BVT and HDF to cleaner burning fuels was not only a business investment but an investment towards a cleaner, greener future for everyone.

## Demonstrate Natural Gas-Powered Police Vehicle

### Contractor

Agility Fuel Systems

### Cosponsor

SCAQMD

### Project Officer

Phil Barroca

### Background

Mobile source emissions continue to be a major contributor to air pollution in the South Coast Air Basin. The SCAQMD's Fleet Rules provide a mandate for public fleets to purchase clean, alternative fuel vehicles when replacing or adding to their fleets; however, law enforcement and emergency vehicles are exempt from these rules and, collectively, law enforcement vehicles represent a significant amount of mobile source emissions in the basin.

### Project Objective

The objective of this project was to increase awareness and use of alternative fuel vehicles in the law enforcement vehicle sector. This program was intended to demonstrate the use of a clean, natural gas-powered vehicle in a law enforcement vehicle and deploy this vehicle into daily police vehicle activities. This demonstration program is exclusive with the City of South Pasadena which will provide annual vehicle performance information and vehicle operator feedback for a period of two years.

When this project was initially approved by the SCAQMD Governing Board in 2009, the Ford Crown Victoria was the most widely deployed vehicle in law enforcement agencies in the country. This project specifically funded the purchase of a new 2011 FCV, the conversion to dedicated CNG, and a two-year demonstration of this vehicle by the City of South Pasadena. The program commenced with contract execution in the second quarter of 2012.

### Technology Description

The technology in this project involves the conversion of a new gas-powered 2011 Ford Crown Victoria Police Pursuit Vehicle (PPV) to dedicated CNG. The PPV is powered by a 4.6 liter, V-8 engine. The CNG conversion is an EPA approved system by EvoTek LLC, a subsidiary of Impco Technologies, Inc. The vehicle's CNG fuel storage consists of five high pressure CNG fuel storage tanks comprising a total of 16.9 gasoline gallon equivalents (GGE) of CNG fuel. Four tanks, or 12.4 GGE are Type 1 steel tanks; the vehicle was subsequently upgraded with a 4.5 GGE Type 3 CNG fuel tank to provide the vehicle with extended range and usability. The CNG conversion and tank installations were performed under subcontract by A-1 Alternative Fuel Systems located in Fresno, CA.



Figure 1: City of South Pasadena  
CNG 2011 PPV



**Figure 2: Type 3 CNG Fuel Tank upgrade installed in trunk of PPV; 4.5 GGE of fuel capacity.**

### Status

The City of South Pasadena has been operating the CNG PPV since the second quarter of 2012, primarily as a K-9 unit. The vehicle has amassed 35,000 miles to date and based on conservative estimates displaced the use of more than 2300 gallons of gasoline. The City recently reported that the engine dies on occasion when the vehicle is idling at a stop; this problem is currently under review.

### Benefits

Relative to its gas-powered counterpart, the CNG version of this vehicle is at least 70% cleaner in hydrocarbon plus NO<sub>x</sub> emissions. As mentioned above, the vehicle is also displacing the use of petroleum-based fuels. Based on full-life projections of 300,000 miles for this vehicle vocation, a CNG-powered Ford Crown Victoria would displace the use of 20,000 gallons of gasoline.

### Project Costs

The total amount awarded to this project was \$54,000 for the purchase of a new 2011 Ford Crown Victoria with the factory-equipped PPV package, the installation of the CNG conversion system and four CNG fuel storage vessels. An additional \$3,145 was approved for this project to purchase and install one 4.5 GGE Type 3 CNG fuel storage tank to increase the vehicle's fuel storage capacity to 16.9 GGE.

## Commercialization and Applications

The technology utilized in this project has been successfully demonstrated and increased awareness to cities and municipalities and law enforcement jurisdictions on both the environmental benefits and cost benefits of using CNG in high fuel consuming vehicles.



**Figure 3: City of South Pasadena CNG-powered K9 unit**

## Remote Sensing Measurements of On-Road Emissions from Heavy-Duty Diesel Vehicles

### Contractor

University of Denver and Environmental Systems Products (now Envirotest Systems Corporation)

### Cosponsors

NREL  
SCAQMD

### Project Officer

Wei Li

### Background

It is important to determine and monitor the benefits of CARB regulations in comparison to the large sums of public funds devoted to heavy-duty vehicle (HDV) diesel emission reductions. To properly gauge the effectiveness of HOV regulations, it was deemed necessary to conduct a study to develop a database of on-road emissions from HDVs operating near ports.

### Project Objective

The study was intended to update on-road HDV fleet emissions data to better characterize in-use on-road heavy-duty vehicle emissions in the South Coast Air Basin and evaluate the impact of CARB's Drayage Truck Regulation and In-Use On-Road Heavy Duty Diesel Vehicle Regulation and San Pedro Bay Ports Clean Air Action Plan (CAAP). A subsidiary goal was to compare results from two different measurement systems.

### Technology Description

Two sets of remote sensing equipment were used, a University of Denver developed FEAT 3002, used for research studies, and a commercial product, the RSD 4600, made by Environmental Systems Products (ESP), now Envirotest Systems Corporation.

Remote sensing is an inexpensive method of measuring on-road CO, CO<sub>2</sub>, HC and NO (both instruments); and NO<sub>2</sub>, SO<sub>2</sub> and NH<sub>3</sub> (FEAT 3002 only) gaseous emissions; and UV(RSD 4600 only) and IR opacity (both instruments) from a large

number of vehicles without inconveniencing vehicle operation.

### Status

Four field campaigns conducted over five years, 2008, 2009, 2010 and 2012, resulted in license plate matched records for 7078 trucks at the Port of Los Angeles Water Street exit (shown below in Figure 1) and 9189 trucks at the Peralta Weigh Station on SR91. Each campaign operated for one week at each of the two locations.

This study was successfully completed in December 2013.



Figure 1: Port of Los Angeles Weigh Station

### Results

**Peralta:** The heavy-duty California fleet observed at Peralta continues to age and over the five year span has increased in average age by about 0.9 model years. Since 2008 the average model year of just the California fleet has gone from 2000.2 (8.1 years old) to 2003.8 (9 years old).

FEAT reported NO<sub>x</sub> (NO+NO<sub>2</sub>) emissions have decreased by 27% from 2008 to 2012 with the largest drop (more than 60% of the total) occurring since the 2010 measurements. For the 2008 to 2010 period, the RSD 4600 reported 11% of NO reductions compared to 13% reductions in NO reported by FEAT over the same period. RSD 4600 was not used at Peralta in 2012.

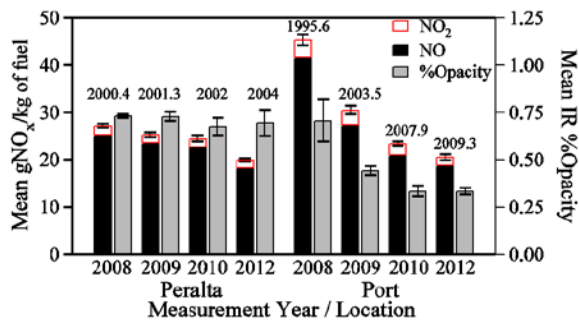


The overall trend for FEAT IR %opacity at Peralta showed no statistical change since 2008, though a closer examination by chassis model year shows that the DPF equipped trucks (chassis models 2008 and newer) have similar IR %opacity reductions as those seen at the Port though their fraction of the fleet at Peralta was still too small to reduce the overall mean. The RSD 4600 UV channel reported a 7% reduction between 2008 and 2010.

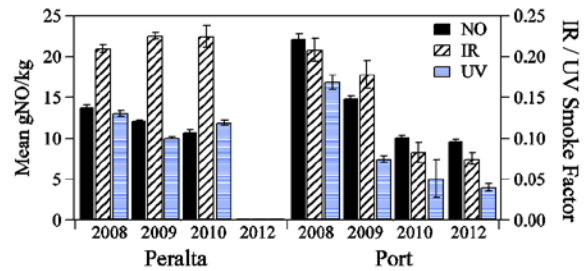
**Port of Los Angeles:** The fleet age at the Port changed dramatically between the sampling campaigns in 2008 and 2012, averaging almost 14 model years newer. In 2008 the average model year was 1995.6 (~12 years old) and in 2012 the average model year was 2009.3 (~ 3 years old).

FEAT reported NO<sub>x</sub> emissions reductions of 55%, with the decrease slowing as expected since 2010 when the CAAP truck replacement was completed. The RSD 4600 observed a 56% reduction in NO compared with the FEAT instruments NO reduction of 50%.

A 54% reduction in FEAT IR %opacity was observed from 2008-2010 with no significant change during the last 2 year interval. The RSD 4600 IR and UV smoke channels reported reductions of 64% and 76% respectively, from 2008 to 2012, with most of the reduction occurring from 2008 to 2010.



**Figure 2: FEAT 3002 Mean Grams of NO and NO2 per kg of fuel (left axis) and IR %Opacity (right axis) versus measurement year.**



**Figure 3: RSD 4600 mean Grams of NO per kg of fuel (left axis) and IR and UV Smoke Factor (right axis) versus measurement year.**

**Comparison of FEAT 3002 and ESP 4600 Results**

FEAT 3002 and RSD 4600 emission measurements were binned by model year for each campaign and results compared. Results for NO showed good correlation while the correlations for other pollutants were variable.

**Benefits**

The remote sensing technology is uniquely able to inexpensively monitor the heavy-duty fleet and ensure emission reduction benefits are being achieved and maintained. The technology is able to measure and compare emissions from differently fueled vehicles. These capabilities allow public agencies to make regulatory decisions with better information and with greater confidence.

**Project Costs**

	SCAQMD	NREL	Total
DU FEAT Measurements and Reporting	\$161,041	\$161,041	\$322,082
ESP RSD Measurements	\$ 38,000	-	\$ 38,000
<b>Total</b>	<b>\$199,041</b>	<b>\$161,041</b>	<b>\$360,082</b>

**Commercialization and Applications**

Both FEAT 3002 and RSD 4600 systems reported similar trends and both are well suited for monitoring progress in HDV on-road emissions that are otherwise expensive and difficult to monitor. The FEAT unit has the advantage of measuring NO<sub>2</sub> as well as NO and of measuring SO<sub>2</sub>, and ammonia (NH<sub>3</sub>). The RSD 4600 UV smoke channel was more sensitive to particulate emissions than the IR channels of either system. The addition of an NO<sub>2</sub> channel to the RSD 4600 would be beneficial and is being undertaken by the manufacturer.

## In-Use Emissions Testing & Demonstrate Retrofit Technology for On-Road Heavy-Duty Engines

### Contractor

West Virginia University Research Corp

### Cosponsors

CARB

Ports of Los Angeles and Long Beach

SCAQMD

West Virginia University

### Project Officer

Adewale Oshinuga

### Background

On-road heavy-duty engines are now subject to the 2010 U.S. EPA emissions standards of 0.01 g/bhp-hr PM and 0.20 g/bhp-hr NO<sub>x</sub>. Some engine manufacturers are using emission credits which allow them to produce a mixture of engines certified at, below, or above 0.20 g/bhp-hr NO<sub>x</sub>. While recent limited-scale studies have shown reduced NO<sub>x</sub> and PM emissions from trucks powered by 2010 compliant engines, other studies indicate a potential increase in some exhaust emissions. As such, additional studies are required to assess the impact of the technologies on emissions from engines used in a variety of applications, particularly since the number of these engines will continue to increase in the future. In December 2010, the SCAQMD awarded contracts to West Virginia University (WVU) and University of Riverside, California (CE-CERT) to conduct in-use emissions testing, and if needed, to evaluate emission reduction potential of retrofit technology on existing and new on-road heavy-duty engines. In 2011 the emission testing study was amended to include additional funds from the Ports of Los Angeles and Long Beach to conduct additional in-use emissions tests of heavy-duty drayage vehicles and assess in-use emissions from a 2010 U.S. EPA compliant heavy-duty vehicle as the vehicle is driven over a 2,500-mile route between Morgantown, WV, and Riverside, CA.

### Project Objective

The primary objective of this study was to

evaluate the emissions rates of regulated pollutants from current model year heavy-duty diesel, natural gas and dual-fueled vehicles operating under different vocations. Specifically:

1. Assessment of emissions rates of CO, CO<sub>2</sub>, NMHC, CH<sub>4</sub>, NO<sub>x</sub> and PM emissions from vehicles operating as port drayage application, transit buses and refuse trucks.
2. Characterize ammonia emission rates from stoichiometric-fueled natural gas vehicles and urea-SCR diesel vehicles.
3. Characterize PM number concentrations and formaldehyde, benzene, toluene, ethyl benzene and o-p xylene emissions.
4. Develop a retrofit strategy for reduction of ammonia emissions from natural gas engines.
5. Assess in-use emissions from a 2010 U.S. EPA compliant heavy-duty vehicle as the vehicle is driven over a 2,500-mile route between WV and CA.

### Project Description

WVU and CE-CERT were contracted by SCAQMD to conduct heavy-duty chassis dynamometer testing to achieve the above-mentioned objectives. The test matrix included vehicles from eight engine technology categories distributed among four different vocations. A total of 24 heavy-duty vehicles were tested as part of this study. WVU used the transportable heavy-duty chassis dynamometer stationed at Ralph's Distribution Center at Riverside for this study as shown below in Figure 1.



Figure 1: Test Vehicle during chassis dynamometer testing

As part of the in-use emissions testing study, WVU was contracted to collect data during a cross-country truck operation for over 2,500 miles from Morgantown, WV to Riverside, CA. Figure 2 shows the test vehicle in Denver, CO, during the cross-country study.



**Figure 2: Test Vehicle set up for the cross-country data collection**

### Status

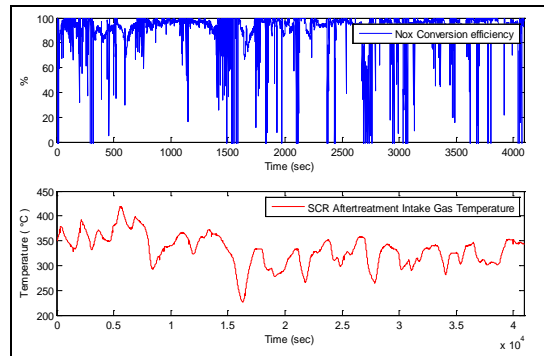
The testing phase of the project was completed in February 2013.

### Results

First, the in-use emissions testing study showed that NO<sub>x</sub> emissions from natural gas vehicles with TWC and the dual-fuel HPDI equipped with DPF and SCR to be lower 2010 compliant diesel engines both in term of distance-specific and brake-specific emissions. Sustained activity of the TWC under all operating conditions contributed to orders of magnitude lower NO<sub>x</sub> emissions. The overall lower engine out NO<sub>x</sub> emissions from the dual-fuel HPDI engine reduced the effect of SCR inactivity on the NO<sub>x</sub> emissions from this engine. Second, exhaust temperature characteristics over the drayage cycle did not support sustained SCR activity for the diesel with SCR, while the stoichiometric natural gas with TWC exhibit orders of magnitude lower NO<sub>x</sub> emissions over all three drayage activity. Third, the dual-fuel HPDI vehicles also exhibited lower NO<sub>x</sub> even during periods of no SCR activity. From a perspective of port drayage application the natural gas fueled vehicles will contribute to lower NO<sub>x</sub> emissions during activities inside the port and local urban type operation. Fourth, diesel vehicles with SCR require sustained vehicle speeds and higher operating loads to achieve lower NO<sub>x</sub> emissions. Fifth, stoichiometric natural gas engines were characterized by orders of magnitude higher ammonia emissions than diesel vehicles equipped with SCR. Sixth, N<sub>2</sub>O emissions from natural gas

engines were observed only during the warm-up phase of the three-way catalyst. No significant N<sub>2</sub>O emissions were detected from any diesel technology vehicles. Finally, particle size distribution analysis showed particle emissions from stoichiometric natural gas engines and DPF equipped diesels to be of the same order of magnitude as ambient air concentrations. The results also indicated the impact of engine component ageing on ultrafine particle emissions.

Results of the cross-country study showed that the NO<sub>x</sub> conversion efficiency of the SCR after-treatment system to be on an average 83-88% during the course of the test campaign. Sustained temperatures of greater than 250 Deg C contributed to high SCR activity at highway driving conditions. One of the shortcomings of the cross-country study was the lack of high traffic densities in major sections of the route. Figure 3 shows the SCR after-treatment efficiency and the measured SCR intake exhaust gas temperatures during the entire cross-country test campaign.



**Figure 3: NO<sub>x</sub> conversion efficiency of SCR and exhaust gas temperatures during cross-country study**

### Benefits

The study provided a comprehensive understanding of emission rates of current technology heavy-duty diesel and alternative fueled engines operating in Southern California. In addition, the study provided a reference for updating federal, state and local in-use emissions inventories.

### Project Costs

The total project cost was \$1,982,162, of which SCAQMD's cost was \$1,459,484. CARB, POLA, POLB, WVU and UCR provided the remaining \$522,678 in direct and in-kind contributions.

SCAQMD Contract #11612

August 2013

## In-Use Emissions Testing & Demonstrate Retrofit Technology for On-Road Heavy-Duty Engines

### Contractor

University of California, Riverside

### Cosponsors

CARB

Ports of Los Angeles and Long Beach

SCAQMD

University of California, Riverside

### Project Officer

Adewale Oshinuga

### Background

On-road heavy-duty engines are now subject to the 2010 U.S. EPA emissions standards of 0.01 g/bhp-hr PM and 0.20 g/bhp-hr NO<sub>x</sub>. Some engine manufacturers are using emission credits which allow them to produce a mixture of engines certified at, below, or above 0.20 g/bhp-hr NO<sub>x</sub>. While recent limited-scale studies have shown reduced NO<sub>x</sub> and PM emissions from trucks powered by 2010 compliant engines, other studies indicate a potential increase in some exhaust emissions. As such, additional studies are required to assess the impact of the technologies on emissions from engines used in a variety of applications, particularly since the number of these engines will continue to increase in the future. In December 2010, the SCAQMD awarded contracts to West Virginia University (WVU) and University of Riverside, California (CE-CERT) to conduct in-use emissions testing, and if needed, to evaluate emission reduction potential of retrofit technology on existing and new on-road heavy-duty engines. In 2011 the emission testing study was amended to include additional funds from the Ports of Los Angeles and Long Beach to conduct additional in-use emissions tests of heavy-duty drayage vehicles and assess in-use emissions from a 2010 U.S. EPA compliant heavy-duty vehicle as the vehicle is driven over a 2,500-mile route between Morgantown, WV, and Riverside, CA.

### Project Objective

The objectives of this study were to conduct in-use

testing of heavy-duty natural gas and diesel vehicles while measuring: 1) regulated emissions; 2) unregulated emissions such as ammonia and formaldehyde; 3) greenhouse gas levels of CO<sub>2</sub> and N<sub>2</sub>O; and 4) ultrafine PM emissions.

### Project Description

WVU and CE-CERT were contracted by SCAQMD to conduct heavy-duty chassis dynamometer testing to achieve the above-mentioned objectives. The test matrix included vehicles from eight engine technology categories distributed among four different vocations. A total of 24 heavy-duty vehicles were tested as part of this study. The testing protocol involved measuring emissions while the vehicles followed driving cycles that were better at representing the in-use emissions than those used for certification. All testing was carried out on a chassis dynamometer with measurements being made with a laboratory meeting 40 CFR Part 1065 specifications.



Figure 1: Truck being tested on chassis dynamometer

### Status

The testing phase of the project was completed in May 2013.

### Results

#### Emissions of PM and NO<sub>x</sub>

- PM emissions from all diesel vehicles and driving cycles met the 10mg per bk-hp-hr

certification limit. For inventory purposes, the measured value on a per-mile basis was  $\leq 2$  mg/mi. PM emissions for the single LPG vehicle found in the South Coast Air Basin was  $\sim 140$  mg/bk-hp-hr on the UDDS cycle.

- NO<sub>x</sub> emissions depended on the certification value, application/driving cycle and the manufacturer. With diesel engines used for goods movement, emissions were lowest with installed SCR technology; however, increases up to 500% were measured when the temperature of the SCR was  $< 325^{\circ}\text{C}$ . Vehicles using only cooled EGR were certified to higher levels and surprisingly showed emissions for near-port operations that were 250% higher than for service to regional distribution centers. An overall lower average exhaust temperature is typical of vehicles operating close to port where a significant amount of queuing takes place.
- Navistar engines all had emissions exceeding the compliance level. News in May 2013 indicated that Navistar exceeded the limit established for engines certified under the EPA nonconformance penalty (NCP) rule, thus resulting in a recall of the Navistar engines. Other news indicated Navistar's approach to use EGR and pay fines as the NO<sub>x</sub> emission solution was abandoned in favor of adopting SCR technology like the other engine manufacturers. Navistar's technology change to SCR will allow them to comply with the strict NO<sub>x</sub> certification levels.
- NO<sub>x</sub> emissions from diesel refuse haulers using SCRs showed most of the NO<sub>x</sub> was produced during the compaction portion of the in-use cycle as exhaust temperatures were relatively low when compared with exhaust temperature during the transit portion of the cycle
- An important finding was the percentage of NO<sub>x</sub> as NO<sub>2</sub> ranged from 10% to near 90% with most of the data showing high levels of NO<sub>2</sub>, especially with an SCR. These values can be compared with the retrofit rule where the NO<sub>2</sub> levels were limited to 20% above the baseline levels.

#### **NH<sub>3</sub>, Hydrocarbons, Toxics and Fine PM**

- NH<sub>3</sub> emissions were very low; ranging from about 10 to 100 mg/mi over the range of vehicle/cycle combinations. All vehicles showed cycle averaged raw NH<sub>3</sub> emission concentrations  $< 10$  ppm.
- The emission factors for the THC, CH<sub>4</sub>, NMHC and toxics were very low for all

vehicle/cycle combinations with a DOC/DPF installed as expected from the ACES project that showed a 98% reduction from diesel engines without DPFs. THC, NMHC, and CH<sub>4</sub> emissions were at or below 0.45 g/mi, 0.30 g/mi, and 0.20 g/mi, respectively.

- Real-time PM measurements suggest the reported reference PM emission rate may be lower due to low filter weights for DPF equipped vehicles.
- Fine particles show higher concentrations during the first 200 seconds of a cold start. Hot stabilized engines show similar results between test cycles. The fine particles appear to be higher for the regional port cycle where extended high loads were experienced by the after treatment systems.

#### **Greenhouse Gas & Fuel Economy**

- For engines burning diesel fuel, the GHG and fuel economy are represented by CO<sub>2</sub> since the very low methane emissions do not measurably contribute to GHG. However with LPG, methane emissions represented  $\sim 8\%$  of the GHG. Fuel economy ranged from 2.6 to 7.6 mpg for the range of vehicles and cycles, with goods movement vehicles having the highest fuel economy for the regional cycle. The refuse trucks showed slightly higher fuel economy values for the RTC compared to the UDDS.
- The project measured N<sub>2</sub>O, another greenhouse gas, and levels were very low for all vehicles and were about one to two standard deviations above ambient concentrations, as expected.

#### **Benefits**

The project met the intended goals and provided direct information on the difference between in-use and certification emission levels for trucks operating in the Basin. The results point to a need to lower the emissions from HDDT even with the current strict emission standards, especially when the trucks are operating outside the not-to-exceed zones. Otherwise, this region will not make the planned progress towards cleaner air.

#### **Project Costs**

The total project cost was \$1,982,162, of which SCAQMD's cost was \$1,459,484. CARB, POLA, POLB, WVU and UCR provided the remaining \$522,678 in direct and in-kind contributions.

## Identify Cellulosic Biomass Feedstocks

### Contractor

University of California, Riverside / CE-CERT

### Cosponsors

Ford Motor Company Endowed Chair  
SCAQMD

### Project Officer

Brian Choe

### Background

California consumes more transportation fuel than any other state, with gasoline alone responsible for 14.6 billion gallons in 2011. High fuel use produces high greenhouse gas (GHG) emissions that feed global climate change. The national Renewable Fuel Standard (RFS2) mandates alternative fuels with lower GHG emissions than motor gasoline, and State Low Carbon Fuel Standards (LCFS) require carbon intensity to drop 10% by 2020. The California Air Resources Board and California Energy Commission note that biofuels from non-edible abundant lignocellulosic biomass in the state can reduce GHG emissions by as much as 75% over conventional fuels.

### Project Objective

The objective was to identify state lignocellulosic residues and wastes with favorable characteristics for conversion into biofuels using University of California, Riverside (UCR) high throughput (HT) systems through four main tasks: (1) select promising cellulosic biomass, (2) analyze their sugar content, (3) evaluate their recalcitrance, and (4) design a HT hydrolysis and dehydration reaction system.

### Technology Description

Four parameters, adapted from the 2011 National Renewable Energy Laboratory (NREL) techno-economic report, defined the criteria for promising biorefinery feedstocks: (a) potential availability of at least 773,000 dry tons/year, (b) distribution density over 98.5 dry tons/mi<sup>2</sup>, (c) minimum structural carbohydrate content of 59%, and (d) a sugar yield at or above 90% (wt/wt). Two national and two regional studies were utilized to estimate the availabilities and county

level distribution densities of biomass types and allow selection of biomass materials satisfying the criteria. Next, the UCR downscaled HT system was applied to simultaneously determine sugar contents of up to 16 leading biomass candidates with 3 replicates of each. UCR's HT pretreatment and enzymatic hydrolysis (HTPH) device shown in Figure 1 was then applied to measure actual sugar release from biomass types that possessed more than 59% sugar by weight based on one pretreatment with just hot water at 180°C and another with 0.5% dilute sulfuric acid at 160°C followed by enzymatic hydrolysis with a high loadings of Spezyme® CP cellulase and Multifect® Xylanase xylanase. Biomass that released more than 90% of total sugar content was deemed most promising. Finally, a high-pressure steam chamber was designed and fabricated to operate at up to 260°C and 665 psig, thereby allowing future screening for production of reactive intermediates (RIs) that can be converted into hydrocarbon fuels.



Figure 1: UCR's HTPH device

### Status

The project was completed in November 2013. The report contains details of the four tasks outlined in this summary. All tasks needed to identify promising sources of biomass in California were completed. The kinetic modeling study originally planned was not undertaken as selection of promising candidates was possible without this additional information.

## Results

Of the more than 60 biomass types evaluated, 9 cleared the first threshold for availability in excess of 773,000 dry tons/year: municipal solid wastes (MSW) as mixed paper with mixed cardboard and processed wood wastes; agricultural residues of rice straw, heifer, and dairy cattle manures; and logging, thinning, and primary and secondary mill residues from forestry. Together, these made up more than two-thirds or 68% of the state's 23 million dry tons of cellulosic residues and wastes.

Out of these 9 biomass types, rice straw qualified as the most promising single biomass feedstock candidate. Field and seed crop rice straw had an average potential availability approaching 1 million dry tons/year and a distribution density ranging from a low of 110 dry tons/mi<sup>2</sup> to a high of 131 dry tons/mi<sup>2</sup> concentrated in small clusters of 6-7 contiguous rice producing counties (i.e., Glenn, Butte, Colusa, Sutter, Yolo, Yuba, and Placer Counties) in the Central Valley. Rice straw also showed a total glucan, xylan, mannan, galactan, and arabinan sugar content that exceeded 59% (wt/wt). Furthermore, yields of the dominant sugars of glucose, xylose, galactose, and mannose was as high as ~92% (wt/wt) when subjected to dilute sulfuric acid HTPH at 160°C.

Another promising feedstock is MSW mixed paper. Although sugar yields were limited to 60-70% (wt/wt), such sugar yields were possible without pretreatment, the single most expensive step in bioethanol production from cellulosic biomass.

The remaining biomass types did not meet criteria for adequate distribution density (i.e., heifer manure, MSW processed wood wastes, secondary mill residues, logging slash, and thinnings), sugar content (i.e., dairy cattle), and sugar yields (i.e., MSW mixed cardboard and primary mill residue).

It is important to note that the study had some limitations that deserve more attention. First, combining several of the biomass types that are available in particular areas would likely result in the total availability meeting the selection criteria. In addition, although the assessment took into account sustainability and handling losses, it did not include the impact of current consumptions in other non-biofuel sectors or the costs of gathering biomass from the source, which could alter availability. Also, the biomass evaluation depended on the particular samples that could be obtained, and more extensive sampling could ensure that the results are more representative at

the state level. And energy crops could greatly increase the impact. However, more extensive studies of this nature were beyond the scope of this project.

## Benefits

Assuming a 76% of theoretical conversion of biomass to ethanol, rice straw, which constitutes 4.3% (wt/wt) of cellulosic biomass now available in California, would generate 77 million gallons/year of bioethanol, equal to 5.9% (vol/vol) of the 1.3 billion gallons of ethanol consumed by the state in 2010. If processes were available to release sugars from the more recalcitrant lignocellulosic materials in California, softwoods of Douglas fir and redwood primary mill residues, along with MSW mixed papers and cardboards, as much as 351 million gallons or 27% of the state's 2010 ethanol consumption could be generated. Thus, even though, such materials did not satisfy all four criteria, it is important not to ignore them in light of such considerations.

## Project Costs

The project was completed at a cost of \$250,000, of which SCAQMD provided \$235,000 and the Ford Motor Company Endowed Chair provided \$15,000.

## Commercialization and Applications

This study shows lignocellulosic biomass could contribute substantially to meeting California GHG reduction targets. In addition, even greater impact would likely be possible through deconstruction of more recalcitrant materials to the RIs furfural, levulinic acid, and 5-hydroxymethylfurfural (5-HMF) for conversion into infrastructure compatible fuels. The HTHD system developed in this project is a valuable tool for efficient screening of multiple materials at favorable conditions for RI formation.

# Passenger Vehicle Replacement Tire Efficiency Study

**Contractor**

Energy Solutions

**Cosponsors**

Energy Solutions  
SCAQMD

**Project Officer**

Aaron Katzenstein

**Background**

Passenger vehicle low-rolling resistance replacement tires (herein referred to as “fuel efficient tires”) provide significant opportunities to reduce air pollutants and carbon dioxide while saving consumers fuel and money. Fuel efficient tires are technically feasible and common for new vehicles (due to environmental regulations) with a very high benefit/cost ratio and rapid payback. However, they face significant market barriers in the replacement market. This is because manufacturers face a modest cost increase, tire retailers lack a significant incentive to stock and promote fuel efficient tires and consumers have limited resources to identify these tires.

**Project Objective**

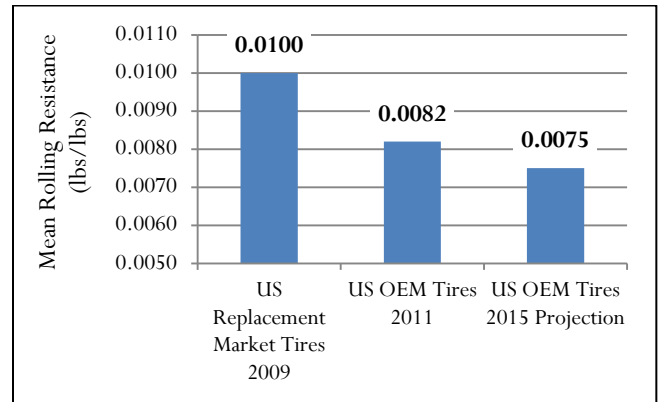
The objective of this study was intended to:

- Quantify environmental benefits of fuel efficient tires, including expected fuel savings and air quality and greenhouse gas (GHG) benefits;
- Define fuel efficient tire characteristics; and
- Evaluate a fuel efficient tire incentive program design.

**Technology**

Rolling resistance refers to the force needed to move a tire forward and overcome internal deformations and friction with the road. Rolling resistance coefficient (RRC) is a common benchmark and is determined by the force needed to overcome rolling resistance divided by the load on the tire. Technologies to reduce rolling resistance without sacrificing traction include increasing the use of natural rubber with dispersed silica. Low-rolling

resistance tires are widely deployed on new vehicles by Original Equipment Manufacturers (OEMs) and U.S. EPA predicts a further 10% improvement in this market by 2015. Thus a 25% per vehicle reduction in replacement market tire rolling resistance is technically feasible as shown in Figure 1 from the study. A 20% overall reduction is feasible including vehicles with specialty tires.



**Figure 1: Replacement Market Passenger Vehicle Tire Rolling Resistance Coefficient (RRC) Compared to OEM Median RRC**

Sources: RMA 2009, Lutsey 2012, Energy Solutions Calculation

**Status**

The study was completed in October 2013, and successfully achieved all objectives.

**Results**

An overall 4% fuel economy benefit can be achieved for the fleet of vehicles operating on replacement tires. Estimated air quality benefits from one year of full deployment include 1,500 tons of ozone precursor reductions and 1.6 million tons of greenhouse gas (GHG) reductions. Manufacturers are not expected to trade-off rolling resistance for other attributes (safety/traction and durability) and appropriate program design can discourage trade-offs.

An incentive and education program can achieve benefits that are proportional to participation rates. Retailers will play a key role due to customer interactions and stocking decisions. An electronic



processing system, with purchase data submitted by retailers, will also play an important role.

### **Benefits**

Expected benefits far exceed costs under a wide range of scenarios. For instance, a hypothetical one year program with a 10% penetration rate at a cost of \$12.50/tire (\$50/vehicle) would cost about \$9 million (this example is not intended to predict actual participation rates). This hypothetical program would achieve net lifetime benefits of \$50-\$64 million at a benefit/cost ratio of about 7:1 due to fuel savings, GHG reductions and criteria pollutant benefits. Air quality benefits alone (including GHG), using the lower of two valuation methods in the study, would roughly equal costs. Net benefits would scale up with higher penetration rates, even if somewhat higher costs per vehicle were necessary. This extremely high benefit/cost ratio exceeded initial expectations.

### **Project Cost**

SCAQMD project cost was \$10,000. Energy Solutions provided a \$6,000 cost-sharing contribution in recognition of the importance of this project.

### **Commercialization and Application**

Fuel efficient tires are ready for commercial deployment in the replacement market and regulators

in the European Union, Japan and South Korea have set a precedent with policies to overcome market barriers in overseas markets. An SCAQMD incentive and education program would help overcome market barriers locally and the following implementation steps are recommended:

1. Determine incentive levels and structure based on available funding levels and further retailer engagement.
2. Test tires for rolling resistance to support program design and prepare an initial list of eligible products and allow manufacturers to submit data for additional products.
3. Evaluate potential designs for an on-line system that accepts retailer sales data, validates qualifying product purchases and processes rebate applications.
4. Support state efforts to promote fuel efficient tires and federal efforts to develop a customer information and labeling program. In the meanwhile, the SCAQMD can consider the development of educational materials to complement a potential local incentive program.

# Showcase: Demonstration of NO<sub>x</sub> and PM Emission Control Technology on Diesel-Powered Construction Equipment

## Contractor

Griffith Construction Company

## Cosponsors

Griffith Construction Company  
Nett Technologies Inc  
Puritech GmbH  
SCAQMD

## Project Officer

Richard Carlson

- No interference with operator visibility, access or safety.
- Equipment performance and functionality equivalent to non-retrofitted configuration.
- Operation for a minimum of 1,000 hours with CARB monitoring.

## Technology Description

Two technologies were selected: 1) a combined DPF and SCR technology from Nett Technologies and 2) a DPF technology which included fuel injected in front of an oxidation catalyst from Puritech.

## Background

Off-road equipment represents an important source of emissions in the South Coast Air Basin. Based on the California Air Resources Board (CARB), there were approximately 68,600 pieces of diesel-powered construction equipment in the Basin in 2006, which together produced approximately 120 tons per day of NO<sub>x</sub> and 7.5 tons per day of PM emissions.

The Showcase was a cooperative program between the SCAQMD, MSRC, CARB, participating off-road equipment fleets and control technology providers to demonstrate the effectiveness and durability of emission control technologies for off-road construction equipment.

The SCAQMD awarded a contract to Griffith Construction to participate in the Showcase Program to demonstrate NO<sub>x</sub> and particulate matter (PM) control technologies on five off-road vehicles.

## Project Objective

The objective of this project was to demonstrate after-treatment NO<sub>x</sub> and PM emission control systems for off-road construction vehicles. The demonstration included the following goals:

The Nett BlueMAX Ultra system uses a fuel burner to raise the exhaust gas temperature high enough during normal operation to continuously regenerate the DPF. Regeneration is initiated automatically based on exhaust pressure, flow rate and temperature. The Nett BlueMAX Plus SCR system uses a passive continuously regenerated DPF while the excavator is operating normally and is intended for units with higher exhaust gas temperatures. The SCR system is the same on both systems and injects urea in front of an SCR catalyst based on NO<sub>x</sub> concentration, exhaust temperature and exhaust flow. Emission reductions up to 90% for NO<sub>x</sub> and PM are claimed by Nett.

The PURImax includes a DPF preceded by an oxidation catalyst and a diesel fuel injection system. Diesel fuel is injected to maintain the exhaust temperature high enough for passive DPF regeneration and also to reduce NO<sub>x</sub>, particularly NO<sub>2</sub>. Fuel is automatically injected according to exhaust temperature and exhaust flow rate while the equipment is operating normally. Puritech claims 90% PM reduction and 30% NO<sub>x</sub> reduction.



**Figure 1: DPF/SCR Catalyst on Loader**

### Status

The five retrofit systems were installed on the off-road equipment. The Nett BlueMAX Ultra SCR system with actively regenerated DPF was installed on two Tier 1 Caterpillar TH103 rough terrain forklifts in 2009 and 2010. However, the systems were removed in 2011 because rough terrain forklifts were not well suited for the Nett retrofit system due to the system's high electrical demand when running, the intermittent/short run time duty cycle of the forklifts, and their low average engine power. The result was that the forklift batteries frequently ran down and the power demand for battery charging and operation of the retrofit system exceeded the capacity of the alternators. The two forklift systems only accumulated a few hundred hours.

The Nett BlueMAX Plus SCR system with passively regenerated DPF was installed on a Tier 3 Caterpillar 330DL excavator in 2013 and has accumulated approximately 600 hours. A low NO<sub>x</sub> efficiency alarm for the SCR system was reported several times but has been corrected by a software change. There were no problems with the DPF.

The Puritech PURImax DPF was installed on one Tier 1 Caterpillar 988G rubber-tired loader and one Tier 3 Caterpillar 950H rubber-tired loader in 2012. The Tier 1 loader has accumulated nearly 3,000 hours and the Tier 3 loader has accumulated over 1,800 hours. Both have operated without problems and DPF cleaning has not been required.

### Results

No emission measurements were performed on these systems because CARB was unable to provide a portable emission measurement system as originally planned. The demonstration showed

that off-road equipment can be successfully retrofitted with retrofit devices that reduce both PM and NO<sub>x</sub> provided they are compatible with the specific equipment duty cycle and configuration.

### Benefits

The benefits of this demonstration are mainly qualitative since emission measurements were not performed. The project demonstrated that retrofit systems that reduce both NO<sub>x</sub> and PM can be installed and operated successfully on off-road equipment. As a result, retrofit can remain an option for future emission reductions.

### Project Costs

Total Project	SCAQMD	Griffith
\$191,450	\$92,750	\$98,750

Additional non-monetary cost-share was provided by Nett and Puritech for maintenance of their systems.

### Commercialization and Applications

CARB verification is required for commercialization in California. The technology providers are currently pursuing CARB verification for off-road engine applications. The Nett SCR system is verified by EPA for off-road mobile applications. A Nett DPF is verified by CARB for stationary engines. The PURImax system is verified in Europe. The systems demonstrated in the project are commercially available outside California.

## Develop & Demonstrate Selective Catalytic Regeneration Technology for NO<sub>x</sub> and PM Emissions Control on Heavy-Duty Trucks

### Contractor

Johnson Matthey Inc

### Cosponsors

SCAQMD  
U.S. EPA

### Project Officer

Jeff Cox

### Background

There is a great deal of test data and field experience that demonstrate the performance and reliability of passive technologies for the reduction of PM. There has been little data collected that demonstrates the performance and impact on fleet operations of the newer retrofit NO<sub>x</sub> reduction technologies using SCR. A demonstration of the emission reduction and the impact on fleet operations of these new technologies is necessary to evaluate the potential impact of the retrofit technology.

### Project Objective

This project was undertaken to demonstrate the emission reduction potential with a retrofit 4-way emission control technology on 35 heavy-duty diesel trucks operating in the South Coast Air Basin. Since SCR based NO<sub>x</sub> reduction is effected by the exhaust temperature profile of the application, special attention was paid to the relationship between system performance and exhaust temperature. Of secondary concern is the impact that such a technology will have on a fleet from an operation and maintenance standpoint.

### Technology Description

Johnson Matthey (JM) has developed a product that combines their continuously regenerating technology (CRT) with urea-based selective catalytic reduction (SCR) to retrofit on heavy-duty diesel vehicles. The SCRT consists of several subsystems; CRT, SCR catalyst module and urea dosing system.

The CRT was previously verified by CARB as a level 3 PM control device (>85% reduction) that also meets the 20% NO<sub>2</sub> requirement for 1998-

2002 MY heavy-duty diesel engines. The SCR system uses NH<sub>3</sub>, carried on the vehicle as urea, to reduce NO<sub>x</sub> over a vanadium-based catalyst. The precise air assisted injection of urea is performed using an OE dosing pump controlled by an ECU developed by JM.

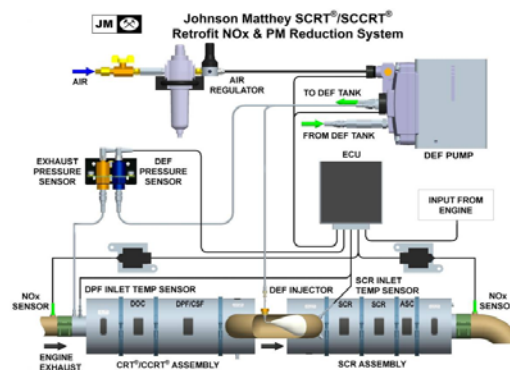


Figure 1: System Schematic

### Status

The phases of this project were:

- CARB test plan was completed and submitted on September 15, 2010, for vanadium. There was an SCR catalyst formulation change that occurred during the program. All program field installations were vanadium SCR.
- 25 systems were installed and operated on trucks within 5 fleets. The trucks were equipped with Caterpillar C12, Cummins ISM, Mack E7 or MBE OM906LA engines built between 1999 and 2003.
- Chassis dyno emissions testing that was originally part of the program was cancelled.



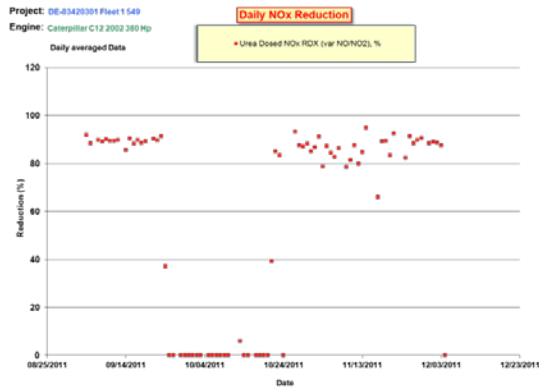
Figure 2: Universal Application Mounted System

Changes to the CARB On-Highway Truck and Bus 2010 Regulation occurred during this program. The previous interim 2007 NO<sub>x</sub> standard was dropped and instead required a direct transition to a 2010 NO<sub>x</sub> standard.

Potential program participating fleets dropped out with the consideration of installing a retrofit PM device only as a route to rule compliance with less complexity than the JM SCRT system with post program upgrade costs. The balances of system installations against the program were not complete because the SCRT CARB experimental operational permit expiration date and the CARB verification timing were not aligned, requiring system removals.

### Results

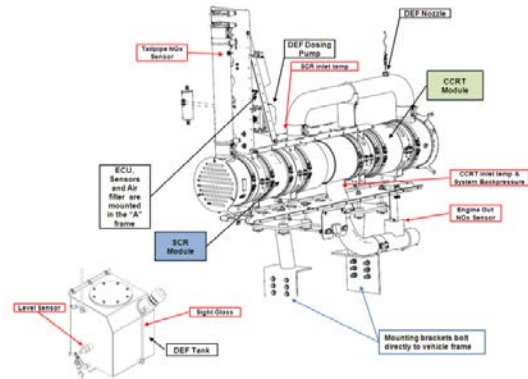
Emissions data was gathered using NO<sub>x</sub> sensors to compare system out and engine out NO<sub>x</sub> levels during actual operation. The daily operational NO<sub>x</sub> reduction was as high as 85% as seen below.



**Figure 3: Daily NO<sub>x</sub> reduction during SCRT durability trial**

Other information generated by the project included:

- Verification that 70% NO<sub>x</sub> reduction can be achieved with a CRT inlet temperature over 240°C for 40% of the operating time.
- A universal Class 7/8 system bracket design was integrated on the majority of participating vehicles.
- Bracket system durability failures were observed in a challenging bulk hauling application that experienced some off-highway unpaved surfaces when g loads exceed 7g's.
- Wire splices in the electrical harness had failure issues during installation where harness routing had aggressive bend radius during installation.



**Figure 4: Vehicle Integration Application Schematic**

- DEF connections (flareless tube, pipe and JIC fittings) from tank to pump proved to be a challenge at initial system commissioning requiring some post installation service requiring downtime.
- The installation location and orientation of the tailpipe NO<sub>x</sub> sensor was demonstrated as unreliable in some installations.

### Benefits

Besides the percentage of NO<sub>x</sub> reduction shown, the data gathered during this program was able to show that some applications with 15 hour shifts could remove as much as 13 lbs. of NO<sub>x</sub> per daily average.

### Project Costs

Total project cost was \$1,200,000, of which SCAQMD contributed \$300,000 along with pass-thru funding provided by U.S. EPA in the amount of \$900,000.

### Commercialization and Applications

This demonstration program identified areas in the system that needed improvement like the wiring harness, DEF line connection methods and tailpipe NO<sub>x</sub> sensor orientation to increase the system reliability. The universal class 7/8 bracket design system behind the vehicle cab integrated well with various over-the-road applications for bulk goods delivery. Certain vehicle applications with excessive operational g loadings challenged the bracket systems where improvements are required before commercialization. The universal bracket design allowed for the system to be assembled with common parts and the price of the system to be lowered because of better volume purchasing.

## CSULB CEERS Student Education Study to Assess the Effects of a Humid Air System with an Exhaust Scrubber on Diesel Emissions

### Contractor

CSULB Foundation

### Cosponsor

SCAQMD

### Project Officer

Alfonso Baez

### Background

Humid air system or fumigation is an effective approach in reducing diesel NO<sub>x</sub> emissions. In this method, water vapor is injected in the intake air supplied to the engine cylinders. The process reduces the local temperature in the cylinder and raises the specific heat of the air-fuel mixture which also contributes to the elimination of the hot spots in the engine cylinder. With decreased temperature, NO<sub>x</sub> reduction is achieved. With an optimized system, fumigation can reduce NO<sub>x</sub> emission without significant increases in hydrocarbon emissions. Other benefits of the process include longer life of the engine components due to reduced cycle temperature and reductions in carbon deposits.

Air misting has been used to remove dust particles in the air. In general, fogging and air misting could reduce concentration of large particles of 2-10 microns but not the smaller ones. One of the effective methods for removing small particles is the use of an electrostatic scrubber. In this method, the droplets entering the scrubber region are electrically charged which results in attraction of the particles to the droplets and their sedimentations.

### Project Objective

The objective of the project was to investigate the combined effects of the humid air system and an exhaust fog scrubber or an electrostatic fog for significant reductions in both NO<sub>x</sub> and PM emissions of diesel engines.

### Technology Description

The experiments were performed in the diesel engine laboratory of the CEERS/Mechanical and Aerospace Engineering Department. A Vanguard 3-cylinder naturally aspirated liquid-cooled diesel

engine connected to an electric dynamometer with a maximum output power of 20 brake horse power (BHP) at 3600 rpm was used for the investigations. The experiments were performed at two different BHP of 5.3 and 8.8. Due to the high freestanding resistance by the dynamometer, it was not possible to run the experiments at a higher load.

The gaseous emissions were measured with a Horiba PG-250 emission analyzer. The exhaust PM measurements were performed in two different methods. The first was a direct measurement with a TSI DusTrak aerosol monitor (Model 8520). The unit is supplied with three different inlet nozzles for different size particle measurements. For the present investigations, the 2.5 μm inlet nozzle was used.

The second method for PM measurements was using a dilution tunnel connected to a cyclone with a Teflo filter (Figure 1). The raw exhaust gas was transferred via the sampling pilot tube to the dilution tunnel via a heated transfer tube. The dilution tunnel was also supplied with filtered dry air equipped with temperature, pressure, and flow control sensors. Two stainless steel tubes of 0.635 cm ID were used for sampling the diluted flow downstream of the venturi. One tube was connected to the Horiba PG-250, and another to the cyclone. 47 mm Teflo filters as recommended in 40 CFR 1065 were used. The Teflo filters were conditioned (dried) in a uniform temperature at 72F inside a class 10,000 clean room for at least 24 hours both prior to and after the experiments before weight measurements. Weight measurements were performed with a Mettler-Toledo MT5 analytical microbalance, provided by the UCI laser center.



**Figure 1. Dilution Tunnel and Horiba 250 Emission Analyzer**

The humid air intake was generated using a Sunpentown humidifier (Model SU-2000) which injected mist to the intake air of the engine at a rate of 6.05 cm<sup>3</sup>/min at 70 F. The level of humidity at the engine air intake was measured with an Omega RH 32, temperature/humidity meter. A 60% relative humidity for the intake air could be maintained.

The electrostatic fog was produced with a newly designed L-shaped static generator rod connected to a variable voltage AC generator. Figure 2 shows the experimental set-up.



Figure 2. Mixing box

**Status**

The project has been completed in March 2013.

**Results**

Tables 1 and 2 show exhaust emissions and percent changes of NO<sub>x</sub> and PM for the highest BHP with two different methods of PM measurements. These cases are:

- C1. Raw exhaust (Exh),
- C2. Exhaust with humid air system (Exh&Hum),
- C3. Exhaust with exhaust fog scrubber (Exh&Fog),
- C4. Humid air intake and exhaust fog scrubber (Exh&Hum&Fog),
- C5. Exhaust with electrostatic fog scrubber (Exh&Fog&Elec), and finally
- C6. Exhaust with humid air intake and electrostatic fog scrubber (Exh&Hum&Fog&Elec)

In table 1, the reduction in NO<sub>x</sub> for C2, when humid air system was used was in excess of 24%, the highest among all cases studies. At this power, the combustion temperature was high and the humid air was effective in reducing the temperature, resulting in substantial reduction in the NO<sub>x</sub> emission. Injecting fog into the exhaust resulted in nearly 20% NO<sub>x</sub> reduction, followed by C5 at nearly 17%, C4 at about 13%, and finally C6 at slightly higher than 12%.

C2 was the only case with substantial reduction in PM (at slightly higher than 34%), when the humid air system was used. All the other cases showed

increases in PM, even in the C3 experiment when fog was injected into the exhaust.

	rpm	Torque (N.m)	mf (lb/hr)	BHP (hp)	BSFC (lb/hr-hp)	PM/BSFC	NOx/BSFC	% APM/Exh	% ANOx/Exh
Exh	1754	20	3.31	8.77	0.38	113.20	259.07		
Exh&Hum	1758	20	3.97	8.79	0.45	74.30	196.28	-34.36	-24.24
Exh&Fog	1765	20	3.31	8.83	0.37	116.17	207.54	2.62	-19.89
Exh&Hum&Fog	1768	20	3.17	8.84	0.36	121.48	224.61	7.31	-13.30
Exh&Fog&Elec	1767	20	3.17	8.84	0.36	123.25	215.37	8.88	-16.87
Exh&Hum&Fog&Elec	1767	20	3.17	8.84	0.36	136.62	227.55	20.69	-12.17

Table 1. % Change in Emissions with Direct PM Measurements

In table 2, except for C2, all cases showed increases in PM emission with the highest being for C6, followed by C4, C3, and C5 respectively. For C2, there was substantial reduction in PM emission at nearly 40% which also corresponds to the highest rate of NO<sub>x</sub> reduction at slightly higher than 51%. All other cases also displayed NO<sub>x</sub> reduction with C3 being the next highest followed by the C6, C4, and C5 respectively. These trends were similar with the previous results when PM was measured directly with a TSI unit.

	rpm	Torque (N.m)	mf (lb/hr)	BHP (hp)	BSFC (lb/hr-hp)	PM/BSFC	NOx/BSFC	% APM/Exh	% ANOx/Exh
Exh	1754	20	3.31	8.77	0.38	232.42	114.72		
Exh&Hum	1758	20	3.97	8.79	0.45	139.76	55.78	-39.87	-51.38
Exh&Fog	1765	20	3.31	8.83	0.37	266.52	86.98	14.67	-24.18
Exh&Hum&Fog	1768	20	3.17	8.84	0.36	270.28	95.04	16.29	-17.15
Exh&Fog&Elec	1767	20	3.17	8.84	0.36	250.31	98.78	7.70	-13.89
Exh&Hum&Fog&Elec	1767	20	3.17	8.84	0.36	302.18	94.31	30.01	-17.79

Table 2. % Change in Emissions using Dilution Tunnel for PM Measurements

**Benefits**

Results of the present experiments have shown that the humid air system and exhaust fog scrubber with distilled water as the working fluid are viable options for reducing both NO<sub>x</sub> and PM emissions in diesel engines.

**Project Costs**

The project was completed with funding from the SCAQMD in the amount of \$28,000 and in-kind cost-share contributions in the form of space and laboratory equipment and additional person-hours.

**Commercialization and Applications**

Further steps are required for development of a portable adaptive system that can be incorporated in the existing and new diesel trucks for reducing NO<sub>x</sub> and PM emissions.

## Demonstrate Medium-Speed Neighborhood Electric Vehicles

### Contractor

South Bay Cities Council of Governments  
(SBCCOG)

### Cosponsor

SCAQMD

### Project Officer

Lisa Mirisola

### Background

Achieving federal and state clean air standards in Southern California will require emission reductions from both mobile and stationary sources beyond those expected using current technologies. Passenger cars and light trucks account for most of these emissions. In addition, there are increasing concerns over GHG emissions from these vehicles and petroleum dependence from the heavy use of conventional technologies. For many residents within the geographic boundaries of the SCAQMD, commutes and other daily trips can be accomplished solely on residential streets at speeds below 35 MPH.

### Project Objective

This program was intended to promote neighborhood electric vehicles (NEVs) to residents, businesses and municipalities in the South Bay sub-region. The project objective was to answer these three questions:

1. Will South Bay residents drive NEVs to satisfy a portion of their travel needs without the infrastructure changes and driving culture that have provided support in the most successful NEV communities elsewhere?
2. Does the usage have the potential to produce significant environmental and economic benefits?
3. Is large scale deployment of NEVs (or LUVs) feasible?

### Technology Description

A NEV is a zero emission vehicle that can be driven on public streets subject to being registered, having a Vehicle Identification Number (VIN), being insured and adhering to vehicle safety standards. In 1998, the National Highway Traffic Safety Administration (NHTSA) of the Federal Department of Transportation defined a street-legal Low Speed Vehicle (LSV) in the Code of Federal Regulations (Rule FMVSS 500). NEVs are recognized as a sub-class of LSVs, limited to a maximum speed of 25 MPH and restricted to streets with speed zones of 35 MPH or less. The “advancement” involved is learning how to stimulate a stalled market place for a technology that was originally commercialized about 20 years ago.



Figure 1: NEV Used in Study

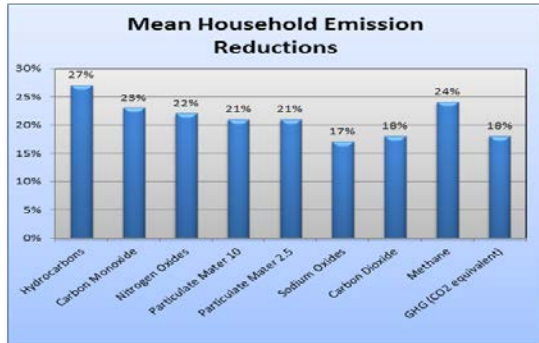
### Status

The active demonstration phase of the project was completed in December 2012. There were four main activities: 1) preparation (leasing vehicles, arranging insurance; acquiring and installing GPS, recruiting, and selecting and training participants); 2) active demonstration (51 households drove a NEV for 2 to 4 months each); 3) data processing and analysis (GPS generated a data point every minute each vehicle was “on” creating millions of geo-data points that were mapped, summarized in tables, and interpreted); and 4) reporting. Unanticipated problems included occasional



unreliability of the NEVs which led to a change in fleet composition about half way through the active demonstration; poorly maintained driver logs which required additional staff time to call drivers for interpretation; and more complex travel patterns and destinations which required more staff time to interpret and analyze.

**Results**



**Figure 2: Mean Household Emission Reduction**

The objectives did not involve any specific emissions reduction targets. Emissions reduction per household is one outcome the project sought to measure. However, the average household reductions in criteria pollutants and GHG emissions were surprisingly high compared to reasonable expectations.

Another of the objectives was to verify that drivers routinely used a NEV and accessed a wide range of destinations. NEV miles on average made up 19% of total household VMT. There were no performance tradeoffs. More NEV use resulted in greater reductions in criteria pollutants and GHG emissions reductions.

**Benefits**

The immediate benefits included giving a specialized, zero emission neighborhood vehicle a high level of public exposure, while producing environmental impacts that can help make the vehicle attractive to manufacturers and policy makers.

Potential benefits include the pollution reductions that are possible if all South Bay residents “right sized” their vehicles to suit their travel needs. That is assuming all trip segments less than 5 miles long, driven by South Bay residents in a zero emission neighborhood vehicle (approximately 1.7

billion of 43% of the VMT driven by South Bay residents) could be shifted from gasoline to EV propulsion technology. That is approximately 1 billion annual trip segments or 82% of all trip segments. That equates to a 59% reduction in private vehicle hydrocarbons, 52% reduction in carbon monoxide, 51% reduction nitrogen dioxide, 48% reduction in all particulate matter, 47% reduction in sodium oxides, and a 56% reduction in methane emissions. Overall, battery recycling will improve the net gains from widespread NEV use, although NEVs use relatively small onboard battery packs.

**Project Costs**

	Actual Cost (Including in-kind by SBCCOG)	SCAQMD Project Budget
<b>Total</b>	\$311,807.02	\$298,640.00
<b>Labor</b>	\$175,757.74	\$158,805.00
<b>GPS</b>	\$10,497.19	\$10,435.89
<b>Insurance</b>	\$10,491.39	\$11,336.11
<b>Vehicle Acquisition</b>	\$105,517.52	\$118,063.00
<b>Vehicle Unplanned</b>	\$6,527.79	\$ -
<b>Other Expenses</b>	\$3,015.39	\$ -

**Commercialization and Applications**

The South Bay Cities Council of Governments is planning a presentation specifically for the auto manufacturing industry to share the data that essentially establishes the existence of a short range, slow speed vehicle market in mature, compact suburbs such as the South Bay cities. Lessons learned about product quality and price will also be presented.

There are about 275,000 “secondary” vehicles driven by South Bay residents. Replacing them with NEVs and other ZEVs is the market target. The primary barrier to reaching that target is the public education to guide residents and businesses toward the ability to “right size” their vehicle choices. Most residents currently use too much automotive technology to make the 1-, 2-, and 3-mile trips that make up the majority of their average travel behavior.

## Demonstrate Quick Charge Infrastructure for Electric Buses

### Contractor

Foothill Transit

### Cosponsors

ARRA (via FTA)  
SCAQMD

### Project Officer

Joseph Impullitti

### Background

Transit buses are ideal applications for advanced, alternative energy technologies that address criteria pollutant and greenhouse gas emissions because they operate in highly visible, congested areas where air quality is a problem. Electric zero emission transit buses address these problems. Traditionally, the range and charging needs of batteries have been barriers to employ battery-powered buses in large scale applications. Additionally, the weight of traditional buses has made it difficult to feasibly incorporate a battery with sufficient power and energy storage capacity into coach designs. By using a smaller battery that can be charged quickly and repeatedly, the bus weight and cost can be reduced. The keys to quick charge electric bus technology are the utilization of a quick charge battery and quick charge infrastructure. The battery must be able to retain its energy reserve and charging profile over many charge-discharge cycles and be quick charged in ten minutes or less. The quick charge infrastructure must be able to deliver a large amount of energy in a short period of time and operate safely without human intervention because of the high voltage and associated heavy cables.

### Project Objective

The objective of this demonstration is to determine the feasibility of quick charge electric buses and associated infrastructure in an established urban route. Foothill Transit replaced three diesel buses with Ecoliner electric buses with

quick charge capability and quick charge infrastructure on an existing route from the City of La Verne to the City of Pomona.

### Technology Description

Each 35-foot Proterra Ecoliner quick-charge electric bus can carry 37 passengers and were built with the following features:

- Composite body: lighter weight, longer life, less cost to maintain
- Battery (74 kWh): <10 minute recharge time, safe chemistry, tested >10,000 cycles
- Drive System: improved fuel economy, reduced noise, low maintenance, lower operating costs

The charging infrastructure was designed and built by AeroVironment with the following features:

- 500KW charger can rapid charge the battery from 10% to 95% in 10 minutes or less
- Unique architecture allows for lower cost and lower impact grid connections while maintaining high charge rates
- Safe overhead charge connection, no operator contact with charger

### Status

The three buses are currently operating in revenue service on Foothill's 291 lines from La Verne to Pomona.



**Figure 1: Ecoliner Bus Being Charged at Foothill Transit's Pomona Station**

**Results**

All three Ecoliner buses are running in daily revenue service on line 291 from La Verne to Pomona. The three buses have accumulated nearly 175,000 in-service miles and Proterra data collection indicates overall energy efficiency is as good as or better than initially expected. The following characterizes the performance results of the demonstration:

- Total battery charge/discharge cycles: 22,406
- Battery capacity loss over 3 years: <2%
- Maintenance and Repair issues:
  - No propulsion or charging issues
  - Borg Warner transmission issue, replaced with Eaton transmission
  - Non power-train issues with fit & finish, doors and wheel chair lift
- Maintenance Cost Savings Over Diesel: Approximately \$40K/year for 3 buses
- Fuel Economy Vs. Diesel:
  - Altoona test results: 17.5 to 29.2 mpg diesel equivalent
  - Fuel Economy: 1.5 – 2.0 kWh/mile
  - 40 foot diesel bus averages 3.8 mpg
  - Cost for 120 mile daily usage:
    - Ecoliner - \$36 (\$0.15/kWh)
    - Diesel - \$126 (\$4.00/gal)

**Benefits**

Foothill Transit believes that quick charge battery electric vehicles will be a solution that will create a paradigm shift for transit fleets because:

- Ability to use battery-electric vehicles as a one-to-one replacement of a conventionally driven vehicle
- Lower energy requirements – smaller battery means lower cost lower weight, improved efficiency, and the battery can accept a high rate of charge so regeneration from braking is increased.

According to CARB, a reduction of 0.47 tons of criteria pollutants and 77.3 tons of GHG’s per bus per year is realized. If Foothill Transit were to meet the ZBUS regulation with 15% of their fleet converted to electric, the benefits would be 22.4 tons of criteria pollutants and 3,600 tons of GHG emission reductions.

**Project Costs**

SOURCE	CONTRIBUTION	PERCENT
<b>ARRA (via FTA)</b>	\$4,770,000	94%
<b>SCAQMD</b>	\$290,000	6%
<b>TOTAL</b>	\$5,060,000	100%

**Commercialization and Applications**

Foothill Transit became the first transit agency in the U.S. to use on-route charge electric buses. The Proterra buses are 72% plus Buy America content and qualify for FTA funding. The agency is purchasing an additional 12 buses from Proterra to completely electrify its 291 route between La Verne and Pomona. Cost per bus is \$990K which is a 25% reduction compared to the first three buses that cost \$1.2M per bus. The new buses will have improvements to Fit & Finish, new doors, new seating layout and the same power-train and batteries which have performed well for Foothill. Nine of the twelve buses will be assigned to the 291 Route and 3 buses will be assigned to other routes in Foothill Transit’s territory.

## Upgrade & Install Electric Charging Infrastructure

### Contractor

ECotality

### Cosponsor

SCAQMD

### Project Officer

Patricia Kwon

### Background

There are approximately 1,800 PEV chargers in need of upgrading in the South Coast Air Basin. These sites are ideal locations to upgrade electrical vehicle service equipment (EVSE) for Level 2 charging at a lower cost than to install EVSE at new site locations. Leveraging the DOE and/or CEC funding, SCAQMD executed a contract with ECotality to install new or upgraded Level 2 EVSE at high usage site locations identified by SCAQMD and ECotality. ECotality received DOE and CEC funding to pay for hardware and partial installation costs for Level 2 EVSE at 70 site locations. SCAQMD is providing cofunding of \$1,000 per charger to offset installation costs at these locations. Data will be collected from these chargers and provided to SCAQMD to assist in SCAQMD's PEV infrastructure planning process for the DOE and CEC PEV infrastructure grants for the South Coast region.

### Project Objective

SCAQMD executed a contract with ECotality to leverage DOE and CEC support for installation of Level 2 EVSE as part of The EV Project, a national project for installation of EVSE in key markets. ECotality upgraded existing EVSE which were obsolete and installed new EVSE. ECotality submitted a list of approved sites. As part of the SCAQMD program, ECotality dedicated full time resources to identify potential site hosts eligible for replacement of obsolete units.

ECotality completed installation 47 of the planned 70 EVSE. Some costs are in excess of \$1,000,

with those costs were supplemented by The EV Project funding and/or the site hosts. Using the approved site list for sites with obsolete equipment proved challenging. For a three month period, ECotality had a full-time staff person contact site hosts and owners of obsolete EVSE to assess replacement opportunities. With little progress, ECotality assigned additional staff and regional management to make contact to a larger approved list. From January 2011 to March 2012, these employees were largely unable to secure approval for replacement of obsolete EVSEs. Some significant challenges encountered were:

- Site hosts did not understand or recognize that the site had EVSE
- Site hosts felt the new EVSE was another passing fad
- Site hosts felt obsolete equipment was not used and new EVSE would be under utilized
- Site hosts felt the EVSEs offered little benefit to their business
- Site hosts did not believe enough PEVs existed to support the replacement of EVSE
- Site hosts did not want to enter into business agreements

After attempting to improve contact and replacement of obsolete EVSE through the use of experienced skilled sales and support staff, ECotality approached SCAQMD to request approval of funds to contribute to new sites. By agreement, ECotality followed the same procedures for submission to SCAQMD and provided site locations for approval or denial. These new installations accounted for 68% of the replacements and contributed to additional EVSE installations. Some prominent locations included LA Live Staples Center, Loyola Marymount University, University of Southern California, and Fox Studios. Other sites who received SCAQMD funding included local small businesses, hotels, marketplaces, and commercial developments. All sites are publicly accessible during business hours. For instance, Staples Center EVSEs may only be available during official events.

## Technology Description

Level 2 EVSE with J1772 connectors were installed. The largest challenge for construction of ground-mount EVSE units included the style of EVSE. Because the Blink EVSE utilizes a concrete base; post-mounted EVSE and foundations were not compatible with the Blink unit. This typically required additional construction to facilitate the installation of the new EVSE. As a requirement for new construction and electrical work, permits were required and obtained for projects. There were no significant issues presented with permitting of replacement units.

## Status

ECotality declared bankruptcy in late 2013 and was unable to complete all 70 Level 2 EVSE installations. CarCharging Group assumed control of ECotality's assets in late 2013 and is the process of communicating with site hosts in The EV Project to determine their future status starting in 2014. The EV Project has been recently extended by DOE to April 2014.



Figure 1: Blink EVSE

## Results

ECotality's Level 2 EVSE installations are shown in the following map:

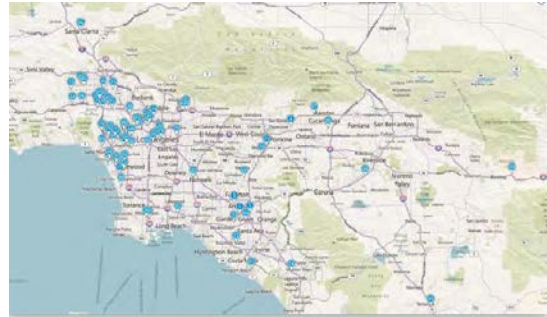


Figure 2: Ecotality's Level 2 EVSE Installations

Source:  
<http://prod.blinknetwork.com/blinkMap.html>

## Benefits

This project will assist in advancing PEV readiness in California by creating additional public access charging that is convenient and affordable for PEV drivers.

## Project Costs

EV infrastructure hardware and installation costs were through DOE and CEC funding from The EV Project, and remaining installation costs were cost shared between The EV Project and the site owner. SCAQMD funding provided \$1,000 per EVSE towards installation costs for a total of \$70,000.

## Commercialization and Applications

Level 2 EVSE is currently commercially available, with installations worldwide. The EV Project installed about 370 Level 2 EVSE in the greater Los Angeles region, with SCAQMD funding contributing towards 70 of those installations.

## Demonstrate Advanced Fuel Cell Bus (American Fuel Cell Bus)

### Contractor

SunLine Transit Agency

### Cosponsors

Dept. of Transportation/FTA  
CARB  
SCAQMD

### Project Officer

Joseph Impullitti

### Background

FTA's National Fuel Cell Bus Program (NFCBP) includes an international network of technology developers, suppliers and experts in the area of zero emission buses and enabling technology. Periodic reviews and reports on the status of the NFCBP will provide the SCAQMD with available data that may reflect on the commercial readiness of ZBuses and enabling technology.

### Project Objective

The intent of this project is the development of a new design fuel cell bus with a North American chassis as well as domestically sourced fuel cell and drive components. Success in this program will ensure availability of a U.S. built product that can offer transit properties the opportunity to buy buses through the FTA capital program. Specifically, the program commercial focus anticipates that the resulting fuel cell bus product would be built and sold profitably at a price of under \$2 million. Also, there is an expectation that extended warranties for the fuel cell and battery pack can be attained, further driving down the warranty costs through significantly longer operating lives than the 2005 generation fuel cells and batteries. Body / chassis weight and noise reductions will maximize the number of passengers each fuel cell bus can accommodate while also maximizing the passengers' level of comfort. Packaging the latest generation fuel cell-hybrid drive system into a physically attractive bus

with contemporary styling, and which features sufficient U.S. derived content to meet FTA "Buy-America" provisions is very important. Finally, the vehicle will include new power electronics, advanced energy storage and a unique hi-efficiency accessory electronics package.

### Technology Description

BAE Systems based the American Fuel Cell Bus (AFCB) propulsion system on its commercial hybrid electric transit bus product, which is operating in buses around the world. For the AFCB, the system was modified to provide power with the Ballard fuel cell system in place of a diesel engine/generator. Ballard's 150 kW fuel cell incorporates the latest advances for durability and efficiency based on numerous field demonstrations of Ballard fuel cell powered buses. The AFCB also incorporates a suite of electric accessories powered by BAE Systems' Accessory Power System.

### Status

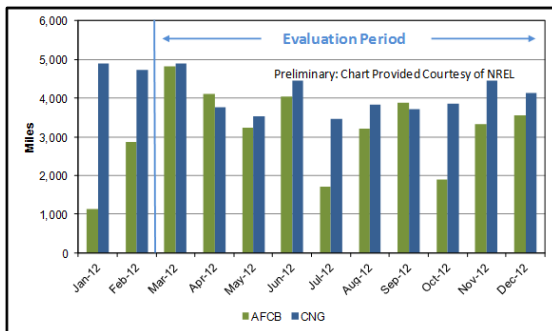
In accordance with the project plan, the vehicle entered revenue service on December 7, 2011 and completed the one year demonstration phase on December 6, 2012. The bus is continuing in daily revenue service and data provided in this report will be through the end of December 2012. Over the one-year demonstration period, the bus amassed over 36,000 miles and nearly 40,000 miles by the end of December 2012.



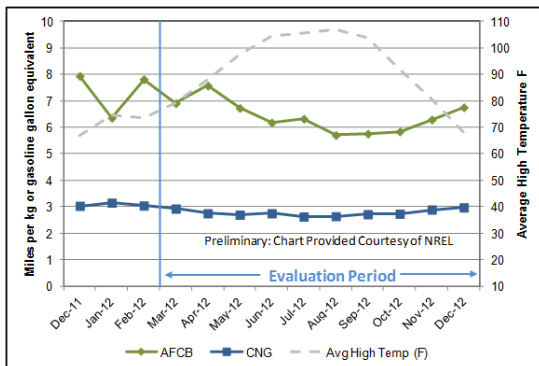
Figure 1: AFCB

## Results and Benefits

During the evaluation period, the AFCB has achieved exceptional availability, averaging 85 percent. The issues causing downtime were most often related to general bus system items rather than the advanced technologies that were the focus of the demonstration. These issues were generally of a "low tech" nature and consistent with the type of issues that would be expected when introducing a new configuration in a prototype bus model. Overall, the AFCB averaged 6.54 miles per kilogram of hydrogen, which equates to 7.39 miles per diesel gallon equivalent (DGE). Using the gasoline gallon equivalent (GGE) fuel economy of the CNG buses as a baseline, the AFCB had a fuel economy 2.4 times higher than that of the CNG buses.



**Chart 1: Fuel Cell Bus Miles compared to CNG Reference Fleet**



**Chart 2: Fuel Economy Summary**

Each of the project team members report that the demonstration has gone well and all are pleased with the performance of the AFCB. BAE Systems reports that the performance of the bus matched or exceeded their expectations. SunLine notes that the bus procurement and development process went well and the AFCB start-up issues were much fewer than with previous fuel cell electric buses.

## Project Costs

The total project cost was \$10,214,877, as follows:

- FTA/CalStart (\$4,197,955)
- CARB (\$800,000)
- SCAQMD (\$400,000)
- BAE (\$4,152,450) - in-kind
- SunLine/EIDorado (\$664,438) - in-kind

## Commercialization and Applications

For fuel cell electric buses to be fully commercialized, the fuel cell hybrid propulsion system needs to be an option offered by the bus OEM in response to increased market demand, as is the case with current diesel hybrid systems. Hybrid buses are currently offered by most OEMs, which order and install the propulsion system at the bus manufacturing plant. BAE Systems' role is as supplier and integrator of propulsion and electric power systems that enable the capability offered by the OEM. In the case of the AFCB project, the integrator and transit agency have taken the lead role in developing the bus. This role needs to transition to the bus OEM for the technology to be fully adopted.

SCAQMD Contract #10714

December 2013

## Develop Fuel Cell Gas-Turbine Hybrid System for On-Board Locomotive Applications

### Contractor

University of California, Irvine

### Cosponsors

CARB

SCAQMD

### Project Officer

Dipankar Sarkar

### Background

Transportation of freight via rail is ubiquitous within the logistics system of both California and the United States. While the system provides a necessary service and has a major positive effect on the economy, its benefits are coupled to serious environmental and health concerns due to the combustion of diesel fuel in conventional locomotives. The burden of these negative effects is disproportionately placed on those who live closest to operational centers for the locomotives. Thus, there exists a need to develop a power system for the locomotives (and in the long-term, other diesel-burning vehicles) that avoids a major portion of the emission of deleterious CO<sub>2</sub>, NO<sub>x</sub>, and diesel particulate matter. While major development has been underway to develop reciprocating engines or post-combustion technologies to address the issue, it may be an advantage to utilize a fundamentally more efficient and cleaner prime mover technology. The Solid Oxide Fuel Cell-Gas Turbine (SOFC-GT) is proposed as a candidate for this purpose. The SOFC-GT, though still in the early stages of development, has proven to have high-efficiency operation with exceedingly low emissions of CO<sub>2</sub> and NO<sub>x</sub>. This work evaluates the system's capability to satisfy the requirements of the locomotive application and the rail industry's expectations.

### Project Objectives

The objectives of the project are to (1) develop and implement a proof-of-concept system analysis for a SOFC-GT hybrid power block for long-haul

locomotive applications, and (2) establish a conceptual design for a real world demonstration.

### Technology Description

In this work, the system is based on the recuperated Brayton cycle, with the SOFC and turbine in the topping cycle configuration. Just as in the recuperated Brayton cycle, the heat exchanger in this work's baseline serves to preheat the air prior to entry to fuel cell, with the intent of supporting a high fuel cell operating temperature so that high power densities can be maintained and losses are at a minimum. In addition, it is assumed that the outlet temperature of the fuel cell will not be high enough to support the turbine inlet temperature requirements. Moreover, control of the turbine's operating temperature is necessary for overall system control. Thus, the system also includes a combustor between the fuel cell and turbine to meet both these needs. The system has a single turbine.

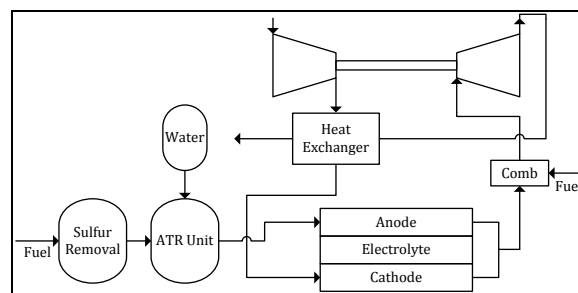


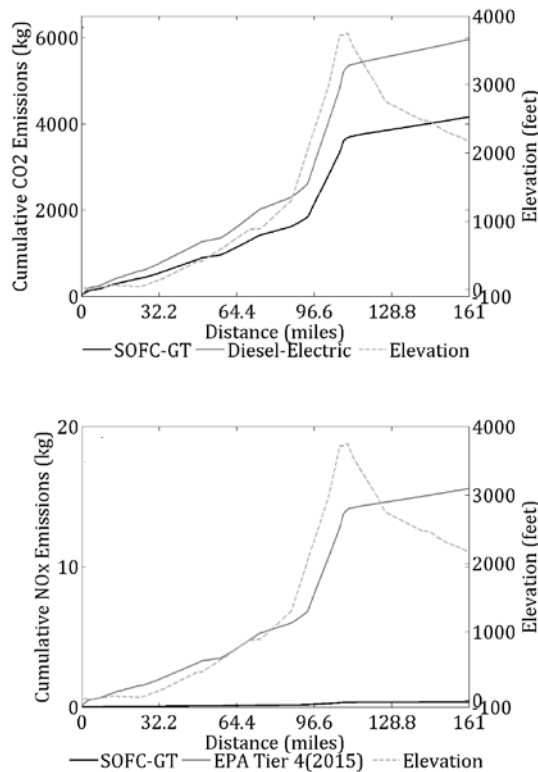
Figure 1: SOFC-GT Baseline System Layout

### Status

This project has been completed including the submission of a final report. The project has resulted in the successful development and execution of the simulation model for the SOFC-GT locomotive. The analysis, executed to assess performance when operating on hydrogen, liquefied natural gas and diesel fuels along a representative route through the Cajon Pass, demonstrates the viability of the technology and establishes a conceptual design for a real world demonstration.



**Results**



**Figure 2: Emissions Comparison between SOFC-GT and Diesel-Electric Systems**

Along a typical operating route, an SOFC-GT locomotive fueled by diesel fuel can experience average system efficiency of 52.2%, thereby saving 30.3% of CO<sub>2</sub>, and 97.7% of NO<sub>x</sub> emissions; a natural gas-fueled system offers average system efficiency of 60%, CO<sub>2</sub> savings of 53.8%, and NO<sub>x</sub> savings of 97.7%. For these systems, the integration of the reformer onboard provided an increase in efficiency over the option of offboard reformation; a 7-point gain was observed for diesel and a 12-point gain observed for natural gas. In terms of durability, it was observed that constant rated-power operation could induce a degradation rate of 0.75% per hour, much too high for commercial viability as full deactivation of the SOFC would occur in only 300 hours. However, degradation over a typical route was small enough to be reversible. Furthermore, with a carbon mitigation strategy such as an anode barrier layer applied to only half of the cell, degradation rates could be as low as 0.02% to 0.05% per hour, approaching viability if regenerative cycles are considered a regular part of system maintenance.

It was concluded that the SOFC-GT system is capable of replacing the conventional diesel engine. Adoption of a system operating on diesel would be relatively difficult due to limitations of durability and space available onboard for storing of the water required for reformation. In addition, the degradation issue may be avoided with as little as 100 anode oxidation regenerative cycles over a prime mover lifetime of 100,000 hours of operation. Reformates generated off-board, natural gas reformed onboard and humidified hydrogen were established as viable fuel options, all of which provided even greater efficiency and emissions benefits than the diesel case. The natural gas-fueled system with the fuel reformed onboard proved to be the most efficient option. The hydrogen case would provide for zero emission operation at the locomotive but life-cycle emission dependent on the hydrogen source.

**Benefits**

The SOFC-GT system has the potential to all but eliminate locomotive NO<sub>x</sub> emissions, reduce CO<sub>2</sub> emissions between 30% and 60% based on fuel choice, correspondingly increase fuel efficiency and thereby substantially reduce operating costs, and reduce local noise levels and deleterious air quality impacts in areas of high rail activity.

**Project Costs**

The cost of the project was \$156,000, co-funded by CARB at \$78,000 and the SCAQMD at \$78,000. The project was completed within budget.

**Commercialization and Applications**

It was determined that the space (footprint and volume) allocated today for the diesel engine on conventional locomotives is sufficient, and the dynamic response for the proposed SOFC-GT system is satisfactory. The next step is to design and conduct a demonstration of the SOFC-GT power block on an experimental rail platform. The advent of domestically sourced natural gas and the growing interest of railroad companies to transition from diesel to natural gas suggest an implementation strategy with natural gas, circumventing altogether the exploration of fueling the SOFC-GT power block with diesel.

SCAQMD Contract #13113

January 2013

## Participate in California Fuel Cell Partnership for CY 2012 & Provide Support for Regional Coordinator

### Contractor

Bevilacqua-Knight Inc

### Cosponsors

8 automakers; 2 energy providers; 6 government agencies; 1 technology provider; and 17 associate members

### Project Officer

Lisa Mirisola

### Background

Established with eight members in 1999, the California Fuel Cell Partnership (CaFCP) is a collaboration in which private and public entities are independent participants. It is not a joint venture, legal partnership or unincorporated association. Therefore, each participant contracts with Bevilacqua-Knight, Inc. for their portion of CaFCP administration. SCAQMD joined the CaFCP in April 2000, and the CaFCP currently includes 34 organizations interested in demonstrating fuel cell vehicle and fueling infrastructure technology.

### Project Objective

There were several goals for 2012:

- Establish and maintain a common vision for the market transition of FCVs in California;
- Facilitate the deployment of commercial fueling stations and coordinate with OEM vehicle plans;
- Support practical codes and standards development;
- Prepare communities for vehicles and fueling stations, and train first responders;
- Coordinate with other fuel cell vehicle demonstration programs worldwide; and
- Enhance public awareness and understanding through technology demonstrations and outreach.

### Status

The members of the CaFCP intend to continue their cooperative demonstration efforts and have set goals through 2012, subject to a budget approved annually. This final report covers the SCAQMD Contract #11656 for 2012 membership. This contract was completed on schedule.



Figure 1: Fuel Cell Vehicles on Display at Local Event

### Technology Description

The CaFCP members together or individually are demonstrating fuel cell passenger cars and transit buses and associated fueling infrastructure in California. The passenger cars include Daimler's B Class F-CELL, GM's Chevy Fuel Cell Vehicle, Honda's FCX Clarity, Hyundai's Tucson, Nissan's XTrail, and Toyota's FCHV-adv. The fuel cell transit buses include 12 placed at AC Transit (Van Hool buses with UTC fuel cells) and 3 placed at Sunline Transit (1 UTC/ISE, and 1 Ballard/New Flyer, and 1 Ballard/BAE). Proterra has also placed a battery dominant FC hybrid bus at the City of Burbank and Hydrogenics/BAE has placed one bus with SF MTA.

### Results

Specific accomplishments include:

- Automotive members placed over 400 fuel cell passenger vehicles on California roads from 1999 through 2012, including the first retail customers starting in 2005;

- Transit agency members have demonstrated 20 fuel cell buses since 1999, with 15 currently in operation (see technology description);
- There are eight public hydrogen fueling stations in operation in California. There are also 15 additional private stations clustered in regional networks in northern and southern California;
- CaFCP staff and members continue to train local fire departments and work with emergency response organizations to coordinate with state and national efforts;
- CaFCP organized or participated in several ride & drive events, notably Santa Monica AltCar Expo.
- CaFCP continued to upgrade its comprehensive up-to-date website focusing on efforts in California, participated in technical and educational conferences, and helped prepare for hydrogen station openings.

### **Benefits**

Compared to conventional vehicles, fuel cell vehicles can offer zero or near-zero smog-forming emissions, reduced water pollution from oil leaks, higher efficiency and much quieter and smoother operation. If alternative or renewable fuels are used as a source for hydrogen, fuel cell vehicles will also encourage greater energy diversity and lower greenhouse gas emissions (CO<sub>2</sub>).

By combining efforts, the CaFCP can accelerate and improve the commercialization process. The members have a shared vision about the potential of fuel cells as a practical solution to California's environmental issues and similar issues around the world. The CaFCP provides a unique forum where technical and interface challenges can be identified early, discussed, and potentially resolved through cooperative efforts.

### **Project Costs**

Auto members provide vehicles, the staff and facilities to support them. Energy members engage in fueling infrastructure activities. The CaFCP's annual operating budget is about \$2 million, and includes facility operating costs, program administration, joint studies and public outreach and education. Each member makes an annual contribution of approximately \$88,000 towards the common budget. Some government agencies contribute additional in-kind products and services. SCAQMD provides an additional \$50,000 annually

to support a Southern California Regional Coordinator and provides office space for additional staff in-kind at SCAQMD.

### **Commercialization and Applications**

While research by multiple entities will be needed to reduce the cost of fuel cells and improve fuel storage and infrastructure, the CaFCP can play a vital role in demonstrating fuel cell vehicle reliability and durability, fueling infrastructure and storage options and increasing public knowledge and acceptance of the vehicles and fueling.

From 2010 to 2012, CaFCP's goals relate to Building Market Foundations through coordinated individual and collective effort. In 2013, CaFCP will start its fourth phase with activities to launch the commercial market. During this phase, CaFCP members, individually or in groups, will focus on important goals.

- Prepare for larger-scale manufacturing, which encompasses cost reduction, supply chain and production.
- Work on the customer channel, including identifying and training dealers and service technicians.
- Reduce costs of station equipment, increase supply of renewable hydrogen at lower cost, and develop new retail station approaches.
- Support cost reduction through incentives and targeted RD&D projects
- Continue research, development and demonstration of advanced concepts in renewable and other low-carbon hydrogen.
- Provide education and outreach to the public and community stakeholders on the role of FCEVs and hydrogen in the evolution to electric drive.

## Participate in California Fuel Cell Partnership for CY 2013 & Provide Support for Regional Coordinator

### Contractor

Bevilacqua-Knight Inc

### Cosponsors

8 automakers; 6 government agencies; 1 technology provider; and 19 associate members

### Project Officer

Lisa Mirisola

### Background

Established with eight members in 1999, the California Fuel Cell Partnership (CaFCP) is a collaboration in which private and public entities are independent participants. It is not a joint venture, legal partnership or unincorporated association. Therefore, each participant contracts with Bevilacqua-Knight, Inc. for their portion of CaFCP administration. SCAQMD joined the CaFCP in April 2000, and the CaFCP currently includes 34 organizations interested in demonstrating fuel cell vehicle and fueling infrastructure technology.

### Project Objective

There were several goals for 2013:

- Establish and maintain a common vision for the market transition of FCVs in California;
- Facilitate the deployment of commercial fueling stations and coordinate with OEM vehicle plans;
- Support practical codes and standards development;
- Prepare communities for vehicles and fueling stations, and train first responders;
- Coordinate with other fuel cell vehicle demonstration programs worldwide; and
- Enhance public awareness and understanding through technology demonstrations and outreach.

### Status

The members of the CaFCP intend to continue their cooperative demonstration efforts and have set goals through 2016, subject to a budget approved annually. This final report covers the SCAQMD Contract #14054 for 2013 membership. This contract was completed on schedule.



Figure 1: DOE Solar Decathlon, Irvine CA

### Technology Description

The CaFCP members together or individually are demonstrating fuel cell passenger cars and transit buses and associated fueling infrastructure in California. The passenger cars include Daimler's B Class F-CELL, GM's Chevy Fuel Cell Vehicle, Honda's FCX Clarity, Hyundai's Tucson, Nissan's XTrail, and Toyota's FCHV-*adv*. The fuel cell transit buses include 12 placed at AC Transit (Van Hool buses with UTC fuel cells) and 3 placed at Sunline Transit (1 UTC/ISE, and 1 Ballard/New Flyer, and 1 Ballard/BAE).

### Results

Specific accomplishments include:

- Automotive members placed over 500 fuel cell passenger vehicles on California roads from 1999 through 2013, including the first retail customers starting in 2005;
- Transit agency members have demonstrated 24 fuel cell buses since 1999, with 15 currently in operation (see technology description);
- There are ten public hydrogen fueling stations in operation in California. There

are also 15 additional private stations clustered in regional networks in northern and southern California;

- CaFCP staff and members continue to train local fire departments and work with emergency response organizations to coordinate with state and national efforts;
- CaFCP organized or participated in several ride & drive events, notably Santa Monica AltCar Expo.
- CaFCP continued to upgrade its comprehensive up-to-date website focusing on efforts in California, participated in technical and educational conferences and helped prepare for hydrogen station openings.

### **Benefits**

Compared to conventional vehicles, fuel cell vehicles can offer zero or near-zero smog-forming emissions, reduced water pollution from oil leaks, higher efficiency and much quieter and smoother operation. If alternative or renewable fuels are used as a source for hydrogen, fuel cell vehicles will also encourage greater energy diversity and lower greenhouse gas emissions (CO<sub>2</sub>).

By combining efforts, the CaFCP can accelerate and improve the commercialization process. The members have a shared vision about the potential of fuel cells as a practical solution to California's environmental issues and similar issues around the world. The CaFCP provides a unique forum where technical and interface challenges can be identified early, discussed, and potentially resolved through cooperative efforts.

### **Project Costs**

Auto members provide vehicles, the staff and facilities to support them. Energy members engage in fueling infrastructure activities. The CaFCP's annual operating budget is about \$2 million, and includes facility operating costs, program administration, joint studies and public outreach and education. Each member makes an annual contribution of approximately \$88,000 towards the common budget. Some government agencies contribute additional in-kind products and services. SCAQMD provides an additional \$50,000 annually to support a Southern California Regional Coordinator and provides office space for additional staff in-kind at SCAQMD.

### **Commercialization and Applications**

While research by multiple entities will be needed to reduce the cost of fuel cells and improve fuel storage and infrastructure, the CaFCP can play a vital role in demonstrating fuel cell vehicle reliability and durability, fueling infrastructure and storage options and increasing public knowledge and acceptance of the vehicles and fueling.

From 2013 to 2016, CaFCP's goals relate to Preparing for Market Launch through coordinated individual and collective effort. During this fourth phase, CaFCP members, individually or in groups, will focus on important goals.

- Prepare for larger-scale manufacturing, which encompasses cost reduction, supply chain and production.
- Work on the customer channel, including identifying and training dealers and service technicians.
- Reduce costs of station equipment, increase supply of renewable hydrogen at lower cost, and develop new retail station approaches.
- Support cost reduction through incentives and targeted RD&D projects
- Continue research, development and demonstration of advanced concepts in renewable and other low-carbon hydrogen.
- Provide education and outreach to the public and community stakeholders on the role of FCEVs and hydrogen in the evolution to electric drive.

## Develop, Initiate and Implement Clean Vehicle Outreach Project

### Contractor

Three Squares, Inc. (TSI)

### Cosponsor

SCAQMD

### Project Officer

Lisa Mirisola

Lourdes Cordova Martinez

### Background

The SCAQMD has long supported plug-in electric vehicles, ranging from light-duty battery electric vehicles to heavy-duty plug-in hybrid electric vehicles, due to the clean air benefits associated with electrifying the transportation sector. With the commercialization this year of plug-in vehicles (PEVs) by Nissan, GM and Ford, the SCAQMD Board expressed concerns that only the early-adopters and PEV advocates would know the true value associated with these technologies; whereas the general public is insufficiently educated and often times misinformed about the costs and benefits of such vehicles.

### Project Objective

TSI was contracted to coordinate an outreach campaign designed to retool existing SCAQMD programs to include and expand the current efforts to focus some or all of the messaging aspects, where appropriate, in the near-term on clean and high efficiency vehicles. These efforts will be included under a newly badged Clean Air Choices (CAC) program, which will provide an umbrella platform to promote all of the SCAQMD clean air technology activities in the future, such as low-VOC paints and solvents, electric lawn and garden equipment, air filters, low NO<sub>x</sub> boiler and aftertreatment technologies, as well as clean vehicles.

Analyzing the list of current clean vehicle outreach events in the South Coast Air Basin, the project team selected several events to conduct in person outreach and live demonstrations of the

Clean Vehicle Calculator. TSI also coordinated displays with iPads and custom branded handouts featuring the Clean Air Choices Program Logo.

### Technology Description

After several meetings with SCAQMD staff discussing the vision for the calculator, defining the audience (consumers in the South Coast Air Basin) and working through the technical specifications so that the calculator would function across digital platforms (desktop, iPhone, iPad, Droid, BlackBerry), TSI developed the “Clean Vehicle Calculator” and launched the site <http://www.cleancarchoices.org>.

In order to facilitate ease of use and updating of the calculator data (new vehicle models, smog scores, MSRP, and dealer assignments), TSI developed a Content Management System (CMS) to allow SCAQMD staff to make updates directly via a web-based portal. SCAQMD staff was briefed and trained on using the CMS.

Year	Make	Model	MSRP	Smog Score	Dealer					
2012	Audi	A3	\$24,148	2	0	19	28	23	7.8	Write Note
2013	Audi	A3	\$24,148	3	0	19	28	23	6.1	Write Note
2011	BMW	128i	\$34,328	4	0	18	28	22	8.5	Write Note
2012	BMW	128i	\$32,086	12	0	18	28	22	8.5	Write Note
2012	BMW	128i ConnectedDrive	\$34,379	3	0	19	28	23	8.5	Write Note
2012	BMW	128i ConnectedDrive	\$37,793	12	0	18	28	22	8.5	Write Note
2011	BMW	200i	\$34,628	3	0	18	28	22	8.5	Write Note

Figure 1: Image of Calculator CMS Interface

### Status

The Clean Vehicle Calculator is available online at <http://www.cleancarchoices.org> and is also available via a click through link on the Clean Air Choices program web site located at <http://www.cleanairchoices.org>. The CMS is fully functional via a web-based portal and SCAQMD staff have user logins and passwords.

TSI conducted outreach activities at the following events located in the South Coast Air Basin:

- September 20, 2012  
Senior Clean Air Fair - Los Angeles, CA  
September 20, 2013  
AltCar Expo – Santa Monica, CA
- September 28, 2013  
Plug-In Day at the SCAQMD – Diamond Bar, CA



**Figure 2: Clean Vehicle Calculator iPad demonstration at AltCar Expo**

## Results

The CMS was launched prior to the AltCar Expo which allowed updating of the calculator to include the new 2013 clean vehicle models. SCAQMD staff has been trained and will be able to enter the new 2014 clean vehicle models as soon as the vehicle list is available.

TSI staff interacted with attendees both as they visited the SCAQMD booth and while roaming around the event venues. Because of the portability of the handheld iPad, outreach staff was able to interact with attendees waiting in line for the ride and drive and demonstrate the Clean Vehicle Calculator. In addition, TSI staff visited with other exhibitors to inform them about the free online calculator and walk them through a live demonstration.

## Benefits

The Clean Vehicle Calculator allows interested car shoppers to view easy, quick comparisons of environmental and economic benefits of selecting a clean vehicle, connect directly with a

local dealer and phone the dealer to schedule a test drive.

## Project Costs

The following costs were associated with the tasks outlined in the scope of work:

Task 1 – Customized Content Management System = \$9,500

Task 2 – Clean Air Choices Outreach = \$12,000

The total contract award was \$21,500; however, the final budget was \$16,901.

## Commercialization and Applications

The rebranded Clean Air Choices Program web site will become a venue to feature a variety of programs focused on promoting clean vehicles and clean home choices to residents in the South Coast Air Basin.

The Clean Vehicle Calculator will continue to be updated with new vehicle models as they are added to the SCAQMD Clean Vehicle Lists and featured at local dealerships. The Content Management System will allow SCAQMD staff easy access to make updates via a web interface and the ability to add vehicles, dealerships and edit vehicle data like smog scores.

## **Appendix D**

### **List of Acronyms**





## LIST OF ACRONYMS

AFRC—air/fuel ratio control	HCCI—Homogeneous Charge Combustion Ignition
APCD—Air Pollution Control District	HCNG—hydrogen-compressed natural gas (blend)
AQMD—Air Quality Management District	HDDT—highway dynamometer driving schedule
AQMP—Air Quality Management Plan	HDV—heavy-duty vehicle
ARB—Air Resources Board	HEV—Hybrid electric vehicle
ARRA—American Recovery & Reinvestment Act	HPDI—High Pressure Diesel Injection
BACT—Best Available Control Technology	HT—high throughput
BSNO <sub>x</sub> —brake specific NO <sub>x</sub>	HTPH—high throughput pretreatment and enzymatic hydrolysis
CAAP—Clean Air Action Plan	ICE—internal combustion engine
CAFR—Comprehensive Annual Financial Report	ICEV—internal combustion engine vehicle
CARB—California Air Resources Board	ICTC—Interstate Clean Transportation Corridor
CCF—California Clean Fuels	LCFS—Low-Carbon Fuel Standard
CEC—California Energy Commission	Li—lithium ion
CE-CERT—College of Engineering – Center for Environmental Research and Technology	LIMS—Laboratory Information Management System
CEMS—continuous emission monitoring system	LNG—liquefied natural gas
CFD—computational fluid dynamic	LPG—liquefied petroleum gas or propane
CNG—compressed natural gas	LSV—low-speed vehicle
CO <sub>2</sub> —carbon dioxide	MATES—Multiple Air Toxics Exposure Study
CO—carbon monoxide	MECA—Manufacturers of Emission Controls Association
CRT—continuously regenerating technology	MPFI—Multi-Port Fuel Injection
DC—direct connection	MPG—miles per gallon
CY—calendar year	MSRC—Mobile Source Air Pollution Reduction Review Committee
DCM—dichloromethane	MSW—municipal solid wastes
DDC—Detroit Diesel Corporation	MY—model year
DEG—diesel equivalent gallons	MTA—Metropolitan Transportation Authority (Los Angeles County “Metro”)
DGE—diesel gallon equivalents	NAFA—National Association of Fleet Administrators
DF—deterioration factor	NCP—nonconformance penalty
DMS—Division of Measurement Standards	NEV—neighborhood electric vehicles
DMV—Department of Motor Vehicles	NGV—natural gas vehicle
DOC—diesel oxidation catalysts	NHTSA—National Highway Traffic Safety Administration
DOE—Department of Energy	NMHC—non-methane hydrocarbon
DOT—Department of Transportation	NO—nitrogen monoxide
DPF—diesel particulate filters	NO <sub>2</sub> —nitrogen dioxide
DRI—Desert Research Institute	NO + NO <sub>2</sub> —nitrous oxide
ECM—emission control monitoring	NO <sub>x</sub> —oxides of nitrogen
EGR—exhaust gas recirculation	NREL—National Renewables Energy Lab
EPRI—Electric Power Research Institute	OBD—On-Board Diagnostics
ESD—emergency shut down	OCTA—Orange County Transit Authority
EV—electric vehicle	OEM—original equipment manufacturer
FCV—fuel cell vehicle	PAH—polyaromatic hydrocarbons
FTA—Federal Transit Administration	PbA—lead acid
FTP—federal test procedures	PCM—powertrain control module
g/bhp-hr—grams per brake horsepower per hour	PHEV—plug-in hybrid vehicle
GC/MS—gas chromatography/mass spectrometry	PM—particulate matter
GGE—gasoline gallon equivalents	PM2.5—particulate matter ≤ 2.5 microns
GHG—Greenhouse Gas	PM10—particulate matter ≤ 10 microns
GTL—gas to liquid	
H&SC—California Health and Safety Code	

## LIST OF ACRONYMS (cont'd)

PPM—parts per million  
RDD&D—research, development, demonstration,  
and deployment  
RFS—renewable fuel standards  
RI—reactive intermediates  
RRC—rolling resistance co-efficient  
RTA—Riverside Transit Agency  
SBCCOG— South Bay Cities Council of  
Governments  
SCAB—South Coast Air Basin or “Basin”  
SCAQMD—South Coast Air Quality Management  
District  
SCE—Southern California Edison  
SCR—selective catalytic reduction  
SI—spark ignited  
SoCalGas—Southern California Gas Company (A  
Sempra Energy Utility)  
SULEV—super ultra-low emission vehicle  
TC—total carbon  
THC—total hydrocarbons  
TO—task order  
UDDS—urban dynamometer driving schedule  
U.S.EPA—United States Environmental Protection  
Agency  
ULEV—ultra low emission vehicle  
VMT—vehicle miles traveled  
VOC—volatile organic compounds  
WVU—West Virginia University  
ZEV—zero emission vehicle

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

## Annual RECLAIM Audit Report for 2012 Compliance Year

**March 4, 2014**

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Barry R. Wallerstein, D.Env.

**Deputy Executive Officer**

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**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

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Speaker of the Assembly  
Appointee

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**EXECUTIVE OFFICER**

Barry R. Wallerstein, D.Env.

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## LIST OF ABBREVIATIONS

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ACEMS	Alternative Continuous Emissions Monitoring System(s)
AER	Annual Emission Report
APEP	Annual Permit Emissions Program
SCAQMD	South Coast Air Quality Management District
AQMP	Air Quality Management Plan
BACT	Best Available Control Technology
BARCT	Best Available Retrofit Control Technology
CAA	Clean Air Act
CARB	California Air Resources Board
CCAA	California Clean Air Act
CEQA	California Environmental Quality Act
CEMS	Continuous Emissions Monitoring System(s)
CGA	Cylinder Gas Audit
CPMS	Continuous Process Monitoring System(s)
EDR	Electronic Data Reporting
ERC	Emission Reduction Credit
IYB RTC	Infinite-Year Block RECLAIM Trading Credit
LAER	Lowest Achievable Emission Rate
LAP	Laboratory Approval Program
MDP	Missing Data Procedures
MRR	Monitoring, Reporting and Recordkeeping
MSERC	Mobile Source Emission Reduction Credit
NAAQS	National Ambient Air Quality Standard
NNI	No Net Increase
NOx	Oxides of Nitrogen
NSR	New Source Review
QCER	Quarterly Certification of Emissions Report
RACT	Reasonably Available Control Technology
RATA	Relative Accuracy Test Audit
RECLAIM	REgional CLean Air Incentives Market
RTC	RECLAIM Trading Credit
RTU	Remote Terminal Unit
SIP	State Implementation Plan
SOx	Oxides of Sulfur
SSC	Stationary Source Committee
SWG	Standing Working Group
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound
WATERS	Web Access To Electronic Reporting System



## EXECUTIVE SUMMARY

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### Introduction

The South Coast Air Quality Management District (SCAQMD) Governing Board adopted the REgional CLean Air Incentives Market (RECLAIM) program on October 15, 1993. The RECLAIM program represented a significant departure from traditional command-and-control regulations. RECLAIM's objective is to provide facilities with added flexibility in meeting emissions reduction requirements while lowering the cost of compliance. This is accomplished by establishing facility-specific emissions reduction targets without being prescriptive regarding the method of attaining compliance with the targets. Each facility may determine for itself the most cost-effective approach to reducing emissions, including reducing emissions at their facility, and/or purchasing RECLAIM Trading Credits (RTCs) from other RECLAIM facilities, or from other RTC holders.

Rule 2015 - Backstop Provisions includes provisions for annual program audits focusing on specific topics, as well as a one-time comprehensive audit of the program's first three years, to ensure that RECLAIM is meeting all state and federal requirements and other performance criteria. Rule 2015 also provides backstop measures if the specific criteria are not met. This report constitutes the Rule 2015 annual program audit report for Compliance Year 2012 (January 1 through December 31, 2012 for Cycle 1 and July 1, 2012 through June 30, 2013 for Cycle 2 facilities). This annual audit report covers activities for the 19<sup>th</sup> year of the program.

### Chapter 1: RECLAIM Universe

When RECLAIM was adopted in October 1993, a total of 394 facilities were identified as the initial "universe" of sources subject to the requirements of RECLAIM. From program adoption through June 30, 2012, the overall changes in RECLAIM participants were 121 facilities included into the program, 70 facilities excluded from the program, and 169 facilities ceased operation. Thus, the RECLAIM universe consisted of 276 active facilities on July 1, 2012. From July 1, 2012 through the end of Compliance Year 2012 (December 31, 2012 for Cycle 1 facilities and June 30, 2013 for Cycle 2 facilities), two facilities were included into the RECLAIM universe, no facility was excluded, and five facilities (one facility in both the NO<sub>x</sub> and SO<sub>x</sub> universes and four in the NO<sub>x</sub> universe only) either shut down or consolidated their operations at other facilities and are no longer in the active RECLAIM universe. These changes resulted in a net decrease of three facilities in the universe, bringing the total number of active RECLAIM facilities to 273 as of the end of Compliance Year 2012.

### Chapter 2: RTC Allocations and Trading

The allocation reduction in NO<sub>x</sub> RTCs adopted by the Governing Board on January 7, 2005 was completed in Compliance Year 2011. The amendments to SO<sub>x</sub> RECLAIM, which the Governing Board adopted on November 5, 2010 to phase in SO<sub>x</sub> reductions, will commence in Compliance Year 2013 and continue through Compliance Year 2019. That rule amendment will result in an overall

reduction of 5.7 tons/day (or 48.4%) in SO<sub>x</sub> allocations when fully implemented (for Compliance Year 2019 and beyond). As a result, there were no programmatic allocation reductions in NO<sub>x</sub> or SO<sub>x</sub> RTCs during Compliance Year 2012.

The NO<sub>x</sub> RTC supply increased by 12.2 tons and the SO<sub>x</sub> RTC supply decreased by 16.2 tons during Compliance Year 2012. All of these changes, except 0.7 tons of NO<sub>x</sub> RTCs, were due to allocation adjustments for clean fuel production pursuant to Rule 2002(c)(12). The remaining 0.7 tons of increased NO<sub>x</sub> RTC supply was issued as the result of a merger between a RECLAIM facility and an adjacent non-RECLAIM facility (issued based on the operational history of the previously non-RECLAIM facility pursuant to Rule 2002). As a result, the NO<sub>x</sub> and SO<sub>x</sub> RTC supplies for Compliance Year 2012 were 9,689 tons and 4,283 tons, respectively.

During calendar year 2013, there were 367 registered RTC transactions with a total value of almost \$30.4 million traded, excluding the values reported for "swap" transactions (exchange of RTCs for other RTCs, rather than for money). Since the inception of the RECLAIM program in 1994, a total value of over \$1.05 billion dollars has been traded in the RTC trading market, excluding swaps. In terms of volume traded in calendar year 2013, a total of 4,443 tons of discrete NO<sub>x</sub> RTCs, 557 tons of discrete SO<sub>x</sub> RTCs, 1,779 tons of infinite-year block (IYB) NO<sub>x</sub> RTCs and 438 tons of IYB SO<sub>x</sub> RTCs were traded. RTC trading market activity during calendar year 2013 was comparable in terms of number of trades, but substantially higher in total value (by 62%) and volume (by 42%) compared to calendar year 2012.

The average annual prices of discrete-year NO<sub>x</sub> RTCs traded during calendar year 2013 were \$549 per ton for Compliance Year 2012 RTCs, \$1,080 per ton for Compliance Year 2013 RTCs, and \$1,881 per ton for Compliance Year 2014 RTCs. The average annual prices for discrete-year SO<sub>x</sub> RTCs traded during the same period were \$291 per ton for Compliance Year 2012 RTCs and \$485 per ton for RTCs for Compliance Year 2013. Therefore, the average annual prices for discrete NO<sub>x</sub> and SO<sub>x</sub> RTCs for all compliance years remained well below the \$15,000 per ton threshold to evaluate and review the compliance aspects of the program set forth by SCAQMD Rule 2015, as well as the \$40,067 per ton of NO<sub>x</sub> and \$28,848 per ton of SO<sub>x</sub> discrete RTCs pre-determined overall program review thresholds established by the Governing Board pursuant to Health and Safety Code §39616(f).

The average annual price during calendar year 2013 for IYB NO<sub>x</sub> RTCs was \$45,914 per ton, and the average annual price for IYB SO<sub>x</sub> RTCs was \$181,653 per ton. Therefore, average annual IYB RTC prices did not exceed the \$601,010 per ton of IYB NO<sub>x</sub> RTCs or the \$432,727 per ton of IYB SO<sub>x</sub> RTCs pre-determined overall program review thresholds established by the Governing Board pursuant to Health and Safety Code §39616(f).

Investors were again active in the RTC market during calendar year 2013. They were involved in 134 of the 229 discrete NO<sub>x</sub> and SO<sub>x</sub> trade registrations with price and 19 of 21 IYB NO<sub>x</sub> and SO<sub>x</sub> trades with price. Excluding one set of trades resulting from a set of changes of operator between two companies, investors were involved in 31% of total value and 44% of total volume for discrete NO<sub>x</sub> trades, and 2% of total value and 1% of total volume for discrete SO<sub>x</sub>

trades. Investors were involved in 100% of the IYB NO<sub>x</sub> and SO<sub>x</sub> trades with price. At the end of calendar year 2013, investors' holdings of IYB NO<sub>x</sub> RTCs and IYB SO<sub>x</sub> RTCs were 4.9% and 0.9% of the total RECLAIM RTCs, respectively.

### **Chapter 3: Emission Reductions Achieved**

For Compliance Year 2012, aggregate NO<sub>x</sub> emissions were below total allocations by 19% and aggregate SO<sub>x</sub> emissions were below total allocations by 40%. No emissions associated with breakdowns were excluded from reconciliation with facility allocations in Compliance Year 2012. Accordingly, no mitigation is necessary to offset excluded emissions due to approved Breakdown Emission Reports. Therefore, based on audited emissions, it can be concluded that RECLAIM achieved its targeted emission reductions for Compliance Year 2012. With respect to the Rule 2015 backstop provisions, Compliance Year 2012 aggregate NO<sub>x</sub> and SO<sub>x</sub> emissions were both well below aggregate allocations and, as such, did not trigger the requirement to review the RECLAIM program.

### **Chapter 4: New Source Review Activity**

The annual program audit assesses New Source Review (NSR) activity from RECLAIM facilities in order to ensure that RECLAIM is complying with federal NSR requirements and state no net increase (NNI) in emissions requirements, while providing flexibility to facilities in managing their operations and allowing new sources into the program. In Compliance Year 2012, a total of 46 NO<sub>x</sub> RECLAIM facilities had NSR NO<sub>x</sub> emission increases, and four SO<sub>x</sub> RECLAIM facilities had NSR SO<sub>x</sub> emission increases due to expansion or modification. Consistent with all prior compliance years, there were sufficient NO<sub>x</sub> and SO<sub>x</sub> RTCs available to allow for expansion, modification, and modernization by RECLAIM facilities.

RECLAIM is required to comply with federal NSR emissions offset requirements at a 1.2-to-1 offset ratio programmatically for NO<sub>x</sub> emission increases and a 1-to-1 offset ratio for SO<sub>x</sub> emission increases on a programmatic basis. In Compliance Year 2012, RECLAIM provided an offset ratio based on the compliance year's total unused allocations and total NSR emission increases of 9-to-1 for NO<sub>x</sub>, demonstrating federal equivalency. RECLAIM inherently complies with the federally-required 1-to-1 SO<sub>x</sub> offset ratio for any compliance year, provided aggregate SO<sub>x</sub> emissions under RECLAIM are lower than or equal to aggregate SO<sub>x</sub> allocations for that compliance year. As shown in Chapter 3, there was no programmatic SO<sub>x</sub> exceedance during Compliance Year 2012; in fact, there was a surplus of SO<sub>x</sub> RTCs. Therefore, RECLAIM more than complied with the federally-required SO<sub>x</sub> offset ratio and further quantification of the SO<sub>x</sub> offset ratio is unnecessary. Compliance with the federally-required offset ratio also demonstrates compliance with any applicable state NNI requirements for new or modified sources. In addition, RECLAIM requires application of, at a minimum, California Best Available Control Technology (BACT), which is very similar to federal Lowest Achievable Emission Rate (LAER), for all new or modified sources with emission increases. In addition, more stringent control technology can be required pursuant to RECLAIM if it is

determined to be cost effective as compared to AQMP measures or adopted SCAQMD rules.

## **Chapter 5: Compliance**

Of the 278 NO<sub>x</sub> RECLAIM facilities during Compliance Year 2012, a total of 265 facilities (95%) complied with their NO<sub>x</sub> allocations, and all but one of the 33 SO<sub>x</sub> facilities (97%) complied with their SO<sub>x</sub> allocations. The 13 NO<sub>x</sub> facilities that exceeded their NO<sub>x</sub> allocations had aggregate NO<sub>x</sub> emissions of 1,208 tons and did not have adequate allocations to offset 361.1 tons (or 29.9%) of their combined emissions. This exceedance amount is small compared to the overall allocations for Compliance Year 2012 (3.7% of total NO<sub>x</sub> allocations). One SO<sub>x</sub> facility had SO<sub>x</sub> emissions that exceeded its SO<sub>x</sub> allocations by only three pounds. The exceedances from these 13 facilities (12 NO<sub>x</sub>-only facilities and one NO<sub>x</sub> and SO<sub>x</sub> facility) did not impact the overall RECLAIM emission reduction goals. Pursuant to Rule 2010(b)(1)(A), all 13 facilities had their respective exceedances deducted from their annual allocations for the compliance year subsequent to the date of SCAQMD's determination that the facilities exceeded their Compliance Year 2012 allocations. The overall RECLAIM NO<sub>x</sub> and SO<sub>x</sub> emission reduction targets and goals were met for Compliance Year 2012 (*i.e.*, aggregate emissions for all RECLAIM facilities were well below aggregate allocations).

## **Chapter 6: Reported Job Impacts**

This chapter compiles data as reported by RECLAIM facilities in their Annual Permit Emissions Program (APEP) reports. The analysis focuses exclusively on job impacts at RECLAIM facilities and determination if those job impacts were directly attributable to RECLAIM as reported by those facilities. There may be additional effects of the RECLAIM program on the local economy outside of RECLAIM facilities (*e.g.*, generating jobs for consulting firms, source testing firms and CEMS vendors) and also factors other than RECLAIM (*e.g.*, the prevailing economic climate), that impact the job market. These factors are not evaluated in this report. Also job losses and job gains are strictly based on RECLAIM facilities' reported information. AQMD is not able to independently verify the reported job impacts information.

According to the Compliance Year 2012 employment survey data gathered from APEP reports, RECLAIM facilities reported a net gain of 2,026 jobs, representing 2% of their total employment. All of the facilities that reported job losses and job gains cited factors other than RECLAIM as the reasons for these changes in employment figures. Furthermore, none of the five RECLAIM facilities listed as shutdown during Compliance Year 2012 cited RECLAIM as a factor contributing to the decision to shutdown.

## **Chapter 7: Air Quality and Public Health Impacts**

Audited RECLAIM emissions have been in an overall downward trend since the program's inception. Compliance Year 2012 NO<sub>x</sub> emissions increased slightly (7.0%) relative to Compliance Year 2011 and Compliance Year 2012 SO<sub>x</sub> emissions were 6.4% less when compared to last year. Quarterly calendar year 2012 NO<sub>x</sub> emissions fluctuated within four percent of the mean NO<sub>x</sub> emissions for the year. Quarterly calendar year 2012 SO<sub>x</sub> emissions fluctuated within ten

percent of the year's mean SOx emissions. There was no significant shift in seasonal emissions from the winter season to the summer season.

The California Clean Air Act (CCAA) required a 50% reduction in population exposure to ozone, relative to a baseline averaged over three years (1986 through 1988), by December 31, 2000. The Basin achieved the December 2000 target for ozone well before the deadline. In calendar year 2013, the per capita exposure to ozone (the average length of time each person is exposed) continued to be well below the target set for December 2000.

Air toxic health risk is primarily caused by emissions of certain volatile organic compounds (VOCs) and fine particulates, such as metals. RECLAIM facilities are subject to the same air toxic, VOC, and particulate matter regulations as other sources in the Basin. All sources are subject, where appropriate, to the NSR rule for toxics (Rule 1401). In addition, new or modified sources with NOx or SOx emission increases are required to be equipped with BACT, which minimizes to the extent feasible the increase of NOx and SOx emissions. RECLAIM and non-RECLAIM facilities that emit toxic air contaminants are required to report those emissions to SCAQMD. Those toxics emissions reports are used to identify candidates for the Toxics Hot Spots program (AB2588), which in turn quantifies toxic risk from facilities in the program and identifies those facilities that are required to do public notice and/or reduce their health risk levels to the public. There is no evidence that RECLAIM has caused or allowed higher toxic risk in areas adjacent to RECLAIM facilities.

## INTRODUCTION

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The South Coast Air Quality Management District (SCAQMD) REgional CLean Air Incentives Market (RECLAIM) program was adopted in October 1993 and replaced certain command-and-control rules regarding oxides of nitrogen (NO<sub>x</sub>) and oxides of sulfur (SO<sub>x</sub>) with a new market incentives program for facilities that meet the inclusion criteria. The goals of RECLAIM are to provide facilities with added flexibility in meeting emissions reduction requirements while lowering the cost of compliance. The RECLAIM program was designed to meet all state and federal Clean Air Act and other air quality regulations and program requirements, as well as various other performance criteria, such as equivalent or better air quality improvement, enforcement, implementation costs, job impacts, and no adverse public health impacts.

Since RECLAIM represents a significant change from traditional command-and-control regulations, RECLAIM rules include provisions for program audits in order to verify that the RECLAIM objectives are being met. The rules provide for a comprehensive audit of the first three years of program implementation and for annual program audits. The audit results are used to help determine whether any program modifications are appropriate. SCAQMD staff has completed the initial tri-annual program audit and each individual annual program audit report through the 2012 Compliance Year Audit.

This report presents the annual program audit and progress report of RECLAIM's nineteenth compliance year (January 1 through December 31, 2012 for Cycle 1 and July 1, 2012 through June 30, 2013 for Cycle 2 RECLAIM facilities), also known as Compliance Year 2012. As required by Rule 2015(b)(1) – Annual Audits, this audit assesses:

- Emission reductions;
- Per capita exposure to air pollution;
- Facilities permanently ceasing operation of all sources;
- Job impacts;
- Average annual price of each type of RECLAIM Trading Credit (RTC);
- Availability of RTCs;
- Toxic risk reductions;
- New Source Review permitting activity;
- Compliance issues, including a list of facilities that were unable to reconcile emissions for that compliance year;
- Emission trends/seasonal fluctuations;
- Emission control requirement impacts on stationary sources in the program compared to other stationary sources identified in the Air Quality Management Plan (AQMP); and
- Emissions associated with equipment breakdowns.

The annual program audit report is organized into the following chapters:

1. ***RECLAIM Universe***  
This chapter discusses summarizes changes to the universe of RECLAIM sources that occurred up until July 1, 2012 (covered under the Annual RECLAIM Audit Report for 2011 Compliance Year), then discusses changes to the RECLAIM universe of sources in detail through the end of Compliance Year 2012.
2. ***RTC Allocations and Trading***  
This chapter summarizes changes in emissions allocations in the RECLAIM universe, RTC supply and RTC trading activity, average annual prices, availability of RTCs, and market participants.
3. ***Emission Reductions Achieved***  
This chapter assesses emissions trends and progress towards emission reduction goals for RECLAIM sources, emissions associated with equipment breakdowns, and emissions control requirement impacts on RECLAIM sources compared to other stationary sources. It also discusses the latest amendments to the RECLAIM program.
4. ***New Source Review Activity***  
This chapter summarizes New Source Review (NSR) activities at RECLAIM facilities.
5. ***Compliance***  
This chapter discusses compliance activities and the compliance status of RECLAIM facilities. It also evaluates the effectiveness of SCAQMD's compliance program, as well as the monitoring, reporting, and recordkeeping (MRR) protocols for NOx and SOx.
6. ***Reported Job Impacts***  
This chapter addresses job impacts and facilities permanently ceasing operation of all emission sources.
7. ***Air Quality and Public Health Impacts***  
This chapter discusses air quality trends in the South Coast Air Basin, seasonal emission trends for RECLAIM sources, per capita exposure to air pollution, and the toxic impacts of RECLAIM sources.

## CHAPTER 1 RECLAIM UNIVERSE

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### Summary

*When RECLAIM was adopted in October 1993, a total of 394 facilities were identified as the initial “universe” of sources subject to the requirements of RECLAIM. From program adoption through June 30, 2012, the overall changes in RECLAIM participants were 121 facilities included into the program, 70 facilities excluded from the program, and 169 facilities ceased operation. Thus, the RECLAIM universe consisted of 276 active facilities on July 1, 2012. From July 1, 2012 through the end of Compliance Year 2012 (December 31, 2012 for Cycle 1 facilities and June 30, 2013 for Cycle 2 facilities), two facilities were included into the RECLAIM universe, no facility was excluded, and five facilities (one facility in both the NO<sub>x</sub> and SO<sub>x</sub> universes and four in the NO<sub>x</sub> universe only) either shut down or consolidated their operations at other facilities and are no longer in the active RECLAIM universe. These changes resulted in a net decrease of three facilities in the universe, bringing the total number of active RECLAIM facilities to 273 as of the end of Compliance Year 2012.*

### Background

The RECLAIM program replaced the traditional “command-and-control” rules for a defined list of facilities participating in the program (the RECLAIM “universe”). The criteria for inclusion in the RECLAIM program are specified in Rule 2001 – Applicability. Facilities are generally subject to RECLAIM if they have NO<sub>x</sub> or SO<sub>x</sub> emissions greater than or equal to four tons per year in 1990 or any subsequent year. However, certain facilities are categorically excluded from RECLAIM. The categorically excluded facilities include dry cleaners; restaurants; police and fire fighting facilities; construction and operation of landfill gas control, processing or landfill gas energy facilities; public transit facilities, potable water delivery operations; facilities that converted all sources to operate on electric power prior to October 1993; and facilities, other than electric generating facilities established on or after January 1, 2001, located in the Riverside County portions of the Mojave Desert Air Basin or the Salton Sea Air Basin.

Other categories of facilities are not automatically included but do have the option to enter the program. These categories include electric utilities (exemption only for the SO<sub>x</sub> program); equipment rental facilities; facilities possessing solely “various locations” permits; schools or universities; portions of facilities conducting research operations; ski resorts; prisons; hospitals; publicly-owned municipal waste-to-energy facilities; publically-owned sewage treatment facilities operating consistent with an approved regional growth plan; electrical power generating systems owned and operated by the Cities of Burbank, Glendale, or Pasadena or their successors; facilities on San Clemente Island; agricultural facilities; and electric generating facilities that are new on or after January 1, 2001 and located in the Riverside County portions of the Mojave Desert Air Basin or the Salton Sea Air Basin. An initial universe of 394 RECLAIM facilities was developed using the inclusion criteria initially adopted in the RECLAIM program based on 1990, 1991 and 1992 facility emissions data.



A facility that is not in a category that is specifically excluded from the program may voluntarily join RECLAIM regardless of its emission level. Additionally, a facility may be required to enter the RECLAIM universe if:

- It increases its NO<sub>x</sub> and/or SO<sub>x</sub> emissions above the four ton per year threshold; or
- It ceases to be categorically excluded and its reported NO<sub>x</sub> and/or SO<sub>x</sub> emissions are greater than or equal to four tons per year; or
- It is determined by SCAQMD staff to meet the applicability requirements of RECLAIM, but was initially misclassified as not subject to RECLAIM.

At the time of joining RECLAIM, each RECLAIM facility is issued an annually declining allocation of emission credits (“RECLAIM Trading Credits” or “RTCs”) based on its historic production level (if the facility existed prior to January 1, 1993), external offsets it previously provided, and any Emission Reduction Credits (ERCs) generated at and held by the facility. Each RECLAIM facility’s RTC holdings constitute an annual emissions budget. RTCs may be bought or sold as the facility deems appropriate (see Chapter 2 – RTC Allocations and Trading).

RECLAIM facilities that permanently go out of business are removed from the active emitting RECLAIM universe, but may retain their remaining RTCs and participate in the trading market.

## **Universe Changes**

The RECLAIM rules include several mechanisms to exclude facilities originally included in the program and to add new facilities. The overall changes to the RECLAIM universe from the date of adoption (October 15, 1993) through June 30, 2012 (the last day of Compliance Year 2011 for Cycle 2 facilities) were: the inclusion of 121 facilities (including 33 facilities created by partial change of operator of existing RECLAIM facilities), the exclusion of 70 facilities, and the shutdown of 169 facilities. Thus, the net change in the RECLAIM universe from January 1, 1994 through June 30, 2012 was a decrease of 118 facilities from 394 to 276 facilities. From July 1, 2012 through the end of Compliance Year 2012 (December 31, 2012 for Cycle 1 facilities and June 30, 2013 for Cycle 2 facilities), two facilities were included, no facility was excluded, and five facilities shut down. These changes brought the total number of facilities in the RECLAIM universe to 273 facilities. The Compliance Year 2012 RECLAIM universe includes 241 NO<sub>x</sub>-only, no SO<sub>x</sub>-only, and 32 both NO<sub>x</sub> and SO<sub>x</sub> RECLAIM facilities. The list of active facilities in the RECLAIM universe as of the end of Compliance Year 2012 is provided in Appendix A.

### **Facility Inclusions and Exclusions**

Two facilities were included in the RECLAIM universe from July 1, 2012 through the end of Compliance Year 2012. One of these facilities elected to enter the RECLAIM program and the other was created through the partial change of operator of an existing RECLAIM facility (one facility was split into two). The facility that opted to enter RECLAIM was initially permitted post-October 15, 1993, and is considered “new” as defined by SCAQMD Rule 2000 – General. Appendix B lists these two facilities and the reasons for their inclusion.

Additionally, one existing NO<sub>x</sub> RECLAIM facility merged with a neighboring non-RECLAIM facility through change of operator of the RECLAIM facility to the operator of the non-RECLAIM facility, bringing the formerly non-RECLAIM facility into the program. However, this did not result in a change to the overall number of facilities in RECLAIM since it was a merger. No facility was excluded from the RECLAIM universe during Compliance Year 2012.

Staff has periodically initiated the process of reviewing past Annual Emission Reports from non-RECLAIM facilities to determine applicability of RECLAIM pursuant to Rule 2001(b) – Criteria for Inclusion in RECLAIM. Commencing in 2012, an annual review process was implemented. This facility inclusion process begins with SCAQMD staff compiling a list of non-RECLAIM (pollutant-specific) facilities that emitted NO<sub>x</sub> or SO<sub>x</sub> emissions greater than or equal to four tons per year, as reported under the Annual Emission Reporting (AER) program, for potential inclusion into RECLAIM. This part of the process involves screening for only emissions from equipment that are subject to RECLAIM (*e.g.*, emissions from on-site, off-road mobile sources are not included). From this initial list, each facility's business activity/operations are evaluated based on SCAQMD's records for possible categorical exemption pursuant to Rule 2001(i). Facilities that qualify under these categorical exemptions are removed from the list. The remaining facilities are informed of their potential inclusion into RECLAIM and are given the opportunity to provide records to demonstrate why the facility should not be included under RECLAIM. This may include additional information about the facility's operations that would qualify it for categorical exemption from RECLAIM pursuant to Rule 2001(i), or correcting their AER-reported emissions with supporting documentation. Once a facility has qualified for inclusion, a draft facility permit is prepared, sent to the facility for comments, finalized and issued.

In October 2012, SCAQMD informed 60 facilities in writing of potential inclusion into RECLAIM based upon their reported emissions in past years (58 potential NO<sub>x</sub> facilities and two potential SO<sub>x</sub> facilities, both of which were already NO<sub>x</sub> facilities). No facilities were included into RECLAIM during Compliance Year 2012 as a result of this evaluation process. Three facilities were included into NO<sub>x</sub> RECLAIM during the 2013 compliance year and are not addressed in this report because they did not impact the RECLAIM universe during Compliance Year 2012. At the time of composing this report, twenty-eight of the 60 facilities remain under review for inclusion. As stated above, the inclusion review process has now been shifted to an annual process. Additionally, 13 facilities identified through this annual process in 2013 are being evaluated for potential inclusion. Additional inclusions will be addressed in future RECLAIM annual program audits as facility eligibility is confirmed.

### **Facilities Permanently Ceasing Operations**

Five RECLAIM facilities permanently ceased operations between July 1, 2012 and the end of Compliance Year 2012. Two of the facilities each consolidated their operations with separate existing RECLAIM facilities within the SCAQMD. One power plant shut down as air quality mitigation for the start-up of a new power plant located in the SCAQMD. Another facility shut down its operation, its only piece of process equipment was rendered inoperable, and it sold the property to an adjacent facility. The facility that bought the property is a university and became RECLAIM exempt, and categorically excluded from

RECLAIM pursuant to Rule 2001(i)(2)(H). The last shutdown facility moved its operation to a new plant in a different state. Four of the five facilities permanently ceasing operations were in NOx RECLAIM, and the remaining shutdown facility was in both NOx and SOx RECLAIM. Appendix C lists these facilities and provides brief descriptions of the reported reasons for their closures.

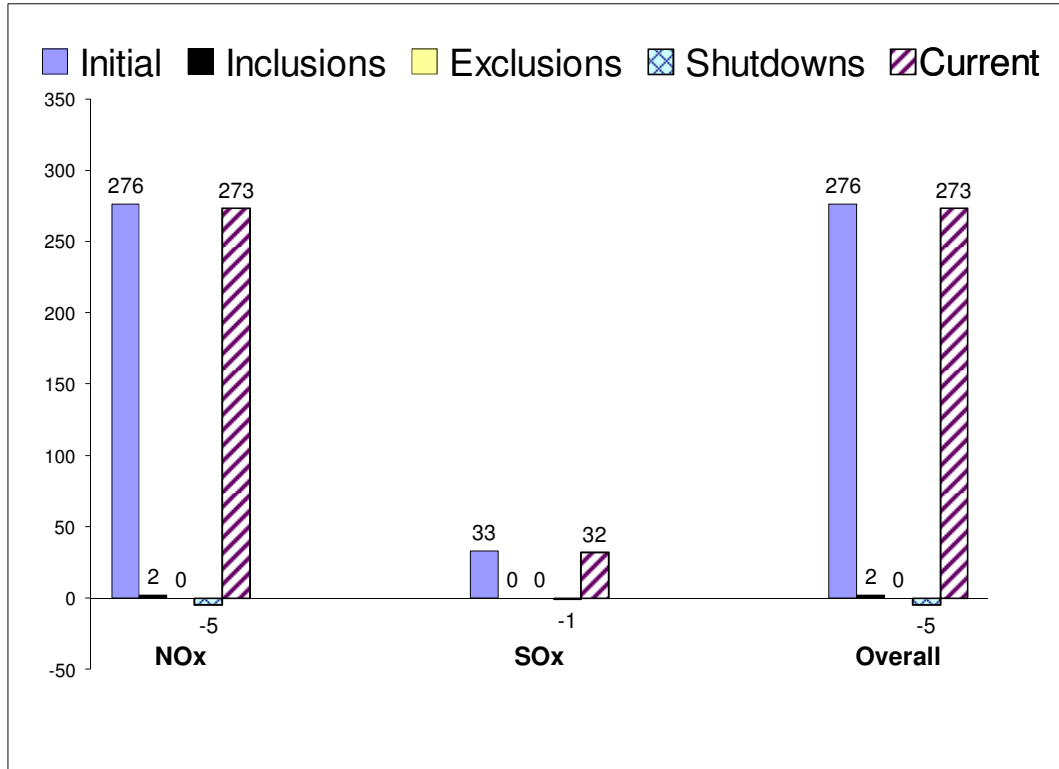
The above mentioned changes to the RECLAIM Universe resulted in a net decrease of three facilities in the RECLAIM universe. Table 1-1 summarizes changes in the RECLAIM universe between the start of the program and June 30, 2013. Overall changes to the RECLAIM universe that occurred from July 1, 2012 through June 30, 2013 are illustrated in Figure 1-1.

**Table 1-1  
RECLAIM Universe Changes**

	<b>NOx Facilities</b>	<b>SOx Facilities</b>	<b>Total* Facilities</b>
<b>Universe – October 15, 1993 (Start of Program)</b>	392	41	394
Inclusions – October 15, 1993 through June 30, 2012	121	12	121
Exclusions – October 15, 1993 through June 30, 2012	-69	-4	-70
Shutdowns – October 15, 1993 through June 30, 2012	-168	-16	-169
<b>Universe – June 30, 2012</b>	276	33	276
Inclusions – July 1, 2012 through end of Compliance Year 2012	2	0	2
Exclusions – July 1, 2012 through end of Compliance Year 2012	0	0	0
Shutdowns – July 1, 2012 through end of Compliance Year 2012	-5	-1	-5
<b>Universe – End of Compliance Year 2012</b>	273	32	273

\* Total Facilities is not the sum of NOx and SOx facilities due to the overlap of some facilities being in both the NOx and SOx universes.

**Figure 1-1**  
**Universe Changes from July 1, 2012 through End of Compliance Year 2012**



## CHAPTER 2

### RTC ALLOCATIONS AND TRADING

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#### Summary

*The allocation reduction in NOx RTCs adopted by the Governing Board on January 7, 2005 was completed in Compliance Year 2011. The amendments to SOx RECLAIM, which the Governing Board adopted on November 5, 2010 to phase in SOx reductions, will commence in Compliance Year 2013 and continue through Compliance Year 2019. That rule amendment will result in an overall reduction of 5.7 tons/day (or 48.4%) in SOx allocations when fully implemented (for Compliance Year 2019 and beyond). As a result, there were no programmatic allocation reductions in NOx or SOx RTCs during Compliance Year 2012.*

*The NOx RTC supply increased by 12.2 tons and the SOx RTC supply decreased by 16.2 tons during Compliance Year 2012. All of these changes, except 0.7 tons of NOx RTCs, were due to allocation adjustments for clean fuel production pursuant to Rule 2002(c)(12). The remaining 0.7 tons of increased NOx RTC supply was issued as the result of a merger between a RECLAIM facility and an adjacent non-RECLAIM facility (issued based on the operational history of the previously non-RECLAIM facility pursuant to Rule 2002). As a result, the NOx and SOx RTC supplies for Compliance Year 2012 were 9,689 tons and 4,283 tons, respectively.*

*During calendar year 2013, there were 367 registered RTC transactions with a total value of almost \$30.4 million traded, excluding the values reported for "swap" transactions (exchange of RTCs for other RTCs, rather than for money). Since the inception of the RECLAIM program in 1994, a total value of over \$1.05 billion dollars has been traded in the RTC trading market, excluding swaps. In terms of volume traded in calendar year 2013, a total of 4,443 tons of discrete NOx RTCs, 557 tons of discrete SOx RTCs, 1,779 tons of infinite-year block (IYB) NOx RTCs and 438 tons of IYB SOx RTCs were traded. RTC trading market activity during calendar year 2013 was comparable in terms of number of trades, but substantially higher in total value (by 62%) and volume (by 42%) compared to calendar year 2012.*

*The average annual prices of discrete-year NOx RTCs traded during calendar year 2013 were \$549 per ton for Compliance Year 2012 RTCs, \$1,080 per ton for Compliance Year 2013 RTCs, and \$1,881 per ton for Compliance Year 2014 RTCs. The average annual prices for discrete-year SOx RTCs traded during the same period were \$291 per ton for Compliance Year 2012 RTCs and \$485 per ton for RTCs for Compliance Year 2013. Therefore, the average annual prices for discrete NOx and SOx RTCs for all compliance years remained well below the \$15,000 per ton threshold to evaluate and review the compliance aspects of the program set forth by SCAQMD Rule 2015, as well as the \$40,067 per ton of NOx and \$28,848 per ton of SOx discrete RTCs pre-determined overall program review thresholds established by the Governing Board pursuant to Health and Safety Code §39616(f).*

*The average annual price during calendar year 2013 for IYB NOx RTCs was \$45,914 per ton, and the average annual price for IYB SOx RTCs was \$181,653 per ton. Therefore, average annual IYB RTC prices did not exceed the \$601,010 per ton of IYB NOx RTCs or the \$432,727 per ton of IYB SOx RTCs pre-determined overall program review thresholds established by the Governing Board pursuant to Health and Safety Code §39616(f).*

*Investors were again active in the RTC market during calendar year 2013. They were involved in 134 of the 229 discrete NOx and SOx trade registrations with price and 19 of 21 IYB NOx and SOx trades with price. Excluding one set of trades resulting from a set of changes of operator between two companies, investors were involved in 31% of total value and 44% of total volume for discrete NOx trades, and 2% of total value and 1% of total volume for discrete SOx trades. Investors were involved in 100% of the IYB NOx and SOx trades with price. At the end of calendar year 2013, investors' holdings of IYB NOx RTCs and IYB SOx RTCs were 4.9% and 0.9% of the total RECLAIM RTCs, respectively.*

## **Background**

SCAQMD issues each RECLAIM facility emissions allocations for each compliance year, according to the methodology specified in Rule 2002 – Allocations for Oxides of Nitrogen (NOx) and Oxides of Sulfur (SOx), based on its historic production levels as reported to SCAQMD in its emission inventory reports (if the facility existed prior to January 1, 1993) and its listed starting emission factor in Tables 1 or 2, any qualified<sup>1</sup> external offsets it previously provided, and any unused ERCs generated at and held by the facility. These allocations are issued as RTCs, denominated in pounds of NOx or SOx with a specified 12-month term. Each RTC may only be used for emissions occurring within the term of that RTC. The RECLAIM program has two staggered compliance cycles—Cycle 1 with a compliance period of January 1 through December 31 of each year, and Cycle 2 with a compliance period of July 1 of each year through June 30 of the following year. Each RECLAIM facility is assigned to either Cycle 1 or Cycle 2 and the RTCs it is issued (if any) have corresponding periods of validity.

The issuance of allocations for future years provides RECLAIM facilities guidance regarding their future emission reduction requirements. Facilities can plan their compliance strategies by reducing actual emissions or securing needed RTCs through trade registrations (or a combination of the two), based on their operational needs.

RECLAIM facilities may acquire RTCs issued for either cycle through trading and apply them to emissions, provided that the RTCs are used for emissions occurring within the RTCs' period of validity and the trades are made during the appropriate time period. RECLAIM facilities have until 30 days after the end of each of the first three quarters of each compliance year to reconcile their quarterly and year-to-date emissions, and until 60 days after the end of each compliance year to reconcile their last quarter and total annual emissions by securing adequate RTCs. Please note that, although other chapters in this report

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<sup>1</sup> Only external offsets provided at a one-to-one offset ratio after the base year used for allocation quantification purposes.

present and discuss Compliance Year 2012 data, RTC trading and price data discussed in this chapter are for calendar year 2013.

## **RTC Allocations and Supply**

The methodology for determining RTC allocations is established by Rule 2002. According to the rule, allocations may change when the universe of RECLAIM facilities changes, emissions associated with the production of re-formulated gasoline increase or decrease, reported historical activity levels are updated, or starting emission factors are changed. In addition to these SCAQMD-allocated RTCs, RTCs may be generated by conversion of emissions reduction credits from mobile and area sources pursuant to approved protocols. The total RTC supply in RECLAIM is made up of all RECLAIM facilities' allocations, conversions of ERCs owned by RECLAIM and non-RECLAIM facilities (the window of opportunity to convert ERCs to RTCs other than during the process of a non-RECLAIM facility entering the program closed June 30, 1994), emissions associated with the production of re-formulated gasoline, and conversion of emission reduction credits from mobile sources and area sources pursuant to approved protocols. Changes in the RTC supply during Compliance Year 2012 are discussed below.

## **Allocations Adjustments Due to Inclusion and Exclusion of Facilities**

Allocations for a facility are based on the facility's historical operations, their starting emission factor, emission reduction requirements under the command-and-control rules subsumed by RECLAIM, AQMP control measures subsumed by RECLAIM, and adjustments for Best Available Retrofit Control Technology (BARCT) equivalency. Facilities entering RECLAIM after 1994 may receive allocations just like facilities that were included at the beginning of the program. However, allocations issued for these facilities are only applicable for the compliance year upon entry and forward. In addition, these facilities are issued allocations and Non-tradable/Non-usable Credits for Compliance Year 1994 for the sole purpose of establishing their starting allocation to ensure compliance with offset requirements under Rule 2005 - New Source Review for RECLAIM and the trading zone restriction to ensure net ambient air quality improvement within the sensitive zone established by Health and Safety Code §40410.5. These Compliance Year 1994 credits are not allowed to be used to offset current emissions because they are expired.

One new facility opted into the RECLAIM program and another facility was created through a partial change of operator in Compliance Year 2012. Both facilities belong to the NO<sub>x</sub> RECLAIM program. However, neither facility qualified for allocations pursuant to Rule 2002 – Allocations for Oxides Nitrogen (NO<sub>x</sub>) and Oxides of Sulfur (SO<sub>x</sub>). Additionally, one existing NO<sub>x</sub> RECLAIM facility merged with a neighboring non-RECLAIM facility through change of operator of the RECLAIM facility to the operator of the non-RECLAIM facility. This previously non-RECLAIM facility is an existing facility as defined in Rule 2002 and was therefore eligible for additional allocations. A total of 0.7 tons per year of NO<sub>x</sub> allocations were issued to the merged facility for the previously non-RECLAIM facility. There were no facilities excluded from the RECLAIM program in Compliance Year 2012.

## **Allocations Adjustments Due to Clean Fuel Production**

Rule 2002(c)(12) – Clean Fuel Adjustment to Starting Allocation, provides refineries with RTCs to compensate for their actual emissions increases caused by the production of CARB Phase II reformulated gasoline. The amount of these RTCs is based on actual emissions for the subject compliance year and historical production data. Based on the historical production data submitted, qualifying refineries were issued in 2000 an aggregate baseline of 86.5 tons of NOx and 42.3 tons of SOx for Compliance Year 1999, 101.8 tons of NOx and 41.4 tons of SOx for Compliance Year 2000, and 98.4 tons of NOx and 40.2 tons of SOx for each subsequent Compliance Year. These refineries are required to submit, at the end of each compliance year in their Annual Permit Emissions Program (APEP) report, records to substantiate actual emission increases due solely to the production of reformulated gasoline. If actual emission increases for a subject year are different than the projected amount, the RTCs issued are adjusted accordingly (*i.e.*, excess RTCs issued are deducted if emissions were less than projected; conversely, additional RTCs are issued if emissions were higher than projected).

As a result of the amendment to Rule 2002 in January 2005 to further reduce RECLAIM NOx allocations, the NOx historical baseline Clean Fuel Adjustments for Compliance Year 2007 and subsequent years held by the facility were also reduced by the appropriate factors as stated in Rule 2002(f)(1)(A). On the other hand, Rule 2002(c)(12) entitles refineries to a Clean Fuels adjustment based on actual emissions. Therefore, each refinery is subject to an adjustment at the end of each compliance year equal to the difference between the amount of actual emission increases due solely to production of reformulated gasoline at each refinery and the amount of credits it was issued in 2000 after discounting by the factors for the corresponding compliance year. For Compliance Year 2012, the overall effect of adjusting NOx allocations to account for these differences was a total of 11.5 tons of NOx RTCs (0.1% of total NOx allocation for Compliance Year 2012) added to, and 16.2 tons of SOx RTCs (0.4% of total SOx allocation for Compliance Year 2012) deducted from refineries' Compliance Year 2012 holdings.

## **Changes in RTC Allocations Due to Activity Corrections**

RECLAIM facilities' allocations are determined by their reported historical activity levels (*e.g.*, fuel usage, material usage, or production). If a facility makes corrections to its reported activity levels, the allocation is adjusted accordingly. There were no changes in RTC allocations due to activity corrections in Compliance Year 2012.

## **Conversions of Other Types of Emission Reduction Credits**

Conversions of Mobile Source Emission Reduction Credits (MSERCs) and other types of emission reduction credits, other than regular stationary source ERCs issued under Regulation XIII – New Source Review, to RTCs are allowed under Rule 2008 – Mobile Source Credits, and several programs under Regulation XVI – Mobile Source Offset Programs and Regulation XXV – Intercredit Trading. Conversion of these credits to RTCs is allowed based on the respective approved protocol specified in each rule. Currently, Rules 1610 – Old-Vehicle Scrapping and 1612 – Credits for Clean On-Road Vehicles allow the creation of



MSERCs. However, there are no State Implementation Plan (SIP) approved protocols for conversion of MSERCs to RTCs. As a result, no new RTCs were issued as a result of conversion of other types of emission reduction credits in Compliance Year 2012.

### Net Changes in RTC Allocations

The changes to RTC supplies described in the above sections resulted in a net increase of 12.2 tons of NOx RTCs (0.13% of the total) and a decrease of 16.2 tons of SOx RTCs (0.38% of total) for Compliance Year 2012. Table 2-1 summarizes the changes in NOx and SOx RTC supplies that occurred in Compliance Year 2012 pursuant to Rule 2002.

**Table 2-1  
Changes in NOx and SOx RTC Supplies during Compliance Year 2012 (tons/year)**

Source	NOx	SOx
Universe changes	0.7	0
Clean Fuel/Reformulated Gasoline	11.5	-16.2
Activity corrections	0	0
MSERCs	0	0
<b>Net change</b>	<b>12.2</b>	<b>-16.2</b>

Note: The data in this table represents the changes that occurred over the course of Compliance Year 2012 to the Compliance Year 2012 aggregate NOx and SOx RTC supplies originally issued pursuant to Rule 2002, not the difference between 2012 aggregate RTC supply and that for any other compliance year.

### Allocation Reduction Resulting from BARCT Review

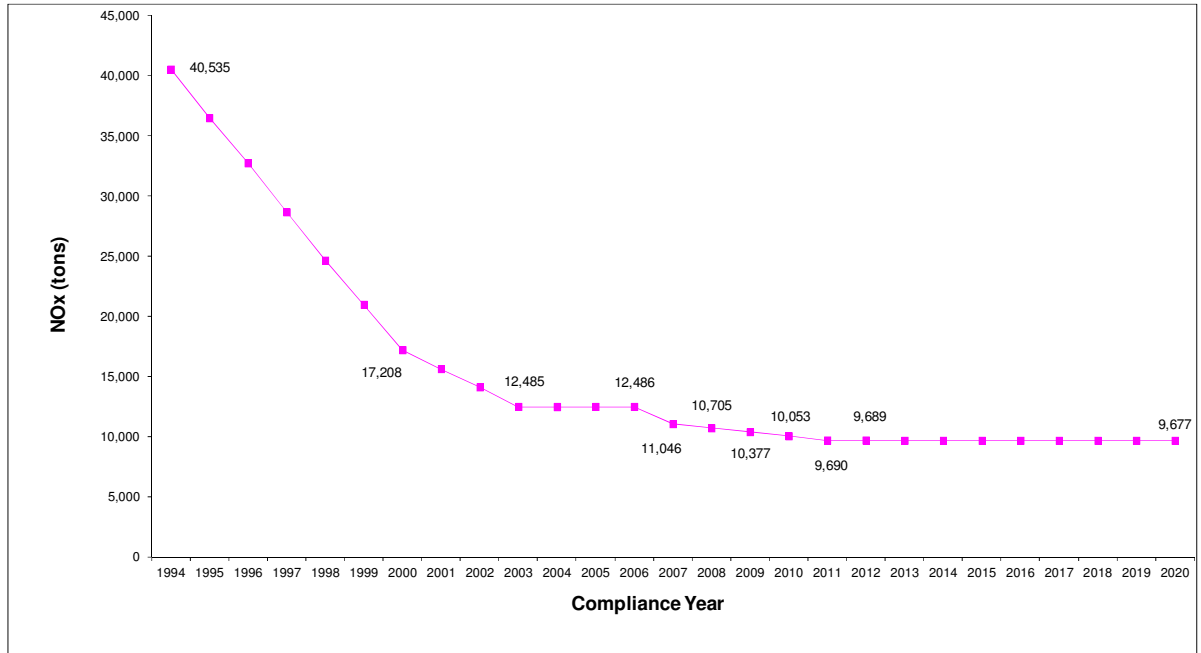
Pursuant to California Health and Safety Code §40440, SCAQMD is required to monitor the advancement in BARCT and periodically re-assess the RECLAIM program to ensure that RECLAIM achieves equivalent emission reductions to the command-and-control BARCT rules it subsumes. This assessment is done periodically as part of AQMP development. This process resulted in 2003 AQMP Control Measure #2003 CMB-10 – Additional NOx Reductions for RECLAIM (NOx) calling for additional NOx reductions from RECLAIM sources. SCAQMD staff then started the rule amendment process, including a detailed analysis of control technologies that qualified as BARCT for NOx, and held lengthy discussions with stakeholders—including regulated industry, environmental groups, the California Air Resources Board (CARB), and the United States Environmental Protection Agency (USEPA). On January 7, 2005, the Governing Board implemented CMB-10 by adopting changes to the RECLAIM program that resulted in a 22.5% reduction of NOx allocations from all RECLAIM facilities. The reductions were phased in commencing in Compliance Year 2007 and have been fully implemented since Compliance Year 2011.

Similarly, on November 5, 2010, the Governing Board adopted changes to the RECLAIM program implementing the 2007 AQMP Control Measure CMB-02 – Further SOx Reductions for RECLAIM (SOx). Specifically, these amendments will result in an overall reduction of 5.7 tons SOx per day when fully implemented in Compliance Year 2019 (the reductions are being phased in from Compliance Year 2013 through Compliance Year 2019: 3.0 tons per day in 2013, 4.0 tons

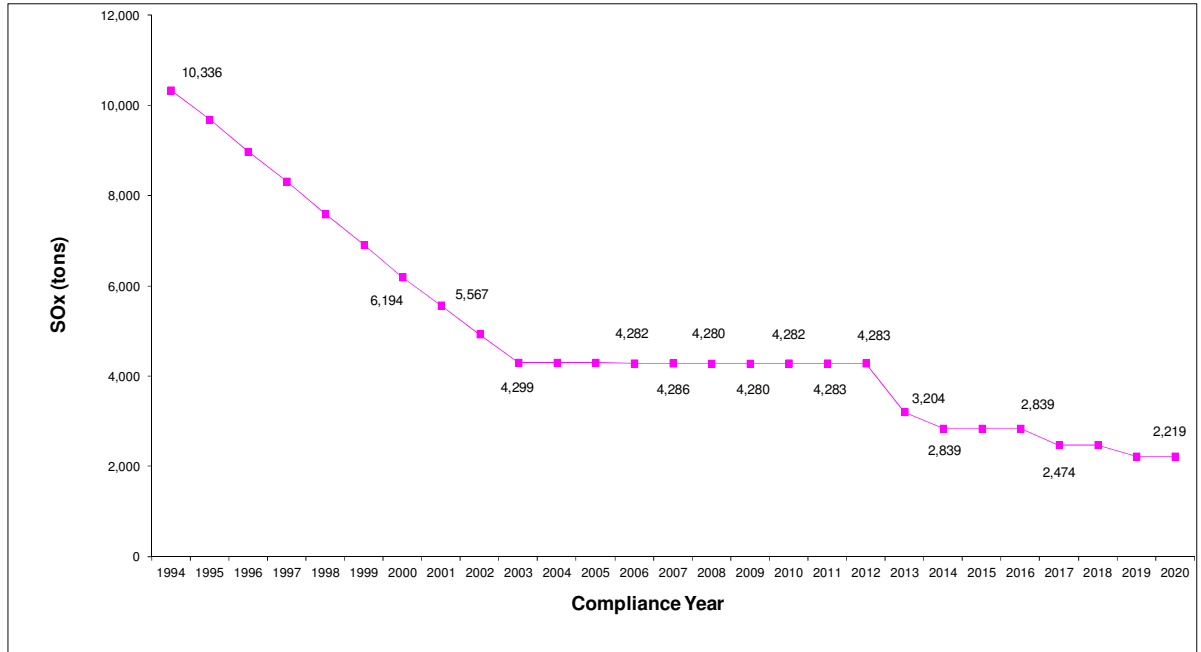
per day in years 2014 through 2016, 5.0 tons per day in 2017 and 2018, and a cumulative 5.7 tons per day starting in 2019 and continuing thereafter). This reduction in SOx is an essential part of the South Coast Air Basin's effort in attaining the federal 24-hour average PM2.5 standard by the year 2020.

Figures 2-1 and 2-2 illustrate the total NOx and SOx RTC supplies through the end of Compliance Year 2020 incorporating all the changes discussed above.

**Figure 2-1**  
**NOx RTC Supply**



**Figure 2-2  
SOx RTC Supply**



On December 7, 2012 the SCAQMD Governing Board adopted the 2012 AQMP, which includes Control Measure CMB-01 – Further NOx Reductions for RECLAIM, calling for reductions of NOx emissions within the RECLAIM program by 3 to 5 tons per day. The rule development and adoption process for this latest NOx reduction is currently ongoing. The actual amount of NOx reduction will be determined at the completion of the public process and will be submitted to the Governing Board for its consideration at a public hearing later in 2014.

**Upcoming Proposal for Credit Generation**

Proposed Rule 2511 – Credit Generation Program for Locomotive Head End Power Unit Engines and Proposed Rule 2512 – Credit Generation Program for Ocean-Going Vessels at Berth are two potential rules that could generate credits for the RECLAIM program. Proposed Rule 2511 would allow generation of emission reduction credits through the voluntary repowering of diesel-fueled auxiliary head end power generating units on passenger locomotives with cleaner engines. Proposed Rule 2512 would allow generation of emission reduction credits through the control of exhaust emissions from auxiliary engines and/or boilers used on Ocean-Going Vessels while at berth in a commercial marine port. Both of these two proposed rules are presently targeted for Governing Board consideration as part of the Rule and Control Measure Forecast for calendar year 2014, as approved by the Governing Board at the January 10, 2014 Board meeting.

**RTC Price Reporting Methodology**

RTC trades are reported to SCAQMD as one of two types: discrete-year RTC transactions or infinite-year block (IYB) transactions (trades that involve blocks of

RTCs with a specified start year and continuing into perpetuity). Prices for discrete-year trades are reported in terms of dollars per pound and prices for IYB trades are reported as total dollar value for total amount of IYB RTCs traded. In addition, the trading partners are required to identify any swap trades because prices reported for swap trades are based on the agreed upon value of the trade by the participants, and do not involve exchange of funds for the total value agreed upon. As such, the reported prices for swap trades may be somewhat arbitrary and are, therefore, excluded from the calculation of annual average prices. In this report, the average annual prices for discrete-year RTCs are averaged in dollars per ton of RTCs for each compliance year, while the average price for IYB RTCs are averaged as a total dollar value per ton of IYB RTCs.

Rule 2015(b)(6) specifies that, if the average annual price of discrete NOx or SOx RTCs exceeds \$15,000 per ton, the Executive Officer will conduct an evaluation and review of the compliance and enforcement aspects of RECLAIM. The Governing Board has also established average RTC price overall program review thresholds pursuant to Health and Safety Code §39616(f). Unlike the \$15,000 per ton threshold for review of the compliance and enforcement aspects of RECLAIM, these overall program review thresholds are adjusted by CPI each year. For RTC transactions occurring in calendar year 2013, the overall program review thresholds in 2013 dollars are \$40,067 per ton of discrete-year NOx RTCs, \$28,848 per ton of discrete-year SOx RTCs, \$601,010 per ton of infinite-year NOx RTCs, and \$432,727 per ton of infinite-year SOx RTCs.

## **RTC Trading Activity Excluding Swaps**

### **Overall Trading Activity**

The RTC market activity in calendar year 2013 was comparable to the market activity in calendar year 2012 in terms of the number of transactions. The calendar year 2013 trading activity—367 total registered trade transactions (344 NOx trades and 23 SOx trades)—was slightly higher than the number of trade transactions in calendar year 2012 (363 total registered trade transactions). These trades included discrete and IYB RTCs traded with prices, discrete and IYB RTC transfers with zero price, and discrete and IYB RTC swap trades.

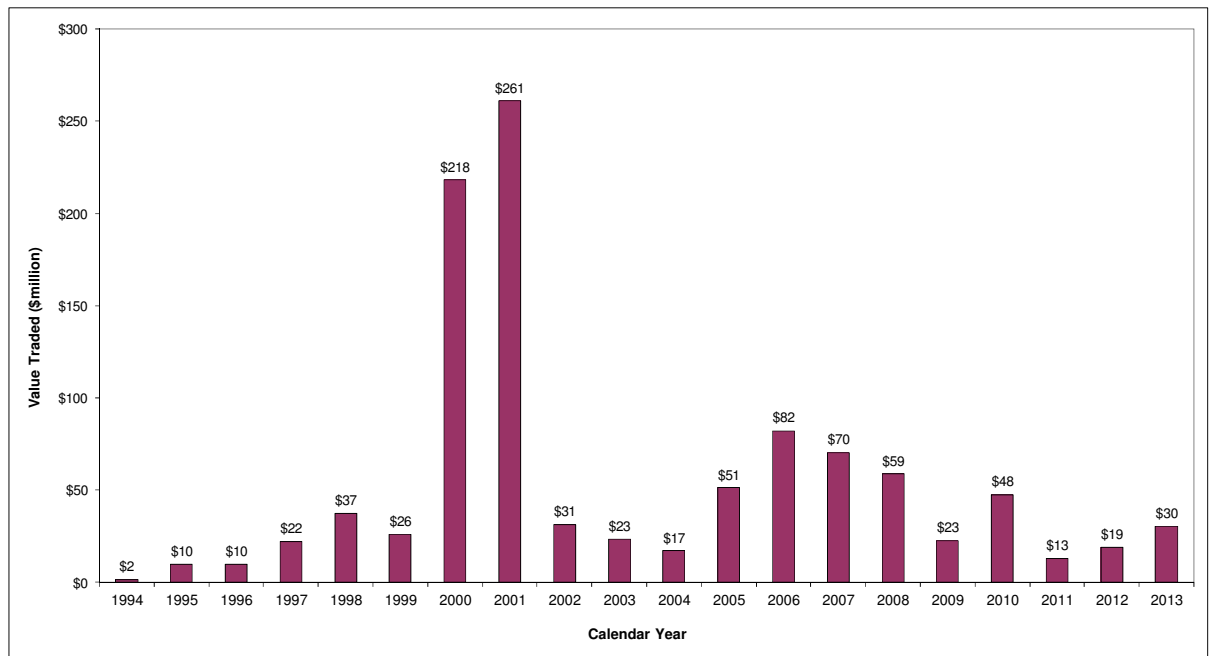
Although the number of transactions in calendar year 2013 was comparable to that in calendar year 2012, the value and volume (pounds) traded in calendar year 2013 were substantially higher (62% and 42%, respectively) than those traded in calendar year 2012. Excluding swap trades, a total value of almost \$30.4 million was traded in calendar year 2013 (\$15.9 million for NOx and \$14.5 million for SOx)—substantially higher than the total value of \$18.8 million traded in calendar year 2012 (\$4.2 million for NOx and \$14.6 million for SOx). The increase in the total value traded (also total volume) was largely due to the sale of NOx and SOx RTCs resulting from a set of changes of operator between two companies, which accounted for \$23.5 million (77.3% of the total value traded). Further details of the trades resulting from these changes of operator between two companies are presented at the end of this section. Figure 2-3 shows historical trading values (excluding swaps). Figure 2-4 summarizes overall trading activity (excluding swaps) in calendar year 2013 by pollutant.

With respect to volume traded (also excluding swap trades), 5,000 tons of discrete RTCs and 2,216 tons of IYB RTCs were traded in calendar year 2013.

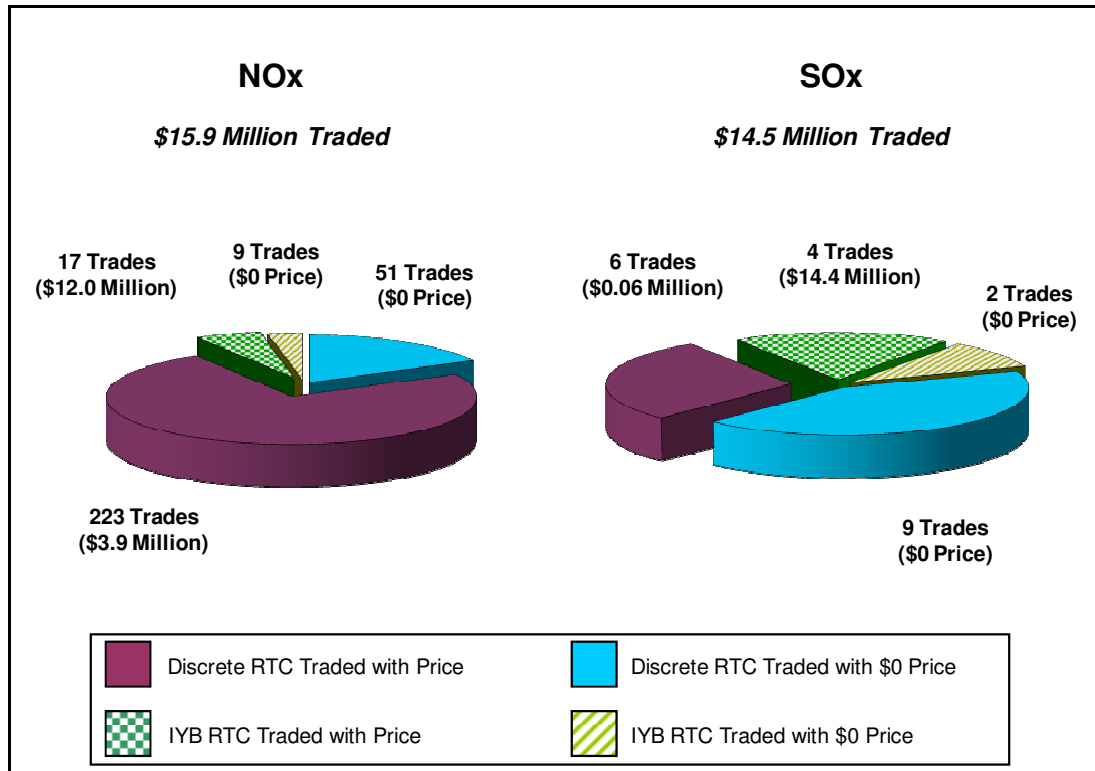
This is significantly higher than the volume traded in calendar year 2012 (4,392 tons of discrete RTCs and 700 tons of IYB RTCs). In calendar year 2013, there were 3,370 tons of discrete NOx RTCs and 83 tons of discrete SOx traded with price and 1,073 tons of discrete NOx and 474 tons of discrete SOx traded without price. In addition, there were 261 tons of IYB NOx and 79 tons of IYB SOx traded with price and, 1,518 tons of IYB NOx, and 358 tons of IYB SOx traded with zero price. Additional information on the discrete and IYB trading activities, value, and volume are discussed later in this chapter.

There were 71 trades with zero price in calendar year 2013. RTC transfers with zero price generally occur when a seller transfers or escrows RTCs to a broker pending transfer to the purchaser with price, when there is a transfer between facilities under common operator, when a facility is retiring RTCs for a settlement agreement or pursuant to variance conditions, or when there is a transfer between facilities that have gone through a change of operator. Trades with zero price also occur when the trading parties have mutual agreements where one party provides a specific service (*e.g.*, providing steam or other process components) for the second party. In return, the second party will transfer the RTCs necessary to offset emissions generated from the service.

**Figure 2-3**  
**Annual Trading Values for NOx and SOx (Excluding Swaps)**



**Figure 2-4  
Calendar Year 2013 Overall Trading Activity (Excluding Swaps)**



**Discrete RTC Trading Activity**

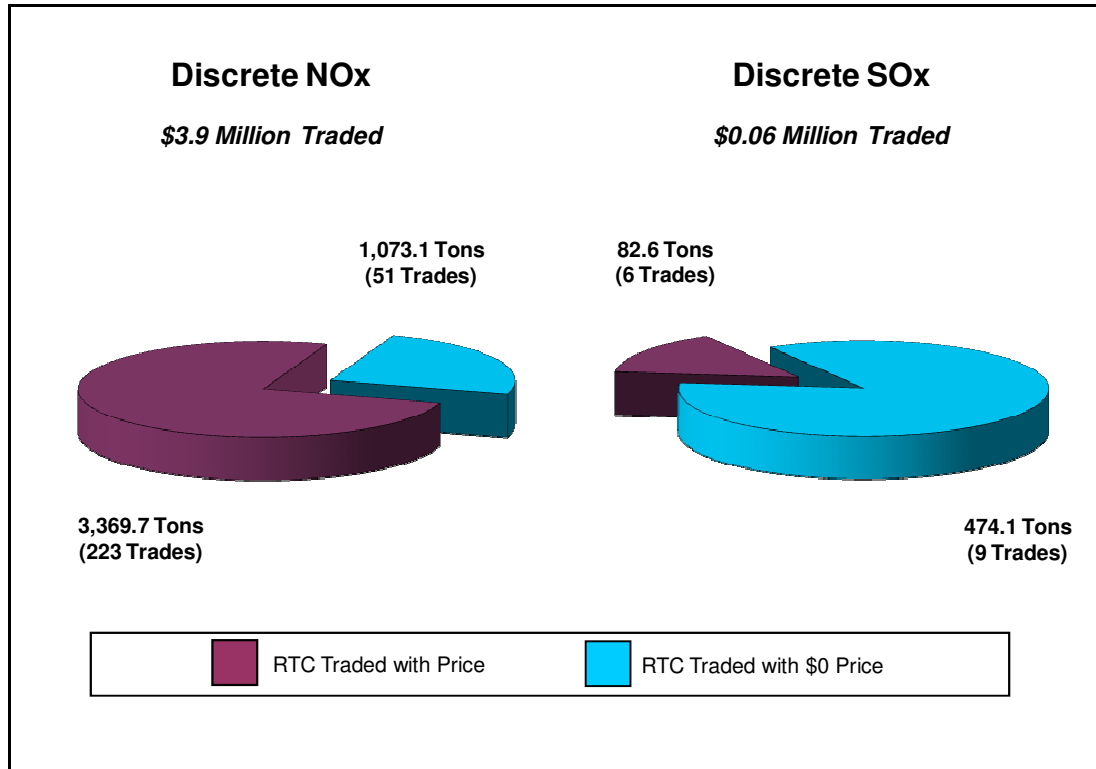
In calendar year 2013, there were a total of 274 discrete NOx RTC trades (223 trades with price and 51 trades with zero price) and 15 discrete SOx RTC trades (six trades with price and nine trades with zero price), excluding swap trades. Most of the trading of discrete NOx RTCs included RTCs for Compliance Years 2012 through 2015. There was one NOx trade that involved RTCs for Compliance Years 2016, 2017, and 2018. Most of the trading of discrete SOx RTCs included RTCs for Compliance Years 2012 and 2013. There was one SOx trade that involved RTCs for Compliance Years 2015 and 2016.

Discrete RTC trading values increased significantly in calendar year 2013. The 223 NOx trades with price totaled \$3.9 million in value. This is almost double the \$2.0 million in calendar year 2012. The six discrete SOx trades with price totaled \$0.06 million in value, which also is double the \$0.03 million traded in calendar year 2012.

The overall quantity of discrete NOx RTCs traded in calendar year 2013, 4,443 tons, increased from 3,301 tons traded in calendar year 2012. Total quantity of discrete NOx RTCs traded with price also increased to 3,370 tons in 2013 from 2,150 tons in calendar year 2012. There were a total of 1,073 tons of discrete NOx RTCs traded with zero price in 2013. The overall quantity of discrete SOx RTCs traded decreased from 1,091 tons to 557 tons. However, the quantity of discrete SOx RTCs traded with price more than doubled from 35 tons in 2012 to

83 tons in 2013. There were also 474 tons of discrete SOx RTCs trades with zero price. Figure 2-5 illustrates the trading activity of discrete RTCs (excluding swaps) for calendar year 2013.

**Figure 2-5  
Calendar Year 2013 Trading Activity for Discrete RTCs (Excluding Swaps)**



**IYB RTC Trading Activity**

In calendar year 2013, there were 26 IYB NOx trades and six IYB SOx trades. The IYB NOx trades included Compliance Years 2012, 2013, 2014, or 2015 as the start year, while the IYB SOx trades included Compliance Years 2013 or 2014 as the start year. Of the 26 IYB NOx trades, 17 trades were with price and 9 trades with zero price. Of the six IYB SOx trades, four trades were with price and two trades were with zero price.

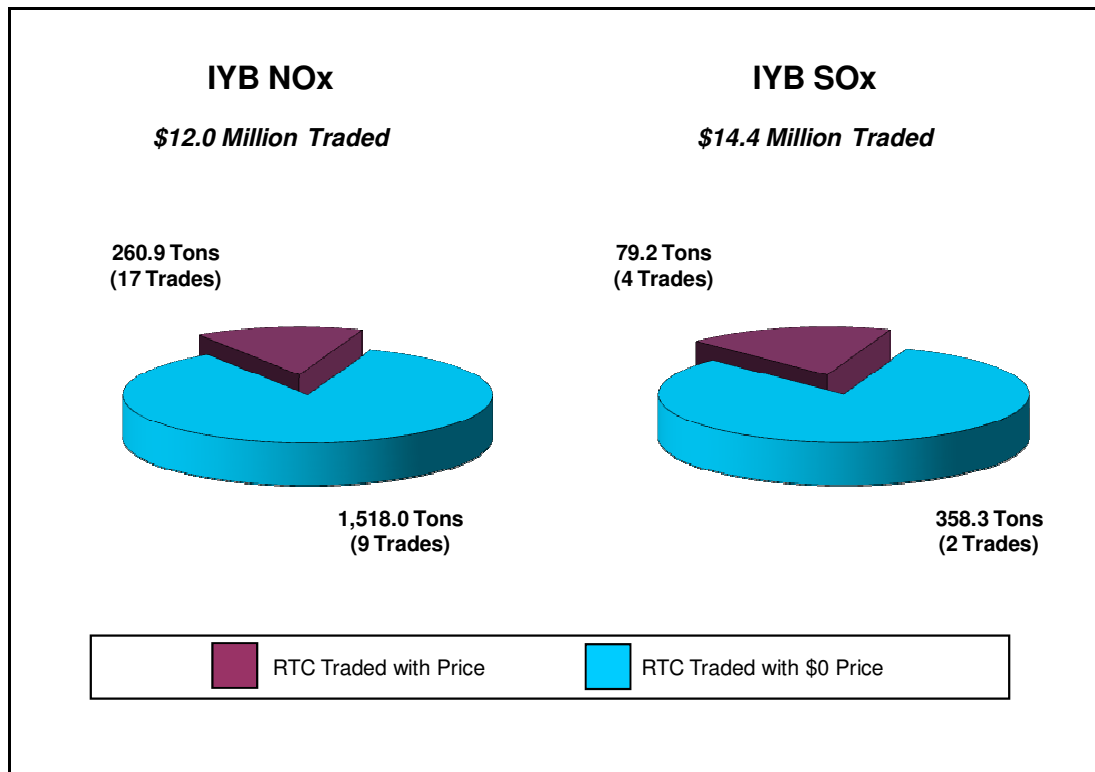
The 17 IYB NOx trades with price totaling \$12 million in calendar year 2013 were much higher than the 13 trades with price for \$2.2 million in 2012. The four IYB SOx RTC trades with price totaling \$14.4 million in calendar year 2013 were just slightly lower than the \$14.6 million traded in 2012.

The total quantity of 1,779 tons of IYB NOx traded in Calendar Year 2013 was much higher than the 131 tons traded in Calendar Year 2012. There were 261 tons of IYB NOx traded with price in calendar year 2013 compared to only 47 tons traded in calendar year 2012. The total quantity of IYB SOx traded in Calendar Year 2013 was 438 tons, which is less than the 569 tons traded in

Calendar Year 2012. The 79.2 tons of IYB SOx traded with price in 2013 also was lower than the 116 tons traded in calendar year 2012.

In addition to trades with price, there were also nine IYB NOx trades totaling 1,518 tons and two IYB SOx trades totaling 358 tons traded with zero price in calendar year 2013. Of the IYB NOx RTCs traded without price, 1,496 tons were the result of changes of operator transferring their SCAQMD issued allocations from their old operators to their new operators. All 358 tons of the IYB SOx RTCs traded without price were due to a change of operator and the associated transfer of IYB SOx RTCs that were originally issued by SCAQMD. Figure 2-6 illustrates the calendar year 2013 IYB RTC trading activity excluding swap trades.

**Figure 2-6**  
**Calendar Year 2013 Trading Activity for IYB RTCs (Excluding Swaps)**

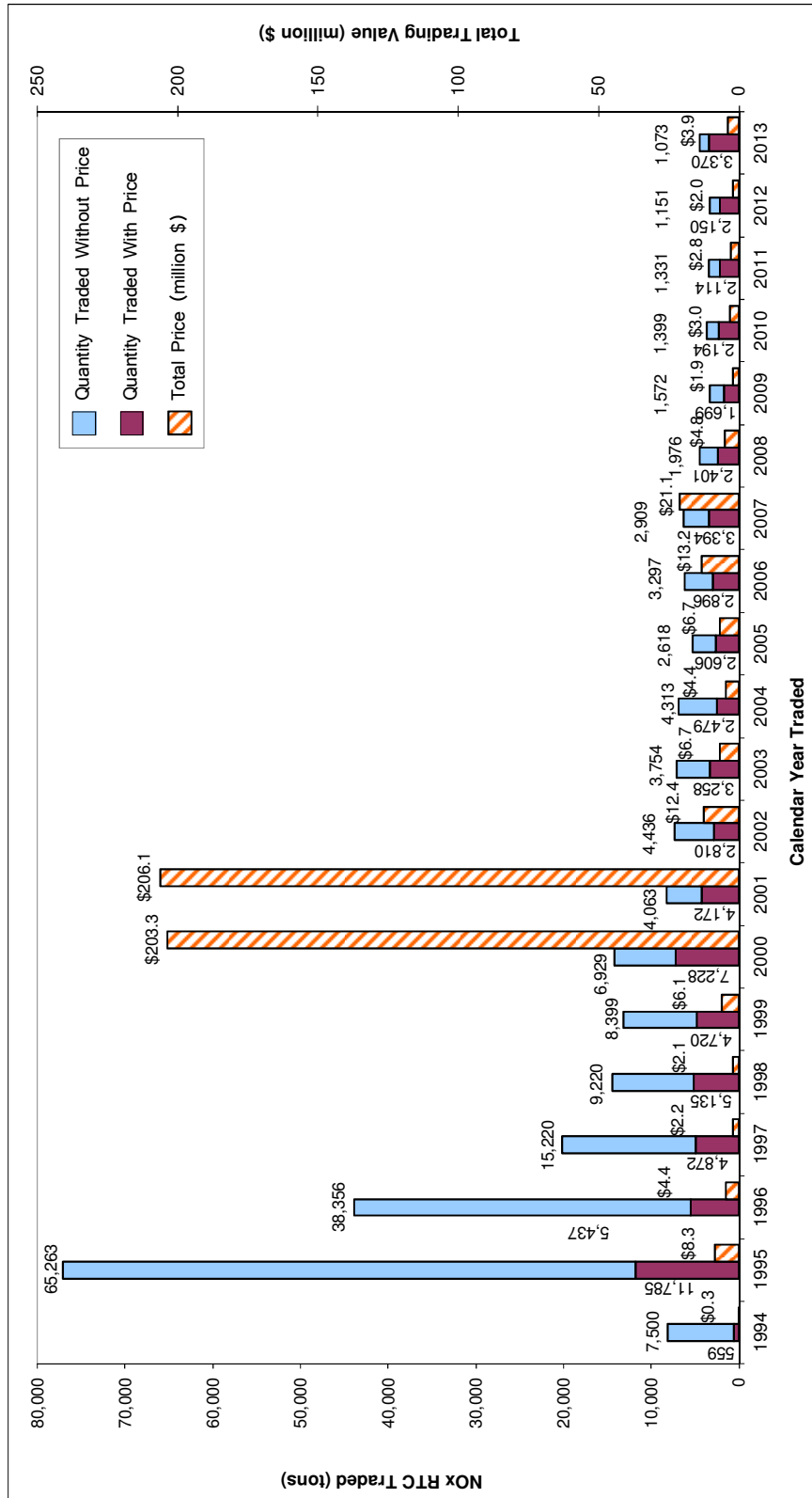


Prior to the amendment of Rule 2007 – Trading Requirements in May 2001, swap information and details of discrete and IYB trades were not required to be provided by trade participants. In compiling data for calendar years 1994 through part of 2001, any trade registration involving IYB RTCs was considered as a single IYB trade and swap trades were assumed to be nonexistent. Trading activity since inception of the RECLAIM program is illustrated in Figures 2-7 through 2-10 (discrete NOx trades, discrete SOx trades, IYB NOx trades, and IYB SOx trades, respectively) based on the trade reporting methodology described earlier in this report.



As mentioned in the beginning of this section, there was a set of changes of operator between two companies in 2013. These changes resulted in significant amounts of RTCs transferred between these two companies both with and without prices and were the main cause in the increased trading activity in 2013. Some of the transfers of RTCs resulting from these changes of operator occurred with price and the others were with \$0 price. The transfers with \$0 included only RTCs that were originally issued to the facilities by SCAQMD and included 468 tons of discrete NOx RTCs, 128 tons of discrete SOx RTCs, 771 tons of IYB NOx RTCs and 358 tons of IYB SOx RTCs. The other transfers included RTCs that were previously purchased from other sources by the previous operator and included 48 tons of discrete year SOx RTCs (58% of total volume of discrete SOx RTCs traded with price), 202 tons of IYB NOx RTCs (77% of total volume of IYB NOx RTCs traded with price) and 78.7 tons of IYB SOx RTCs (99% of total volume of IYB SOx RTCs traded with price). These transfers totaled \$0.04 million for the discrete year SOx RTCs (67% of total value discrete SOx RTCs traded), \$9.2 million for the NOx IYB RTCs (77% of total value of NOx IYB RTCs traded) and \$14.3 million for the IYB SOx RTCs (84% of total value of SOx IYB RTCs traded).

Figure 2-7  
Discrete NOx RTC Trades (Excluding Swaps)



**Figure 2-8  
Discrete SOx RTC Trades (Excluding Swaps)**

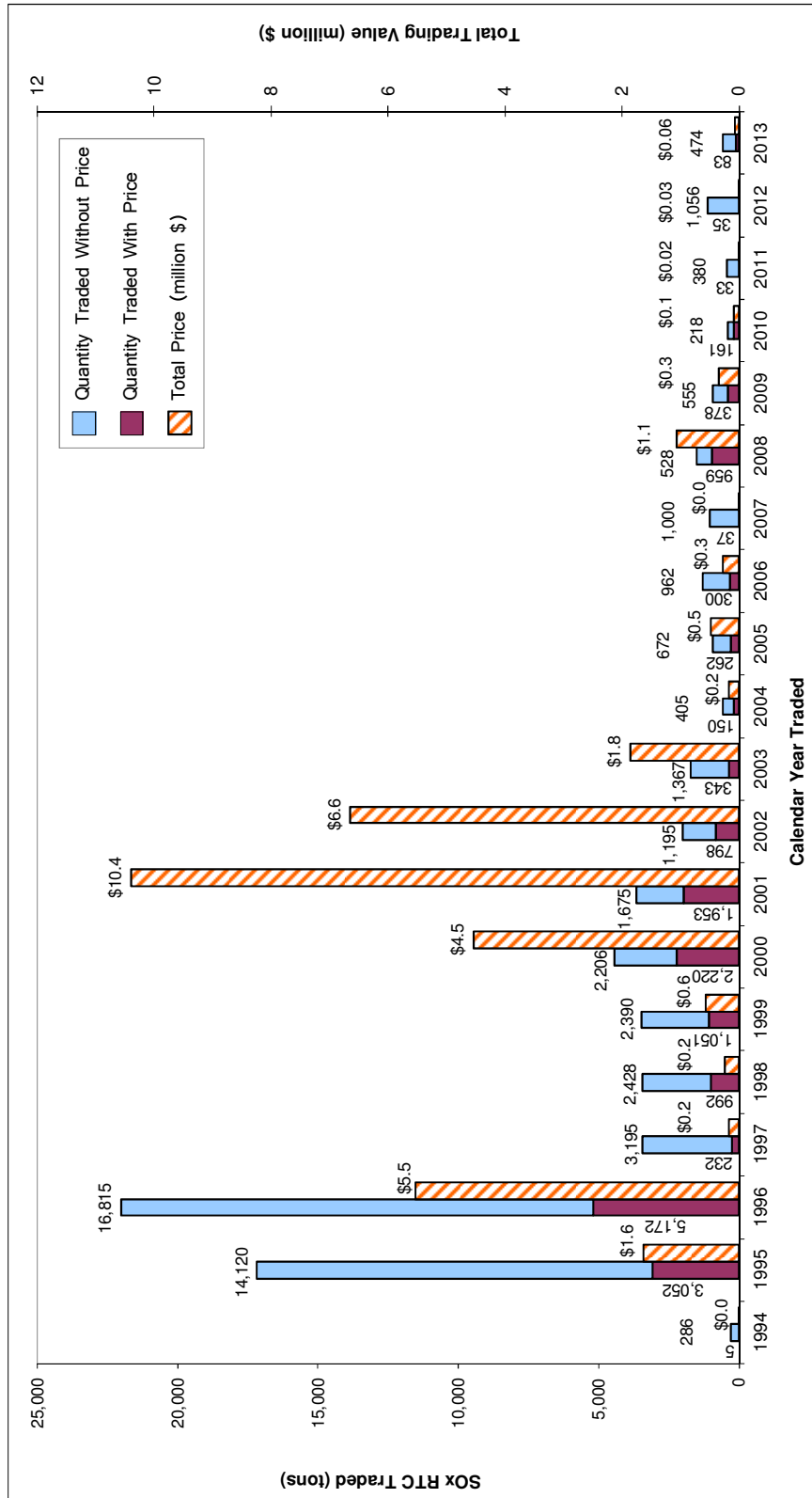


Figure 2-9  
IYB NOx RTC Trades (Excluding Swaps)

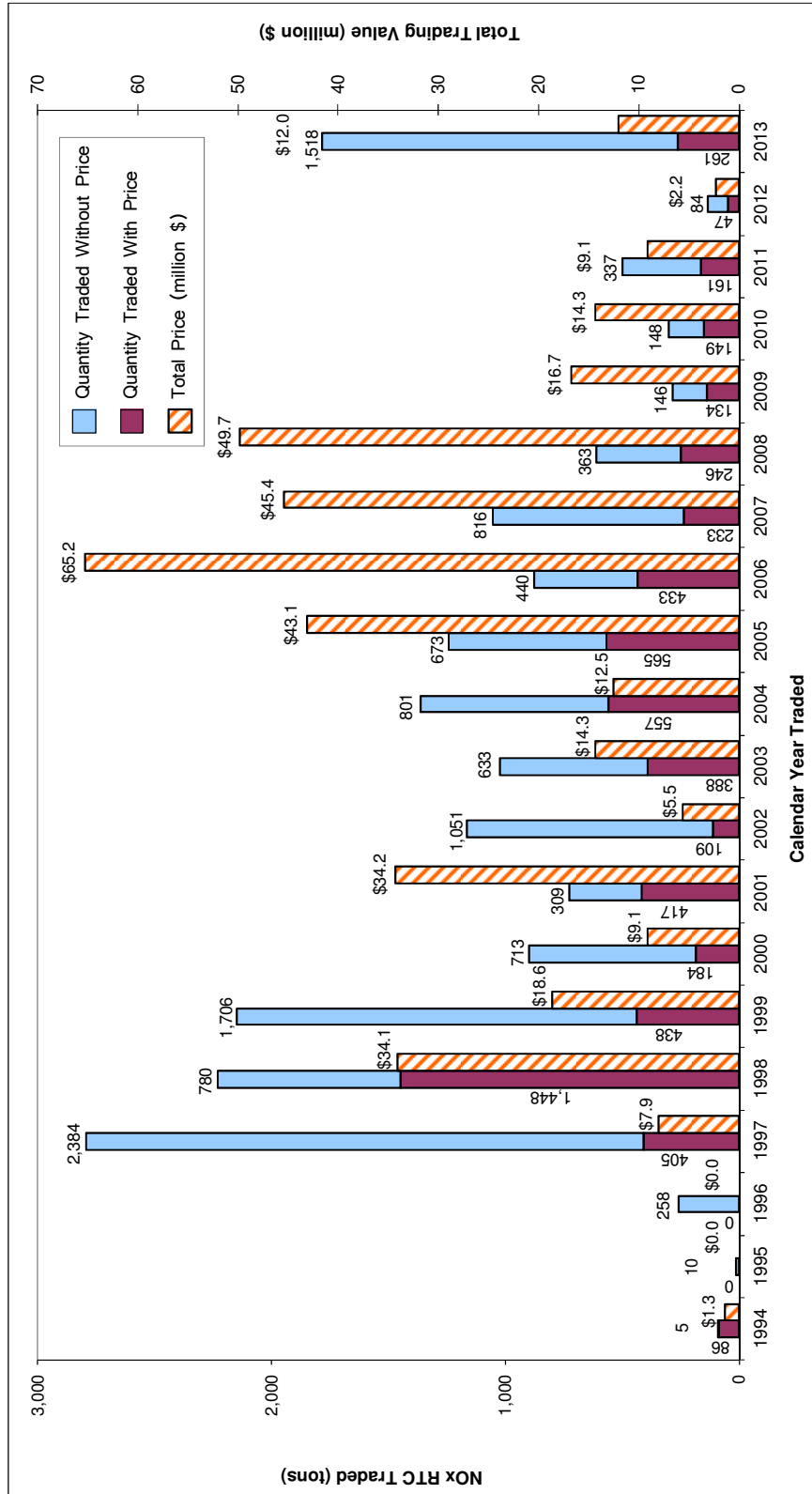
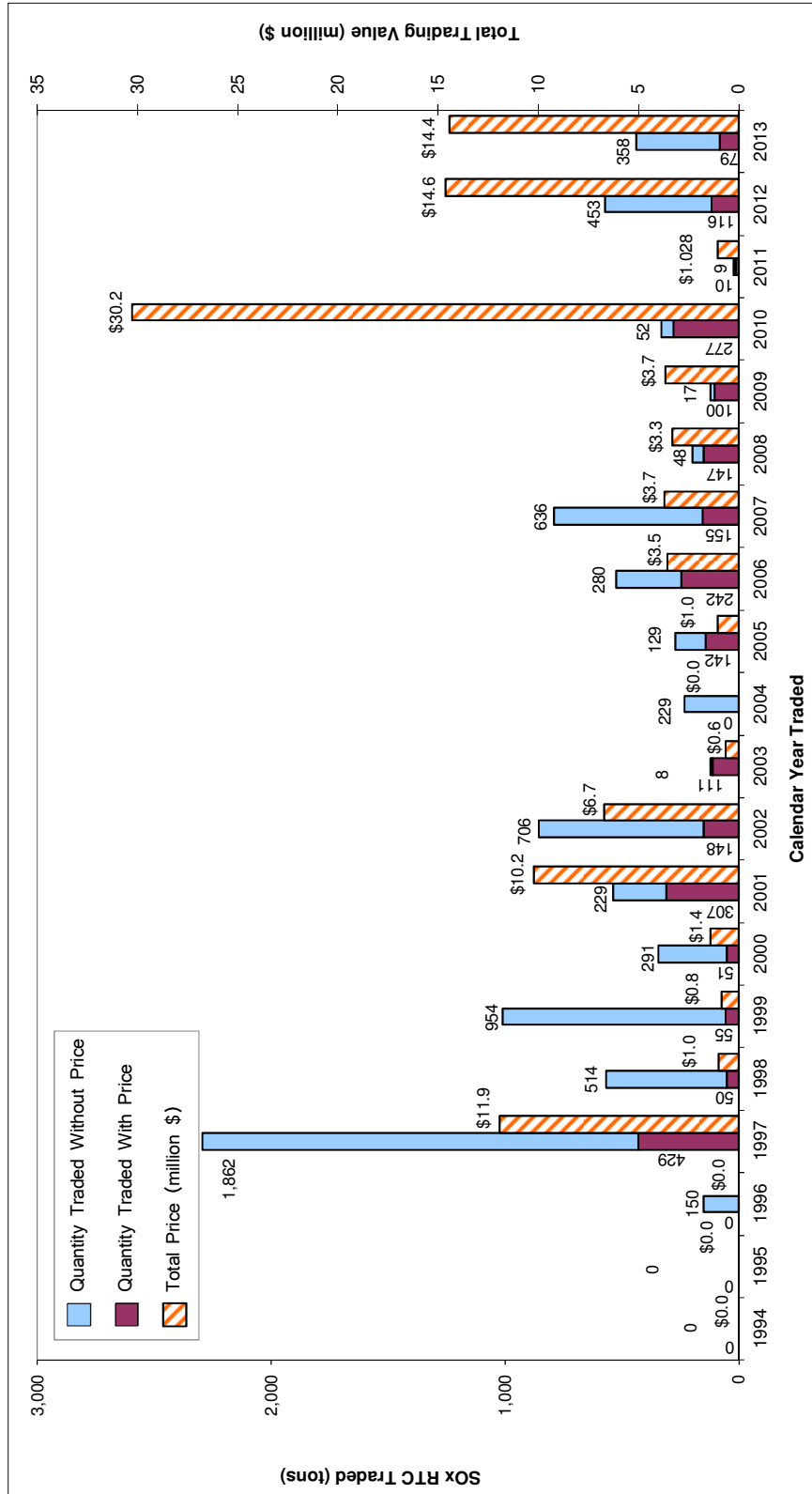


Figure 2-10  
IYB SOx RTC Trades (Excluding Swaps)



## Swap Trades

In addition to traditional trades of RTCs for a price, RTC swaps also occurred between trading partners. There were swaps of RTCs with different zones, cycles, expiration years, and pollutants. In some cases, swaps involved a combination of RTCs and cash payment as a premium. Trading parties swapping RTCs were required to report the agreed upon price of RTCs for each trade even though, with the exception of the above-described premiums, no money was actually exchanged. Over \$2.74 million in total value was reported from RTCs that were swapped in calendar year 2013. The swap values are based on the prices reported on the RTC trade registrations. Since RTC swap trades occur when two trading partners exchange RTCs, values reported on both trades involved in the exchange are included in the calculation of the total value reported. However, in cases where commodities other than RTCs are involved in the swap, these commodity values are not included in the above reported total value (*e.g.*, in the case of a swap of NO<sub>x</sub> RTCs valued at \$10,000 for another set of RTCs valued at \$8,000 together with a premium of \$2,000, the value of such a swap would have been reported at \$18,000 in Table 2-2).

For calendar years that have swap transactions with large values (*e.g.*, 2009) the inclusion of swap transactions in the average trade price calculations would have resulted in calculated average annual prices dominated by swap transactions, and therefore, may not be representative of market prices actually paid for RTCs. Prices of swap trades are excluded from analysis of average trade prices because the values of the swap trades are solely based upon prices agreed upon between trading partners and do not reflect actual funds transferred. Tables 2-2 and 2-3 present the calendar years 2001 through 2013 RTC swaps for NO<sub>x</sub> and SO<sub>x</sub>, respectively.

**Table 2-2**  
**NOx Registrations Involving Swaps\***

Year	Total Value (\$ millions)	IYB RTC Swapped with Price (tons)	Discrete RTC Swapped with Price (tons)	Number of Swap Registrations with Price	Total Number of Swap Registrations
2001	\$24.29	6.0	612.2	71	78
2002	\$14.31	64.3	1,701.7	94	94
2003	\$7.70	69.9	1,198.1	64	64
2004	\$3.74	0	1,730.5	90	90
2005	\$3.89	18.7	885.3	53	53
2006	\$7.29	14.8	1,105.9	49	49
2007	\$4.14	0	820.0	43	49
2008	\$8.41	4.5	1,945.8	48	50
2009	\$55.76	394.2	1,188.4	37	42
2010	\$3.73	18.2	928.5	25	31
2011	\$2.00	0	775.5	25	32
2012	\$1.29	0	928.1	36	36
2013	\$2.41	11.6	1,273.5	44	44

\* There are swaps that are without price. Swaps without price are strictly transfers of RTCs between trading partners and their respective brokers. Information regarding swap trades was not required prior to May 9, 2001.

**Table 2-3**  
**SOx Registrations Involving Swaps\***

Year	Total Value (\$ millions)	IYB RTC Swapped with Price (tons)	Discrete RTC Swapped with Price (tons)	Number of Swap Registrations with Price	Total Number of Swap Registrations
2001	\$1.53	18.0	240.0	3	4
2002	\$6.11	26.6	408.4	30	30
2003	\$5.88	20.9	656.0	32	32
2004	\$0.39	0	161.8	13	13
2005	\$2.16	43.5	227.8	13	14
2006	\$0.02	0	24.4	2	2
2007	\$0.00	0	0	0	0
2008	\$0.40	0	197.0	5	8
2009	\$3.63	55.3	401.3	9	10
2010	\$6.89	79.4	417.0	16	18
2011	\$0.25	0	228.5	3	4
2012	\$27.01	100.0	7.5	4	4
2013	\$0.33	3.1	5.5	2	2

\* There are swaps that are without price. Swaps without price are strictly transfers of RTCs between trading partners and their respective brokers. Information regarding swap trades was not required prior to May 9, 2001.

## RTC Trade Prices

### Discrete-Year RTC Prices

In calendar year 2013, the average annual prices for discrete-year NO<sub>x</sub> RTCs were \$549 per ton for Compliance Year 2012, \$1,080 per ton for Compliance Year 2013 RTCs, and \$1,881 per ton for Compliance Year 2014. The highest NO<sub>x</sub> average price was \$3,800 per ton for Compliance Year 2018 RTCs. There was only one trade that involved discrete-year NO<sub>x</sub> RTCs for Compliance Years 2016, 2017, and 2018.

The average annual prices for discrete-year SO<sub>x</sub> RTCs were \$291 per ton for Compliance Year 2012, \$485 per ton for Compliance Year 2013, and \$900 per ton for Compliance Years 2015 and 2016<sup>2</sup>. There was only one trade that involved discrete-year SO<sub>x</sub> RTCs for Compliance Years 2015 and 2016 and this trade was also associated with the change of operator. The \$485 per ton for Compliance Year 2013 SO<sub>x</sub> RTCs traded in calendar year 2013 is less than the corresponding \$759 per ton Compliance Year 2012 SO<sub>x</sub> RTCs traded in calendar year 2012. These discrete-year SO<sub>x</sub> RTCs average prices are based on only three trades for each of these calendar years. Averages based on such small populations are expected to be highly variable.

Figures 2-11 and 2-12 present the average annual prices for discrete-year NO<sub>x</sub> and SO<sub>x</sub> RTCs during calendar years 2005 through 2013, respectively. Note that prices for a Compliance Year's RTCs may also be shown for the calendar year after those RTCs expired, since the average price for each compliance year is based on sales of both Cycle 1 RTCs expiring in December of that year, as well as Cycle 2 RTCs expiring in June of the following year. Furthermore, Cycle 1 RTCs expiring in December may be traded during the 60-day reconciliation period following the expiration date, which extends into the next calendar year.

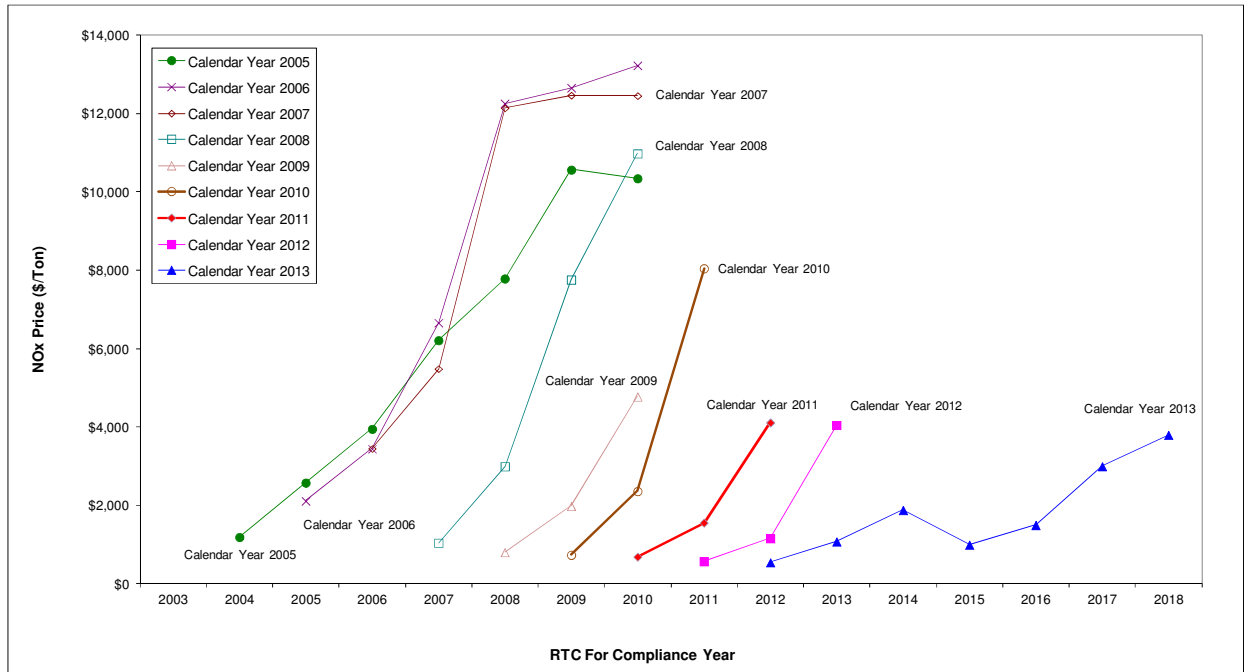
Average annual prices in calendar year 2013 for discrete NO<sub>x</sub> and SO<sub>x</sub> RTCs for all compliance years remained well below the \$15,000 per ton threshold to evaluate and review the compliance aspects of the program set forth by SCAQMD Rule 2015, as well as the \$40,067 per ton of NO<sub>x</sub> and \$28,848 per ton of SO<sub>x</sub> discrete RTCs pre-determined overall program review thresholds established by the Governing Board pursuant to Health and Safety Code §39616(f).

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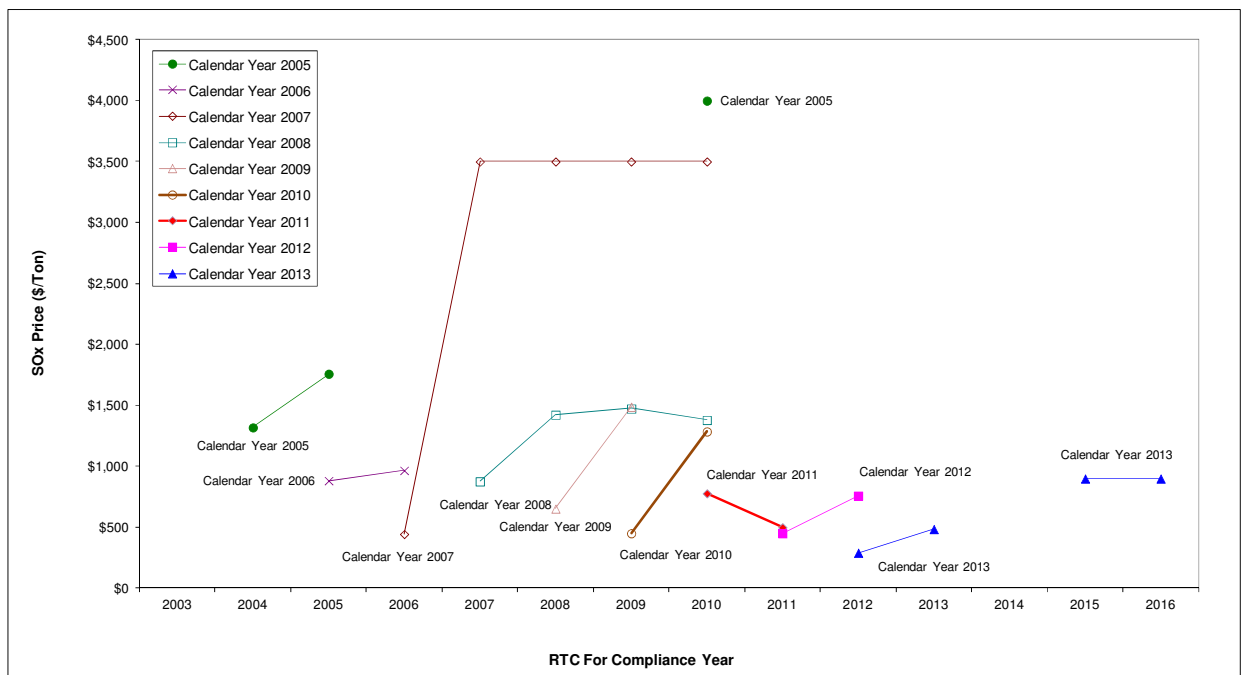
<sup>2</sup> There were no discrete-year SO<sub>x</sub> RTCs for Compliance Year 2014 traded in calendar year 2013.



**Figure 2-11**  
**Average Annual Prices for Discrete-Year NOx RTCs during Calendar Years 2005 through 2013**



**Figure 2-12**  
**Average Annual Prices for Discrete-Year SOx RTCs during Calendar Years 2005 through 2013**



### **Twelve-Month Rolling Average Prices of Compliance Year 2012 NOx RTCs**

The January 2005 RECLAIM amendments directed the Executive Officer to calculate the 12-month rolling average price of NOx RTCs (“rolling average price”) “for all trades for the current compliance year” excluding “RTC transactions reported at no price.” Swap transactions are also excluded from the calculation of rolling average prices.

In the event that the rolling average price exceeds \$15,000 per ton, the Executive Officer is required to report the rolling average price to the Governing Board. If the Governing Board determines that the rolling average price exceeds \$15,000 per ton, SCAQMD is required to review the compliance aspects of the RECLAIM program. In its resolution amending Rule 2002(f) on January 7, 2005, the Governing Board directed the Executive Officer to report the NOx RTC 12-month rolling average price data to the Stationary Source Committee (SSC) at least quarterly. Accordingly, such reports have been prepared by SCAQMD staff and submitted to the SSC on a quarterly basis. To date, the twelve-month rolling average prices have been far below and have not exceeded the \$15,000 per ton threshold. Staff continues to monitor the twelve-month rolling average price of current-year NOx RTCs on a monthly basis and report the rolling average prices to the Stationary Source Committee on a quarterly basis.

As shown in Table 2-4, the twelve-month rolling average prices of Compliance Year 2013 NOx RTCs have generally been flat or declining since January 2013 and have not exceeded the \$15,000 per ton threshold specified in Rule 2002(f). Therefore, it was not necessary for the Executive Officer to report the rolling average price to the Governing Board or for the Governing Board to require a compliance audit. For Compliance Year 2012 NOx RTCs, the same findings were true and were included in the RECLAIM Annual Audit Report for 2011 Compliance Year, submitted to the Governing Board in March 2013.

**Table 2-4**  
**Twelve-Month Rolling Average Prices of Compliance Year 2013 NOx RTCs**

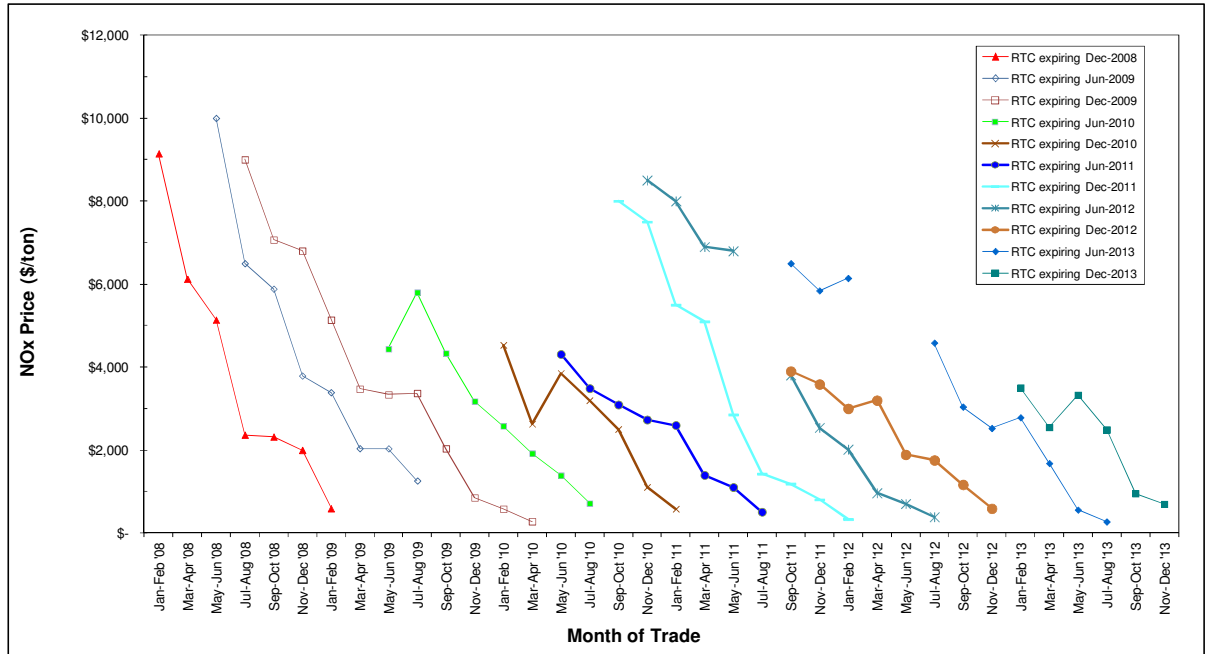
Reporting Month	12-Month Period	Average Price (\$/ton)
January 2013	January through December 2012	\$4,053
February 2013	February 2012 through January 2013	\$4,044
March 2013	March 2012 through February 2013	\$4,044
April 2013	April 2012 through March 2013	\$4,042
May 2013	May 2012 through April 2013	\$3,765
June 2013	June 2012 through May 2013	\$3,765
July 2013	July 2012 through June 2013	\$3,758
August 2013	August 2012 through July 2013	\$3,665
September 2013	September 2012 through August 2013	\$3,643
October 2013	October 2012 through September 2013	\$1,849
November 2013	November 2012 through October 2013	\$1,522
December 2013	December 2012 through November 2013	\$1,444
January 2014	January through December 2013	\$1,080

#### **Average Price for NOx RTCs Nearing Expiration**

Generally, RTC prices decrease as their expiration dates approach and during the sixty days after their expiration dates during which they can be traded. RTC prices are usually lowest during the 60 day-period following their expiration date during which facilities are allowed to trade and obtain RTCs to cover their emissions. This general trend has been repeated every year since 1994 except for Compliance Years 2000 and 2001 (during the California energy crisis), when NOx RTC prices increased as the expiration dates approached because the power plants' NOx emissions increased significantly and there was a shortage of NOx RTCs. Prices for NOx RTCs that expired in calendar year 2013 followed the general trend of RTC prices declining over the course of the Compliance Year and the sixty-day trading period thereafter.

The bi-monthly average price for these near-expiration NOx RTCs is shown in Figure 2-13 to illustrate the general price trend for these RTCs. The general declining trend of RTC prices nearing and just past expiration indicates that there was an adequate supply to meet RTC demand during the final reconciliation period following the end of the compliance years. A similar analysis is not performed for the price of SOx RTCs nearing expiration because there are not enough SOx trades over the course of the year to yield meaningful data, however SOx RTC prices have generally followed the same trends.

**Figure 2-13**  
**Bi-Monthly Average Price for NOx RTCs near Expiration**



Note: Data is presented for a limited number of RTC expiration dates for graphical clarity.

**IYB RTC Prices**

The average annual price for IYB NOx RTCs traded in calendar year 2013 is \$45,914 per ton, which is lower than the average annual price of \$48,146 per ton traded in calendar year 2012. The average annual price for IYB SOx RTCs traded in calendar year 2013 is \$181,653 per ton, which is higher than the \$125,860 per ton traded in calendar year 2012. There were only four IYB SOx trades with price totaling 79 tons in 2013, which is lower than the 116 tons traded in 2012. However, the IYB SOx RTC average price was dominated by one IYB SOx trade resulting from a change of operator that accounted for over 99% of the trading volume. Data regarding IYB RTCs traded with price (excluding swap trades) for NOx and SOx RTCs and their average annual prices since 1994 are summarized in Tables 2-5 and 2-6, respectively. In calendar year 2013, the average annual IYB RTC prices did not exceed the \$601,010 per ton of NOx RTCs or the \$432,727 per ton of SOx RTCs program review thresholds established by the Governing Board pursuant to California Health and Safety Code §39616(f).

**Table 2-5**  
**IYB NOx Pricing (Excluding Swaps)**

Calendar Year	Total Reported Value (\$ millions)	IYB RTC Traded with Price (tons)	Number of IYB Registrations With Price	Average Price (\$/ton)
1994*	\$1.3	85.7	1	\$15,623
1995*	\$0.0	0	0	N/A
1996*	\$0.0	0	0	N/A
1997*	\$7.9	404.6	9	\$19,602
1998*	\$34.1	1,447.6	23	\$23,534
1999*	\$18.6	438.3	19	\$42,437
2000*	\$9.1	184.2	15	\$49,340
2001*	\$34.2	416.9	25	\$82,013
2002	\$5.5	109.5	31	\$50,686
2003	\$14.3	388.3	28	\$36,797
2004	\$12.5	557.0	52	\$22,481
2005	\$43.1	565.3	71	\$76,197
2006	\$65.2	432.9	50	\$150,665
2007	\$45.4	233.5	25	\$194,369
2008	\$49.7	245.6	27	\$202,402
2009	\$16.7	134.2	14	\$124,576
2010	\$14.3	149.0	13	\$95,761
2011	\$9.1	160.7	29	\$56,708
2012	\$2.2	46.6	13	\$48,146
2013	\$12.0	260.9	17	\$45,914

\* No information regarding swap trades was reported until May 9, 2001.

**Table 2-6**  
**IYB SOx Pricing (Excluding Swaps)**

Calendar Year	Total Reported Value (\$ millions)	IYB RTC Traded with Price (tons)	Number of IYB Registrations With Price	Average Price (\$/ton)
1994*	\$0.0	0	0	N/A
1995*	\$0.0	0	0	N/A
1996*	\$0.0	0	0	N/A
1997*	\$11.9	429.2	7	\$27,738
1998*	\$1.0	50.0	1	\$19,360
1999*	\$0.8	55.0	3	\$14,946
2000*	\$1.4	50.6	5	\$27,028
2001*	\$10.2	306.8	8	\$33,288
2002	\$6.7	147.5	5	\$45,343
2003	\$0.6	110.9	1	\$5,680
2004	\$0.0	0.0	0	N/A
2005	\$1.0	141.5	3	\$7,409
2006	\$3.5	241.7	12	\$14,585
2007	\$3.7	155.2	5	\$23,848
2008	\$3.3	146.8	5	\$22,479
2009	\$3.7	100.0	4	\$36,550
2010	\$30.2	277.0	10	\$109,219
2011	\$1.03	10.0	2	\$102,366
2012	\$14.6	116.2	4	\$125,860
2013	\$14.4	79.2	4	\$181,653

\* No information regarding swap trades was reported until May 9, 2001.

## Market Participants

RECLAIM market participants have traditionally included RECLAIM facilities, brokers, commodity traders, and private investors. Starting in calendar year 2004, mutual funds joined the traditional participants in RTC trades. Market participation expanded further in 2006, when foreign investors started participating in RTC trades. However, foreign investors have not participated in any RTC trades since calendar year 2008 and foreign investors do not hold any current or future RTCs at this time.

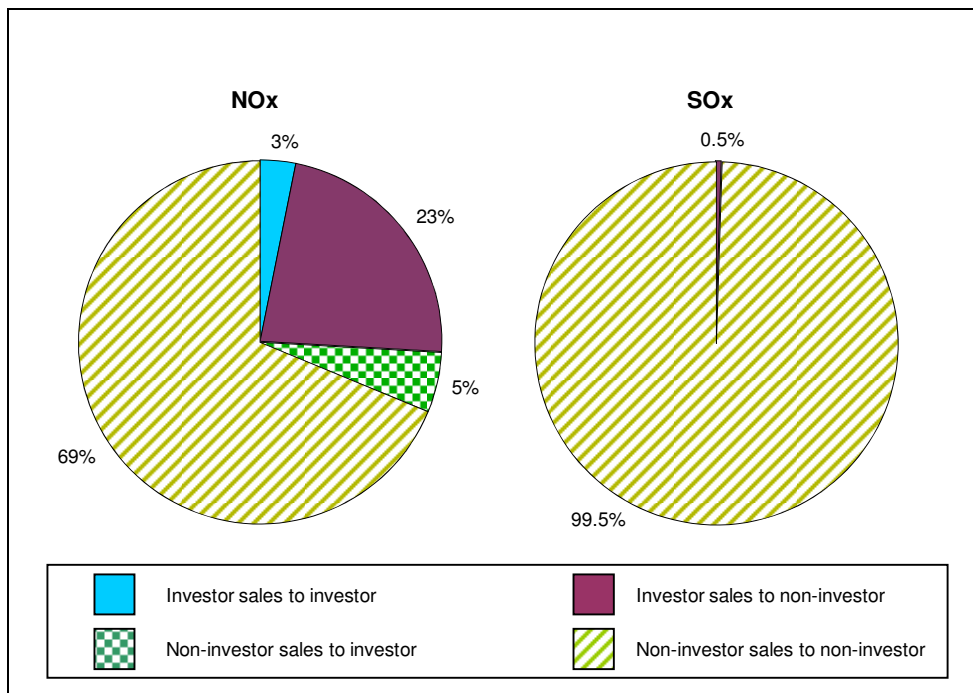
RECLAIM facilities are the original sources and users of RTCs. They usually sell their surplus RTCs by the end of the compliance year or when they have a long-term decrease in emissions. Brokers match buyers and sellers, and usually do not purchase or own RTCs. Commodity traders and private investors actually invest in and own RTCs in order to seek profits by trading them. For discussion in this report, “investors” include all parties who hold RTCs other than RECLAIM facility permit holders and brokers.

### Investor Participation

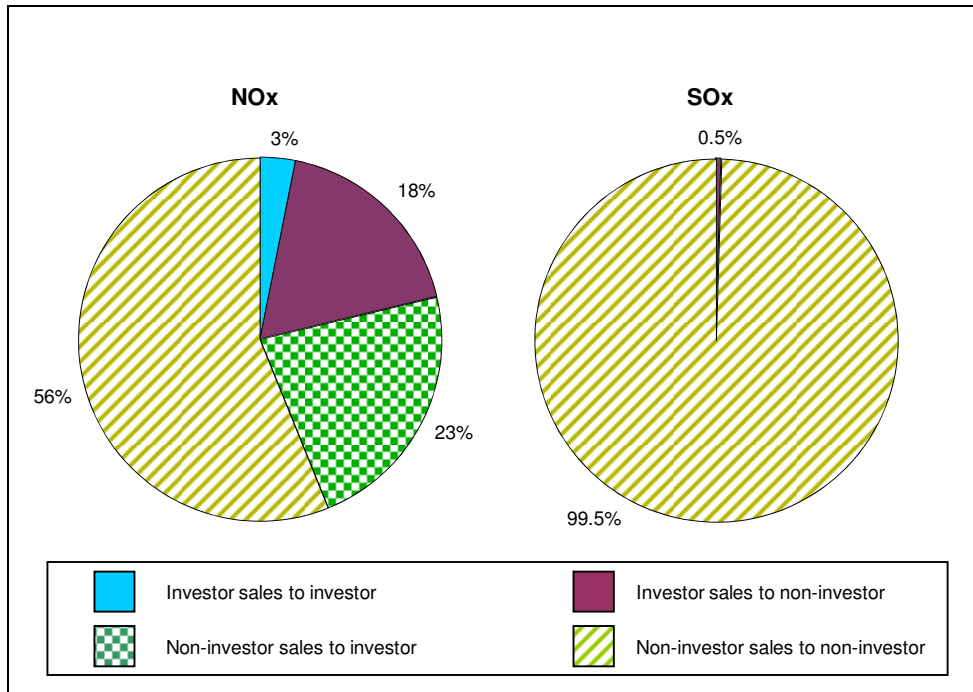
Investors were involved in 133 of the 223 discrete NOx RTC trades with price, one of the six discrete SOx RTC trades with price, 16 of the 17 IYB NOx trades with price and three of the four IYB SOx trades with price in calendar year 2013.

Investors' involvement in discrete NOx and SOx trades registered with price in calendar year 2013 is illustrated in Figures 2-14 and 2-15. Figure 2-14 is based on total value of discrete NOx and SOx RTCs traded, and shows that investors were involved in 31% and 0.5%, respectively, of the NOx and SOx trades reported by value. Figure 2-15 is based on discrete volume traded with price and shows that investors were involved in 44% and 0.5% of the NOx and SOx trades by volume, respectively. Figures 2-16 and 2-17 provide similar data for both IYB NOx and SOx trades, and show that investors were involved in 23% of IYB NOx trades and 0.4% of IYB SOx trades on a reported value basis, and 22% of IYB NOx and 0.6% of IYB SOx trades on the basis of the number of pounds traded with price. These involvement figures are relatively low when compared to investor involved trades in calendar year 2012.

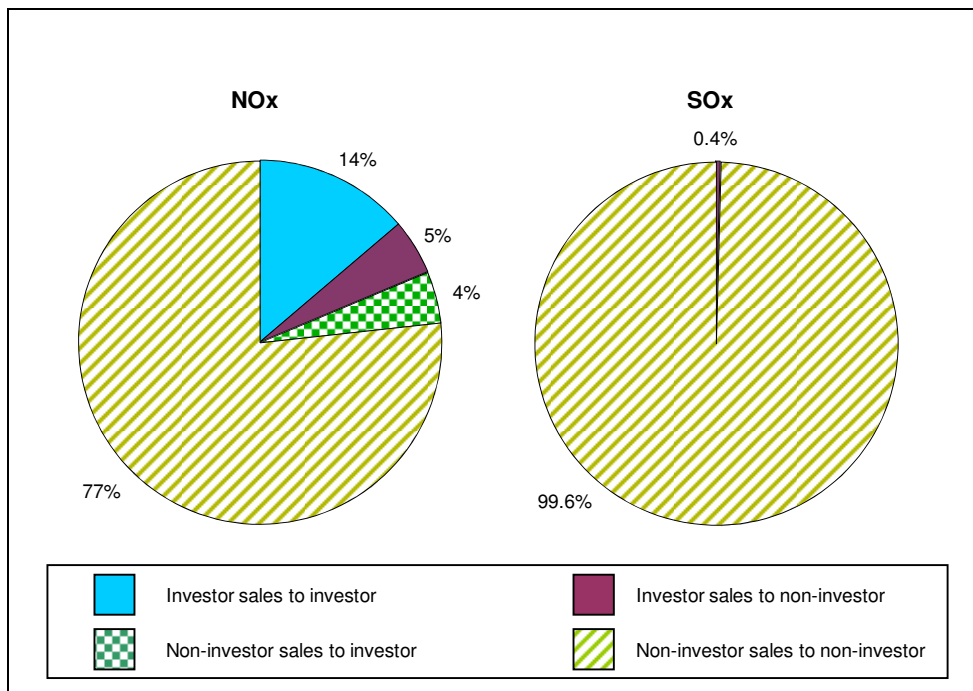
**Figure 2-14**  
**Calendar Year 2013 Investor-Involved Discrete NOx and SOx Trades Based on Value Traded**



**Figure 2-15**  
**Calendar Year 2013 Investor-Involved Discrete NOx and SOx Trades Based on Volume Traded with Price**

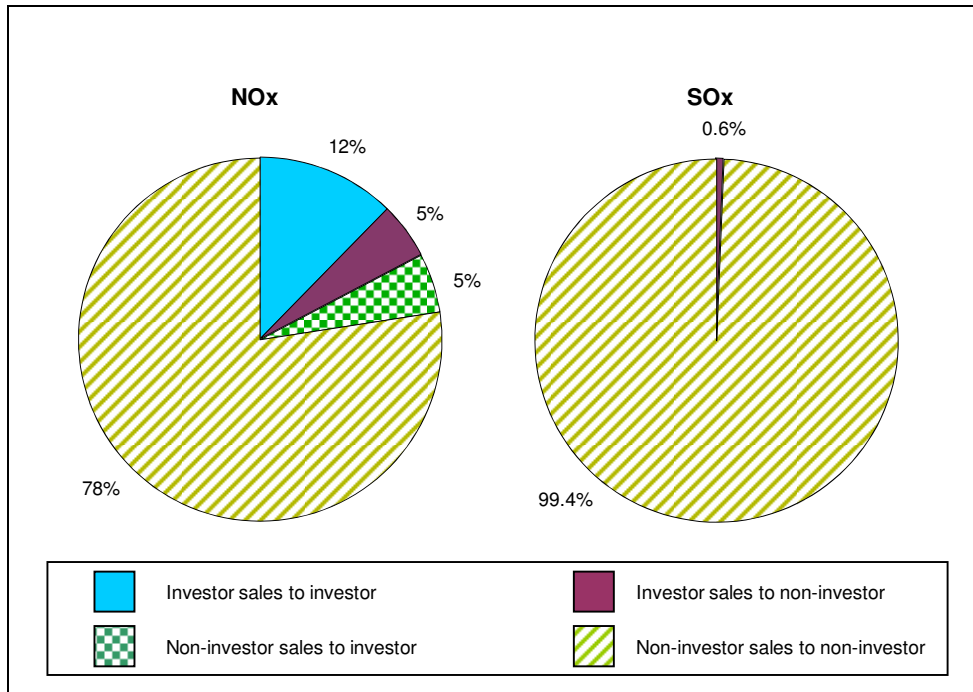


**Figure 2-16**  
**Calendar Year 2013 Investor-Involved IYB NOx and SOx Trades Based on Value Traded**



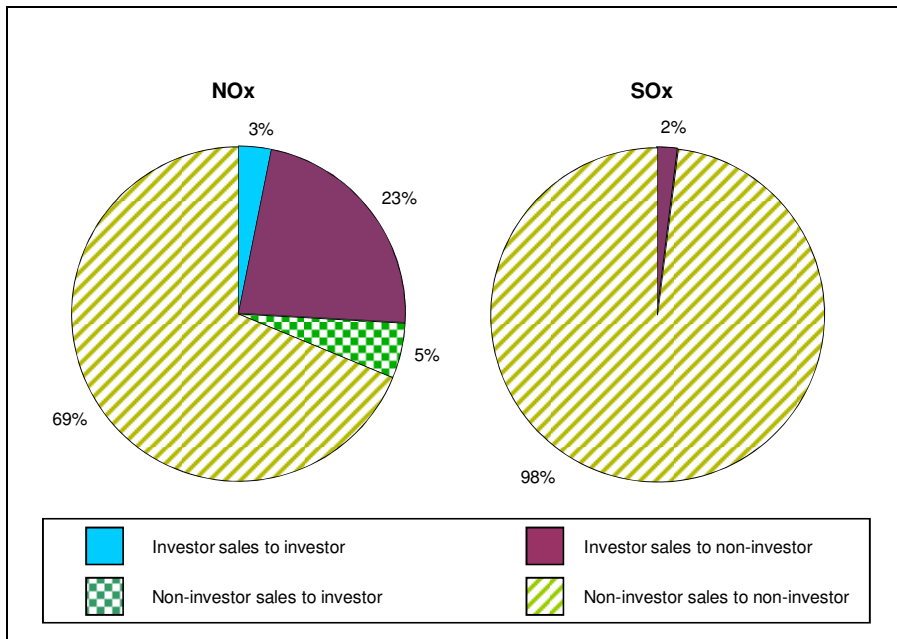


**Figure 2-17**  
**Calendar Year 2013 Investor-Involved IYB NOx and SOx Trades Based on Volume Traded with Price**

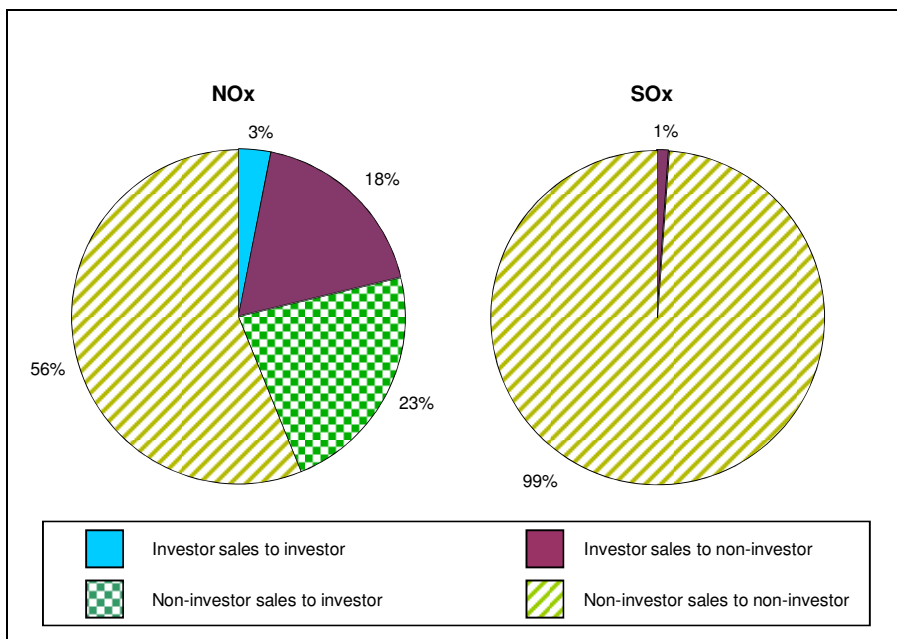


As mentioned in previous sections, there were RTC transfers due to changes of operator between two companies in calendar 2013. The amount of RTCs traded with price as a result of the changes of operator were significant and skewed the above percentages to show a lower investor participation rate, especially in IYB RTC trades. These transfers were the result of RECLAIM facilities changing hands and not influenced by RTC market activities. As such, Figures 2-18 through 2-21 are presented to show investor participation rates after removing these trades in the same manner as in Figures 2-14 through 2-17, respectively. Figures 2-14, 2-15, 2-18, and 2-19 together show that investor involvement in discrete-year RTC trades was appreciably less in calendar year 2013 than it has been in recent years, even with the effect of the change of operator removed. However, investor involvement in IYB RTC trades is still significant (100% in both NOx and SOx IYB RTC trades) when the effect of the change of operator is removed.

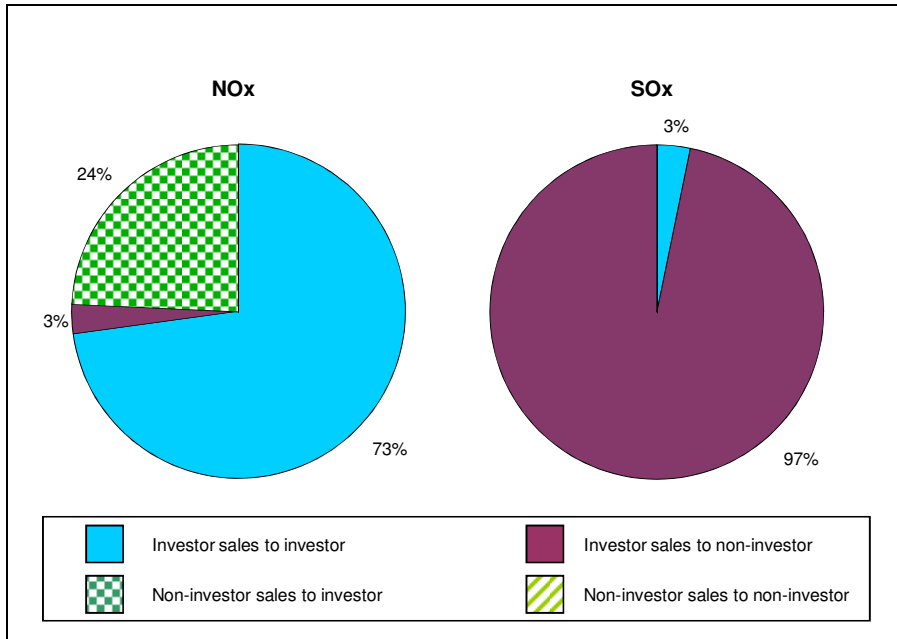
**Figure 2-18**  
**Calendar Year 2013 Investor-Involved Discrete NOx and SOx Trades Based on Value Traded (with trades resulting from change of operator removed)**



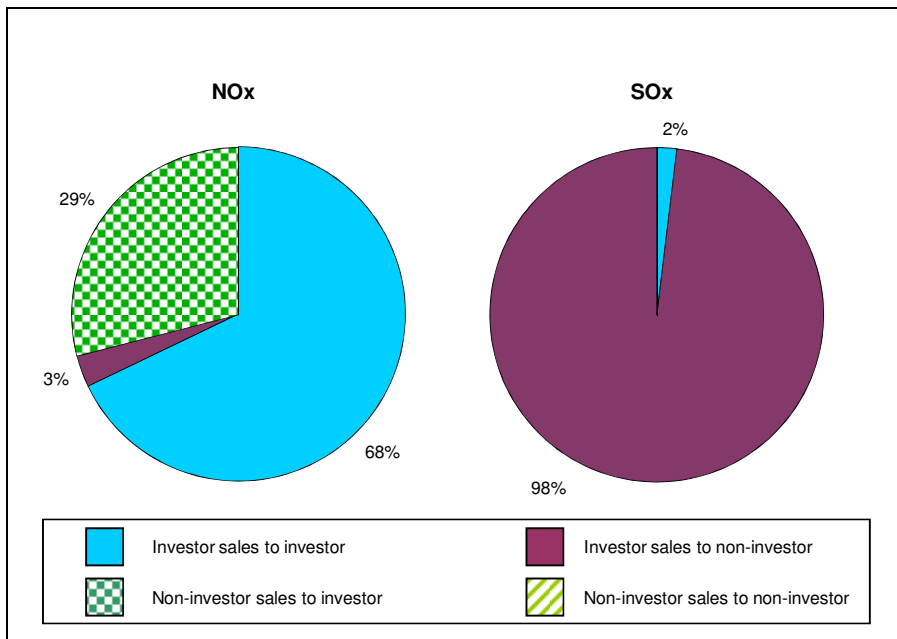
**Figure 2-19**  
**Calendar Year 2013 Investor-Involved Discrete NOx and SOx Trades Based on Volume Traded with Price (with trades resulting from change of operator removed)**



**Figure 2-20**  
**Calendar Year 2013 Investor-Involved IYB NOx and SOx Trades Based on Value Traded (with trades resulting from change of operator removed)**



**Figure 2-21**  
**Calendar Year 2013 Investor-Involved IYB NOx and SOx Trades Based on Volume Traded with Price (with trades resulting from change of operator removed)**



As of the end of calendar year 2013, investors' holding of IYB NOx RTCs was unchanged at 4.9% compared to the end of calendar year 2012. Mutual fund investors hold 2.7% of all IYB NOx RTCs, down from 3.2% at the end of calendar year 2012. Investors slightly increased their holding of IYB SOx RTCs to 0.9% at the end of calendar year 2013 from 0.7% at the end of calendar year 2012. No IYB SOx RTCs are currently held by mutual fund investors.

The supply of IYB RTCs available for sale has been mainly from facilities that have permanently shut down or that were in the process of doing so. There were five RECLAIM facilities that shut down during Compliance Year 2012 (refer to Chapter 1). One of the five facilities participated in both the NOx and SOx RECLAIM program. This facility did not hold any IYB NOx or IYB SOx RTCs. The remaining four NOx-only facilities held a total of 8.4 tons of IYB NOx RTCs. Of this amount, 2.4 tons of IYB NOx RTCs were sold to investors, 4.7 tons of IYB NOx RTCs were sold to non-investors, and the remaining 1.3 tons of IYB NOx RTCs have not been sold or transferred. Note that the majority of these sales occurred prior to calendar year 2013, as facilities often decrease production in years prior to shutting down.

### **Investor Impacts on RTC Market**

Theoretically, the role of investors in this market is to provide capital for installing air pollution control equipment that costs less than the market value of credits. In addition, investors can also improve price competitiveness. This market theory may not fully apply to RECLAIM due to the uniqueness of the program because RECLAIM facility operators have no substitute for RTCs, and short of curtailing operations, pollution controls cannot be implemented within a short time period. That is, there is no alternative source of credits available to RECLAIM facilities when RTC prices increase (they do not have the option to switch to another source of credits when RTCs become expensive). Therefore, they may be at the mercy of owners of surplus or investor-owned RTCs in the short term, particularly during times of rapid price increases, as evidenced in 2000 and 2001 during the California energy crisis.

To put investors' holdings in context, RECLAIM facilities have generally held back approximately 10% of their allocations each compliance year as a margin to ensure that they did not inadvertently find themselves exceeding their allocations (failing to reconcile by securing sufficient RTCs to cover their emissions) if their reported emissions were increased as the result of any problems or errors discovered by SCAQMD staff during annual audits. For Compliance Year 2012, the total RECLAIM NOx emissions were 7,810 tons. However, Compliance Year 2012 spans a period marked by a depressed economy with lower production at many manufacturing facilities and thus emissions were lower compared to historical levels. If the economy were to improve, total RECLAIM NOx emissions may approach recent historical levels (historical emission trends are illustrated in Figure 7-1). RECLAIM NOx emissions as recent as Compliance Year 2007 totaled 8,794 tons. If the recovering economy was to cause emissions to return to the 2007 level, the NOx RTC surplus would be only 895 tons (9% of allocation), which is slightly less than the traditional 10% compliance margin. Therefore, the current aggregate investors' holdings of 4.9% of NOx IYB RTCs (more than half the total surplus IYB RTCs in this scenario) have the potential to result in a sellers' market. The current rule development effort to further reduce

the overall NO<sub>x</sub> supply to reflect current BARCT (refer to Chapter 3) has the potential to increase the importance of investors' holdings of RTCs.

While it can be argued that the holding of IYB NO<sub>x</sub> RTCs by investors as a group is still small relative to the total supply of IYB NO<sub>x</sub> RTCs (4.9% overall), there is no clear basis to estimate the level of IYB RTCs available for sale by non-investors or the extent of additional emissions reductions that will be achieved in future years. IYB RTCs represent an even more critical aspect of the program because these streams of RTCs are sought after to support growth at new or existing facilities. Active facilities are less likely to sell their future year RTCs as IYB. As a result, new RECLAIM facilities or facilities with modifications resulting in emissions increases are potentially at the mercy of investors holding IYB RTCs. Although investors' holdings of IYB NO<sub>x</sub> RTCs did not change during calendar year 2013, they have the ability to purchase RTCs at any time so there is the potential for investors' holdings of IYB NO<sub>x</sub> RTCs to increase in the future.

On the other hand, overall emissions in RECLAIM will certainly change and can be affected by various factors including installation of more emission control equipment, production changes, inclusion of additional facilities into the RECLAIM universe, and shifts in industry sectors and in the economy, in general. In January 2005, SCAQMD identified cost-effective control opportunities outside the power producing industry that would amount to 3.7 tons per day of additional NO<sub>x</sub> reductions based on historical production rates. Staff anticipates that there are two primary mechanisms that will drive the implementation of these control technologies: implementation of BACT when existing sources reach the end of their useful lives and are replaced, and demand for RTCs approaching the supply driving up RTC prices and incentivizing the installation of emission controls. The first of these mechanisms will occur gradually over time and the second is unlikely to be significant until economic conditions change resulting in increased production at RECLAIM facilities. The significance of investors' holdings will certainly depend on the ability of RECLAIM facilities to generate adequate emissions reductions in time to dampen the effect of a sellers' market that may exist if demand surges in a short period of time, as it did during the California energy crisis of 2000-2001. Proposals to generate emission reduction credits from sources outside of RECLAIM (*i.e.*, mobile and area sources) can also dampen sudden price increases. SCAQMD staff continues to monitor investor participation in the market to ensure that such participation does not adversely impact the RECLAIM program.

## **Other Types of RTC Transactions and Uses**

Another type of RTC trade, besides traditional trading and swapping activities, is a trade involving the contingent right (option) to buy or sell RTCs. In those transactions, one party pays a premium for the right to purchase or sell RTCs owned by the other party at a pre-determined price within a certain time period. Until RTCs are transferred from seller to buyer, prices for options are not reported, because the seller is not paid for the actual RTCs, but only for the right to purchase or sell the RTCs at a future date. These rights may or may not be actually exercised. RTC traders are obligated to report options to the SCAQMD within five business days of reaching an agreement. These reports are posted on the SCAQMD website. There was no reported trade involving the contingent right (option) to buy or sell RTCs in calendar year 2013.

As in prior years, RTCs were used in other programs during calendar year 2013. A total of 1.8 tons of NO<sub>x</sub> RTCs and 0.8 tons of SO<sub>x</sub> RTCs were surrendered to satisfy variance conditions. These consisted of discrete year RTCs only. However, no RTCs were surrendered to mitigate impacts from construction projects in calendar year 2013.

## CHAPTER 3 EMISSION REDUCTIONS ACHIEVED

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### Summary

*For Compliance Year 2012, aggregate NO<sub>x</sub> emissions were below total allocations by 19% and aggregate SO<sub>x</sub> emissions were below total allocations by 40%. No emissions associated with breakdowns were excluded from reconciliation with facility allocations in Compliance Year 2012. Accordingly, no mitigation is necessary to offset excluded emissions due to approved Breakdown Emission Reports. Therefore, based on audited emissions, it can be concluded that RECLAIM achieved its targeted emission reductions for Compliance Year 2012. With respect to the Rule 2015 backstop provisions, Compliance Year 2012 aggregate NO<sub>x</sub> and SO<sub>x</sub> emissions were both well below aggregate allocations and, as such, did not trigger the requirement to review the RECLAIM program.*

### Background

One of the primary objectives of the annual RECLAIM program audits is to assess whether RECLAIM is achieving its targeted emission reductions. Those targeted emission reductions are embodied in the annual allocations issued to RECLAIM facilities. In particular, the annual allocations reflect required emission reductions initially from the subsumed command-and-control rules and control measures, as well as from subsequent changes to BARCT. In January 2005, the Board adopted an amendment to Rule 2002 to further reduce RECLAIM NO<sub>x</sub> allocations to implement the latest BARCT. The amendments to Rule 2002 called for the NO<sub>x</sub> allocation reductions to be phased-in during Compliance Years 2007 through 2011. These changes resulted in cumulative NO<sub>x</sub> allocation reductions of 22.5% (7.7 tons/day; 2,811 tons/year) from all RECLAIM facilities by Compliance Year 2011, with the biggest single-year reduction of 11.7% in Compliance Year 2007. Similarly, the Board again amended Rule 2002 in November 2010 to implement changes in BARCT for SO<sub>x</sub>. Specifically, the November 2010 amendments called for reducing aggregate RECLAIM SO<sub>x</sub> emissions by 2,081 tons per year (48%), with the reductions phased-in from Compliance Year 2013 through Compliance Year 2019. A little over half of the SO<sub>x</sub> reductions were scheduled to occur in Compliance Year 2013 (recently completed for Cycle 1 facilities and concluding June 30, 2014 for Cycle 2 facilities).

### Emissions Audit Process

Since the inception of the RECLAIM program, SCAQMD has conducted annual program audits of the emissions data submitted by RECLAIM facilities to ensure the integrity and reliability of facility reported data. The process includes reviews of APEP reports submitted by RECLAIM facilities and audits of field records and emission calculations. The audit process is described in further detail in Chapter 5 – Compliance.

SCAQMD staff adjusts the APEP-reported emissions based on audit results, as necessary. Whenever SCAQMD staff finds discrepancies, they discuss the

findings with the facility operators and provide the operators an opportunity to review changes resulting from facility audits and to present additional data or information in support of the data stated in their APEP reports. This rigorous audit process, although resource intensive, reinforces RECLAIM's emissions monitoring and reporting requirements and enhances the validity and reliability of the reported emissions data. The audited emissions are used to determine if a facility complied with its allocations. The most recent five compliance years' audited emissions for each facility are posted on SCAQMD's web page after the audits are completed. Additionally, all emissions data presented in this annual RECLAIM audit report are compiled from audited facility emissions.

## **Emission Trends and Analysis**

RECLAIM achieves its emission reduction goals on an aggregate basis by ensuring that annual emissions are below total RTCs. It is important to understand that the RECLAIM program is successful at achieving these emission reduction goals even when some individual RECLAIM facilities exceed their RTC account balances, provided aggregate RECLAIM emissions do not exceed aggregate RTCs issued. Therefore, aggregate NO<sub>x</sub> or SO<sub>x</sub> emissions from all RECLAIM sources are the basis for determining whether the programmatic emission reduction goals for that emittant are met each year. In aggregating emissions from RECLAIM facilities, audited emissions are used in the Annual RECLAIM Report for that Compliance Year. Table 3-1 and Figure 3-1 show aggregate NO<sub>x</sub> emissions based on audited emission data for Compliance Years 1994 through 2012.

Table 3-1 and Figure 3-1 show that, programmatically, there were excess NO<sub>x</sub> RTCs remaining after accounting for audited NO<sub>x</sub> emissions for every compliance year since 1994, except for Compliance Year 2000 when NO<sub>x</sub> emissions exceeded the total allocations for that year due to the California energy crisis. Since Compliance Year 2007, the first year of the programmatic reduction in RECLAIM NO<sub>x</sub> allocations which were adopted by the Governing Board as part of the January 2005 rule amendments, the unused NO<sub>x</sub> RTCs have been at least 20 percent of the aggregate allocations. There may be other forces at play to cause such results in addition to actual emission reductions implemented through the application of air pollution control systems by RECLAIM facilities. Potentially, the effects of the nation's economic downturn and slow recovery over the last few years may also be contributing to lower aggregate emissions in the RECLAIM universe, although less so for Compliance Year 2012 as the economy has begun to improve. As shown in Table 3-1, Compliance Year 2012 NO<sub>x</sub> emissions increased about 7% when compared to 2011 and almost 10% compared to Compliance Year 2010. This may be a reflection of the economic turnaround in the region.



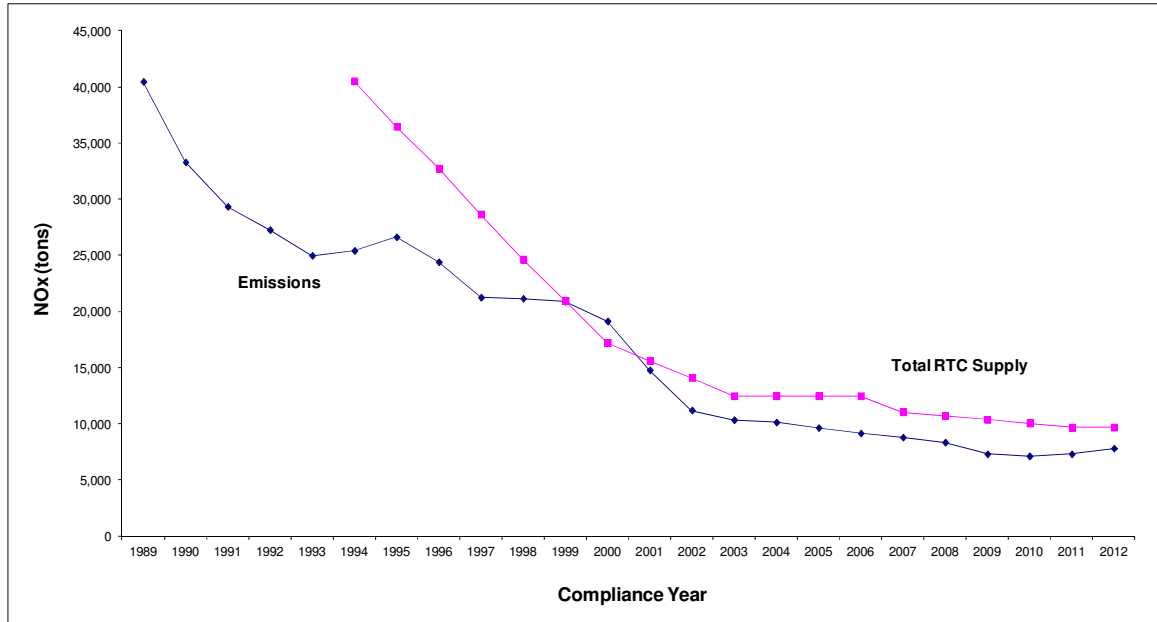
**Table 3-1**  
**Annual NOx Emissions for Compliance Years 1994 through 2012**

Compliance Year	Audited Annual NOx Emissions <sup>1</sup> (tons)	Audited Annual NOx Emissions Change from 1994 (%)	Total NOx RTCs <sup>2</sup> (tons)	Unused NOx RTCs (tons)	Unused NOx RTCs (%)
1994	25,420	0%	40,534	15,114	37%
1995	26,632	4.8%	36,484	9,852	27%
1996	24,414	-4.0%	32,742	8,328	25%
1997	21,258	-16%	28,657	7,399	26%
1998	21,158	-17%	24,651	3,493	14%
1999	20,889	-18%	20,968	79	0.38%
2000	19,148	-25%	17,208	-1,940	-11%
2001	14,779	-42%	15,617	838	5.4%
2002	11,201	-56%	14,111	2,910	21%
2003	10,342	-59%	12,485	2,143	17%
2004	10,134	-60%	12,477	2,343	19%
2005	9,642	-62%	12,484	2,842	23%
2006	9,152	-64%	12,486	3,334	27%
2007	8,794	-65%	11,046	2,252	20%
2008	8,346	-67%	10,705	2,359	22%
2009	7,300	-71%	10,377	3,077	30%
2010	7,116	-72%	10,053	2,937	29%
2011	7,302	-71%	9,690	2,388	25%
2012	7,810	-69%	9,689	1,879	19%

<sup>1</sup> The RECLAIM universe is divided into two cycles with compliance schedules staggered by six months. Compliance years for Cycle 1 facilities run from January 1 through December 31 and Cycle 2 compliance years are from July 1 through June 30.

<sup>2</sup> Total RTCs = Allocated RTCs + RTCs from ERC conversion.

**Figure 3-1  
NOx Emissions and Available RTCs**



Similar to Table 3-1 and Figure 3-1 for NOx, Table 3-2 presents aggregate annual SOx emissions data for each compliance year based on audited emissions, and Figure 3-2 compares these audited aggregate annual SOx emissions with the aggregate annual SOx RTC supply. As shown in Table 3-2 and Figure 3-2, RECLAIM facilities have not exceeded their SOx allocations on an aggregate basis in any compliance year since program inception. For Compliance Year 2012, SOx emissions were below total allocations by 40%. Similar to the unused NOx RTCs, the unused SOx RTCs for the last four compliance years, inclusive of Compliance Year 2012, remain in excess of 30%. The data indicates that RECLAIM met its programmatic SOx emission reduction goals and demonstrated equivalency in SOx emission reductions compared to the subsumed command-and-control rules and control measures. Based on audited emission data, annual SOx emissions have followed a general downward trend, except for increases in Compliance Years 1995, 1997, 2005, and 2007 compared to their respective previous year.

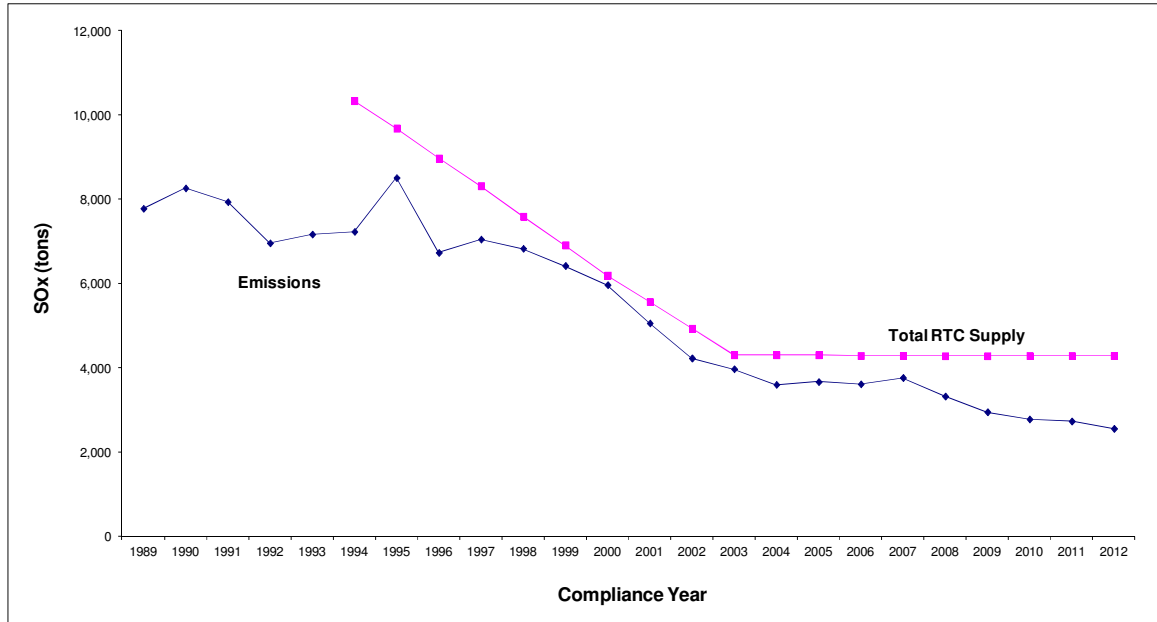
**Table 3-2**  
**Annual SOx Emissions for Compliance Years 1994 through 2012**

Compliance Year	Audited Annual SOx Emissions <sup>1</sup> (tons)	Audited Annual SOx Emissions Change from 1994 (%)	Total SOx RTCs <sup>2</sup> (tons)	SOx RTCs Left Over (tons)	SOx RTCs Left Over (%)
1994	7,230	0%	10,335	3,105	30%
1995	8,508	18%	9,685	1,177	12%
1996	6,731	-6.9%	8,976	2,245	25%
1997	7,048	-2.5%	8,317	1,269	15%
1998	6,829	-5.5%	7,592	763	10%
1999	6,420	-11%	6,911	491	7.1%
2000	5,966	-17%	6,194	228	3.7%
2001	5,056	-30%	5,567	511	9.2%
2002	4,223	-42%	4,932	709	14%
2003	3,968	-45%	4,299	331	7.7%
2004	3,597	-50%	4,299	702	16%
2005	3,663	-49%	4,300	637	15%
2006	3,610	-50%	4,282	672	16%
2007	3,759	-48%	4,286	527	12%
2008	3,319	-54%	4,280	961	22%
2009	2,946	-59%	4,280	1,334	31%
2010	2,775	-62%	4,282	1,507	35%
2011	2,727	-62%	4,283	1,556	36%
2012	2,552	-65%	4,283	1,731	40%

<sup>1</sup> The RECLAIM universe is divided into two cycles with compliance schedules staggered by six months. Compliance years for Cycle 1 facilities run from January 1 through December 31 and Cycle 2 compliance years are from July 1 through June 30.

<sup>2</sup> Total RTCs = Allocated RTCs + RTCs from ERC conversion.

**Figure 3-2  
SOx Emissions and Available RTCs**



### Comparison to Command-and-Control Rules

RECLAIM subsumed a number of command-and-control rules<sup>1</sup> and sought to achieve reductions equivalent to these subsumed rules. RECLAIM facilities are exempt from the subsumed rules' requirements that apply to SOx or NOx emissions once the facilities comply with the applicable monitoring requirements of Rules 2011 - Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SOx) Emissions or 2012 - Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NOx) Emissions, respectively. During Compliance Year 2012, one of the subsumed rules, Rule 1110.2 – Emissions from Gaseous and Liquid-Fueled Engines, was amended on September 7, 2012. Even though this rule was subsumed by RECLAIM, the February 1, 2008 amendment to Rule 1110.2 added, in part, emission standards for new non-emergency engines driving electrical generators that are specifically applicable to both RECLAIM and non-RECLAIM facilities. The purpose of the September 2012 rule amendment was to re-affirm the previously adopted emission limits for biogas-powered internal combustion engines as well as to provide: additional time for compliance, a compliance option for a longer averaging time for engines with superior performance in achieving lower mass emissions, and a compliance option that further extends the effective dates for certain engines based on a compliance flexibility fee. This amended rule did not impose a new category-wide equipment emission limit change and did not alter the RECLAIM-related portions of the rule concerning new non-emergency engines driving electrical generators. Instead, it extended the compliance timeline for the command and control emission limit already existing in the 2008 amendment of the rule for operators of biogas-powered internal combustion

<sup>1</sup> See Tables 1 and 2 of Rule 2001.

engines. The emission limit was based on the Interim Report on the Technology Assessment for Rule 1110.2 Biogas Engines presented to the Governing Board in July 2010.

Other rules amended or adopted during Compliance Year 2012 but not subsumed by RECLAIM included Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II, Rule 1114 – Petroleum Refining Coking Operations, and Rule 1148.2 – Notification and Reporting Requirements for Oil and Gas Wells and Chemical Suppliers.

The May 3, 2013 amendment to Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II excluded several categories of equipment with de minimus emissions from the requirement to obtain written permits to facilitate the streamlining of the District's permitting system. Similarly, the May 3, 2013 amendment to Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II included additional categories to the streamlined filing/registration program of Rule 222 and clarified and enhanced the enforceability and the ability to appeal operating conditions issued pursuant to the provisions of that rule.

Rule 1114 – Petroleum Refining Coking Operations, adopted on May 3, 2013, established a depressurization limit of less than two pounds per square inch gauge (psig) pressure prior to venting a coke drum to atmosphere. Additionally, it included into the rule options for alternative compliance schedules and interim limits for facilities not able to meet the less than two psig compliance deadline within six months of rule adoption, depending on the number of delayed coking units they operate. The intent of the adopted rule was to reduce volatile organic compounds, particulate matter, hazardous air pollutants, sulfur compounds and methane emissions released during the delayed coking process at petroleum refineries. Furthermore, the rule also included deadlines for permit applications, installation of monitoring equipment and exemptions from certain Regulation IV requirements.

Finally, on April 5, 2013 Rule 1148.2 – Notification and Reporting Requirements for Oil and Gas Wells and Chemical Suppliers was adopted. This rule established requirements for owners or operators of onshore oil and gas wells within SCAQMD's jurisdiction to notify the Executive Officer when conducting well drilling, well completion, and well reworking activities that involve production stimulation activities such as hydraulic fracturing, gravel packing and/or acidizing. Rule 1148.2 also initiated emissions and chemical reporting requirements. Additionally, this rule also impacted suppliers of chemicals and additives used in drilling, rework, and well completion fluids.

Rules 219, 222, 1114, and 1148.2 are not subsumed under RECLAIM, they apply equally to RECLAIM and non-RECLAIM facilities. The amendment to Rule 1110.2 did not impose new emission limits. Therefore, there are no differential impacts between RECLAIM and non-RECLAIM facilities as a result of these rule amendments/adoptions.

## **Program Amendments**

The Governing Board amended Rule 2002 – Allocations for Oxides of Nitrogen (NO<sub>x</sub>) and Oxides of Sulfur (SO<sub>x</sub>) in November 2010. These amendments call for SO<sub>x</sub> RTCs to be adjusted to achieve a 48.4% (2080.5 tons/yr) overall

reduction, phased in from Compliance Year 2013 through Compliance Year 2019. If overall SOx emissions were to remain unchanged at the Compliance Year 2012 level, then emissions would exceed allocations in Compliance Year 2017.

During Compliance Year 2012, there were no new amendments to Regulation XX adopted by SCAQMD's Governing Board. However, on December 7, 2012 SCAQMD Governing Board did adopt the 2012 AQMP, including Control Measure CMB-01 – Further NOx Reductions from RECLAIM that proposes to reduce NOx emissions from RECLAIM sources by three to five tons per day by 2020. The reductions were originally planned for two phases – two to three tons per day by Compliance Year 2015 in Phase I and an additional one to two tons per day by 2020 in Phase II. Rule development is currently underway with an anticipated public hearing in 2014 to consider the reductions as a single amendment (the reductions, if adopted, will most likely be implemented in phases over a number of years).

## Breakdowns

Pursuant to Rule 2004(i) – Breakdown Provisions, a facility may request that emissions increases due to a breakdown not be counted towards the facility's allocations. In order to qualify for such exclusion, the facility must demonstrate that the excess emissions were the result of a fire or a mechanical or electrical failure caused by circumstances beyond the facility's reasonable control. The facility must also take steps to minimize emissions resulting from the breakdown, and mitigate the excess emissions to the maximum extent feasible. Applications for exclusion of unmitigated breakdown emissions from a facility's total reported annual RECLAIM emissions must be approved by SCAQMD in writing. In addition, facilities are required to quantify unmitigated breakdown emissions for which an exclusion request has been approved in their APEP report.

As part of the annual program audit report, Rule 2015(d)(3) requires SCAQMD staff to determine whether excess emissions approved to be excluded from RTC reconciliation have been programmatically offset by unused RTCs within the RECLAIM program. If the breakdown emissions exceed the unused RTCs, any excess breakdown emissions must be offset by either: (1) deducting the amount of emissions not programmatically offset from the RTC holdings for the subsequent compliance year from facilities that had unmitigated breakdown emissions, proportional to each facility's contribution to the total amount of unmitigated breakdown emissions; and/or (2) RTCs obtained by the Executive Officer for the compliance year following the completion of the annual program audit report in an amount sufficient to offset the unmitigated breakdown emissions.

As shown in Table 3-3, a review of APEP reports for Compliance Year 2012 found that no facilities requested to exclude breakdown emissions from being counted against their allocations. Thus, for Compliance Year 2012, no additional RTCs are required to offset breakdown emissions pursuant to Rule 2015(d)(3).

**Table 3-3**  
**Breakdown Emission Comparison for Compliance Year 2012**

<b>Emittant</b>	<b>Compliance Year 2012 Unused RTCs (tons)</b>	<b>Unmitigated Breakdown Emissions<sup>1</sup> (tons)</b>	<b>Remaining Compliance Year 2012 RTCs (tons)</b>
NOx	1,879	0	1,879
SOx	1,731	0	1,731

<sup>1</sup> Data for unmitigated breakdown emissions (not counted against Allocation) as reported under APEP reports.

## Impact of Changing Universe

As discussed in Chapter 1, two facilities were included, no facility was excluded and five facilities shut down in Compliance Year 2012. Changes to the universe of RECLAIM facilities have the potential to impact emissions and the supply and demand of RTCs, and therefore, may impact RECLAIM emission reduction goals.

Existing facilities (defined by Rule 2000 as those with valid SCAQMD Permits to Operate issued prior to October 15, 1993 and that continued to be in operation or possess valid SCAQMD permits on October 15, 1993) that are not categorically excluded may choose to enter the program even though they do not meet the inclusion criteria. They may also be included by SCAQMD if their facility-wide emissions increase to four tons or more per year of NOx or SOx or both. When one of these existing facilities enters the program, they are issued RTC allocations based on their operational history pursuant to the methodology prescribed under Rule 2002. Inclusions of existing facilities may affect demand more than supply because even though these facilities are issued RTCs based on their operational history, the amount may not be sufficient to offset their current or future operations. Overall, inclusions shift the accounting of emissions from the universe of non-RECLAIM sources to the universe of RECLAIM sources without actually changing the overall emissions inventory. Finally, inclusions change the rules and requirements that apply to the affected facilities. There were no existing facilities that chose to opt into the RECLAIM program between July 1, 2012 and June 30, 2013 and none were included into the RECLAIM program during Compliance Year 2012 based on the Rule 2001 threshold of actual NOx and/or SOx emissions greater than or equal to four tons per year.

Facilities that received all SCAQMD Permits to Operate on or after October 15, 1993 are defined by Rule 2000 as new facilities. New facilities can choose to enter RECLAIM or can be included due to actual NOx or SOx emissions in excess of four tons or more per year. New facilities are not issued RTCs based on operational history, but any external offsets provided by the facility are converted to RTCs. There was one new facility that elected to opt-in between July 1, 2012 and June 30, 2013. When a new facility joins the RECLAIM universe, it is required to obtain sufficient RTCs to offset its NOx or SOx emissions. These RTCs must be obtained through the trading market and are not issued by SCAQMD to the facility. Such facilities increase the overall

demand for the fixed supply of RTCs because they increase total RECLAIM emissions without increasing the total supply of RTCs.

Additionally, facilities that undergo a partial change of operator may have an impact on emissions, depending on the operating conditions of the facility under the new operator. No additional allocations are issued as a consequence of a facility splitting into two and undergoing a partial change of operator. Therefore, the supplies of NO<sub>x</sub> and SO<sub>x</sub> RTCs are not impacted. Between July 1, 2012 and June 30, 2013 there was one facility included into the RECLAIM universe as a result of the partial change of operator of a facility already in RECLAIM.

The shutdown of a RECLAIM facility results in a reduction in actual emissions. The shutdown facility retains its RTC holdings, which it may continue to hold as an investment, transfer to another facility under common ownership, or trade on the market. Therefore, although the facility is no longer emitting, its RTCs may be used at another facility. Shutdown facilities have the opposite effect on the RTC market as do new facilities: the overall demand for RTCs is reduced while the supply remains constant. As reported in Chapter 1, five RECLAIM facilities (one of which was a NO<sub>x</sub> and SO<sub>x</sub> facility, and the other four which were NO<sub>x</sub>-only facilities) shut down permanently between July 1, 2012 and June 30, 2013.

A facility is excluded from the RECLAIM universe if SCAQMD staff determines that the facility was included in the program in error. In such cases, both the emissions and the RTCs that were issued to the facility for future years are withdrawn, thereby having a neutral impact on the RTC supply. Exclusions have the reverse affect as inclusions, in that the accounting of emissions is shifted from the RECLAIM universe of sources to the non-RECLAIM universe of sources. No facilities were excluded between July 1, 2012 and June 30, 2013.

In short, inclusion of new facilities and facilities that result from a partial change of operator, as well as the shutdown of RECLAIM facilities, change the demand for RTCs without changing the supply<sup>2</sup>, while exclusions of existing facilities make corresponding changes to both the demand and the supply, thereby mitigating their own impact on the markets and shifting emissions between the RECLAIM and non-RECLAIM universes.

Compliance Year 2012 NO<sub>x</sub> and SO<sub>x</sub> audited emissions and initial allocations for facilities that were shut down, excluded, or included into the program during Compliance Year 2012 are summarized in Tables 3-4 and 3-5.

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<sup>2</sup> Facilities that were initially permitted after the October 1993 adoption of RECLAIM and that provided NO<sub>x</sub> or SO<sub>x</sub> ERCs to offset their emissions are issued RTCs corresponding to the ERCs provided.



**Table 3-4**  
**NOx Emissions Impact from the Changes in Universe (Tons)**

Category	Compliance Year 2012 NOx Emissions (tons)	Allocated Compliance Year 2012 NOx RTCs (tons)
Shutdown Facilities	4.5	10.0
Excluded Facilities	Not applicable	Not applicable
Included Facilities	172.0	0
RECLAIM Universe	7,810	9,689

**Table 3-5**  
**SOx Emissions Impact from the Changes in Universe (Tons)**

Category	Compliance Year 2012 SOx Emissions (tons)	Allocated Compliance Year 2012 SOx RTCs (tons)
Shutdown Facilities	1.3	3.7
Excluded Facilities	Not applicable	Not applicable
Included Facilities	Not applicable	Not applicable
RECLAIM Universe	2,552	4,283

## Backstop Provisions

Rule 2015 requires that SCAQMD review the RECLAIM program and implement necessary measures to amend it whenever aggregate emissions exceed the aggregate allocations by five percent or more, or whenever the average annual price of RTCs exceeds \$15,000 per ton. Compliance Year 2012 aggregate NOx and SOx emissions were both below aggregate allocations as shown in Figures 3-1 and 3-2. At the same time, average annual prices for NOx and SOx RTCs in calendar year 2012 were below \$15,000 per ton, as shown in Chapter 2. Therefore, there is no need to initiate a program review.

## CHAPTER 4 NEW SOURCE REVIEW ACTIVITY

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### Summary

*The annual program audit assesses New Source Review (NSR) activity from RECLAIM facilities in order to ensure that RECLAIM is complying with federal NSR requirements and state no net increase (NNI) in emissions requirements, while providing flexibility to facilities in managing their operations and allowing new sources into the program. In Compliance Year 2012, a total of 46 NO<sub>x</sub> RECLAIM facilities had NSR NO<sub>x</sub> emission increases, and four SO<sub>x</sub> RECLAIM facilities had NSR SO<sub>x</sub> emission increases due to expansion or modification. Consistent with all prior compliance years, there were sufficient NO<sub>x</sub> and SO<sub>x</sub> RTCs available to allow for expansion, modification, and modernization by RECLAIM facilities.*

*RECLAIM is required to comply with federal NSR emissions offset requirements at a 1.2-to-1 offset ratio programmatically for NO<sub>x</sub> emission increases and a 1-to-1 offset ratio for SO<sub>x</sub> emission increases on a programmatic basis. In Compliance Year 2012, RECLAIM provided an offset ratio based on the compliance year's total unused allocations and total NSR emission increases of 9-to-1 for NO<sub>x</sub>, demonstrating federal equivalency. RECLAIM inherently complies with the federally-required 1-to-1 SO<sub>x</sub> offset ratio for any compliance year, provided aggregate SO<sub>x</sub> emissions under RECLAIM are lower than or equal to aggregate SO<sub>x</sub> allocations for that compliance year. As shown in Chapter 3, there was no programmatic SO<sub>x</sub> exceedance during Compliance Year 2012; in fact, there was a surplus of SO<sub>x</sub> RTCs. Therefore, RECLAIM more than complied with the federally-required SO<sub>x</sub> offset ratio and further quantification of the SO<sub>x</sub> offset ratio is unnecessary. Compliance with the federally-required offset ratio also demonstrates compliance with any applicable state NNI requirements for new or modified sources. In addition, RECLAIM requires application of, at a minimum, California Best Available Control Technology (BACT), which is very similar to federal Lowest Achievable Emission Rate (LAER), for all new or modified sources with emission increases. In addition, more stringent control technology can be required pursuant to RECLAIM if it is determined to be cost effective as compared to AQMP measures or adopted SCAQMD rules.*

### Background

Emissions increases from the construction of new or modified stationary sources in non-attainment areas are regulated by both federal NSR and state NNI requirements to ensure that progress toward attainment of ambient air quality standards is not hampered. RECLAIM is designed to comply with federal NSR

and state NNI requirements without hindering facilities' ability to expand or modify their operations<sup>1</sup>.

Title 42, United States Code §7511a, paragraph (e), requires major sources in extreme non-attainment areas to offset emission increases of extreme non-attainment pollutants and their precursors at a 1.5-to-1 ratio based on potential to emit. However, if all major sources in the extreme non-attainment area are required to implement federal BACT, a 1.2-to-1 offset ratio may be used. Federal BACT is comparable to California's BARCT. SCAQMD requires all existing major sources to employ federal BACT/California BARCT and, therefore, is eligible for a 1.2-to-1 offset ratio for ozone precursors (*i.e.*, NO<sub>x</sub> and VOC). The federal offset requirement for major SO<sub>2</sub> sources is at least a 1-to-1 ratio, which is lower than the aforementioned 1.2-to-1 ratio. Even though the Basin is in attainment with SO<sub>x</sub> standards, SO<sub>x</sub> is a precursor to PM<sub>10</sub> which is a non-attainment air pollutant in the Basin. The applicable offset ratio for PM<sub>10</sub> is at least 1-to-1, thus, the applicable offset ratio for SO<sub>x</sub> is 1-to-1. Health and Safety Code §40920.5 requires "no net increase in emissions from new or modified stationary sources of non-attainment pollutants or their precursors" (*i.e.*, a 1-to-1 offset ratio on an actual emissions basis). All actual RECLAIM emissions are offset at a 1-to-1 ratio provided there is not a programmatic exceedance of aggregate allocations, thus satisfying the federal offset ratio for SO<sub>x</sub> and state NNI requirements for both SO<sub>x</sub> and NO<sub>x</sub>. Annual RTC allocations follow a programmatic reduction to reflect changes in federal BACT/California BARCT and thereby comply with federal and state offset requirements.

RECLAIM requires California BACT/federal LAER for new or modified sources with increases in hourly potential to emit of RECLAIM pollutants. This provision complies with both the state and federal requirements regarding control technologies for new or modified sources. In addition to offset and BACT requirements, RECLAIM subjects RTC trades that are conducted to mitigate emissions increases over the sum of the facility's starting allocation and non-tradable/non-usable credits to trading zone restrictions to ensure net ambient air quality improvement within the sensitive zone established by Health and Safety Code §40410.5. Furthermore, facilities with actual RECLAIM emissions that exceed their initial allocation by 40 tons per year or more are required to analyze the potential impact of their emissions increases through air quality modeling.

Rule 2005 – New Source Review for RECLAIM requires RECLAIM facilities to provide (hold), prior to the start of operation, sufficient RTCs to offset the annual increase in potential emissions for the first year of operation at a 1-to-1 ratio. The same rule also requires existing RECLAIM facilities that increase their annual allocations above the level of their starting allocations plus non-tradable/non-usable credits and all new RECLAIM facilities<sup>2</sup> to provide sufficient RTCs to offset the annual potential emissions increase from new or modified

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<sup>1</sup> Federal NSR applies to federal major sources (sources with the potential to emit at least 10 tons of NO<sub>x</sub> or 100 tons of SO<sub>x</sub> per year for the South Coast Air Basin) and state NNI requirements apply to all NO<sub>x</sub> sources and to SO<sub>x</sub> sources with the potential to emit at least 15 tons per year in the South Coast Air Basin. RECLAIM's NSR provisions apply to all facilities in the program, including those not subject to federal NSR or state NNI (although the threshold for RECLAIM inclusions is four tons per year of NO<sub>x</sub> or SO<sub>x</sub> emissions, some RECLAIM facilities have actual emissions much less than 4 tons per year).

<sup>2</sup> New facilities are facilities that received all District Permits to Construct on or after October 15, 1993. All other facilities are existing facilities.

source(s) at a 1-to-1 ratio at the commencement of each compliance year after the start of operation of the new or modified source(s). Although RECLAIM allows a 1-to-1 offset ratio for emissions increases, RECLAIM complies with the federal offset requirement by complying with the 1.2-to-1 offset requirement for NO<sub>x</sub> on an aggregate basis. This annual program audit report assesses NSR permitting activities for Compliance Year 2012 to verify that programmatic compliance of RECLAIM with federal and state NSR requirements has been maintained.

## NSR Activity

Evaluation of NSR data for Compliance Year 2012 shows that RECLAIM facilities were able to expand and modify their operations while complying with NSR requirements. During Compliance Year 2012, a total of 46 NO<sub>x</sub> RECLAIM facilities (26 in Cycle 1 and 20 in Cycle 2) were issued permits to operate, which resulted in a total of 237.18 tons per year of NO<sub>x</sub> emission increases from starting operations of new or modified sources, and four SO<sub>x</sub> RECLAIM facilities (one facility in Cycle 1 and three facilities in Cycle 2) experienced a total of 7.53 tons per year of SO<sub>x</sub> NSR emission increases that resulted from starting operations of new or modified permitted sources. These emission increases were calculated pursuant to Rule 2005(d) – Emission Increase. As in previous years, there were adequate unused RTCs (NO<sub>x</sub>: 1,879 tons, SO<sub>x</sub>: 1,731 tons; see Chapter 3) in the RECLAIM universe for use to offset these emission increases at the appropriate offset ratios.

## NSR Compliance Demonstration

RECLAIM is designed to programmaticly comply with the federal NSR offset requirements. Meeting the NSR requirement (offset ratio of 1.2-to-1 for NO<sub>x</sub> and at least 1-to-1 for SO<sub>x</sub>) also demonstrates compliance with the state NNI requirements. Section 173 (c) of the federal Clean Air Act (CAA) states that only emissions reductions beyond the requirements of the CAA, such as federal Reasonably Available Control Technology (RACT), shall be considered creditable as emissions reductions for offset purposes. Since the initial allocations (total RTC supply in Compliance Year 1994) already met federal RACT requirements when the program was initially implemented, any emissions reductions beyond the initial allocations are available for NSR offset purposes until RACT becomes more stringent. The programmatic offset ratio calculations presented in the Annual RECLAIM Audit Reports for Compliance Years 1994 through 2004 relied upon aggregate Compliance Year 1994 allocations as representing RACT. However, staff recognizes that RACT may have become more stringent in the intervening years, so it may no longer be appropriate to calculate the programmatic offset ratio based upon aggregate 1994 allocations.

Aggregate allocations for each compliance year represent federal BACT, which is equivalent to local BARCT. Federal BACT is more stringent than federal RACT (*i.e.*, the best available control technology is more stringent than what is reasonably available), so staff started using current allocations (federal BACT) as a surrogate for RACT as the basis for calculating programmatic NO<sub>x</sub> and SO<sub>x</sub> offset ratios in the annual program audit report for Compliance Year 2005 and is continuing to do so for NO<sub>x</sub> in this report. This is a more conservative (*i.e.*, more stringent) approach than using actual RACT and is much more conservative than

using aggregate Compliance Year 1994 allocations. The advantage of this approach is that, as long as the calculated NOx offset ratio is at least 1.2-to-1, it provides certainty that RECLAIM has complied with federal and state offset requirements without the need to know exactly where RACT lies for RECLAIM facilities. However, if this very conservative approach should ever fail to demonstrate that the aggregate NOx offset ratio for any year is at least 1.2-to-1, that will not necessarily mean RECLAIM has not actually complied with the federally required 1.2-to-1 NOx offset ratio. Rather it will indicate that further analysis is required to accurately identify RACT so that the actual offset ratio can be calculated and a compliance determination made.

Provided aggregate RECLAIM emissions do not exceed aggregate allocations, all RECLAIM emissions are offset at a ratio of 1-to-1. This leaves all unused allocations available to provide offsets beyond the 1-to-1 ratio for NSR emission increases. Unused allocations are based on all Cycle 1 and Cycle 2 RTCs of a given compliance year and the aggregate RECLAIM emissions for the selected time period. The NSR emission increase is the sum of emission increases due to permit activities at all RECLAIM facilities during the same compliance year. The aggregate RECLAIM offset ratios are expressed by the following formula:

$$\text{Offset Ratio} = (1 + \frac{\text{compliance year's total unused allocations}}{\text{total NSR emission increases}}) \text{-to-1}$$

As stated in the previous section under the title of "NSR Activity", permits to operate issued to 46 RECLAIM facilities resulted in 237.18 tons of NOx emission increase pursuant to Rule 2005(d). Additionally, as identified in Table 3-1 (Annual NOx Emissions for Compliance Years 1994 through 2012), 1,879 tons of Compliance Year 2012 NOx RTCs remained unused. Therefore, the Compliance Year 2012 NOx programmatic offset ratio calculated from this methodology is 9-to-1 as shown below:

$$\begin{aligned} \text{Offset Ratio} &= (1 + \frac{1,879 \text{ tons}}{237.18 \text{ tons}}) \text{-to-1} \\ &= 9\text{-to-1} \end{aligned}$$

RECLAIM continues to generate sufficient excess emissions reductions to provide a NOx offset ratio greater than the 1.2-to-1 required by federal law. This compliance with the federal offset requirements is built into the RECLAIM program through annual reductions of the allocations assigned to RECLAIM facilities and the subsequent allocation adjustments adopted by the Governing Board to implement BARCT. The required offset ratio for SOx is 1-to-1. Since RECLAIM facilities are required to secure, at a minimum, adequate RTCs to cover their actual emissions, the SOx offset ratio is met automatically provided there is no programmatic exceedance of aggregate SOx allocations for that compliance year. As stated earlier in Chapter 3, there were 1,731 tons of excess (unused) SOx RTCs for Compliance Year 2012. Therefore, there is certainty that both the federally required SOx offset ratio and the California NNI requirement for

SOx were satisfied and a separate calculation of the SOx offset ratio is not necessary.

BACT and modeling are also required for any RECLAIM facility that installs new equipment or modifies existing sources if the installation or modification results in an increase in emissions of RECLAIM pollutants. Furthermore, the RTC trading zone restrictions in Rule 2005 – New Source Review for RECLAIM, limit trades conducted to offset emission increases over the sum of the facility's starting allocation and non-tradable/non-usable credits to ensure net ambient air quality improvement within the sensitive zone, as required by state law.

The result of the review of NSR activity in Compliance Year 2012 shows that RECLAIM is in compliance with both state NNI and federal NSR requirements. SCAQMD staff will continue to monitor NSR activity under RECLAIM in order to assure continued progress toward attainment of ambient air quality standards without hampering economic growth in the Basin.

## Modeling Requirements

Rule 2004, as amended in May 2001, requires RECLAIM facilities with actual NOx or SOx emissions exceeding their initial allocation in Compliance Year 1994 by 40 tons per year or more to conduct modeling to analyze the potential impact of the increased emissions. The modeling analysis is required to be submitted within 90 days of the end of the compliance year. For Compliance Year 2012, one RECLAIM facility<sup>3</sup> was subject to this requirement. The facility submitted modeling analysis that showed that its NOx emissions complied with the most stringent ambient air quality standards set forth in Rule 2005, Appendix A.

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<sup>3</sup> Under the requirements of Rule 2004(q), Mountainview Power Company (Facility ID 160437) was required to submit modeling analysis for its NOx emissions in Compliance Year 2012.

## CHAPTER 5 COMPLIANCE

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### Summary

*Of the 278 NO<sub>x</sub> RECLAIM facilities during Compliance Year 2012, a total of 265 facilities (95%) complied with their NO<sub>x</sub> allocations, and all but one of the 33 SO<sub>x</sub> facilities (97%) complied with their SO<sub>x</sub> allocations. The 13 NO<sub>x</sub> facilities that exceeded their NO<sub>x</sub> allocations had aggregate NO<sub>x</sub> emissions of 1,208 tons and did not have adequate allocations to offset 361.1 tons (or 29.9%) of their combined emissions. This exceedance amount is small compared to the overall allocations for Compliance Year 2012 (3.7% of total NO<sub>x</sub> allocations). One SO<sub>x</sub> facility had SO<sub>x</sub> emissions that exceeded its SO<sub>x</sub> allocations by only three pounds. The exceedances from these 13 facilities (12 NO<sub>x</sub>-only facilities and one NO<sub>x</sub> and SO<sub>x</sub> facility) did not impact the overall RECLAIM emission reduction goals. Pursuant to Rule 2010(b)(1)(A), all 13 facilities had their respective exceedances deducted from their annual allocations for the compliance year subsequent to the date of SCAQMD's determination that the facilities exceeded their Compliance Year 2012 allocations. The overall RECLAIM NO<sub>x</sub> and SO<sub>x</sub> emission reduction targets and goals were met for Compliance Year 2012 (i.e., aggregate emissions for all RECLAIM facilities were well below aggregate allocations).*

### Background

RECLAIM facilities have the flexibility to choose among compliance options to meet their annual allocations by reducing emissions, trading RTCs, or a combination of both. However, this flexibility must be supported by standardized emission MRR requirements to ensure the reported emissions are real, quantifiable, and enforceable. As a result, detailed MRR protocols are specified in the RECLAIM regulation to guarantee accurate and verifiable emission reports.

The MRR requirements were designed to provide accurate and up-to-date emission reports. Once facilities install and complete certification of the required monitoring and reporting equipment, they are relieved from command-and-control rule limits and requirements subsumed under Rule 2001. Mass emissions from RECLAIM facilities are then determined directly by monitoring and reporting equipment for some sources and from data generated by monitoring equipment for others. If monitoring equipment fails to produce quality-assured data or the facility fails to file timely emissions reports, RECLAIM rules require emissions be determined by a rule-prescribed methodology known as Missing Data Procedures or "MDP." Depending on past performance of the monitoring equipment (*i.e.*, availability of quality-assured data) and the duration of the missing data period, MDP use a tiered approach to calculate emissions. As availability of quality-assured data increases, the MDP-calculated emissions become more representative of the actual emissions, but when the availability of quality-assured data is low, MDP calculations become more conservative and approach, to some extent, "worst case" assessments.

## Allocation Compliance

### Requirements

At the beginning of the RECLAIM program in 1994 or at the time a facility is included in the RECLAIM program, each RECLAIM facility is issued an annual allocation for each compliance year pursuant to methodology prescribed under Rule 2002. For a facility in existence prior to October 1993, it is issued allocations by the SCAQMD based on its historical production rate. A facility without an operating history prior to 1994 receives no allocation and must purchase enough RTCs to cover the emissions for their operations, except facilities that have provided ERCs to offset emission increases prior to entering RECLAIM. At the time of joining RECLAIM, these facilities are issued RTCs on an annual basis, converted from the amount of offsets provided. Additionally, all facilities entering RECLAIM holding any ERCs generated at and held by the individual facility itself have those ERCs converted to RTCs and added to their allocated RTCs. Knowing their emission goals, RECLAIM facilities have the flexibility to manage their emissions in order to meet their allocations in the most cost-effective manner. Facilities may employ emission control technology or process changes to reduce emissions, buy RTCs, or sell unneeded RTCs.

Facilities may buy RTCs or sell excess RTCs at any time during the year in order to ensure that their emissions are covered. There is a thirty day reconciliation period commencing at the end of each of the first three quarters of each compliance year. In addition, after the end of each compliance year, there is a 60-day reconciliation period (instead of 30 days as at the end of the first three quarters) during which facilities have a final opportunity to buy or sell RTCs for that compliance year. Each RECLAIM facility must hold sufficient RTCs in its allocation account to cover its quarterly as well as year-to-date emissions for the compliance year at the end of each reconciliation period. By the end of each quarterly and annual reconciliation period, each facility is required to certify the emissions for the preceding quarter and/or compliance year by submitting its Quarterly Certification of Emissions Reports (QCERs) and/or APEP report, respectively.

### Compliance Audit

Since the beginning of the program, SCAQMD staff has conducted annual program audits of all emission reports submitted by RECLAIM facilities to ensure their integrity and reliability. The audit process includes conducting field inspections to check process equipment, monitoring devices, and operational records. Additionally, emissions calculations are performed in order to verify emissions reported electronically to SCAQMD or submitted in QCERs and APEP reports. These inspections revealed that some facilities made errors in quantifying their emissions such as arithmetic errors, used incorrect emission factors or adjustment factors (*e.g.*, pressure correction factors and bias adjustment factors), used emission calculation methodologies not allowed under the rules, used MDP inappropriately, or did not use MDP when required. Other common mistakes included reporting non-RECLAIM emissions and/or omitting reportable emissions.

Whenever an audit revealed a facility's emissions to be in excess of its annual allocation, the facility was provided an opportunity to review the audit and to



present additional data to further refine audit results. This extensive and rigorous audit process ensures valid and reliable emissions data.

### **Compliance Status**

During this compliance year, a total of 13 RECLAIM facilities failed to reconcile their emissions (12 NOx-only facilities and one facility that exceeded both its NOx and SOx allocations). Ten of these 13 facilities failed to secure sufficient RTCs to cover their reported emissions during either the quarterly or annual reconciliation periods. Of these ten facilities, three facilities (two NOx-only facilities and one NOx and SOx facility), had additional reasons for NOx exceedance such as applying incorrect stackflow calculations, using incorrect emission factors, failing to apply MDP, and using incorrect MDP (the facility with a SOx exceedance failed to secure sufficient SOx RTCs to cover reported SOx emissions). Of the remaining three facilities, one exceeded its allocations because the facility failed to apply bias adjustment factors to its calculated major source emissions. The second facility failed to account for emissions from two reportable sources, failed to report all of the emissions from equipment that are exempt from obtaining SCAQMD permit pursuant to Rule 219, and failed to apply a pressure correction factor in order to standardize its process unit fuel usage. The third facility failed to replace its major source turbines emissions data as reported by their CEMS with MDP based emissions because the facility failed to conduct RATA tests until about two and a half months beyond the rule-specified deadline. Overall, the Compliance Year 2012 allocation compliance rate is 95% (265 out of 278 facilities) for NOx RECLAIM facilities and 97% (32 out of 33 facilities) for SOx RECLAIM facilities. For purposes of comparison, the allocation compliance rates for Compliance Year 2011 were 93% and 100% for NOx and SOx RECLAIM facilities, respectively. The 13 facilities that had NOx emissions in excess of their individual NOx allocations had 1,208 tons of NOx emissions and did not have adequate RTCs to cover 361.1 of those tons (or 29.9%). This exceedance amount (3.7% of aggregate NOx allocations) is small compared to the overall allocations for Compliance Year 2012. One SOx facility had SOx emissions that exceeded its SOx allocations by only three pounds. Pursuant to Rule 2010(b)(1)(A), all 13 facilities had their respective exceedances deducted from their annual emissions allocations for the compliance year subsequent to SCAQMD's determination that the facilities exceeded their Compliance Year 2012 allocations.

### **Impact of Missing Data Procedures**

MDP was designed to provide a method for determining emissions when an emission monitoring system fails to yield valid emissions. For major sources, these occurrences may be caused by failure of the monitoring systems, the data acquisition and handling systems, or by lapses in the Continuous Emission Monitoring System (CEMS) certification period. Major sources are also required to use MDP for determining emissions whenever daily emissions reports are not submitted by the applicable deadline. When comparing actual emissions with a facility's use of substituted MDP emissions, the range of MDP emissions can vary from "more representative" to emissions being overstated to reflect a "worst case"<sup>1</sup> scenario. For instance, an MDP "worst case" scenario may occur for

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<sup>1</sup> Based on uncontrolled emission factor at maximum rated capacity of the source and 24 hours per day.

major sources that fail to have their CEMS certified in a timely manner, and therefore, have no valid CEMS data that can be used for substitution. In other cases, where prior CEMS data is available, MDP is applied in tiers depending on the duration of missing data periods and the historical availability of monitoring systems. As the duration of missing data periods gets shorter and the historical availability of monitoring systems gets higher, the substitute data yielded by MDP becomes more representative of actual emissions<sup>2</sup>.

In addition to MDP for major sources, RECLAIM rules also define MDP for large sources and process units. These procedures are applicable when a process monitoring device fails or when a facility operator fails to record fuel usage or other monitored data (e.g., hours of operation). The resulting MDP emissions reports are reasonably representative of the actual emissions because averaged or maximum emissions from previous operating periods may be used. However, for extended missing data periods (more than two months for large sources or four quarters or more for process units) or when emissions data for the preceding year are unavailable, large source and process unit MDP are also based on maximum operation or worst case assumptions.

Based on APEP reports, 95 NO<sub>x</sub> facilities and 13 SO<sub>x</sub> facilities used MDP in reporting portions of their annual emissions during Compliance Year 2012. In terms of mass emissions, 7.5% of the total reported NO<sub>x</sub> emissions and 4.5% of the total reported SO<sub>x</sub> emissions in the APEP reports were calculated using MDP for Compliance Year 2012. Table 5-1 compares the impact of MDP on reported annual emissions for the last few compliance years and the second compliance year, 1995 (MDP was not fully implemented during Compliance Year 1994).

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<sup>2</sup> Based on averaged emissions during periods before and after the period for which data is not available.

**Table 5-1**  
**MDP Impact on Annual Emissions**

Year	Percent of Reported Emissions Using Substitute Data*	
	NOx	SOx
1995	23.0% (65 / 6,070)	40.0% (12 / 3,403)
2006	2.5% (48 / 220)	0.0% (0 / 0)
2007	5.6% (78 / 489)	7.0% (14 / 262)
2008	7.6% (86 / 625)	7.5% (9 / 242)
2009	7.8% (103 / 554)	13.8% (15 / 403)
2010	7.0% (93 / 488)	6.1% (23 / 168)
2011	6.2% (94 / 435)	12.4% (19 / 328)
2012	7.5% (95 / 560)	4.5% (13 / 114)

Numbers in parenthesis that are separated by a forward slash represent the number of facilities that reported use of MDP in each compliance year and tons of emissions based on MDP.

Most of the issues associated with CEMS certifications were resolved prior to Compliance Year 1999. Since then, very few facilities have had to submit emissions reports based on the worst case scenario under MDP, which may considerably overstate the actual emissions from major sources. As an example, most facilities that reported emissions using MDP in 1995 did so because they did not have their CEMS certified in time to report actual emissions. Since their CEMS had no prior data, MDP called for an application of the most conservative procedure to calculate substitute data by assuming continuous uncontrolled operation at the maximum rated capacity of the facility's equipment, regardless of the actual operational level during the missing data periods. As a result, the calculations yielded substitute data that may have been much higher than the actual emissions. In comparison to the 65 NOx facilities implementing MDP in Compliance Year 1995, 95 facilities reported NOx emissions using MDP in Compliance Year 2012. Even though this number of facilities is higher than in 1995, the percentage of emissions reported using MDP during Compliance Year 2012 is much lower than it was in 1995 (7.5% compared to 23%). Additionally, in terms of quantity, NOx emissions in Compliance Year 2012 were about 9% of those in Compliance Year 1995 (560 tons compared to 6,070 tons). Since most CEMS were certified and had been reporting actual emissions by the beginning of Compliance Year 2000, facilities that had to calculate substitute data were able to apply less conservative methods of calculating MDP for systems with high availability and shorter duration missing data periods. Therefore, the substitute data they calculated for their missing data periods were more likely to be representative of the actual emissions.

It is important to note that portions of annual emissions attributed to MDP include actual emissions from the sources as well as the possibility of overestimated emissions. As shown in Table 5-1, approximately 8% of reported NOx annual emissions were calculated using MDP in Compliance Year 2012. MDP may significantly overestimate emissions from some of the sources that operate intermittently and have low monitoring system availability, and/or lengthy missing data periods. Even though a portion of the 8% may be overestimated emissions due to conservative MDP, a significant portion (or possibly all) of it could have also been actual emissions from the sources. Unfortunately, the portion that represents the actual emissions cannot be readily estimated because the extent of this effect varies widely, depending on source categories and operating parameters, as well as the tier of MDP applied. As an example, refineries tend to operate at near maximum capacity for 24 hours per day and seven days per week, except for scheduled shutdowns for maintenance and barring major breakdowns or other unforeseeable circumstances. For Compliance Year 2012, a majority of NOx MDP emissions data (77%) and SOx MDP emissions data (97%) were reported by refineries. Therefore, missing data emissions calculated for such facilities could be more reflective of the actual emissions than those calculated for facilities that do not operate on a continuous basis but, due to low data availability, are required to calculate MDP based upon continuous operation.

## Emissions Monitoring

### Overview

The reproducibility of reported RECLAIM facility emissions—and thereby the enforceability of the RECLAIM program—is assured through a three-tiered hierarchy of MRR requirements. A facility’s equipment falls into an MRR category based on the kind of equipment it is and on the level of emissions produced or potentially produced by the equipment. RECLAIM divides all NOx sources into major sources, large sources, process units, and equipment exempt from obtaining a written permit pursuant to Rule 219. All SOx sources are divided into major sources, process units, and equipment exempt from obtaining a written permit pursuant to Rule 219. Table 5-2 shows the monitoring requirements applicable to each of these categories.

**Table 5-2  
Monitoring Requirements for RECLAIM Sources**

Source Category	Major Sources (NOx and SOx)	Large Sources (NOx only)	Process Units and Rule 219 Equipment (NOx and SOx)
Monitoring Method	Continuous Emission Monitoring System (CEMS)	Fuel Meter or Continuous Process Monitoring System (CPMS)	Fuel Meter, Timer, or CPMS
Reporting Frequency	Daily	Monthly	Quarterly

## Continuous Emission Monitoring System (CEMS)

### Requirements

CEMS represent both the most accurate and the most reliable method of calculating emissions because they continuously monitor all of the parameters necessary to directly determine mass emissions of NO<sub>x</sub> and SO<sub>x</sub>. They are also the most costly method. These attributes make CEMS the most appropriate method for the largest emission-potential equipment in the RECLAIM universe, major sources. Even though the number of major sources monitored by either CEMS or Alternative Continuous Emission Monitoring Systems (ACEMS) represent 18% and 62% of all permitted RECLAIM NO<sub>x</sub> and SO<sub>x</sub> sources, respectively, reported emissions for Compliance Year 2012 revealed that 76% of all RECLAIM NO<sub>x</sub> emissions and 97% of all RECLAIM SO<sub>x</sub> emissions were determined by CEMS or ACEMS.

ACEMS are alternatives to CEMS that are allowed under the RECLAIM regulation. These are devices that do not directly monitor NO<sub>x</sub> or SO<sub>x</sub> mass emissions; instead, they correlate multiple process parameters to arrive at mass emissions. To be approved for RECLAIM MRR purposes, ACEMS must be determined by the SCAQMD to be equivalent to CEMS in relative accuracy, reliability, reproducibility, and timeliness.

### Compliance Status

By the end of calendar year 1999, almost all facilities that were required to have CEMS had their CEMS certified or provisionally approved. The only remaining uncertified CEMS are for sources that recently became subject to major source reporting requirements and sources that modified their CEMS. Typically, there will be a few new major sources each year. Therefore, there will continue to be a small number of CEMS in the certification process at any time.

### Semiannual and Annual Assessments of CEMS

RECLAIM facilities conduct their Relative Accuracy Test Audit (RATA) of certified CEMS using private sector testing laboratories approved under the SCAQMD Laboratory Approval Program (LAP). These tests are conducted either semiannually or annually, depending on the most recent relative accuracy value (the sum of the average differences and the confidence coefficient) for each source. The interval is annual only when all required relative accuracies obtained during an audit are 7.5% or less (*i.e.*, more accurate).

To verify the quality of CEMS, the RATA report compares the CEMS data to data taken simultaneously, according to approved testing methods (also known as reference methods), by a LAP-approved source testing contractor. In order to have a passing RATA, each of the following relative accuracy performance criteria must be met:  $\pm 20\%$  for pollutant concentration,  $\pm 15\%$  for stack flow rate, and  $\pm 20\%$  for pollutant mass emission rate. The RATAs also determine whether CEMS data must be adjusted for low readings compared to the reference method (bias adjustment factor), and by how much. The RATA presents two pieces of data, the CEMS bias (how much it differs from the reference method on the average) and the CEMS confidence coefficient (how variable that bias or average difference is).

Tables 5-3 and 5-4, respectively, summarize the 2012 and 2013 calendar years' passing rates for RATAs of certified CEMS for NO<sub>x</sub> and SO<sub>x</sub> concentration, total sulfur in fuel gas concentrations, stack flow rate (in-stack monitors and F-factor based calculations), and NO<sub>x</sub> and SO<sub>x</sub> mass emissions. However, the tables do not include SO<sub>x</sub> mass emissions calculated from total sulfur analyzer systems because such systems serve numerous devices, and therefore are not suitable for mass emissions-based RATA testing.

**Table 5-3**  
**Passing Rates Based on RATAs of Certified CEMS in 2012<sup>1</sup>**

Concentration						Stack Flow Rate				Mass Emissions			
NO <sub>x</sub>		SO <sub>2</sub>		Total <sup>2</sup> Sulfur		In-Stack Monitor		F-Factor Based Calc.		NO <sub>x</sub>		SO <sub>x</sub> <sup>3</sup>	
No.	% Pass	No.	% Pass	No.	% Pass	No.	% Pass	No.	% Pass	No.	% Pass	No.	% Pass
336	100	84	100	14	100	42	100	341	100	336	100	53	100

1. About one percent of test audits were still submitted in paper form.
2. Includes Cylinder Gas Audit (CGA) tests.
3. Does not include SO<sub>x</sub> emissions calculated from total sulfur analyzers.

**Table 5-4**  
**Passing Rates Based on RATAs of Certified CEMS in 2013<sup>1</sup>**

Concentration						Stack Flow Rate				Mass Emissions			
NO <sub>x</sub>		SO <sub>2</sub>		Total <sup>2</sup> Sulfur		In-Stack Monitor		F-Factor Based Calc.		NO <sub>x</sub>		SO <sub>x</sub> <sup>3</sup>	
No.	% Pass	No.	% Pass	No.	% Pass	No.	% Pass	No.	% Pass	No.	% Pass	No.	% Pass
338	100	89	100	14	100	42	100	348	100	338	100	49	100

1. All passing rates calculated from data submitted before January 10, 2014 and may exclude some data from the fourth quarter of calendar year 2013. About two percent of test audits were still submitted in paper form.
2. Includes Cylinder Gas Audit (CGA) tests.
3. Does not include SO<sub>x</sub> emissions calculated from total sulfur analyzers.

As indicated in Tables 5-3 and 5-4, the passing rates for NO<sub>x</sub>/SO<sub>2</sub> concentration, stack flow rate, and mass emissions were all 100%. Since the inception of RECLAIM there have been significant improvements with respect to the availability of reliable calibration gas, the reliability of the reference method, and an understanding of the factors that influence valid total sulfur analyzer data. RATA reports for all total sulfur analyzers during calendar years 2012 and 2013 have indicated passing results.

**Electronic Data Reporting of RATA Results**

Facilities operating CEMS under RECLAIM are required to submit RATA results to SCAQMD. An electronic reporting system, known as Electronic Data Reporting (EDR), was set up to allow RATA results to be submitted electronically using a standardized format in lieu of the traditional formal source test reports in paper form. This system minimizes the amount of material the facility must

submit to SCAQMD and also expedites reviews. Currently, most RATA results are submitted via this system.

### **Non-Major Source Monitoring, Reporting, and Recordkeeping**

Emissions quantified for large sources are primarily based on concentration limits or emission rates specified in the Facility Permit. Other variables used in the calculation of large source emissions are dependent on the specific process of the equipment, but generally include fuel usage, applicable dry F-factor, and the higher heating value of the fuel used. RECLAIM requires large sources to be source tested within defined three-year windows in order to validate fuel meter accuracy, and the equipment's concentration limit or emission rate. Since emissions quantification is fuel-based, the monitoring equipment required to quantify emissions is a non-resettable fuel meter that must be corrected to standard temperature and pressure. Large source emission data must be submitted electronically on a monthly basis.

Process unit emission calculations are similar to those of large sources in that emissions are quantified using the fuel-based calculations for either a concentration limit or an emission factor specified in the Facility Permit. Similar to large sources, variables used in emission calculations for process units are dependent on the equipment's specific process, but generally include fuel usage, applicable dry F-factor, and the higher heating value of the fuel used. Process units that are permitted with concentration limits are also required to be source-tested, but within specified five-year windows. Emissions for equipment exempt from obtaining a written permit pursuant to Rule 219 are quantified using emission factors and fuel usage. No source testing is required for such exempt equipment. Since emissions are fuel-based for both process units and exempt equipment, the monitoring equipment required to quantify emissions is a non-resettable fuel meter, corrected to standard temperature and pressure. Alternately, a timer may be used to record operational time. In such cases, fuel usage is determined based on maximum rated capacity of the source. Process units and exempt equipment must submit emission reports electronically on a quarterly basis.

## **Emissions Reporting**

### **Requirements**

RECLAIM is designed to take advantage of electronic reporting technology to streamline reporting requirements for both facilities and SCAQMD, and to help automate compliance tracking. Under RECLAIM, facilities report their emissions electronically on a per device basis to SCAQMD's Central Station computer as follows:

- Major sources must use a Remote Terminal Unit (RTU) to telecommunicate emission data to the SCAQMD Central Station. The RTU collects data, performs calculations, generates the appropriate data files, and transmits the data to the Central Station. This entire process is required to be performed by the RTU without human intervention on a daily basis.

- Emission data for all equipment other than major sources may be transmitted via RTU or compiled manually and transmitted to the Central Station via modem. Alternatively, emissions from non-major sources may use the SCAQMD internet based application, Web Access To Electronic Reporting System (WATERS) to transmit emission data for non-major sources via internet connection. The data may be transmitted directly by the facility or through a third party.

### **Compliance Status**

The main concern for emission reporting is the timely submittal of accurate daily emissions reports from major sources. If daily reports are not submitted by the specified deadlines, RECLAIM rules may require that emissions from CEMS be ignored and the emissions be calculated using MDP. Daily emission reports are submitted by the RTU of the CEMS to the SCAQMD Central Station via telephone lines. Often communication errors between the two points are not readily detectable by facility operators. Undetected errors can cause facility operators to believe that daily reports were submitted when they were not received by the Central Station. In addition to providing operators a means to confirm the receipt of their reports, the WATERS application can also display electronic reports that were submitted to, and received by, the Central Station. This system helps reduce instances where MDP must be used for late or missing daily reports, because the operators can verify that the Central Station received their daily reports, and can resubmit them if there were communication errors.

### **Protocol Review**

Even though review of MRR protocols was only required by Rule 2015(b)(1) for the first three compliance years of the RECLAIM program, staff continues to review the effectiveness of enforcement and MRR protocols. Based on such review, occasional revisions to the protocols may be needed to achieve improved measurement and enforcement of RECLAIM emission reductions, while minimizing administrative costs to SCAQMD and RECLAIM participants.

Since the RECLAIM program was adopted, staff has produced rule interpretations and implementation guidance documents to clarify and resolve specific concerns about the protocols raised by RECLAIM participants. In situations where staff could not interpret existing rule requirements to adequately address the issues at hand, the protocols and/or rules have been amended.

Finally, when the RECLAIM program first began, the ability to electronically transmit emissions data to SCAQMD's Central Station via modem was considered state-of-the-art technology. However, that technology is now antiquated and finding replacement components (*e.g.*, slower baud-rate modems) is becoming increasingly difficult. As such, SCAQMD is evaluating options to either upgrading or replacing the current Central Station. Key factors being considered include ease of implementation and cost impacts on RECLAIM facilities and SCAQMD. Progress on this effort will be presented in future annual program audit reports.



## CHAPTER 6 REPORTED JOB IMPACTS

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### Summary

*This chapter compiles data as reported by RECLAIM facilities in their Annual Permit Emissions Program (APEP) reports. The analysis focuses exclusively on job impacts at RECLAIM facilities and determination if those job impacts were directly attributable to RECLAIM as reported by those facilities. There may be additional effects of the RECLAIM program on the local economy outside of RECLAIM facilities (e.g., generating jobs for consulting firms, source testing firms and CEMS vendors) and also factors other than RECLAIM (e.g., the prevailing economic climate), that impact the job market. These factors are not evaluated in this report. Also job losses and job gains are strictly based on RECLAIM facilities' reported information. AQMD is not able to independently verify the reported job impacts information.*

*According to the Compliance Year 2012 employment survey data gathered from APEP reports, RECLAIM facilities reported a net gain of 2,026 jobs, representing 2% of their total employment. All of the facilities that reported job losses and job gains cited factors other than RECLAIM as the reasons for these changes in employment figures. Furthermore, none of the five RECLAIM facilities listed as shutdown during Compliance Year 2012 cited RECLAIM as a factor contributing to the decision to shutdown.*

### Background

The APEP reports submitted by RECLAIM facilities include survey forms that are used to evaluate the socioeconomic impacts of the program. Facilities were asked to indicate on the forms the number of jobs at the beginning of Compliance Year 2012 and any changes in the number of jobs that took place during the compliance year in each of three categories: manufacturing, sale of products, and non-manufacturing. The numbers of jobs gained and lost reported by facilities in each category during the compliance year were tabulated.

Additionally, APEP reports ask facilities that shut down during Compliance Year 2012 to provide the reasons for their closure. APEP reports also allow facilities to indicate whether the RECLAIM program led to the creation or elimination of jobs during Compliance Year 2012. Those facilities that reported a change in the number of jobs due to RECLAIM were asked to specify the number of jobs lost or gained, and to state why the job loss or creation was attributed to RECLAIM.

Since data regarding job impacts and facility shutdowns are derived from the APEP reports, the submittal of these reports is essential to assessing the influence that the RECLAIM program has on these issues. The following discussion represents data obtained from APEP reports submitted to SCAQMD for Compliance Year 2012 and clarifying information collected by SCAQMD staff. SCAQMD staff is not able to verify the accuracy of the reported job impacts information.

## Job Impacts

Table 6-1 summarizes job impact data gathered from Compliance Year 2012 APEP reports and follow-up contacts with facilities. A total of 123 facilities reported 11,856 job gains, while 129 facilities reported a total of 9,830 job losses. Net job gains were reported in two of the three categories: sales of products (19), and non-manufacturing (2,604), whereas net job losses were reported in the remaining category: manufacturing (597). Table 6-1 shows a total net gain of 2,026 jobs, which represents a net jobs increase of 2% at RECLAIM facilities during Compliance Year 2012.

**Table 6-1**  
**Job Impacts at RECLAIM Facilities for Compliance Year 2012**

Description	Manufacture	Sales of Products	Non-Manufacture	Total <sup>1</sup>
<b>Initial Jobs</b>	<b>39,983</b>	<b>863</b>	<b>62,542</b>	<b>103,388</b>
<b>Overall Job Gain</b>	<b>3,163</b>	<b>128</b>	<b>8,565</b>	<b>11,856</b>
<b>Overall Job Loss</b>	<b>3,760</b>	<b>109</b>	<b>5,961</b>	<b>9,830</b>
<b>Final Jobs</b>	<b>39,386</b>	<b>882</b>	<b>65,146</b>	<b>105,414</b>
<b>Net Job Change</b>	<b>-597</b>	<b>19</b>	<b>2,604</b>	<b>2,026</b>
<b>Percent (%) Job Change</b>	<b>-1.49%</b>	<b>2.20%</b>	<b>4.16%</b>	<b>1.96%</b>
<b>Facilities Reporting Job Gains</b>	<b>86</b>	<b>23</b>	<b>75</b>	<b>123</b>
<b>Facilities Reporting Job Losses</b>	<b>91</b>	<b>30</b>	<b>81</b>	<b>129</b>

<sup>1</sup> The total number of facilities reporting job gains or losses does not equal the sum of the number of facilities reporting job changes in each category (*i.e.*, the manufacture, sales of products, and non-manufacture categories) due to the fact that some facilities may report changes under more than one of these categories.

Data in Table 6-1 include five RECLAIM facilities that were reported to be shut down or ceasing operations in Compliance Year 2012 as listed in Appendix C. One of the shutdown facilities was sold to, and became part of, an adjacent university which is exempt from RECLAIM pursuant to Rule 2001(i)(2)(H). Since the university did not file for a Change of Operator, the original facility is considered shutdown. In the case of the second facility, its operations were consolidated to a new plant in Tennessee. The third facility, a power plant, was shut down as air quality mitigation for another new power plant in the SCAQMD. The last two facilities were shut down because the operations at those facilities were each consolidated at other facilities in the SCAQMD. None of the shutdown facilities attributed job gains or losses to RECLAIM in Compliance Year 2012 (refer to Appendix E).

As with the shutdown facilities described above, none of the RECLAIM facilities that remain in operation attributed any job gains or losses to RECLAIM for Compliance Year 2012. It should also be noted that based on the past few years of data collected from RECLAIM facilities, the job gains or losses attributed only to RECLAIM comprise a very small percentage (less than 2%) of the total number of jobs lost or gained in that period.

The analysis in this report only considers job gains and losses at RECLAIM facilities. It should be noted that this analysis of socioeconomic impacts based on APEP reports and follow-up interviews is focused exclusively on changes in

employment that occurred at RECLAIM facilities. The effect of the program on the local economy outside of RECLAIM facilities, including consulting and source testing jobs, is not considered.

It is not possible to compare the impact of the RECLAIM program on the job market *vis-à-vis* a scenario without RECLAIM. This is because factors other than RECLAIM (*e.g.*, the prevailing economic climate), also impact the job market. Furthermore, there is no way to compare job impacts attributed to RECLAIM to job impacts attributed to command-and-control rules that would have been adopted in RECLAIM's absence, because these command-and-control rules do not exist. As mentioned previously, the effect of the RECLAIM program on the local economy outside of RECLAIM facilities (*e.g.*, generating jobs for consulting firms, source testing firms and CEMS vendors) is also not considered in this report.

## CHAPTER 7

### AIR QUALITY AND PUBLIC HEALTH IMPACTS

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#### Summary

*Audited RECLAIM emissions have been in an overall downward trend since the program's inception. Compliance Year 2012 NO<sub>x</sub> emissions increased slightly (7.0%) relative to Compliance Year 2011 and Compliance Year 2012 SO<sub>x</sub> emissions were 6.4% less when compared to last year. Quarterly calendar year 2012 NO<sub>x</sub> emissions fluctuated within four percent of the mean NO<sub>x</sub> emissions for the year. Quarterly calendar year 2012 SO<sub>x</sub> emissions fluctuated within ten percent of the year's mean SO<sub>x</sub> emissions. There was no significant shift in seasonal emissions from the winter season to the summer season.*

*The California Clean Air Act (CCAA) required a 50% reduction in population exposure to ozone, relative to a baseline averaged over three years (1986 through 1988), by December 31, 2000. The Basin achieved the December 2000 target for ozone well before the deadline. In calendar year 2013, the per capita exposure to ozone (the average length of time each person is exposed) continued to be well below the target set for December 2000.*

*Air toxic health risk is primarily caused by emissions of certain volatile organic compounds (VOCs) and fine particulates, such as metals. RECLAIM facilities are subject to the same air toxic, VOC, and particulate matter regulations as other sources in the Basin. All sources are subject, where appropriate, to the NSR rule for toxics (Rule 1401). In addition, new or modified sources with NO<sub>x</sub> or SO<sub>x</sub> emission increases are required to be equipped with BACT, which minimizes to the extent feasible the increase of NO<sub>x</sub> and SO<sub>x</sub> emissions. RECLAIM and non-RECLAIM facilities that emit toxic air contaminants are required to report those emissions to SCAQMD. Those toxics emissions reports are used to identify candidates for the Toxics Hot Spots program (AB2588), which in turn quantifies toxic risk from facilities in the program and identifies those facilities that are required to do public notice and/or reduce their health risk levels to the public. There is no evidence that RECLAIM has caused or allowed higher toxic risk in areas adjacent to RECLAIM facilities.*

#### Background

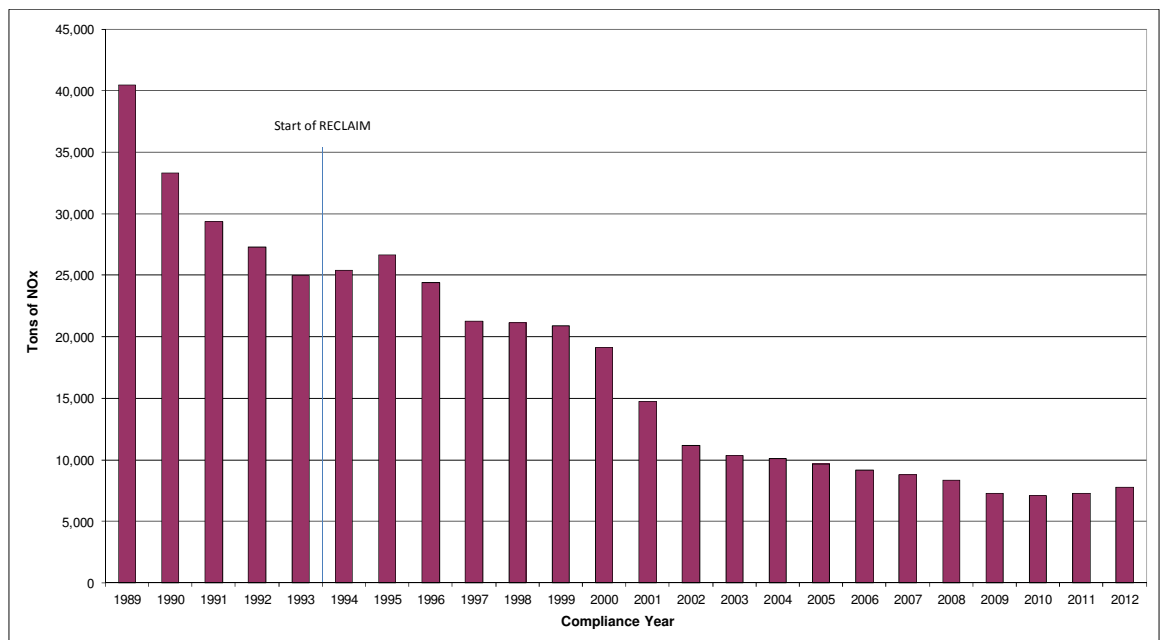
RECLAIM is designed to achieve the same, or higher level of, benefits in terms of air quality and public health as would have been achieved from implementation of the control measures and command-and-control rules that RECLAIM subsumed. Therefore, as a part of each annual program audit, SCAQMD evaluates per capita exposure to air pollution, toxic risk reductions, emission trends, and seasonal fluctuations in emissions. SCAQMD also generates quarterly emissions maps depicting the geographic distribution of RECLAIM emissions. As mentioned in last year's annual report, these maps are generated and posted quarterly on SCAQMD's webpage ([http://www.aqmd.gov/reclaim/Qtrly\\_Maps.htm](http://www.aqmd.gov/reclaim/Qtrly_Maps.htm)) including all quarterly emissions maps presented in previous annual program audit reports. This chapter addresses:

- Emission trends for RECLAIM facilities;
- Seasonal fluctuations in emissions;
- Per capita exposure to air pollution; and
- Toxics impacts.

### Emission Trends for RECLAIM Sources

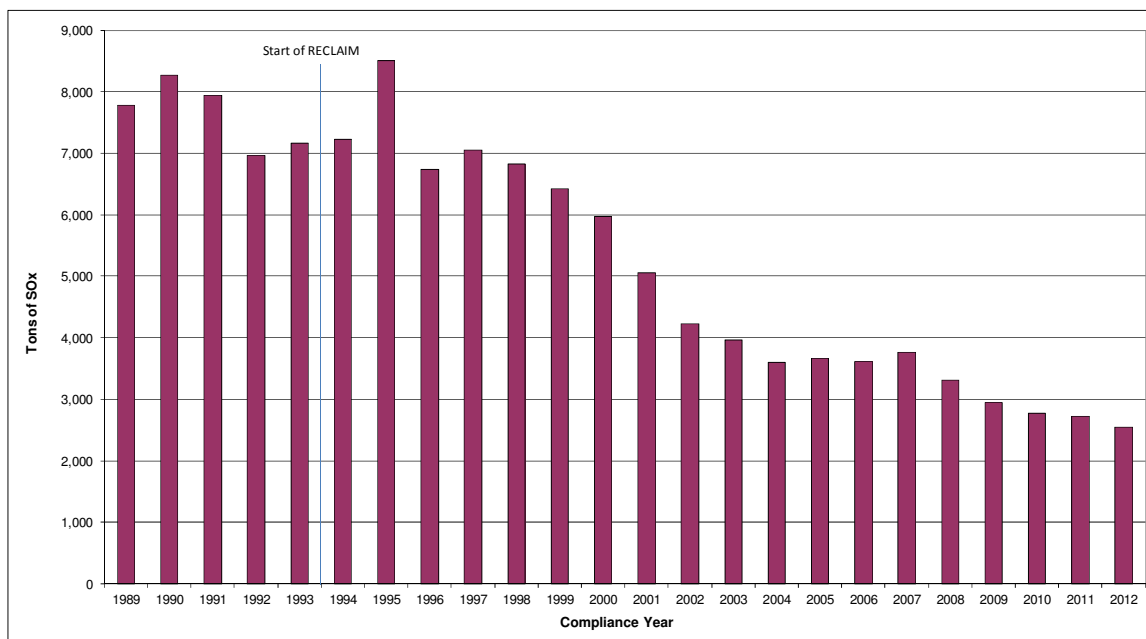
Concerns were expressed during program development that RECLAIM might cause sources to increase their aggregate emissions during the early years of the program due to perceived over-allocation of emissions. In Figures 7-1 and 7-2, which show NOx and SOx emissions from RECLAIM sources since 1989, the analysis of emissions from RECLAIM sources indicates that overall, RECLAIM emissions have been in a downward trend since program inception and the concerns on emission increase during early years of RECLAIM did not materialize.

**Figure 7-1**  
**NOx Emission Trend for RECLAIM Sources**



Note: 1989-1993 emissions presented in this figure are the emissions from the facilities in the 1994 NOx universe.

**Figure 7-2**  
**SOx Emission Trend for RECLAIM Sources**



Note: 1989-1993 emissions presented in this figure are the emissions from the facilities in the 1994 SOx universe.

NOx emissions decreased every year since Compliance Year 1995 through Compliance Year 2010. Then for Compliance Year 2011 as well as this compliance year, NOx emissions increased slightly each year but were still much lower than the programmatic goal as shown in Table and Figure 3-1. Since Compliance Year 1995, annual SOx emissions have also followed a general downward trend, except for slight increases in Compliance Years 1997, 2005, and 2007 compared to each respective previous compliance year. SOx emissions continued to decrease in Compliance Year 2012 when compared to the previous compliance year.

The increase in NOx and SOx emissions from Compliance Year 1994 to 1995 can be attributed to the application of MDP at the onset of RECLAIM implementation. RECLAIM provides for emissions from each major source’s first year in the program to be quantified using an emission factor and fuel throughput (interim reporting) while they certify their CEMS. However, at the beginning of the program (Compliance Year 1994), many facilities had difficulties certifying their CEMS within this time frame, and consequently reported their Compliance Year 1995 emissions using MDP. As discussed in Chapter 5, since CEMS for these major sources had no prior data, MDP required the application of the most conservative procedure to calculate substitute data. As a result, the application of MDP during this time period yielded substitute data that may have been much higher than the actual emissions. In addition, emissions after Compliance Year 1995 decreased steadily through 2000. Thus, RECLAIM facilities did not increase their aggregate emissions during the earlier years of the program.

## Seasonal Fluctuation in Emissions for RECLAIM Sources

During program development, another concern was that RECLAIM might cause facilities to shift emissions from the winter season into the summer ozone season since RECLAIM emission goals are structured on an annual basis, thus exacerbating poor summer air quality. To address this concern, “seasonal fluctuations” were added as part of the required analysis. Accordingly, SCAQMD staff performed a two-part analysis of the quarterly variation in RECLAIM emissions:

1. In the first part, staff qualitatively compared the quarterly variation in Compliance Year 2012 RECLAIM emissions to the quarterly variation in emissions from the same universe of sources prior to the implementation of RECLAIM.
2. In the second part, staff analyzed quarterly audited emissions during calendar year 2012 and compared them with quarterly audited emissions for prior years to assess if there had been such a shift in emissions. This analysis is reflected in Figures 7-3, 7-4, 7-5, and 7-6.<sup>1</sup>

Quarterly emissions data from the facilities in RECLAIM before they were in the program is not available. Therefore, a quantitative comparison of the seasonal variation of emissions from these facilities while operating under RECLAIM with their seasonal emissions variation prior to RECLAIM is not feasible. However, a qualitative comparison has been conducted, as follows:

- NO<sub>x</sub> emissions from RECLAIM facilities are dominated by refineries and power plants.
- SO<sub>x</sub> emissions from RECLAIM facilities are especially dominated by refineries.
- Prior to RECLAIM, refinery production was generally highest in the summer months because more people travel during summer; thus, increasing demand for gasoline and other transportation fuels.
- Electricity generation prior to RECLAIM was generally highest in the summer months because of increased demand for electricity to drive air conditioning units.

Emissions from refineries (NO<sub>x</sub> and SO<sub>x</sub>) and from power plants (NO<sub>x</sub>) are typically higher in the summer months, which was the trend prior to implementation of RECLAIM. Therefore, provided a year’s summer quarter RECLAIM emissions do not exceed that year’s quarterly average emissions by a substantial amount, it can be concluded that, for that year, RECLAIM has not resulted in a shift of emissions to the summer months relative to the pre-RECLAIM emission pattern.

Summer (third quarter) 2012 RECLAIM NO<sub>x</sub> and SO<sub>x</sub> emissions exceed the 2012 quarterly average emissions by about three percent and seven percent, respectively. Based on the foregoing logic, it is clear that these small seasonal fluctuations in RECLAIM emissions are consistent with pre-RECLAIM emissions from the same universe of sources. Therefore, RECLAIM did not cause a shift in

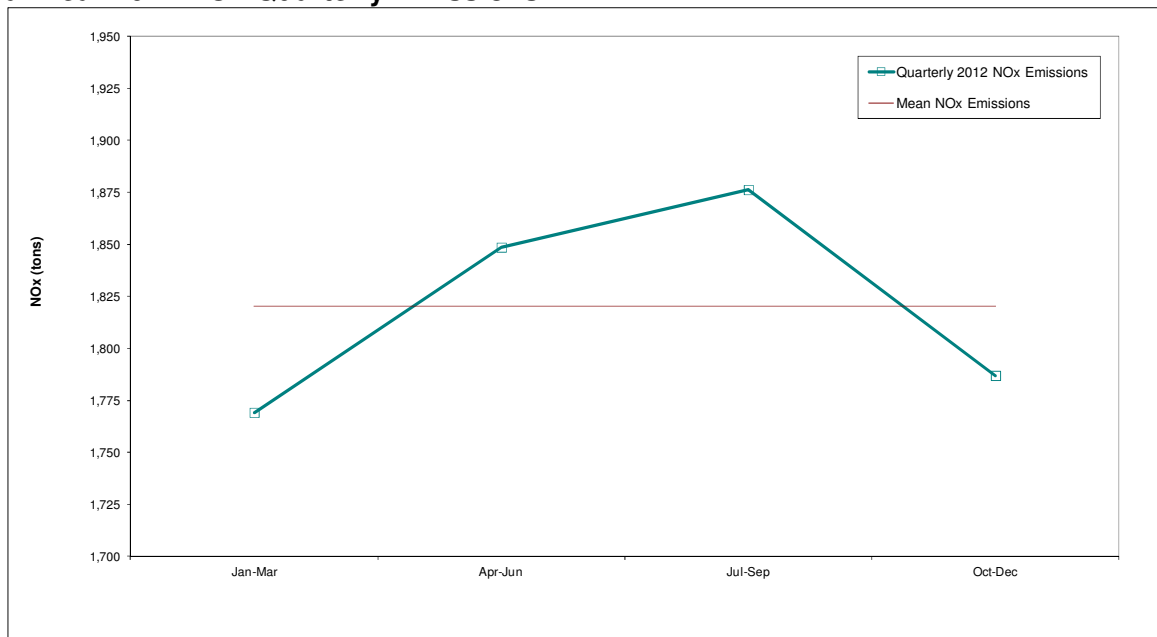
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<sup>1</sup> Data used to generate these figures were derived from audited data. Similar figures for calendar years 1994 through 2007 in previous annual reports were generated from a combination of audited and reported data available at the time the reports were written.

emissions to the summer months relative to the pre-RECLAIM emissions patterns.

Figure 7-3 shows the 2012 mean quarterly NOx emissions, which is the average of the four quarterly aggregate emissions, and the 2012 actual quarterly emissions and Figure 7-4 compares the 2012 quarterly NOx emissions with the quarterly emissions from 2002 through 2011. During calendar year 2012, aggregate quarterly NOx emissions varied from less than three percent below the mean in the first quarter (January through March) to about three percent above the mean in the third quarter (July through September). Figure 7-4 shows that the fourth quarter of 2012 had the lowest aggregate RECLAIM NOx emission totals of any quarter since the program began in 1994. Figures 7-3 and 7-4, together, show that the RECLAIM program has not caused a significant shift in NOx emissions from the winter season into the summer season in recent years relative to early years of the program.

**Figure 7-3**  
**Calendar Year 2012 NOx Quarterly Emissions**





**Figure 7-4**  
**Quarterly NOx Emissions from Calendar Years 2002 through 2012**

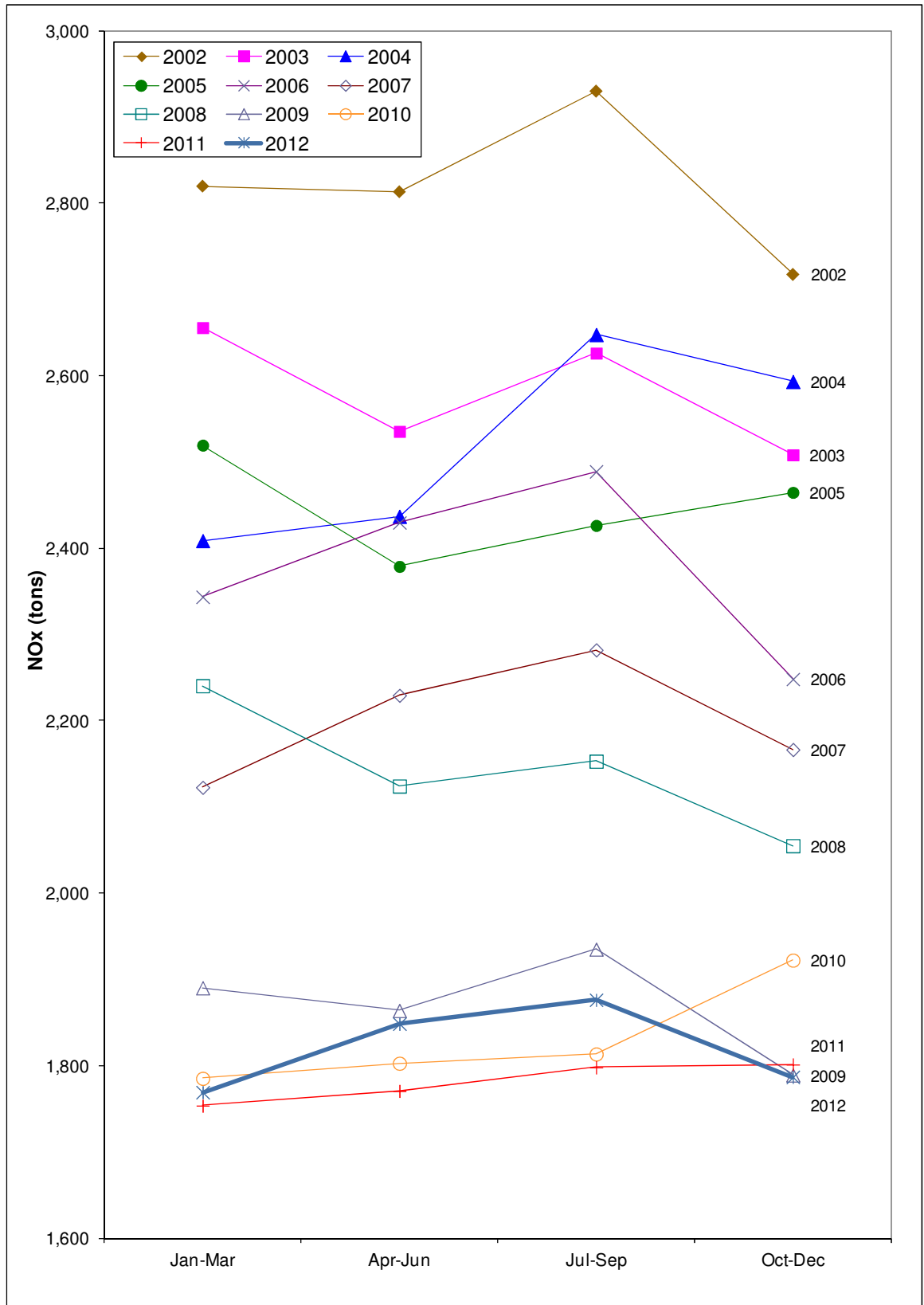
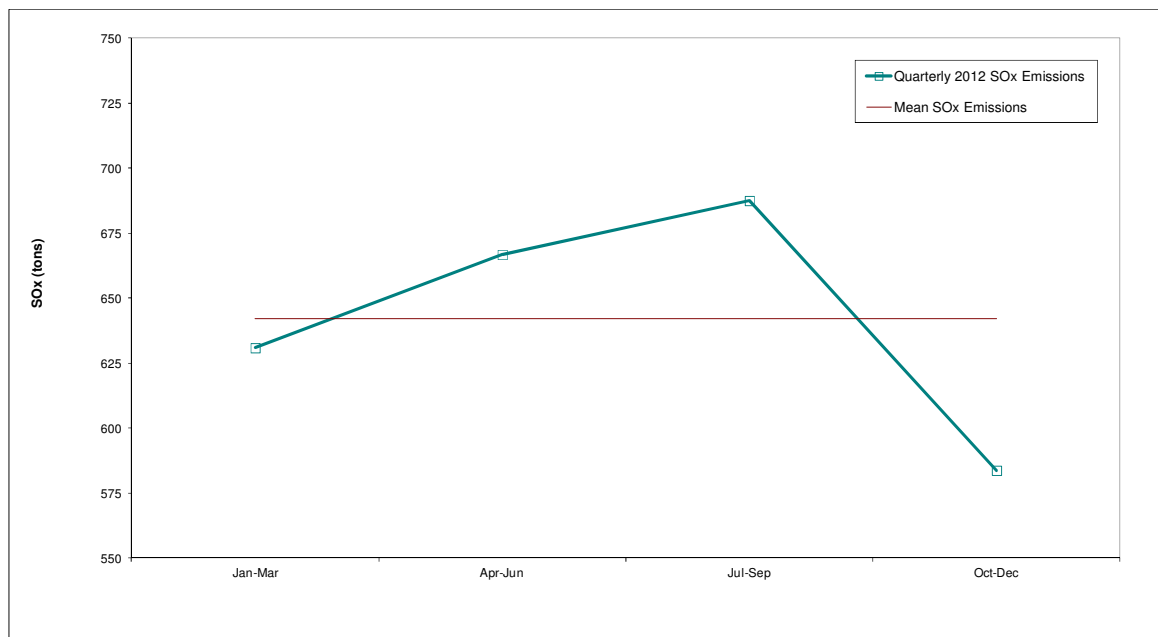


Figure 7-5 presents the 2012 mean quarterly SOx emissions and the 2012 actual quarterly emissions and Figure 7-6 compares the 2012 quarterly SOx emissions with the quarterly emissions from 2002 through 2011. Figure 7-5 shows that quarterly SOx emissions during calendar year 2012 varied from seven percent above the mean in the third quarter (July through September) to nine percent below the mean in the fourth quarter (October through December). Figure 7-6 reveals that the 2012 quarterly aggregate SOx emissions profile was similar to those for previous years and that the first, third, and fourth quarters of 2012 had lower aggregate emissions than the corresponding quarters of any prior year since the program began in 1994.

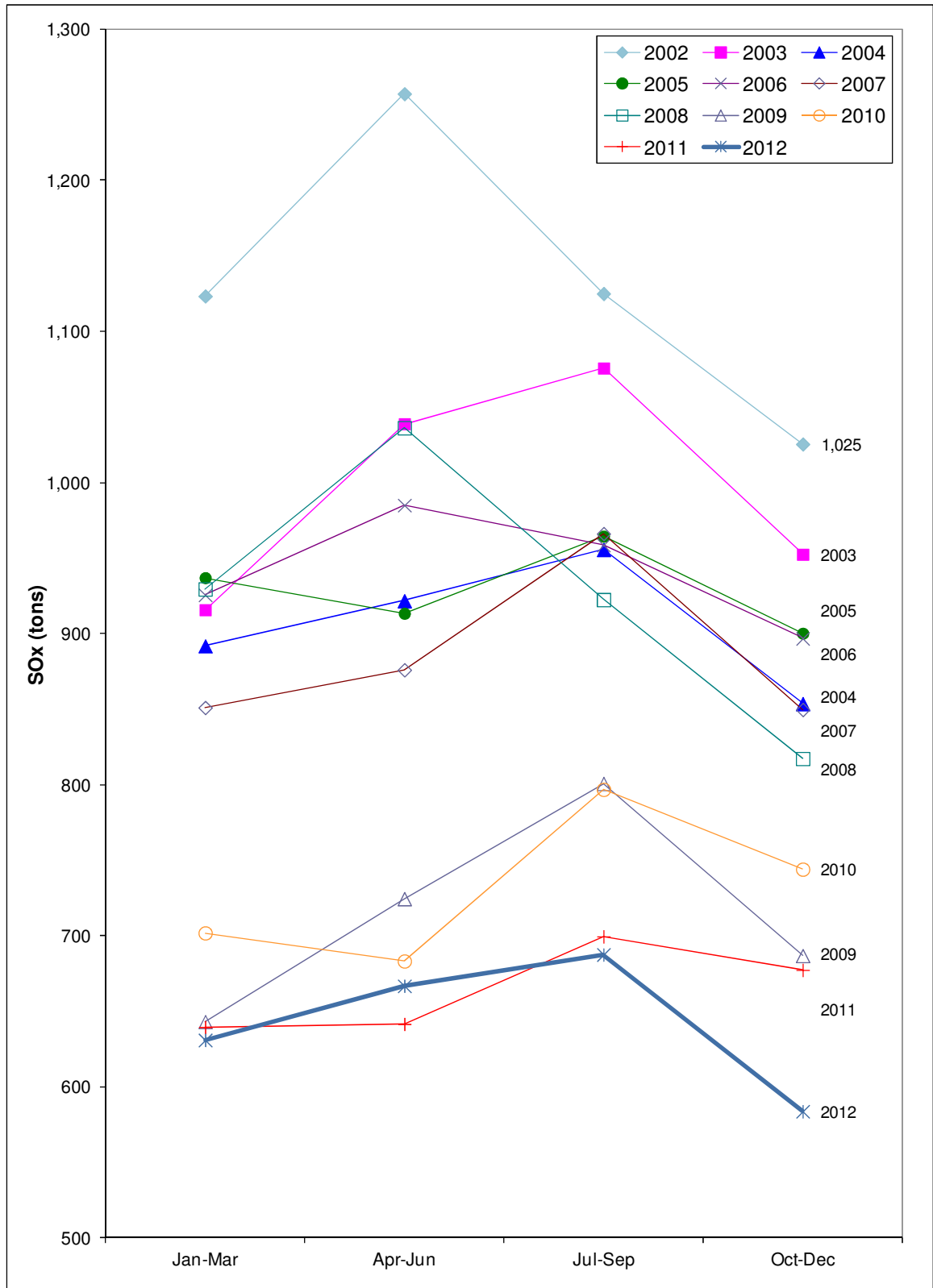
The decline in SOx emissions from the third quarter to the fourth quarter in Figure 7-5 can be attributed to three facilities. One refinery underwent a turnaround of their sulfur recovery unit (SRU) and pre-treater in July 2012 which increased SOx concentrations during the third quarter; thus increasing third quarter emissions over their normal operation levels. Another refinery added a new SRU with low SOx emissions while reducing the loads of three other SRUs during the fourth quarter. Additionally, a third facility added a wet scrubber in the fourth quarter which greatly reduced fourth quarter emissions. These occurrences led to greater than normal third quarter emissions and lower than normal fourth quarter emissions which explain the decline from third quarter to fourth quarter emissions.

This analysis shows that the RECLAIM program has not caused a significant shift in SOx emissions from the winter season into the summer season in recent years relative to early years of the program and that the calendar year 2012 seasonal emissions profile was similar to the corresponding profiles for other recent years.

**Figure 7-5**  
**Calendar Year 2012 SOx Quarterly Emissions**



**Figure 7-6**  
**Quarterly SOx Emissions from Calendar Years 2002 through 2012**



## Per Capita Exposure to Pollution

The predicted effects of RECLAIM on air quality and public health were thoroughly analyzed through modeling during program development. The results were compared to projected impacts from continuing traditional command-and-control regulations and implementing control measures in the 1991 AQMP. One of the criteria examined in the analysis was per capita population exposure.

Per capita population exposure reflects the length of time each person is exposed to unhealthful air quality. The modeling performed in the program development analysis projected that the reductions in per capita exposure under RECLAIM in calendar year 1994 would be nearly identical to the reductions projected for implementation of the control measures in the 1991 AQMP, and the reductions resulting from RECLAIM would be greater in calendar years 1997 and 2000. As reported in previous annual reports, actual per capita exposures to ozone for 1994 and 1997 were below the projections.

As part of the Children's Environmental Health Protection Act that was passed in 1999, and in consultation with the Office of Environmental Health Hazard Assessment, CARB is to "review all existing health-based ambient air quality standards to determine whether these standards protect public health, including infants and children, with an adequate margin of safety." As a result of that requirement, CARB adopted a new 8-hour ozone standard (0.070 ppm), which became effective May 17, 2006, in addition to the 1-hour ozone standard (0.09 ppm) already in place. Table 7-1 shows the number of days that both the new state 8-hour ozone standard of 0.070 ppm and the 1-hour standard of 0.09 ppm were exceeded.

In July 1997, the USEPA established a new ozone National Ambient Air Quality Standard (NAAQS) of 0.085 ppm based on an 8-hour average measurement. As part of the Phase I implementation that was finalized in June 2004, the federal 1-hour ozone standard (0.12 ppm) was revoked effective June 2005. Effective May 27, 2008, the 8-hour NAAQS ozone standard was reduced to 0.075 ppm. Table 7-1 shows monitoring results based on this revised 8-hour federal standard.

Table 7-1 summarizes ozone data for calendar years 2001 through 2013 in terms of the number of days that exceeded the state and federal ambient ozone standards and the Basin's maximum concentration in each calendar year. This table shows that the number of days that exceeded the state and federal ambient ozone standards from calendar year 2012 to 2013 decreased back to 2011 levels; however, the Basin's maximum ozone concentrations, based on both the 1-hour and 8-hour averaging periods, increased slightly over the same period. Although the Basin's maximum ozone concentrations did increase, the changes were small and both concentrations are similar to the average of the corresponding maximum concentrations for 2010 through 2012.

**Table 7-1**  
**Summary of Ozone Data**

Year	Days exceeding state 1-hour standard (0.09 ppm)	Days exceeding state new 8-hour standard (0.07 ppm)	Days exceeding federal 8-hour standard (0.075 ppm)	Basin Maximum 1-hour ozone concentration (ppm)	Basin Maximum 8-hour ozone concentration (ppm)
2001	121	156	132	0.191	0.146
2002	118	149	135	0.169	0.148
2003	133	161	141	0.216	0.200
2004	110	161	126	0.163	0.148
2005	111	142	116	0.163	0.145
2006	102	121	114	0.175	0.142
2007	99	128	108	0.171	0.137
2008	98	136	121	0.176	0.131
2009	100	131	113	0.176	0.128
2010	83	128	109	0.143	0.123
2011	94	127	107	0.160	0.136
2012*	97	140	111	0.147	0.112
2013	92	123	106	0.151	0.122

\* After finalizing the Annual RECLAIM Audit Report for 2011 Compliance Year, the 2012 ozone data decreased slightly from previously reported values. The 2012 ozone data has been revised to reflect the updated changes. However, these changes did not alter the trends stated in the 2011 RECLAIM Report.

The CCAA, which was enacted in 1988, established targets for reducing overall population exposure to severe non-attainment pollutants in the Basin—a 25% reduction by December 31, 1994, a 40% reduction by December 31, 1997, and a 50% reduction by December 31, 2000 relative to a calendar years 1986-88 baseline. These targets are based on the number of hours on average a person is exposed (“per capita exposure”<sup>2</sup>) to ozone above the state 1-hour standard of 0.09 ppm. Table 7-2 shows the 1986-88 baseline, the actual per capita exposures each year since 1994 (RECLAIM’s initial year), and the 1997 and 2000 targets set by the CCAA for each of the four counties in the district and the Basin overall. As shown in Table 7-2, the CCAA reduction targets were achieved as early as 1994 (actual 1994 Basin per capita exposure was 37.6 hours, which is below the 2000 target of 40.2 hours). The per capita exposure continues to remain much lower than the CCAA targets since RECLAIM started in 1994. For calendar year 2013, the actual per capita exposure for the Basin was 1.314 hours, which represents a 98.4% reduction from the 1986-88 baseline level.

<sup>2</sup> SCAQMD staff divides the air basin into a grid of square cells and interpolates recorded ozone data from ambient air quality monitors to determine ozone levels experienced in each of these cells. The total person-hours in a county experiencing ozone higher than the state ozone standard is determined by summing over the whole county the products of the number of hours exceeding the state ozone standard per grid cell with the number of residents in the corresponding cell. The per capita ozone exposures are then calculated by dividing the sum of person-hours by the total population within a county. Similar calculations are used to determine the Basin-wide per capita exposure by summing and dividing over the whole Basin.

**Table 7-2**  
**Per Capita Exposure to Ozone above the State One-Hour Standard of 0.09 ppm (hours)**

Calendar Year	Basin	Los Angeles	Orange	Riverside	San Bernardino
1986-88 baseline <sup>1</sup>	80.5	75.8	27.2	94.1	192.6
1994 actual	37.6	26.5	9	71.1	124.9
1995 actual	27.7	20	5.7	48.8	91.9
1996 actual	20.3	13.2	4	42.8	70
1997 actual	5.9	3	0.6	13.9	24.5
1998 actual	12.1	7.9	3.1	25.2	40.2
2000 actual	3.8	2.6	0.7	8.5	11.4
2001 actual	1.73	0.88	0.15	6	5.68
2002 actual	3.87	2.16	0.13	11.12	12.59
2003 actual	10.92	6.3	0.88	20.98	40.21
2004 actual	3.68	2.26	0.50	6.82	12.34
2005 actual	3.11	1.43	0.03	6.06	12.54
2006 actual	4.56	3.08	0.68	8.02	13.30
2007 actual	2.90	1.50	0.35	4.65	10.53
2008 actual	4.14	2.04	0.26	7.50	14.71
2009 actual	2.872	1.538	0.078	3.884	10.539
2010 actual	1.184	0.377	0.107	2.451	4.476
2011 actual	2.099	0.848	0.015	3.456	8.125
2012 actual	2.366	1.050	0.050	2.587	9.776
2013 actual	1.314	0.519	0.067	1.609	5.497
1997 target <sup>2</sup>	48.3	45.5	16.3	56.5	115.6
2000 target <sup>3</sup>	40.2	37.9	13.6	47	96.3

<sup>1</sup> Average over three years, 1986 through 1988.

<sup>2</sup> 60% of the 1986-88 baseline exposures.

<sup>3</sup> 50% of the 1986-88 baseline exposures.

Table 7-2 shows that actual per capita exposures during all the years mentioned were well under the 1997 and 2000 target exposures limits. It should also be noted that air quality in the Basin is a complex function of meteorological conditions and an array of different emission sources, including mobile, area, RECLAIM stationary sources, and non-RECLAIM stationary sources. Therefore, the reduction of per capita exposure beyond the projected level is not necessarily attributable to implementation of the RECLAIM program in lieu of the command-and-control regulations.

## Toxic Impacts

Based on a comprehensive toxic impact analysis performed during program development, it was concluded that RECLAIM would not result in any significant impacts on air toxic emissions. Nevertheless, to ensure that the implementation of RECLAIM does not result in adverse toxic impacts, each annual program audit is required to assess any increase in the public health exposure to air toxics potentially caused by RECLAIM.

One of the safeguards to ensure that the implementation of RECLAIM does not result in adverse air toxic health impacts is that RECLAIM sources are subject to

the same air toxic statutes and regulations (e.g., SCAQMD Regulation XIV, State AB 2588, State Air Toxics Control Measures, Federal National Emissions Standards for Hazardous Air Pollutants, etc.) as other sources in the Basin. Additionally, air toxic health risk is primarily caused by emissions of VOCs and fine particulates such as certain metals. VOC sources at RECLAIM facilities are subject to source-specific command-and-control rules the same way these rules apply to non-RECLAIM facilities, in addition to the toxics requirements described above. Sources of fine particulates and toxic metal emissions are also subject to the above-identified regulations pertaining to toxic emissions. Moreover, new or modified RECLAIM sources with NO<sub>x</sub> or SO<sub>x</sub> emission increases are also required to be equipped with BACT, which minimizes to the best extent feasible NO<sub>x</sub> and SO<sub>x</sub> emissions.

Under the AER program, facilities that have the potential to emit: 1) four tons per year or more of VOC, NO<sub>x</sub>, SO<sub>x</sub>, or PM, or 100 tons per year or more of CO; or 2) any one of 24 toxic air contaminants (TACs) and ozone depleting compounds (ODCs) emitted above specific thresholds (Rule 301 Table IV), are required to report their emissions annually to the SCAQMD. Beginning with the FY 2000-01 reporting cycle, toxics emission reporting for the AB2588 Program was incorporated into the SCAQMD's AER Program. The data collected in the AER program is used to determine which facilities will be required to take further actions under the AB2588 Hot Spots Program.

Facilities in the AB2588 Program are required to submit a comprehensive toxics inventory, which is then prioritized using Board-approved procedures (see SCAQMD website at [http://www.aqmd.gov/prdas/AB2588/AB2588\\_B2.html](http://www.aqmd.gov/prdas/AB2588/AB2588_B2.html)) into one of three categories: low, intermediate, or high priority. Facilities ranked with low priority are exempt from future reporting. Facilities ranked with intermediate priority are classified as District tracking facilities, which are then required to submit a complete toxics inventory once every four years (or quadrennially). In addition to reporting their toxic emissions quadrennially, facilities designated as high priority are required to submit a health risk assessment (HRA) to determine their impacts to the surrounding community. As of April 2013, SCAQMD staff has reviewed and approved 306 facility HRAs. About 95 percent of the facilities have cancer risks below 10 in a million and over 98 percent of the facilities have acute and chronic non-cancer hazard indices less than 1.

Facilities with cancer risks above 10 in a million or a non-cancer hazard index above 1 are required by AB2588 to conduct a public notice and SCAQMD holds a public meeting to discuss their health risk. To date, the SCAQMD has conducted 47 such public notification meetings for the AB2588 Program.

The Board also established the following action risk levels in Rule 1402: Cancer burden of 0.5, a cancer risk of 25 in a million, and a hazard index of 3.0. Facilities above any of the action risk levels must reduce their risks below the action risk levels within three years. According to the SCAQMD's 2012 Annual Report on AB 2588 Air Toxics "Hot Spots" program<sup>3</sup>, 21 facilities were required to reduce risks and all of these facilities have reduced risks well below the action

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<sup>3</sup> Data and descriptions about the AB2588 Program were taken from the SCAQMD's April 2013 Annual Report on AB 2588 Air Toxics "Hot Spots" Program.  
[http://www.aqmd.gov/prdas/AB2588/pdf/Annual\\_Report\\_2012.pdf](http://www.aqmd.gov/prdas/AB2588/pdf/Annual_Report_2012.pdf)

risk levels mandated by Rule 1402<sup>4</sup>.

Finally, the SCAQMD staff conducts Multiple Air Toxic Exposure Studies (MATES) periodically to assess cumulative air toxic impacts to the residents and workers of southern California. These studies also help document progress in reducing toxic impacts. The third version of MATES (*i.e.*, MATES III) was conducted over a two year period from April 2004 to March 2006. Monitoring conducted at that time indicated resident and worker exposure to 1,3-butadiene, benzene, perchloroethylene, and methylene chloride was reduced by 50 percent or more since MATES II (conducted from April 1998 to March 1999) and exposure to formaldehyde and acetaldehyde was reduced by 9 percent. Exposure to toxic metals, such as arsenic, cadmium, lead, and nickel, was reduced by over 25 percent from the levels observed in MATES II. Field monitoring for MATES IV was completed in June 2013 and analysis of that data is currently underway.

There have been concerns voiced regarding the potential that trading of RTCs can allow for higher production at a RECLAIM facility which may indirectly cause higher secondary emissions of toxic air contaminants, and thereby, make the health risk in the vicinity of the facility worse. If any facility significantly experiences such circumstances, the above described requirements related to toxic emissions under the AB2588 program and/or Rule 1402 would be triggered and the appropriate risk reduction measures would be required. Also, based on the results of recent MATES studies, the region-wide cumulative air toxic impacts on residents and workers in Southern California have been declining. Nonetheless, air toxic risk did increase in a few areas and, in particular, for those living near the San Pedro Bay ports between 1997 and 2005, those risk increases can be primarily attributed to goods movement related sources that are not part of RECLAIM. Therefore, staff has not found any evidence that would suggest that the substitution of NO<sub>x</sub> and SO<sub>x</sub> RECLAIM for the command-and-control rules and the measures RECLAIM subsumes caused a significant increase in public exposure to air toxic emissions relative to what would have happened if the RECLAIM program was not implemented. Staff will continue to monitor and assess toxic impacts as part of future annual program audits.

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<sup>4</sup> In March 2013, one additional facility was identified as subject to the risk reduction requirements. It subsequently submitted a risk reduction plan in August 2013 and revised and amended it in November 2013 and January 2014, respectively. In February 2014, the revised and amended risk reduction plan was provisionally and conditionally approved.



## APPENDIX A

### RECLAIM UNIVERSE OF SOURCES

The RECLAIM universe of active sources as of the end of Compliance Year 2012 is provided below.

Facility ID	Cycle	Facility Name	Program
800088	2	3M COMPANY	NOx
23752	2	AEROCRAFT HEAT TREATING CO INC	NOx
115394	1	AES ALAMITOS, LLC	NOx
115389	2	AES HUNTINGTON BEACH, LLC	NOx/SOx
42676	2	AES PLACERITA INC	NOx
115536	1	AES REDONDO BEACH, LLC	NOx
148236	2	AIR LIQUIDE LARGE INDUSTRIES U.S., LP	NOx/SOx
3417	1	AIR PROD & CHEM INC	NOx
101656	2	AIR PRODUCTS AND CHEMICALS, INC.	NOx
5998	1	ALL AMERICAN ASPHALT	NOx
114264	1	ALL AMERICAN ASPHALT	NOx
3704	2	ALL AMERICAN ASPHALT, UNIT NO.01	NOx
800196	2	AMERICAN AIRLINES INC	NOx
145836	2	AMERICAN APPAREL DYEING & FINISHING, INC	NOx
156722	1	AMERICAN APPAREL KNIT AND DYE	NOx
21598	2	ANGELICA TEXTILE SERVICES	NOx
74424	2	ANGELICA TEXTILE SERVICES	NOx
16642	1	ANHEUSER-BUSCH INC., (LA BREWERY)	NOx/SOx
117140	2	AOC, LLC	NOx
167066	1	ARLON GRAPHICS L.L.C.	NOx
12155	1	ARMSTRONG WORLD INDUSTRIES INC	NOx
16737	2	ATKINSON BRICK CO	NOx
10094	2	ATLAS CARPET MILLS INC	NOx
117290	2	B BRAUN MEDICAL, INC	NOx
800016	2	BAKER COMMODITIES INC	NOx
800205	2	BANK OF AMERICA NT & SA, BREA CENTER	NOx
40034	1	BENTLEY PRINCE STREET INC	NOx
119907	1	BERRY PETROLEUM COMPANY	NOx
166073	1	BETA OFF SHORE	NOx
155474	2	BICENT (CALIFORNIA) MALBURG LLC	Nox

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Facility ID	Cycle	Facility Name	Program
132068	1	BIMBO BAKERIES USA INC	NOx
115241	1	BOEING SATELLITE SYSTEMS INC	NOx
800067	1	BOEING SATELLITE SYSTEMS INC	NOx
174544	2	BREITBURN OPERATION LP	NOx
25638	2	BURBANK CITY, BURBANK WATER & POWER	NOx
128243	1	BURBANK CITY,BURBANK WATER & POWER,SCPPA	NOx
800344	1	CALIFORNIA AIR NATIONAL GUARD, MARCH AFB	NOx
22607	2	CALIFORNIA DAIRIES, INC	NOx
138568	1	CALIFORNIA DROP FORGE, INC	NOx
800181	2	CALIFORNIA PORTLAND CEMENT CO	NOx/SOx
46268	1	CALIFORNIA STEEL INDUSTRIES INC	NOx
107653	2	CALMAT CO	NOx
107654	2	CALMAT CO	NOx
107655	2	CALMAT CO	NOx
107656	2	CALMAT CO	NOx
119104	1	CALMAT CO	NOx/SOx
153992	1	CANYON POWER PLANT	NOx
94930	1	CARGILL INC	NOx
22911	2	CARLTON FORGE WORKS	NOx
118406	1	CARSON COGENERATION COMPANY	NOx
141555	2	CASTAIC CLAY PRODUCTS, LLC	NOx
800373	1	CENCO REFINING COMPANY	NOx/SOx
148925	1	CHERRY AEROSPACE	NOx
800030	2	CHEVRON PRODUCTS CO.	NOx/SOx
56940	1	CITY OF ANAHEIM/COMB TURBINE GEN STATION	NOx
172077	1	CITY OF COLTON	NOx
129810	1	CITY OF RIVERSIDE PUBLIC UTILITIES DEPT	NOx
139796	1	CITY OF RIVERSIDE PUBLIC UTILITIES DEPT	NOx
164204	2	CITY OF RIVERSIDE, PUBLIC UTILITIES DEPT	NOx
16978	2	CLOUGHERTY PACKING LLC/HORMEL FOODS CORP	NOx
800210	2	CONEXANT SYSTEMS INC	NOx
38440	2	COOPER & BRAIN - BREA	NOx
68042	2	CORONA ENERGY PARTNERS, LTD	NOx
152707	1	CPV SENTINEL LLC	NOx
50098	1	D&D DISPOSAL INC,WEST COAST RENDERING CO	NOx
63180	1	DARLING INTERNATIONAL INC	NOx

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Facility ID	Cycle	Facility Name	Program
3721	2	DART CONTAINER CORP OF CALIFORNIA	NOx
7411	2	DAVIS WIRE CORP	NOx
143738	2	DCOR LLC	NOx
143739	2	DCOR LLC	NOx
143740	2	DCOR LLC	NOx
143741	1	DCOR LLC	NOx
132071	1	DEAN FOODS CO. OF CALIFORNIA	NOx
47771	1	DELEO CLAY TILE CO INC	NOx
800037	2	DEMENNO/KERDOON	NOx
125579	1	DIRECTV	NOx
800189	1	DISNEYLAND RESORT	NOx
174371	2	DP3 HANGARS, LLC	NOx
142536	2	DRS SENSORS & TARGETING SYSTEMS, INC	NOx
800264	2	EDGINGTON OIL COMPANY	NOx/SOx
115663	1	EL SEGUNDO POWER, LLC	NOx
800372	2	EQUILON ENTER. LLC, SHELL OIL PROD. US	NOx/SOx
124838	1	EXIDE TECHNOLOGIES	NOx/SOx
17344	1	EXXONMOBIL OIL CORP	NOx
25058	2	EXXONMOBIL OIL CORP	NOx
800089	1	EXXONMOBIL OIL CORPORATION	NOx/SOx
800094	1	EXXONMOBIL OIL CORPORATION	NOx
95212	1	FABRICA	NOx
11716	1	FONTANA PAPER MILLS INC	NOx
346	1	FRITO-LAY, INC.	NOx
2418	2	FRUIT GROWERS SUPPLY CO	NOx
142267	2	FS PRECISION TECH LLC	NOx
5814	1	GAINNEY CERAMICS INC	NOx
115315	1	GEN ON WEST, INC.	NOx
153033	2	GEORGIA-PACIFIC CORRUGATED LLC	NOx
152857	2	GEORGIA-PACIFIC GYPSUM LLC	NOx
124723	1	GREKA OIL & GAS, INC	NOx
137471	2	GRIFOLS BIOLOGICALS INC	NOx
156741	2	HARBOR COGENERATION CO, LLC	NOx
157359	1	HENKEL CORPORATION	NOx
123774	1	HERAEUS METAL PROCESSING, LLC	NOx
113160	2	HILTON COSTA MESA	NOx

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Facility ID	Cycle	Facility Name	Program
160888	1	HINES REIT EL SEGUNDO, LP	NOx
800066	1	HITCO CARBON COMPOSITES INC	NOx
2912	2	HOLLIDAY ROCK CO INC	NOx
800003	2	HONEYWELL INTERNATIONAL INC	NOx
124619	1	IMPRESS USA INC	NOx
124808	2	INEOS POLYPROPYLENE LLC	NOx/SOx
129816	2	INLAND EMPIRE ENERGY CENTER, LLC	NOx
157363	2	INTERNATIONAL PAPER CO	NOx
169678	1	ITT CANNON, LLC	NOx
16338	1	KAISER ALUMINUM FABRICATED PRODUCTS, LLC	NOx
21887	2	KIMBERLY-CLARK WORLDWIDE INC.-FULT. MILL	NOx/SOx
1744	2	KIRKHILL - TA COMPANY	NOx
800335	2	LA CITY, DEPT OF AIRPORTS	NOx
800170	1	LA CITY, DWP HARBOR GENERATING STATION	NOx
800074	1	LA CITY, DWP HAYNES GENERATING STATION	NOx
800075	1	LA CITY, DWP SCATTERGOOD GENERATING STN	NOx
800193	2	LA CITY, DWP VALLEY GENERATING STATION	NOx
61962	1	LA CITY, HARBOR DEPT	NOx
550	1	LA CO., INTERNAL SERVICE DEPT	NOx
173904	2	LAPEYRE INDUSTRIAL SANDS, INC	NOx
141295	2	LEKOS DYE AND FINISHING, INC	NOx
144455	2	LIFOAM INDUSTRIES, LLC	NOx
83102	2	LIGHT METALS INC	NOx
151394	2	LINN WESTERN OPERATING INC	NOx
151532	2	LINN WESTERN OPERATING INC	NOx
152054	1	LINN WESTERN OPERATING INC	NOx
151415	2	LINN WESTERN OPERATING, INC	NOx
115314	2	LONG BEACH PEAKERS LLC	NOx
17623	2	LOS ANGELES ATHLETIC CLUB	NOx
58622	2	LOS ANGELES COLD STORAGE CO	NOx
125015	2	LOS ANGELES TIMES COMMUNICATIONS LLC	NOx
800080	2	LUNDAY-THAGARD COMPANY	NOx/SOx
38872	1	MARS PETCARE U.S., INC.	NOx
14049	2	MARUCHAN INC	NOx
3029	2	MATCHMASTER DYEING & FINISHING INC	NOx
2825	1	MCP FOODS INC	NOx

**ANNUAL RECLAIM AUDIT**

Facility ID	Cycle	Facility Name	Program
173290	1	MEDICLEAN	NOx
115563	1	METAL COATERS OF CALIFORNIA	NOx
94872	2	METAL CONTAINER CORP	NOx
155877	1	MILLERCOORS, LLC	NOx
12372	1	MISSION CLAY PRODUCTS	NOx
11887	2	NASA JET PROPULSION LAB	NOx
40483	2	NELCO PROD. INC	NOx
172005	2	NEW-INDY ONTARIO, LLC	NOx
12428	2	NEW NGC, INC.	NOx
131732	2	NEWPORT FAB, LLC	NOx
18294	1	NORTHROP GRUMMAN CORP, AIRCRAFT DIV	NOx
800408	1	NORTHROP GRUMMAN SYSTEMS	NOx
800409	2	NORTHROP GRUMMAN SYSTEMS CORPORATION	NOx
112853	2	NP COGEN INC	NOx
89248	2	OLD COUNTRY MILLWORK INC	NOx
47781	1	OLS ENERGY-CHINO	NOx
35302	2	OWENS CORNING ROOFING AND ASPHALT, LLC	NOx/SOx
7427	1	OWENS-BROCKWAY GLASS CONTAINER INC	NOx/SOx
169754	1	OXY USA INC	NOx
151594	1	OXY USA, INC	NOx
151601	1	OXY USA, INC.	NOx
45746	2	PABCO BLDG PRODUCTS LLC,PABCO PAPER, DBA	NOx/SOx
17953	1	PACIFIC CLAY PRODUCTS INC	NOx
59618	1	PACIFIC CONTINENTAL TEXTILES, INC.	NOx
2946	1	PACIFIC FORGE INC	NOx
130211	2	PAPER-PAK INDUSTRIES	NOx
800183	1	PARAMOUNT PETR CORP	NOx/SOx
800168	1	PASADENA CITY, DWP	NOx
168088	1	PCCR USA	NOx
171107	2	PHILLIPS 66 CO/LA REFINERY WILMINGTON PL	NOx/SOx
171109	1	PHILLIPS 66 CO/LOS ANGELESREFINERY	NOx/SOx
133987	1	PLAINS EXPLORATION & PRODUCTION CO, LP	NOx
133996	2	PLAINS EXPLORATION & PRODUCTION COMPANY	NOx
137520	1	PLAINS WEST COAST TERMINALS LLC	NOx
800416	1	PLAINS WEST COAST TERMINALS LLC	NOx
800417	2	PLAINS WEST COAST TERMINALS LLC	NOx

**ANNUAL RECLAIM AUDIT**

Facility ID	Cycle	Facility Name	Program
800419	2	PLAINS WEST COAST TERMINALS LLC	NOx
800420	2	PLAINS WEST COAST TERMINALS LLC	NOx
800431	1	PRATT & WHITNEY ROCKETDYNE, INC.	NOx
7416	1	PRAXAIR INC	NOx
42630	1	PRAXAIR INC	NOx
152501	1	PRECISION SPECIALTY METALS, INC.	NOx
136	2	PRESS FORGE CO	NOx
105903	1	PRIME WHEEL	NOx
132191	1	PUREENERGY OPERATING SERVICES, LLC	NOx
132192	1	PUREENERGY OPERATING SERVICES, LLC	NOx
173392	1	QUAD/GRAPHICS MARKETING, LLC	NOx
8547	1	QUEMETCO INC	NOx/SOx
19167	2	R J NOBLE COMPANY	NOx
3585	2	R. R. DONNELLEY & SONS CO, LA MFG DIV	NOx
20604	2	RALPHS GROCERY CO	NOx
115041	1	RAYTHEON COMPANY	NOx
114997	1	RAYTHEON COMPANY	NOx
115172	2	RAYTHEON COMPANY	NOx
800371	2	RAYTHEON SYSTEMS COMPANY - FULLERTON OPS	NOx
15544	2	REICHHOLD INC	NOx
52517	1	REXAM BEVERAGE CAN COMPANY	NOx
114801	1	RHODIA INC.	NOx/SOx
61722	2	RICOH ELECTRONICS INC	NOx
139010	2	RIPON COGENERATION LLC	NOx
800182	1	RIVERSIDE CEMENT CO	NOx/SOx
800113	2	ROHR, INC.	NOx
18455	2	ROYALTY CARPET MILLS INC	NOx
4242	2	SAN DIEGO GAS & ELECTRIC	NOx
161300	2	SAPA EXTRUDER, INC	NOx
155221	2	SAVE THE QUEEN LLC (DBA QUEEN MARY)	NOx
15504	2	SCHLOSSER FORGE COMPANY	NOx
20203	2	SCOPE PRODUCTS INC, DEXT CO	NOx
14926	1	SEMPRA ENERGY (THE GAS CO)	NOx
37603	1	SGL TECHNIC INC, POLYCARBON DIVISION	NOx
131850	2	SHAW DIVERSIFIED SERVICES INC	NOx
117227	2	SHCI SM BCH HOTEL LLC, LOEWS SM BCH HOTE	NOx

**ANNUAL RECLAIM AUDIT**

Facility ID	Cycle	Facility Name	Program
16639	1	SHULTZ STEEL CO	NOx
54402	2	SIERRA ALUMINUM COMPANY	NOx
85943	2	SIERRA ALUMINUM COMPANY	NOx
101977	1	SIGNAL HILL PETROLEUM INC	NOx
119596	2	SNAK KING CORPORATION	NOx
43201	2	SNOW SUMMIT INC	NOx
4477	1	SO CAL EDISON CO	NOx
5973	1	SO CAL GAS CO	NOx
800127	1	SO CAL GAS CO	NOx
800128	1	SO CAL GAS CO	NOx
8582	1	SO CAL GAS CO/PLAYA DEL REY STORAGE FACI	NOx
14871	2	SONOCO PRODUCTS CO	NOx
160437	1	SOUTHERN CALIFORNIA EDISON	NOx
800338	2	SPECIALTY PAPER MILLS INC	NOx
126498	2	STEELSCAPE, INC	NOx
105277	2	SULLY MILLER CONTRACTING CO	NOx
19390	1	SULLY-MILLER CONTRACTING CO.	NOx
2083	1	SUPERIOR INDUSTRIES INTERNATIONAL INC	NOx
3968	1	TABC, INC	NOx
18931	2	TAMCO	NOx
14944	1	TECHALLOY CO., INC.	NOx/SOx
174591	1	TESORO REFINING & MARKETING CO LLC, CAL	NOX/SOx
174655	2	TESORO REFINING & MARKETING CO LLC	NOX/SOx
151798	1	TESORO REFINING AND MARKETING CO	NOx/SOx
800436	1	TESORO REFINING AND MARKETING CO	NOx/SOx
96587	1	TEXOLLINI INC	NOx
148340	2	THE BOEING CO. COMMERCIAL AVIATION SRVCS	NOx
14736	2	THE BOEING COMPANY	NOx
16660	2	THE BOEING COMPANY	NOx
800038	2	THE BOEING COMPANY - C17 PROGRAM	NOx
11119	1	THE GAS CO./ SEMPRA ENERGY	NOx
153199	1	THE KROGER CO/RALPHS GROCERY CO	NOx
11435	2	THE PQ CORP	NOx/SOx
97081	1	THE TERMO COMPANY	NOx
800330	1	THUMS LONG BEACH	NOx
129497	1	THUMS LONG BEACH CO	NOx

**ANNUAL RECLAIM AUDIT**

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Facility ID	Cycle	Facility Name	Program
800325	2	TIDELANDS OIL PRODUCTION CO	NOx
68118	2	TIDELANDS OIL PRODUCTION COMPANY ETAL	NOx
171960	2	TIN, INC. DBA INTERNATIONAL PAPER	NOx
137508	2	TONOGA INC, TACONIC DBA	NOx
53729	1	TREND OFFSET PRINTING SERVICES, INC	NOx
9053	1	TRIGEN- LA ENERGY CORP	NOx
11034	2	TRIGEN-LA ENERGY CORP	NOx
165192	2	TRIUMPH AEROSTRUCTURES, LLC	NOx
43436	1	TST, INC.	NOx
800026	1	ULTRAMAR INC	NOx/SOx
9755	2	UNITED AIRLINES INC	NOx
73022	2	US AIRWAYS INC	NOx
800149	2	US BORAX INC	NOx
800150	1	US GOVT, AF DEPT, MARCH AIR RESERVE BASE	NOx
1073	1	US TILE CO	NOx
800393	1	VALERO WILMINGTON ASPHALT PLANT	NOx
14502	2	VERNON CITY, LIGHT & POWER DEPT	NOx
148896	2	VINTAGE PRODUCTION CALIFORNIA LLC	NOx
148897	2	VINTAGE PRODUCTION CALIFORNIA LLC	NOx
151899	2	VINTAGE PRODUCTION CALIFORNIA LLC	NOx
14495	2	VISTA METALS CORPORATION	NOx
146536	1	WALNUT CREEK ENERGY PARK	NOx/SOx
42775	1	WEST NEWPORT OIL CO	NOx/SOx
17956	1	WESTERN METAL DECORATING CO	NOx
51620	1	WHEELABRATOR NORWALK ENERGY CO INC	NOx
127299	2	WILDFLOWER ENERGY LP/INDIGO GEN., LLC	NOx
158950	1	WINDSOR QUALITY FOOD CO. LTD.	NOx



## APPENDIX B FACILITY INCLUSIONS

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As discussed in Chapter 1, two facilities were added to the RECLAIM universe between July 1, 2012 and the end of Compliance Year 2012. The included facilities are identified, and the reasons for inclusion are also provided.

Facility ID	Cycle	Facility Name	Market	Date	Reason
119596	2	SNAK KING CORPORATION	NOx	8/23/2012	Opt-in at facility request.
172005	2	NEW- INDY ONTARIO, LLC	NOx	7/3/2012	Partial change of operator from an existing facility.

**APPENDIX C**  
**RECLAIM FACILITIES CEASING OPERATION OR EXCLUDED**

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SCAQMD staff is aware of the following RECLAIM facilities that permanently shut down all operations, inactivated their RECLAIM permits, or were excluded from the RECLAIM universe during Compliance Year 2012. The reasons for shutdowns and exclusions cited below are based on the information provided by the facilities and other information available to SCAQMD staff.

Facility ID	9217
Facility Name	VEOLIA ENERGY LOS ANGELES, INC
City and County	Fullerton, Orange County
SIC	4961
Pollutants	NOx
1994 Allocation	26,274
Reason for Shutdown	The facility shut down all its operations, the only piece of process equipment was rendered inoperable, and the property was sold to Hope University which is exempt from RECLAIM per Rule 2001(i)(2)(H).

Facility ID	111415
Facility Name	VAN CAN COMPANY
City and County	Fontana, San Bernardino County
SIC	3411
Pollutants	NOx
1994 Allocation	8,310
Reason for Shutdown	Operations moved to new plant in Tennessee.

Facility ID	167432
Facility Name	EDISON MISSION HUNTINGTON BEACH, LLC
City and County	Huntington Beach, Orange County
SIC	4911
Pollutants	NOx/SOx
1994 Allocation	1,024,673
Reason for Shutdown	Air quality mitigation for a new power plant (Walnut Creek Energy LLC, ID: 146536) also located in the SCAQMD.

Facility ID	800110
Facility Name	THE BOEING COMPANY
City and County	Anaheim, Orange County
SIC	3812
Pollutants	NOx
1994 Allocation	17,846
Reason for Shutdown	Facility consolidated operations at another Boeing facility in Huntington Beach (ID: 16660).

**ANNUAL RECLAIM AUDIT**

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Facility ID	800343
Facility Name	BOEING SATELLITE SYSTEMS, INC
City and County	El Segundo, Los Angeles County
SIC	3669
Pollutants	NOx
1994 Allocation	6,620
Reason for Shutdown	Facility consolidated operations at another Boeing facility in El Segundo (ID: 800067).

**APPENDIX D**  
**FACILITIES THAT EXCEEDED THEIR ANNUAL ALLOCATION**  
**FOR COMPLIANCE YEAR 2012**

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The following is a list of facilities that did not have enough RTCs to cover their NOx and/or SOx emissions in Compliance Year 2012 based on the results of audits conducted by SCAQMD staff.

Facility ID	Facility Name	Compliance Year	Emittant
3704	ALL AMERICAN ASPHALT CORONA	2012	NOx
5998	ALL AMERICAN ASPHALT WESTMINSTER	2012	NOx
17956	WESTERN METAL DECORATING CO	2012	NOx
59618	PACIFIC CONTINENTAL TEXTILES, INC	2012	NOx
73022	US AIRWAYS INC	2012	NOx
101656	AIR PRODUCTS AND CHEMICALS, INC	2012	NOx
118406	CARSON COGENERATION COMPANY	2012	NOx
129816	INLAND EMPIRE ENERGY CENTER, LLC	2012	NOx
133996	PLAINS EXPLORATION AND PRODUCTION COMPANY	2012	NOx
145836	AMERICAN APPAREL DYEING & FINISHING, INC	2012	NOx
153199	THE KROGER CO/RALPHS GROCERY CO	2012	NOx
171107	PHILLIPS 66 CO/LA REFINERY WILMINGTON PL	2012	NOx
800182	RIVERSIDE CEMENT CO	2012	NOx/SOx

## **APPENDIX E**

### **REPORTED JOB IMPACTS ATTRIBUTED TO RECLAIM**

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Each year, RECLAIM facility operators are asked to provide employment data in their APEP reports. The report asks company representatives to quantify job increases and/or decreases, and to report the positive and/or negative impacts of the RECLAIM program on employment at their facilities.

This appendix is included in each Annual RECLAIM Audit Report to provide detailed information for facilities reporting that RECLAIM contributed to job gains or losses. During Compliance Year 2012, no facility reported actual job gains or losses attributable to RECLAIM.

 [Back to Agenda](#)

BOARD MEETING DATE: July 11, 2014

AGENDA NO. 21

REPORT: Hearing Board Report

SYNOPSIS: This reports the actions taken by the Hearing Board during the period of May 1 through May 31, 2014.

COMMITTEE: No Committee Review

RECOMMENDED ACTION:

Receive and file this report.

Edward Camarena  
Chairman of Hearing Board

SM

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Two summaries are attached: **Rules From Which Variances and Orders for Abatement Were Requested in 2014** and **May 2014 Hearing Board Cases**.

The total number of appeals filed during the period May 1 to May 31, 2014 is 0; and total number of appeals filed during the period of January 1 to May 31, 2014 is 4.





























## Report of May 2014 Hearing Board Cases

Case Name and Case No.	Rules	Reason for Petition	District Position/ Hearing Board Action	Type and Length of Variance or Order	Excess Emissions
1. Breitburn Operating, LP Case No. 4358-11 (T. Barrera)	462(d)(1)	Pipeline corrosion requires petitioner to ship its crude by truck rather than the pipeline while repairs are made to the pipeline. This will result in petitioner exceeding its daily loading rack limit.	Not Opposed/Granted	RV granted commencing 5/1/14 and continuing through 10/28/14, the FCD.	VOC: 82 lbs/day NOX: 1.51 lbs/day
2. Fairview Development Center Case No. 5978-1 (V. Tyagi)	203(b) 1146(c)(2)(A)	Petitioner operates three boilers exceeding Rule 1146 limits. Delay in state funding has resulted in failure to meet compliance deadline.	Not Opposed/Granted	RV granted commencing 5/1/14 and continuing through 12/15/16, the FCD.	NOX: 54.28 lbs/day
3. SCAQMD vs. American Two-Way Case No. 5987-1 (N. Sanchez)	203(a)	Respondent operates a diesel emergency generator without a valid permit.	Not Stipulated/Issued	O/A issued commencing 5/20/14 and continuing through 10/31/14. The Hearing Board shall retain jurisdiction over this matter until 10/31/14.	N/A
4. SCAQMD vs. Hixson Metal Finishing Case No. 5418-3 (B. Baird)	203(b) 402 1469(e)(7) H&S Code Section 41700	Fugitive hexavalent chrome emissions are resulting in ambient concentrations exceeding significant risk level set by District rules.	Stipulated/Issued	O/A issued commencing 5/14/14 and continuing through 5/31/16. The Hearing Board shall retain jurisdiction over this matter until 5/31/16.	N/A
5. SCAQMD vs. Ridgeline Energy Services (USA) Inc. Case No. 5954-1 (K. Manwaring)	203(a) 219(s)(2) 402 H&S Code Section 41700	Respondent seeks modification of deadline for emptying storage tanks containing odorous materials.	Opposed/Denied	Mod. O/A denied.	N/A

### Acronyms

FCD: Final Compliance Date  
H&S: Health & Safety Code  
Mod. O/A: Modification of an Order for Abatement  
NOx: Oxides of Nitrogen  
N/A: Not Applicable  
O/A: Order for Abatement  
RV: Regular Variance

VOC: Volatile Organic Compound

BOARD MEETING DATE: July 11, 2014

AGENDA NO. 22

REPORT: Civil Filings and Civil Penalties Report

SYNOPSIS: This reports the monthly penalties from May 1 through May 31, 2014, and legal actions filed by the General Counsel's Office during from May 1 through May 31, 2014. An Index of District Rules is attached with the penalty report.

COMMITTEE: Stationary Source, June 20, 2014, Reviewed

RECOMMENDED ACTION:  
Receive and file this report.

Kurt R. Wiese  
General Counsel

KRW:lc

Violations

Civil Actions Filed

- |   |  |
|---|--|
| 2 | JOSE MUNOZ dba VERNIS GROUP<br>Los Angeles Superior Court Central<br>Case No. 14K04779; Filed: 5.13.14 (PH)<br>P59452, P59462<br>R. 109 – Recordkeeping for Volatile Organic Compound Emissions<br>R. 203 – Permit to Operate  |
| 6 | NORTH COUNTY SAND AND GRAVEL, INC.<br>Superior Court of California - County of Riverside<br>Case No. MCC 1400728; Filed: 5.15.14 (KRW)<br>P46730, P49298, P49299, P58026, P58062, P58077<br>R. 203 – Permit to Operate<br>H&S Codes 42402, 42402.1, 42402.2 and 42402.3 – Violation of<br>Emission Limitations |

8 Violations

2 Cases

Attachments  
May 2014 Penalty Reports  
Index of District Rules and Regulations

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
General Counsel's Office**

**May 2014 Settlement Penalty Report**

**Total Penalties**

<b>Civil Penalties:</b>	<b>\$8,276,400.00</b>
<b>SRV Penalties:</b>	<b>\$35,000.00</b>
<b>MSPAP Penalties:</b>	<b>\$24,725.00</b>
<b>Hearing Board Penalties:</b>	<b>\$14,000.00</b>
<b>Total Cash Penalties:</b>	<b>\$8,350,125.00</b>
<b>Total SEP Value:</b>	<b>\$0.00</b>
<b>Fiscal Year through May 2014 Cash Total:</b>	<b>\$17,540,425.28</b>
<b>Fiscal Year through May 2014 SEP Value Only Total:</b>	<b>\$398,500.00</b>

FAC ID	COMPANY NAME	RULE NUMBER	RECLAIM ID	SETTLED DATE	ATTY INT	NOTICE NO	TOTAL SETTLEMENT
<b>CIVIL PENALTIES:</b>							
101656	AIR PRODUCTS AND CHEMICALS, INC.	2004, 2012 203 3002(C)(1) 3002(C)(1) 1118, 3002(C)(1) 2012, 2004 3002(C)(1)	Y	5/27/2014	NSF	P61005 P61006 P58220 P58221 P58222 P34684 P58213	\$90,500.00
145836	AMERICAN APPAREL DYEING & FINISHING	2004 2004	Y	5/9/2014	NSF	P53139 P53140	\$22,500.00
99157	ARCO DLR ALI YASIN	203(A), 461		5/9/2014	PH3	P56798	\$1,000.00
46268	CALIFORNIA STEEL INDUSTRIES INC	2004	Y	5/27/2014	NSF	P57372	\$1,500.00
800089	EXXONMOBIL OIL CORPORATION	202, 1118, 1105.1, 1173 203, 401 3002 3002 1173 3002(C)(1) 1118 401(A), 401(B) 203, 221, 1118, 3002 3002(C)(1) 461	Y	5/21/2014	JMP/MJR	P56614 P56615 P56616 P56617 P56618 P56619 P56620 P56621 P56622 P59707	\$8,100,000.00

FAC ID	COMPANY NAME	RULE NUMBER	RECLAIM ID	SETTLED DATE	ATTY INT	NOTICE NO	TOTAL SETTLEMENT
129816	INLAND EMPIRE ENERGY CENTER, LLC	2004, 2005 2004, 2012	Y	5/30/2014	TRB	P53135 P53132	\$11,000.00
42127	L & J DRY CLEANING, ALFRED HOWEL	1146.2		5/27/2014	RRF	P61206	\$1,000.00
68798	LA CITY DWP, LOS FELIZ P.S.	203(B), 1470 203(B), 1470		5/20/2014	NSF	P58680 P60251	\$20,000.00
800075	LA CITY, DWP SCATTERGOOD GENERATER	2004, 2012	Y	5/20/2014	NSF	P55536	\$4,500.00
125298	LA CITY, DWP SCATTERGOOD GENERATER	1403, 40 CFR 1403, 40 CFR		5/20/2014	NSF	P53982 P53980	\$2,500.00
143713	LUCKY OIL CO, IOWA SHELL #135181	461 41960.2 203 (B)		5/9/2014	RRF	P56837	\$500.00
154130	NCM DEMOLITION AND REMEDIATION	1403 1403 1403 40 CFR		5/20/2014	NSF	P53984 P53983 P53981	\$1,500.00

FAC ID	COMPANY NAME	RULE NUMBER	RECLAIM ID	SETTLED DATE	ATTY INT	NOTICE NO	TOTAL SETTLEMENT
29110	ORANGE COUNTY SANITATION DISTRICT	203(B), 3002(C)(1) 203(B), 3002(C)(1)		5/9/2014	WBW	P53006 P53005	\$500.00
159780	ROXBURY MEDICAL TOWER, LLC		203 (A)	5/6/2014	KCM	P57964	\$1,000.00
36738	SORENSEN ENGINEERING INC.	3002(C)(1) 3002 3002(C)(1) 3002, 40 CFR 3002(C)(1) 3002 3002(C)(1) 3002(C)(1)		5/9/2014	TRB	P55409 P46745 P30691 P61161  P61164 P61409 P53315	\$15,000.00
150604	SWEISS PETROL		461(E)(2)(C)	5/23/2014	PH3	P60223	\$900.00
110630	WESTERN ENVIRONMENTAL, LLC		402, 41700	5/23/2014	KCM	P49745	\$2,500.00
<b>TOTAL CIVIL PENALTY SETTLEMENTS: \$8,276,400.00</b>							

**SELF-REPORTED VIOLATIONS:**



FAC ID	COMPANY NAME	RULE NUMBER	RECLAIM ID	SETTLED DATE	ATTY INT	NOTICE NO	TOTAL SETTLEMENT
149343	C&D ZODIAC		1124	5/20/2014	NAS	SRV99	\$35,000.00

**TOTAL SRV SETTLEMENT: \$35,000.00**

**MSPAPP SETTLEMENTS:**

174516	ALBERTSONS STORE #6534		203 (B)	5/9/2014		P55798	\$1,100.00
155431	BAJWA'S AM-PM		203(B), 461(C)(2)(B) 41960.2	5/27/2014		P62229	\$1,000.00
155431	BAJWA'S AM-PM		461, 41960.2	5/27/2014		P62224	\$600.00
73015	BIG LOTS STORES, INC.		203 (A)	5/27/2014		P61420	\$600.00
135997	CHAPMAN UNIVERSITY		1470	5/27/2014		P60400	\$550.00
170741	CITY OF DIAMOND BAR		403(D)(1)	5/27/2014		P57687	\$1,000.00
172921	COURTESY CLEANERS		1102	5/13/2014		P58949	\$880.00

FAC ID	COMPANY NAME	RULE NUMBER	RECLAIM ID	SETTLED DATE	ATTY INT	NOTICE NO	TOTAL SETTLEMENT
164513	DON KELLER COLLISION CENTER		109, 203(A)	5/16/2014		P61216	\$700.00
136202	EPSILON PLASTICS INC		3003	5/21/2014		P61500	\$250.00
175289	EXPO SKANSKA RADOS		403	5/30/2014		P57995	\$960.00
147434	FAIRMONT NEWPORT BEACH		201, 222, 1415, 1110.2	5/27/2014		P58584	\$1,050.00
147434	FAIRMONT NEWPORT BEACH		1110.2	5/27/2014		P58589	\$1,050.00
127047	INDUSTRIAL SERVICE OIL CO INC		203 (A)	5/9/2014		P58689	\$1,000.00
175375	JORGE POHLENZ		461	5/1/2014		P59947	\$640.00
164994	LAKESIDE GOLF CLUB		461 (E) (2)	5/21/2014		P61700	\$550.00
137491	MERCEDES-BENZ OF LAGUNA NIGUEL		203 (B)	5/2/2014		P55797	\$2,000.00

FAC ID	COMPANY NAME	RULE NUMBER	RECLAIM ID	SETTLED DATE	ATTY INT	NOTICE NO	TOTAL SETTLEMENT
175371	SECURITY PAVING CO INC		403	5/2/2014		P52991	\$960.00
150260	SOLAR LINK INTERNATIONAL		1168(C)(1)	5/27/2014		P52297	\$3,200.00
159406	SOMERCLARK GAS		203 (B), 461	5/9/2014		P62306	\$715.00
146691	SUPERCHARGED, INC		461, 41960.2	5/21/2014		P62236	\$400.00
143337	TASHKEN AUTO SERVICE INC		109, 203(A)	5/21/2014		P61219	\$640.00
160523	UNITED FAMILY LLC		203 (B), 461	5/2/2014		P59992	\$3,900.00
107394	VICTORIA GAS LIQ, BALBIR SINGH J		461	5/28/2014		P59939	\$480.00
161231	W & W AUTO SALE AND BODY REPAIR		109, 203(B)	5/29/2014		P56716	\$500.00

**TOTAL MSPAPP SETTLEMENTS:**

**HEARING BOARD SETTLEMENTS:**

35188	3M COMPANY Hearing Board Case No. 5970-2		203, 1147, 1303. 3002	5/16/2014	KCM	HRB2222	\$4,000.00
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FAC ID	COMPANY NAME	RULE NUMBER	RECLAIM ID	SETTLED DATE	ATTY INT	NOTICE NO	TOTAL SETTLEMENT
	Monthly penalty for on-going operation of the facility's equipment due the 15th of each month until 9.15.15.						
48849	COMMUNITY HOSPITAL OF HUNTINGTON Hearing Board Case No. 5952-1 CHHP agrees to pay \$1500/month penalty for the on-going operation of its engine.	1470		5/16/2014	KCM	HRB2223	\$1,500.00
54732	INLAND VALLEY REGIONAL MEDICAL C Hearing Board Case No. 5982-1 Beginning 4.11.14, facility to pay \$1000/month until it permanently cease operation of two boilers in non-compliance with R. 1146.	1146		5/1/2014	NAS	HRB2221	\$1,000.00
139195	UHS-CORONA INC/CORONA REGIONAL M Hearing Board Case No. 5941-1 Facility to pay \$500/month it operates the noncompliant engine beginning June 2013; plus additional \$2,000 paid in one lump sum within 30 days of achieving full compliance with Rule 1470. Facility came into compliance May 2014.	1470		5/21/2014	MJR	HRB2224	\$7,500.00

**TOTAL HEARING BOARD SETTLEMENTS: \$14,000.00**

## DISTRICT RULES AND REGULATIONS INDEX FOR MAY 2014 PENALTY REPORTS

### REGULATION I - GENERAL PROVISIONS

Rule 109 Recordkeeping for Volatile Organic Compound Emissions (*Amended 8/18/00*)

### REGULATION II – PERMITS

List and Criteria Identifying Information Required of Applicants Seeking A Permit to Construct from the South Coast Air Quality Management - District (*Amended 4/10/98*)

Rule 201 Permit to Construct (*Amended 1/5/90*)

Rule 202 Temporary Permit to Operate (*Amended 5/7/76*)

Rule 203 Permit to Operate (*Amended 1/5/90*)

Rule 221 Plans (*Adopted 1/4/85*)

Rule 222 Filing Requirements for Specific Emission Sources Not Requiring a Written permit Pursuant to Regulation II. (*Amended 5/19/00*)

### REGULATION IV - PROHIBITIONS

Rule 401 Visible Emissions (*Amended 9/11/98*)

Rule 402 Nuisance (*Adopted 5/7/76*)

Rule 403 Fugitive Dust (*Amended 12/11/98*) *Pertains to solid particulate matter emitted from man-made activities.*

Rule 461 Gasoline Transfer and Dispensing (*Amended 6/15/01*)

### REGULATION XI - SOURCE SPECIFIC STANDARDS

Rule 1102 Petroleum Solvent Dry Cleaners (*Amended 11/17/00*)

Rule 1105.1 Reduction of PM and Ammonia Emissions From Fluid Catalytic Cracking Units

Rule 1110.2 Emissions from Gaseous- and Liquid-Fueled Internal Combustion Engines (*Amended 11/14/97*)

Rule 1118 Emissions From Refinery Flares (*Adopted 2/13/98*)

Rule 1124 Aerospace Assembly and Component Manufacturing Operations (*Amended 9/21/01*)

Rule 1146 Emissions of Oxides of Nitrogen from Industrial, Institutional and Commercial Boilers, Steam Generators, and Process Heaters (*Amended 11/17/00*)

Rule 1146.1 Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters (*Amended 5/13/94*)

- Rule 1141.2 Surfactant Manufacturing (*Amended 11/17/00*)
- Rule 1147 NOx REDUCTIONS FROM MISCELLANEOUS SOURCES (9/08)
- Rule 1173 Fugitive Emissions of Volatile Organic Compounds (*Amended 5/13/94*)

### **REGULATION XIII - NEW SOURCE REVIEW**

- Rule 1303 Requirements (*Amended 4/20/01*)

### **REGULATION XIV - TOXICS**

- Rule 1403 Asbestos Emissions from Demolition/Renovation Activities (*Amended 4/8/94*)
- Rule 1415 Reduction of Refrigerant Emissions from Stationary Refrigeration and Air Conditioning Systems (*Amended 10/14/94*)
- Rule 1470 Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines

### **REGULATION XX REGIONAL CLEAN AIR INCENTIVES MARKET (RECLAIM)**

- Rule 2004 Requirements (*Amended 5/11/01*)
- Rule 2005 New Source Review for RECLAIM (*Amended 4/20/01*)

### **REGULATION XXX - TITLE V PERMITS**

- Rule 3002 Requirements (*Amended 11/14/97*)
- Rule 3003 Applications (*Amended 3/16/01*)

### **CALIFORNIA HEALTH AND SAFETY CODE § 41700**

- 41700 Violation of General Limitations
- 41960.2 Gasoline Vapor Recovery

### **CALIFORNIA CODE OF REGULATIONS**

- Title 13 Mobile Sources and Fuels

### **CODE OF FEDERAL REGULATIONS**

- 40 CFR – Protection of the Environment

BOARD MEETING DATE: July 11, 2014

AGENDA NO. 23

REPORT: Lead Agency Projects and Environmental Documents Received by the SCAQMD

SYNOPSIS: This report provides, for the Board's consideration, a listing of CEQA documents received by the SCAQMD between May 1, 2014 and May 31, 2014, and those projects for which the SCAQMD is acting as lead agency pursuant to CEQA.

COMMITTEE: Mobile Source, June 20, 2014, Reviewed

RECOMMENDED ACTION:  
Receive and file.

Barry R. Wallerstein, D.Env.  
Executive Officer

EC:LT:SN:MK:IM:AK

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## **Background**

**CEQA Document Receipt and Review Logs (Attachments A and B)** – Each month, the SCAQMD receives numerous CEQA documents from other public agencies on projects that could adversely affect air quality. A listing of all documents received and reviewed during the reporting period of May 1, 2014, through May 31, 2014 is included in Attachment A. A list of active projects from previous reporting periods for which SCAQMD staff is continuing to evaluate or has prepared comments is included as Attachment B.

The Intergovernmental Review function, which consists of reviewing and commenting on the adequacy of the air quality analysis in CEQA documents prepared by other lead agencies, is consistent with the Governing Board's 1997 Environmental Justice Guiding Principles and Initiative #4. Consistent with the Environmental Justice Program Enhancements for FY 2002-03 approved by the Board in September 2002, each of the attachments notes those proposed projects where the SCAQMD has been contacted regarding potential air quality-related environmental justice concerns. The SCAQMD has established an internal central contact to receive information on projects with

potential air quality-related environmental justice concerns. The public may contact the SCAQMD about projects of concern by the following means: in writing via fax, email, or standard letters; through telephone communication; as part of oral comments at SCAQMD meetings or other meetings where SCAQMD staff is present; or submitting newspaper articles. The attachments also identify for each project the dates of the public comment period and the public hearing date, as reported at the time the CEQA document is received by the SCAQMD. Interested parties should rely on the lead agencies themselves for definitive information regarding public comment periods and hearings as these dates are occasionally modified by the lead agency.

At the January 6, 2006 Board meeting, the Board approved the Workplan for the Chairman's Clean Port Initiatives. One action item of the Chairman's Initiatives was to prepare a monthly report describing CEQA documents for projects related to goods movement and to make full use of the process to ensure the air quality impacts of such projects are thoroughly mitigated. In response to describing goods movement CEQA documents, Attachments A and B are organized to group projects of interest into the following categories: goods movement projects; schools; landfills and wastewater projects; airports; and general land use projects, etc. In response to the mitigation component, guidance information on mitigation measures were compiled into a series of tables relative to: off-road engines; on-road engines; harbor craft; ocean-going vessels; locomotives; fugitive dust; and, greenhouse gases. These mitigation measure tables are on the CEQA webpages portion of the SCAQMD's website. Staff will continue compiling tables of mitigation measures for other emission sources including airport ground support equipment, etc.

As resources permit, staff focuses on reviewing and preparing comments for projects: where the SCAQMD is a responsible agency; that may have significant adverse regional air quality impacts (e.g., special event centers, landfills, goods movement, etc.); that may have localized or toxic air quality impacts (e.g., warehouse and distribution centers); where environmental justice concerns have been raised; and those projects for which a lead or responsible agency has specifically requested SCAQMD review. If the SCAQMD staff provided written comments to the lead agency as noted in the column "Comment Status", there is a link to the "SCAQMD Letter" under the Project Description. In addition, if the SCAQMD staff testified at a hearing for the proposed project, a notation is provided under the "Comment Status." If there is no notation that the SCAQMD staff testified, then staff did not provide testimony at a hearing for the proposed project.



During the period May 1, 2014 through May 31, 2014, the SCAQMD received 122 CEQA documents. Of the total of 127 documents listed in Attachments A and B:

- 23 comment letters were sent;
- 27 documents were reviewed, but no comments were made;
- 16 documents are currently under review;
- 11 documents did not require comments (e.g., public notices, plot plans, Final Environmental Impact Reports);
- 3 documents were not reviewed; and
- 47 were screened without additional review.

Copies of all comment letters sent to lead agencies can be found on the SCAQMD's CEQA webpage at the following internet address: [www.aqmd.gov/ceqa/letters.html](http://www.aqmd.gov/ceqa/letters.html).

In addition, SCAQMD staff has been working on a Warehouse Truck Trip Study to better quantify trip rates associated with local warehouse and distribution projects, as truck emission represent more than 90 percent of air quality impacts from these projects. Draft final results for the Warehouse Truck Trip Study are completed and are lower than current SCAQMD recommended truck trip rates in the California Emissions Estimator Model (CalEEMod). As an interim measure, staff will no longer be recommending use of the higher truck trip rates in CalEEMod in CEQA comment letters and is recommending truck trip rates from the Institute of Transportation Engineers (ITE) for high cube warehouse projects. Staff will be meeting with the Warehouse Truck Trip Study Working Group and briefing the Mobile Source Committee later this month on the results of the study. Staff will be bringing this item to the Governing Board shortly after, with staff recommendations for truck trip rates for high cube warehouses based on locally collected data.

**SCAQMD Lead Agency Projects (Attachment C)** – Pursuant to CEQA, the SCAQMD periodically acts as lead agency for stationary source permit projects. Under CEQA, the lead agency is responsible for determining the type of CEQA document to be prepared if the proposal is considered to be a “project” as defined by CEQA. For example, an Environmental Impact Report (EIR) is prepared when the SCAQMD, as lead agency, finds substantial evidence that the proposed project may have significant adverse effects on the environment. Similarly, Negative Declaration (ND) or Mitigated Negative Declaration (MND) may be prepared if the SCAQMD determines that the proposed project will not generate significant adverse environmental impacts, or the impacts can be mitigated to less than significance. The ND and MND are written statements describing the reasons why proposed projects will not have a significant adverse effect on the environment and, therefore, do not require the preparation of an EIR.

Attachment C to this report summarizes the active projects for which the SCAQMD is lead agency and is currently preparing or has prepared environmental documentation.

Through the end of May, the SCAQMD received no new requests to be the lead agency for stationary source permit application projects. As noted in Attachment C, through the end of May 2014, the SCAQMD continued working on the CEQA documents for nine active projects.

Through the end of May 2014, SCAQMD staff has been responsible for preparing or having prepared CEQA documents for nine permit application projects, all continuing from 2013. One project ceased evaluation as the permit applications were withdrawn.

**Attachments**

- A. Incoming CEQA Documents Log
- B. Ongoing Active Projects for Which SCAQMD Has or Will Conduct a CEQA Review
- C. Active SCAQMD Lead Agency Projects

**ATTACHMENT A\* INCOMING CEQA  
DOCUMENTS LOG  
MAY 1, 2014 TO MAY 31, 2014**

<u>SCAQMD LOG-IN NUMBER</u> PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>Goods Movement</b> <b>LAC140506-01</b> Berths 212-224 Container Terminal Improvements Project	The proposed project consists of improving the container-handling efficiency of the existing YTI Terminal at the Port to accommodate the projected fleet mix of larger container vessels (up to 13,000 TEUs) that are anticipated to call at the YTI Terminal through 2026. The proposed Project consists of deepening two existing berths (Berths 217–220 and Berths 214–216), which would add an additional operating berth to the YTI Terminal, extending the 100-foot gauge crane rail to Berths 217–220, adding a single operational rail track to the Terminal Island Container Transfer Facility (TICTF) on-dock rail, modifying and replacing cranes, and constructing backland improvements.  Comment Period: 5/6/2014 - 6/16/2014 Public Hearing: N/A	Draft Environmental Impact Report	Port of Los Angeles	Document under review as of 5/31/14
<b>Warehouse &amp; Distribution Centers</b> <b>LAC140509-02</b> Tenth Street Center Industrial Park Project	The proposed project consists of demolishing an existing one-story office building in the eastern portion of the site near North Todd Avenue, demolishing a building foundation and the concrete remnants of the former shipping/receiving bay, and the construction of a 342,629 square-foot industrial/warehouse infill development.  Comment Period: 5/9/2014 - 6/23/2014 Public Hearing: N/A	Draft Environmental Impact Report	City of Azusa	Document reviewed - No comments sent
<b>Warehouse &amp; Distribution Centers</b> <b>RVC140523-06</b> Integra Perris Distribution Center	The proposed project consists of constructing and operating up to 864,000 square feet of industrial warehouse/distribution uses on the approximately 43.2-acre site. One industrial building is proposed. The building would accommodate a high-cube warehouse/distribution center or an electronic commerce/fulfillment center, depending on the market demand.  Comment Period: 5/21/2014 - 6/14/2014 Public Hearing: N/A	Notice of Preparation	City of Perris	Document under review as of 5/31/14
<b>Warehouse &amp; Distribution Centers</b> <b>RVC140527-03</b> FedEx Ground Distribution Facility	The proposed project consists of the construction and operation of a package distribution warehouse facility within an approximately 150,560-square-foot building on roughly 22.6 acres of vacant land.  Comment Period: 5/27/2014 - 6/10/2014 Public Hearing: 6/11/2014	Draft Mitigated Negative Declaration	City of Palm Springs	Document reviewed - No comments sent
<b>Warehouse &amp; Distribution Centers</b> <b>SBC140507-04</b> Optimus Logistics Center #2	The proposed project consists of a high-cube logistics warehouse development site encompassing 1,107,371 square feet in two buildings on 48.4 acres. Parcel 1 would be approximately 41.8 acres with an approximately 912,338 square-foot building. Parcel 2 would be approximately 6.6 acres with an approximately 125,473 square-foot building. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2014/May/nopoptimus.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2014/May/nopoptimus.pdf</a>  Comment Period: 5/7/2014 - 6/5/2014 Public Hearing: N/A	Notice of Preparation	City of Perris	SCAQMD staff commented 5/27/2014

\*Sorted by Land Use Type (in order of land uses most commonly associated with air quality impacts), followed by County, then date received.

# - Project has potential environmental justice concerns due to the nature and/or location of the project.

Comment letters can be accessed at: <http://www.aqmd.gov/home/regulations/ceqa/commenting-agency>

**ATTACHMENT A  
INCOMING CEQA DOCUMENTS LOG  
MAY 1, 2014 TO MAY 31, 2014**

SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>Airports</i> <b>LAC140509-01</b> Runway 6L-24R and Runway 6R-24L RSA and Associated Improvements Project	The proposed project would include: 1) Runway 6L-24R and Runway 6R-24L RSA Improvements including implementation of declared distances, relocation of airport service roads, covering a portion of the Argo Ditch, closure of Los Angeles World Airports equipment parking areas, relocation of security holdbars, relocation of a portion of the Air Operations Area fence, and realignment of taxiway holdbars; 2) Pavement reconstruction of the eastern portion of Runway 6L-24R; and 3) Pavement reconstruction of Taxiway AA and realignment of taxiway holdbars, markings, and lighting on Taxiways Y,Z, and AA. The proposed project would not result in increase of decreased aviation activities at LAX compared to existing conditions.  Comment Period: 5/9/2014 - 6/9/2014 Public Hearing: N/A	Draft Environmental Impact Report	Los Angeles World Airports	Document reviewed - No comments sent
<i>Airports</i> <b>LAC140521-04</b> LAX Northside Plan Update	The proposed project consists of the LAX Northside Plan Update. The project would set forth new regulations for future development occurring within the Northside area of the LAX Specific Plan. The proposed Project is intended to create a vibrant, sustainable center of employment, retail, restaurant, office, hotel, research and development, education, civic, airport support, recreation, and buffer uses that support the needs to surrounding communities and Los Angeles World Airports.  Comment Period: 5/31/2014 - 7/21/2014 Public Hearing: N/A	Notice of Availability of a Draft Environmental Impact Report	Los Angeles World Airports	Document under review as of 5/31/14
<i>Airports</i> <b>ORC140523-03</b> John Wayne Airport Settlement Agreement Amendment Project	The proposed project consists of amending the John Wayne Airport (JWA) Settlement Agreement. The amendment would modify certain terms of the Settlement Agreement and extend the term through 2030. Different amendment scenarios are being evaluated: the Proposed Project; Alternatives A, B, and C which allow varying increases in the million annual passengers and Class A Average Daily Departures' and the No Project Alternatives, which allow the Settlement Agreement to expire. No physical improvements to the JWA facilities are proposed by any project scenario.  Comment Period: 5/23/2014 - 7/8/2014 Public Hearing: 5/28/2014	Draft Environmental Impact Report	County of Orange	Document under review as of 5/31/14
<i>Airports</i> <b>RVC140506-11</b> French Valley Airport Center Plot Plan No. 25183 and TPM 36671 Revised	The proposed project consists of a redesign due to the French Valley Airport Land Use Compatibility Plan being revised to the elimination of the second runway at this airport. The consequence of this change is that additional property owned by the developer of the French Valley Airport Center is available for development because the boundaries of the Airport Compatibility Zones have been modified to allow development of Parcel 2. This area was not previously available for development. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2014/May/nopfrenchvalley.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2014/May/nopfrenchvalley.pdf</a>  Comment Period: 5/6/2014 - 6/5/2014 Public Hearing: N/A	Notice of Preparation	County of Riverside	SCAQMD staff commented 5/27/2014

# - Project has potential environmental justice concerns due to the nature and/or location of the project.  
Comment letters can be accessed at: <http://www.aqmd.gov/home/regulations/ceqa/commenting-agency>

**ATTACHMENT A  
INCOMING CEQA DOCUMENTS LOG  
MAY 1, 2014 TO MAY 31, 2014**

<u>SCAQMD LOG-IN NUMBER</u> PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>Industrial and Commercial</i> <b>LAC140508-08</b> ENV-2013-2005/ 7050 N. Laurel Canyon Blvd.; North Hollywood-Valley Village	The proposed project consists of a change of use of an existing 4,000 square-foot auto dismantling building to a scrap metal collection facility that purchases aluminum, copper, brass, and steel; and recycling collection and buy-back of California CRV.  Comment Period: 5/8/2014 - 5/28/2014 Public Hearing: N/A	Notice of Availability of a Draft Mitigated Negative Declaration	City of Los Angeles	Document does not require comments
<i>Industrial and Commercial</i> <b>RVC140520-03</b> Surface Mining Permit No. 152 Revised Permit No. 1	The proposed project would extend the life of the mining permit, address the modified design slope grading details that were approved in SMP00152S1, and extend operating hours.  Comment Period: N/A Public Hearing: 6/18/2014	Notice of a Public Hearing	County of Riverside	Document under review as of 5/31/14
<i>Waste and Water-related</i> <b>LAC140506-05</b> Pemaco Superfund Site	This document consists of updates to the cleanup of chemicals from the groundwater and soil by the Pemaco treatment system.  Comment Period: N/A Public Hearing: 5/1/2014	Other	U.S. EPA	Document does not require comments
<i>Waste and Water-related</i> <b>LAC140507-01</b> Exide Technologies	The proposed project consists of application for Interim Status Modifications to the State of California, Department of Toxic Substances Control. The application addresses replacement of one miscellaneous unit that is needed to improve operations. The original unit will be decontaminated, demolished and disposed off-site. Comment Period: 5/6/2014 - 7/4/2014 Public Hearing: N/A	Notice of a Public Hearing	Department of Toxic Substances Control	Document reviewed - No comments sent
<i>Waste and Water-related</i> <b>LAC140509-03</b> Elysian Park-Downtown Water Recycling Project	The proposed project consists of delivering recycled water to Elysian park. A new 16-inch recycled water pipeline would be constructed from the existing recycled water pipeline serving the existing Taylor Yard Water Recycling Products, totaling approximately 10,800 linear feet. The proposed Elysian Park recycled water pipeline would connect to a proposed new approximately two million gallon recycled water storage tank located on the hilltop near Elysian Fields within Elysian Park via a proposed new recycled water pumping station located on the west side of I-5, just inside Elysian Park. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2014/May/nopelysianpark.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2014/May/nopelysianpark.pdf</a>  Comment Period: 5/9/2014 - 6/13/2014 Public Hearing: N/A	Notice of Preparation	Los Angeles Department of Water & Power	SCAQMD staff commented 5/27/2014

# - Project has potential environmental justice concerns due to the nature and/or location of the project.  
Comment letters can be accessed at: <http://www.aqmd.gov/home/regulations/ceqa/commenting-agency>

**ATTACHMENT A  
INCOMING CEQA DOCUMENTS LOG  
MAY 1, 2014 TO MAY 31, 2014**

<u>SCAQMD LOG-IN NUMBER</u> PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>Waste and Water-related</i> <b>LAC140513-01</b> DeMenno-Kerdoon Public Notice of Class 1 Permit Modification	The proposed project consists of a Class 1 Permit modification to permit DeMenno-Kerdoon to replace Tank 503 and make related administrative/informational changes to the permit. Tank 503 is one in a series of five tanks (501 through 505) that store light distillate and light naphtha.  Comment Period: N/A Public Hearing: N/A	Public Notice	DeMenno-Kerdoon	Document reviewed - No comments sent
<i>Waste and Water-related</i> <b>LAC140516-02</b> Fremont High School	The proposed project consists of an environmental investigation at Fremont High School. The Los Angeles Unified School District (LAUSD) is proposing to reconfigure and modernize approximately 6 1/2 acres of the school. These areas are being investigated for any soil contamination prior to construction. Environmental investigations conducted by the LAUSD in preparation for the school reconfiguration and modernization project have identified soil contamination from historical uses. Identified soil contamination include lead based paint residue from previous demolished and existing buildings, arsenic used for weed control in the existing parking lot, and organochlorine pesticides in soil from application of termiticides around previously demolished and existing buildings and fuel storage sheds.  Comment Period: 5/16/2014 - 5/30/2014 Public Hearing: N/A	Community Notice	Department of Toxic Substances Control	Document does not require comments
<i>Waste and Water-related</i> <b>LAC140516-03</b> Sylmar Ground Return System Replacement Project	The proposed project consists of replacing the existing underground and marine electrical cables and the existing marine electrode portions of the Sylmar Ground Return System. The new underground and marine electrical cables would be in a different alignment than the existing, through serving the same purpose and function.  Comment Period: 5/16/2014 - 6/30/2014 Public Hearing: N/A	Draft Environmental Impact Report	Los Angeles Department of Water and Power	Document reviewed - No comments sent
<i>Waste and Water-related</i> <b>LAC140516-05</b> DeMenno/Kerdoon Tank T-1108	The proposed project consists of replacing Tank T-1108. The existing tank is an above-ground, steel, flat-bottom tank used to treat and store oily water, oily waste, waste oil, and used oil. The replacement tank will meet the same design standards and will have the same permitted operating capacity as the existing tank.  Comment Period: N/A Public Hearing: N/A	Community Notice	Department of Toxic Substances Control	Document does not require comments
<i>Waste and Water-related</i> <b>LAC140516-06</b> Rockhaven Well (Well No. 16)	The proposed project consists of putting into service a groundwater well, which was drilled by the City of Glendale and completed in 2011 for potable water use. The proposed groundwater well has shown to be able to pump 400 gallons per minute. The project will also include the installation of 1,200 linear feet of 8-inch water main to connect the groundwater well to Crescenta Valley Water District's Nitrate Removal Treatment Plant.  Comment Period: 5/14/2014 - 6/13/2014 Public Hearing: N/A	Draft Negative Declaration	Crescenta Valley Water District	Document reviewed - No comments sent

# - Project has potential environmental justice concerns due to the nature and/or location of the project.  
Comment letters can be accessed at: <http://www.aqmd.gov/home/regulations/ceqa/commenting-agency>

**ATTACHMENT A  
INCOMING CEQA DOCUMENTS LOG  
MAY 1, 2014 TO MAY 31, 2014**

<u>SCAQMD LOG-IN NUMBER</u> PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>Waste and Water-related</i> <b>LAC140520-02</b> La Palma Recharge Basin Project	The proposed project consists of the construction and operation of a 14-acre groundwater recharge basin. The project will add an estimated 51,000 acre feet per year of capacity of water recharge into the Orange County Groundwater Basin. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2014/May/noplalpmarecharge.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2014/May/noplalpmarecharge.pdf</a>  Comment Period: 5/28/2014 - 6/28/2014 Public Hearing: N/A	Notice of Preparation	Orange County Water District	SCAQMD staff commented 5/27/2014
<i>Waste and Water-related</i> <b>LAC140522-12</b> Irwindale Material Recovery and Transfer Station	This document consists of a response from the City of Baldwin Park. The proposed project consists of construction and operation of a Materials Recovery Facility and Transfer Station with a fueling facility and convenience store.  Comment Period: N/A Public Hearing: N/A	Response to Comments	City of Irwindale	Document under review as of 5/31/14
<i>Waste and Water-related</i> <b>ORC140506-08</b> Swanner House Sewer Main Extension Project	The proposed project consists of extending an 8-inch sewer main approximately 800 feet from Swanner House to a point between an existing settling basin and the railroad tracks prior to discharging into the 33-inch sewer main owned and maintained by the Moulton-Niguel Water District.  Comment Period: 5/7/2014 - 6/6/2014 Public Hearing: N/A	Draft Negative Declaration	City of San Juan Capistrano	Document reviewed - No comments sent
<i>Waste and Water-related</i> <b>ORC140509-05</b> Orange County Feeder Blow-off Structure Rehabilitation Project	The proposed project consists of replacing valves and all corroded piping within the existing structure and would re-establish vehicular access to the blow-off structure to allow for these repairs as well as ongoing long-term operation and maintenance.  Comment Period: 5/9/2014 - 6/23/2014 Public Hearing: N/A	Draft Environmental Impact Report	Metropolitan Water District of Southern California	Document reviewed - No comments sent
<i>Waste and Water-related</i> <b>ORC140528-01</b> Landfill Gas Renewable Energy Project at FRB	The proposed project consists of allowing development of a landfill gas renewable energy project at the FRB Landfill.  Comment Period: N/A Public Hearing: N/A	Draft Environmental Impact Report - January 2006	County of Orange	Document reviewed - No comments sent
<i>Waste and Water-related</i> <b>RVC140501-03</b> Moreno Valley Groundwater Development Program	The proposed project consists of developing approximately 2,000 acres-feet per year of groundwater resources into the Moreno Valley area. The first step of the Program would be drilling and testing a well at Eastern's recently acquired parcel, located at 12246 Heacock Street in Moreno Valley, Riverside County. In order to fully implement the Program, it would also be necessary to construct treatment facilities, equip a potable water well, and construct a pump station and related infrastructure on this parcel.  Comment Period: 5/1/2014 - 5/30/2014 Public Hearing: N/A	Draft Mitigated Negative Declaration	Eastern Municipal Water District	Document reviewed - No comments sent

# - Project has potential environmental justice concerns due to the nature and/or location of the project.  
Comment letters can be accessed at: <http://www.aqmd.gov/home/regulations/ceqa/commenting-agency>

**ATTACHMENT A  
INCOMING CEQA DOCUMENTS LOG  
MAY 1, 2014 TO MAY 31, 2014**

SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>Waste and Water-related</i> <b>RVC140508-01</b> Thousand Palms Flood Control Project	The proposed project consists of constructing an approximately 6.97-mile long levee and channel, and associated energy dissipater, and two road crossings north of Interstate 10 for the purposes of flood control. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2014/May/noithousandpalms.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2014/May/noithousandpalms.pdf</a>  Comment Period: 5/2/2014 - 6/23/2014 Public Hearing: N/A	Notice of Preparation	U.S. Army Corps of Engineers, Los Angeles District	SCAQMD staff commented 5/27/2014
<i>Waste and Water-related</i> <b>RVC140509-04</b> Temecula Old Town Sewer Improvement Program	The proposed project consists of installing approximately 3,100 linear feet of 15-inch diameter pipeline in parallel with an existing 8-inch diameter sewer pipeline.  Comment Period: 5/8/2014 - 6/8/2014 Public Hearing: N/A	Notice of Availability of a Draft Mitigated Negative Declaration	Eastern Municipal Water District	Document reviewed - No comments sent
<i>Waste and Water-related</i> <b>RVC140522-01</b> Moreno Master Drainage Plan Revision	The proposed project consists of a revision that includes a conceptual long-range planning document that addresses the current and future drainage needs of the of the Moreno Valley watershed. The revision identifies the alignment, type, size, and cost estimate for the proposed facilities.  Comment Period: 5/22/2014 - 7/7/2014 Public Hearing: N/A	Draft Programmatic Environmental Impact Report	Riverside County Flood Control and Water Conservation District	No review conducted - No comments sent
<i>Waste and Water-related</i> <b>SBC140530-02</b> Lake Arrowhead Community Services District's Pump Station Modification and Water Supply Intake Replacement Project	The proposed project consists of installing a new lake water collection system to replace the aging water collection infrastructure currently located off Point Hamiltair in Lake Arrowhead.  Comment Period: 5/29/2014 - 6/27/2014 Public Hearing: N/A	Draft Mitigated Negative Declaration	Lake Arrowhead Community Services District	Document reviewed - No comments sent
<i>Utilities</i> <b>LAC140506-06</b> Los Angeles County Renewable Energy Ordinance	The proposed project consists of an ordinance amending the Los Angeles County Code Title 22 to establish regulations for the development of small-scale renewable energy systems, utility-scale renewable energy facilities, and temporary meteorological towers. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2014/May/noplacrenewable.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2014/May/noplacrenewable.pdf</a>  Comment Period: 5/5/2014 - 6/4/2014 Public Hearing: N/A	Notice of Preparation	County of Los Angeles	SCAQMD staff commented 5/27/2014

# - Project has potential environmental justice concerns due to the nature and/or location of the project.  
Comment letters can be accessed at: <http://www.aqmd.gov/home/regulations/ceqa/commenting-agency>





**ATTACHMENT A  
INCOMING CEQA DOCUMENTS LOG  
MAY 1, 2014 TO MAY 31, 2014**

SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>Transportation</i> <b>RVC140529-20</b> Seminole Drive Extension Project	The proposed project consists of connecting Seminole Drive to Rushmore Avenue at Kimdale Drive with a new road through Morongo Band of Mission Indian tribal land. The project would be approximately one-mile in length and would provide two 14-foot lanes and two eight-foot graded shoulders.  Comment Period: 5/28/2014 - 6/28/2014 Public Hearing: N/A	Draft Mitigated Negative Declaration	County of Riverside	Document reviewed - No comments sent
<i>Transportation</i> <b>SBC140520-01</b> State Route 210/Pepper Avenue New Interchange Project	The proposed project consists of constructing a new tight diamond interchange along State Route (SR) 210 at Pepper Avenue in portions of the Cities of Rialto and San Bernardino. The project would include providing freeway access ramps at each of the four quadrants of the interchange. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2014/May/ndstaterte210pepper.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2014/May/ndstaterte210pepper.pdf</a>  Comment Period: 5/19/2014 - 6/20/2014 Public Hearing: 6/20/2014	Notice of Availability of a Draft Negative Declaration	California Department of Transportation	SCAQMD staff commented 5/29/2014
<i>Institutional (schools, government, etc.)</i> <b>LAC140506-02</b> Long Beach Courthouse Demolition Project	The proposed project consists of demolishing the former Long Beach Courthouse building and would entail the removal of reinforced concrete, structural steel, siding, glass, and other building materials from the project site. While development of the project site in the future is likely, at this time, no firm plans for the project site have reached the level of a proposed or reasonably foreseeable project. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2014/May/noplongbeachcourt.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2014/May/noplongbeachcourt.pdf</a>  Comment Period: 5/1/2014 - 5/30/2014 Public Hearing: N/A	Notice of Preparation	City of Long Beach	SCAQMD staff commented 5/27/2014
<i>Institutional (schools, government, etc.)</i> <b>LAC140508-03</b> ENV-2014-464/ 6530 N. Winnetka Ave; Canoga Park-Winnetka-Woodland Hills-West Hills	The proposed project consists of the construction, use and maintenance of a two-story, 84,978 square-foot eldercare facility with 37 parking spaces on an 125,921 square-foot site.  Comment Period: 5/8/2014 - 5/28/2014 Public Hearing: N/A	Notice of Availability of a Draft Mitigated Negative Declaration	City of Los Angeles	Document reviewed - No comments sent
<i>Institutional (schools, government, etc.)</i> <b>ORC140530-03</b> Santa Ana Unified School District (SAUSD) Sports Complex	The proposed project consists of improvements to the athletic facilities on the contiguous campus of Valley High School, Carr Intermediate School, and Harvey Elementary School.  Comment Period: N/A Public Hearing: N/A	Final Environmental Impact Report	Santa Ana Unified School District	Document reviewed - No comments sent

# - Project has potential environmental justice concerns due to the nature and/or location of the project.  
Comment letters can be accessed at: <http://www.aqmd.gov/home/regulations/ceqa/commenting-agency>

**ATTACHMENT A  
INCOMING CEQA DOCUMENTS LOG  
MAY 1, 2014 TO MAY 31, 2014**

<u>SCAQMD LOG-IN NUMBER</u> PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>Medical Facility</b> <b>LAC140508-12</b> ENV-2013-4130/4055-4081 S. Marlton Dr. (Current Address) 3780 W. Martin Luther King Jr. Blvd.; West Adams-Baldwin Hills-Leimert (Proposed Address)	The proposed project consists of the construction of a 105,000 square-foot outpatient medical facility on an approximately 8.65-acre site.  Comment Period: 5/8/2014 - 5/28/2014 Public Hearing: N/A	Notice of Availability of a Draft Mitigated Negative Declaration	City of Los Angeles	Document does not require comments
<b>Medical Facility</b> <b>LAC140522-04</b> LAC+USC Medical Center Master Plan	The proposed project consists of a master plan that is envisioned over a period of approximately 25 years, that would be used to guide future development of the LAC+USC Medical Center campus and would influence the delivery of health care services and health related community programs.  Comment Period: 5/22/2014 - 6/18/2014 Public Hearing: N/A	Notice of Preparation	County of Los Angeles	Document reviewed - No comments sent
<b>Medical Facility</b> <b>RVC140513-02</b> Riverside Community Hospital	The proposed project consists of a phased campus master plan for future expansion of Riverside Community Hospital, approximately 22.5 acres; a General Plan amendment to amend land use designation from Downtown Specific Plan to Riverside Community Hospital Specific Plan; an amendment to Zoning Code; removal of Riverside Community Hospital campus from Downtown Specific Plan Healthy Care District; and Plot plan and design review of site plan and building elevations for development of Phase I, consisting of removal of 69 parking spaces and demolition of Medical Office Building.  Comment Period: N/A Public Hearing: 5/20/2014	Notice of a Public Hearing	Riverside Community Hospital	Document reviewed - No comments sent
<b>Retail</b> <b>LAC140508-07</b> ENV-2014-155/ 21405 W. Saticoy St.; Canoga Park-Winnetka-Woodland Hills-West Hills	The proposed project consists of the demolition of an outdoor covered 1,639 square-foot carwash with three auto slots and an approximately 20-foot high sound wall, removal of outdoor vacuums and a Healy vessel, and to add two gas pump islands and extend the gas station canopy by 30' by 57', to add a new diesel pump, two satellite dispensers, and re-locate an existing diesel pump.  Comment Period: 5/8/2014 - 5/28/2014 Public Hearing: N/A	Notice of Availability of a Draft Mitigated Negative Declaration	City of Los Angeles	Document does not require comments
<b>Retail</b> <b>LAC140528-04</b> Sprouts - 8550 Santa Monica Boulevard Project	The proposed project consists of constructing a three-story building with approximately 42,300 square feet of commercial space on a 0.6-acre undeveloped project site. The proposed new commercial building would include a 20,000 square-foot Sprouts Farmers Market, a 1,319 square-foot corner café with an outdoor patio, 3,998 square feet of office space, an 8,000 square-foot fitness center/gym, and a 4,000 square-foot personal service space.  Comment Period: 5/28/2014 - 6/23/2014 Public Hearing: N/A	Notice of Preparation	City of West Hollywood	Document under review as of 5/31/14

# - Project has potential environmental justice concerns due to the nature and/or location of the project.  
Comment letters can be accessed at: <http://www.aqmd.gov/home/regulations/ceqa/commenting-agency>



















**ATTACHMENT C**  
**ACTIVE SCAQMD LEAD AGENCY PROJECTS**  
**THROUGH MAY 31, 2014**

PROJECT DESCRIPTION	PROPONENT	TYPE OF DOCUMENT	STATUS	CONSULTANT
Operators of the Ultramar Wilmington Refinery are proposing to construct and install a 49 MW cogeneration unit to reduce the Refinery's reliance on electricity from the Los Angeles Department of Water and Power and produce steam to meet internal needs. No other refinery modifications are proposed.	Ultramar Wilmington Refinery	Negative Declaration	Staff revised responses to the 3 comment letters received on Draft ND and consultant is providing edited responses and finalizing the Draft ND.	Environmental Audit, Inc.
The Phillips 66 (formerly ConocoPhillips) Los Angeles Refinery Ultra Low Sulfur Diesel project was originally proposed to comply with federal state and SCAQMD requirements to limit the sulfur content of diesel fuels. Litigation against the CEQA document was filed. Ultimately, the California Supreme Court concluded that the SCAQMD had used an inappropriate baseline and directed the SCAQMD to prepare an EIR, even though the project has been built and has been in operation since 2006. The purpose of this CEQA document is to comply with the Supreme Court's direction to prepare an EIR.	Phillips 66 (formerly ConocoPhillips), Los Angeles Refinery	Environmental Impact Report	The Notice of Preparation was circulated for a 30-day public comment period on March 26, 2012. The comment period ended on April 26, 2012. The consultant submitted the administrative Draft EIR to SCAQMD in late July 2013. SCAQMD reviewed the Draft EIR and the consultant is revising the document.	Environmental Audit, Inc.
The Phillips 66 Los Angeles Refinery operators are proposing to install one new 615,000-barrel crude oil storage tank with a geodesic dome to accommodate larger marine vessels delivering crude oil. The proposed project also includes increasing the throughput (i.e., frequency of filling and emptying tank) on two existing tanks and adding geodesic domes to these tanks, installing one new 14,000-barrel water draw surge tank and installing one new electrical power substation.	Phillips 66 Los Angeles Refinery Carson Plant	Negative Declaration	The Draft ND was released for a 30-day public review and comment period beginning on September 10, 2013 and ending on October 9, 2013. Three comment letters were received. SCAQMD reviewed the responses to the comment letters and the consultant is making edits to the responses and finalizing the Draft ND.	Environmental Audit, Inc.
The Tesoro Refining and Marketing Los Angeles Refinery operators are proposing to replace two existing tanks with two new larger tanks and to connect one existing tank to an existing vapor recovery system. The proposed project also includes replacing an onsite 12-inch pipe with a new 48-inch diameter pipe to connect to an existing pipeline to the marine terminal.	Tesoro Refining and Marketing Company Los Angeles Refinery	Negative Declaration	The Notice of Intent of a Draft ND was circulated for a 30-day public comment period from April 25, 2014 to May 27, 2014. The comment period was extended to June 10, 2014.	Environmental Audit, Inc.

A shaded row indicates a new project.

#=SCAQMD was contacted regarding potential environmental justice concerns due to the natural and/or location of the project.

**ATTACHMENT C**  
**ACTIVE SCAQMD LEAD AGENCY PROJECTS**  
**THROUGH MAY 31, 2014**

PROJECT DESCRIPTION	PROPONENT	TYPE OF DOCUMENT	STATUS	CONSULTANT
Warren E & P, Inc. is proposing a modification to a Subsequent MND that was certified by the SCAQMD on July 19, 2011. Warren has submitted a Supplemental ND detailing a gas sales project designed to replace the gas re-injection portion of the 2011 project.	Warren E & P, Inc.	Supplemental Negative Declaration	SCAQMD staff has reviewed and revised the Draft Supplemental ND. The Draft Supplemental ND was released for public review and comment on April 25 until May 27, 2014. The comment period was extended to June 10, 2014.	Environ
Operators of the KinderMorgan Lomita Terminal are proposing to deliver crude oil by expanding their rail facility.	KinderMorgan Lomita Terminal	To Be Determined	The consultants are preparing emission estimates to determine the type of CEQA document to be prepared.	SABS Consulting and TRC
Operators of the Petro Diamond Marine Terminal are proposing to increase the number of ship calls delivering ethanol.	Petro Diamond	To Be Determined	The consultant had prepared Draft Negative Declaration. SCAQMD staff is currently reviewing the Draft Negative Declaration to determine if it is the appropriate type of CEQA document for the project.	SABS Consulting
Quemetco is proposing an increase in daily furnace feed rate.	Quemetco	To Be Determined	Initial Study under review by SCAQMD staff.	Trinity Consultants
Chevron is proposing modifications to its Product Reliability and Optimization (PRO) Project and has applied for a change of permit conditions to reduce NOx emissions and fired duty operating conditions of the Tail Gas Unit.	Chevron	Addendum	Under staff review.	Environmental Audit, Inc.

A shaded row indicates a new project.

#=SCAQMD was contacted regarding potential environmental justice concerns due to the natural and/or location of the project.

[↑ Back to Agenda](#)

BOARD MEETING DATE: July 11, 2014

AGENDA NO. 24

REPORT: Rule and Control Measure Forecast

SYNOPSIS: This report highlights SCAQMD rulemaking activity and Public Workshops potentially scheduled for the year 2014.

COMMITTEE: No Committee Review

RECOMMENDED ACTION:  
Receive and file.

Barry R. Wallerstein, D.Env.  
Executive Officer

EC:PF:cg

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1325	Federal PM 2.5 New Source Review Program
Rule 1325 is moved forward to December to address approvability concerns forwarded by U.S. EPA.	
1153.1	Emissions of Oxides of Nitrogen from Commercial Food Ovens
Proposed Rule 1153.1 is moved from September to October to allow staff additional time to complete the CEQA review process.	
1168	Adhesive and Sealant Applications (CTS-02)
Rule 1168 is moved from September to TBD. Due to the potential tradeoffs between VOC and air toxics and potential occupational exposure, staff will be conducting a technical symposium addressing these issues and seeking Board policy direction in the next couple months. Proposed Amended Rule 1168 will be rescheduled based on the outcome of the above actions.	
Reg. XX	Regional Clean Air Incentives Market (RECLAIM) (CMB-01)
Regulation XX is moved from September to October to allow additional time to evaluate the rule development.	

## 2014 MASTER CALENDAR (continued)

Below is a list of all rulemaking activity scheduled for the year 2014. The last four columns refer to the type of rule adoption or amendment. A more detailed description of the proposed rule adoption or amendment is located in the Attachments (A through D) under the type of rule adoption or amendment (i.e. AQMP, Toxics, Other and Climate Change).

*\*An asterisk indicates that the rulemaking is a potentially significant hearing.*

*+This proposed rule will reduce criteria air contaminants and assist toward attainment of ambient air quality standards.*

*<sup>1</sup>Subject to Board approval*

*California Environmental Quality Act shall be referred to as "CEQA."*

*Socioeconomic Analysis shall be referred to as "Socio."*

### 2014

September		AQMP	Toxics	Other	Climate Change
1111	Reduction of NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces			√	
1151 <sup>*+</sup>	Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations			√	
October					
415	Odors from Rendering Plants			√	
Reg. IX	Standards of Performance for New Stationary Sources			√	
X	National Emission Standards for Hazardous Air Pollutants				
1153.1 <sup>1</sup>	Emissions of Oxides of Nitrogen from Commercial Food Ovens			√	
1161	VOC Reductions from Mold Release Agents (CTS-03)	√			
Reg. XX <sup>1</sup>	Regional Clean Air Incentives Market (RECLAIM) (CMB-01)	√			

**2014 MASTER CALENDAR (continued)**

**2014**

<b>November</b>		<b>AQMP</b>	<b>Toxics</b>	<b>Other</b>	<b>Climate Change</b>
1188	VOC Reductions from Vacuum Trucks (FUG-01)	√			
1401	New Source Review of Toxic Air Contaminants		√		
1402	Control of Toxic Air Contaminants from Existing Sources				
1420	Emissions Standard for Lead		√		
1420.2	Emissions Standard for Lead from Medium Sources		√		
2305*	Indirect Sources		√	√	
4001	Backstop to Ensure AQMP Emission Reduction Targets Are Met at Commercial Marine Ports (IND-01)	√			
<b>December</b>					
1111.1	NOx Reductions from Commercial Space Heating (CMB-03)	√			
1123	Refinery Process Turnarounds (MCS-03)	√			
1325 <sup>1</sup>	Federal PM 2.5 New Source Review Program			√	
1430	Control of Toxic Air Contaminants from Metal Forging, Shredding, Grinding and Other Metal Processing Operations		√		
1450	Control of Methylene Chloride Emissions		√		
2301	Control of Emissions from New or Redevelopment Projects (EGM-01)	√			



**2014 MASTER CALENDAR (continued)**

**2014 TO-BE DETERMINED**

<b>TBD</b>		<b>AQMP</b>	<b>Toxics</b>	<b>Other</b>	<b>Climate Change</b>
219	Equipment Not Requiring a Written Permit Pursuant to Regulation II			√	
222.1	Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation I			√	
1107	Coating of Metal Parts and Products			√	
1113	Architectural Coatings			√	
1118	Control of Emissions from Refinery Flares			√	√
1124	Aerospace Assembly and Component Manufacturing Operations (CTS-02)	√		√	
1162	Polyester Resin Operations (CTS-02)	√		√	
1171	Solvent Cleaning Operations (CTS-02)	√		√	
1147	NOx Reductions from Miscellaneous Sources			√	
1148.1	Oil and Gas Production Wells			√	
1168 <sup>1</sup>	Adhesive and Sealant Applications (CTS-02)	√			
1177	Liquefied Petroleum Gas Transfer and Dispensing			√	
1190 Series	Fleet Vehicle Requirements			√	
1304.2	Greenfield or Existing Electrical Generating Facility Fee for Use of Offsets			√	
Reg. XIII	New Source Review			√	
1420.1	Emission Standard for Lead from Large Lead-Acid Battery Recycling Facilities		√		

**2014 MASTER CALENDAR (continued)**

**2014 TO-BE DETERMINED**

<b>TBD</b>		<b>AQMP</b>	<b>Toxics</b>	<b>Other</b>	<b>Climate Change</b>
1902	Transportation Conformity - Preamble			√	
2511	Credit Generation Program for Locomotive Head End Power Unit Engines			√	
2512	Credit Generation Program for Ocean-Going Vessels at Berth			√	
Reg.XXVII	Climate Change				√
4010 <sup>*+</sup>	General Provisions and Requirements for Ports of Los Angeles and Long Beach (IND-01)	√	√		
4020 <sup>*+</sup>	Backstop Requirements for Ports of Los Angeles and Long Beach (IND-01)	√	√		
Reg. IV, IX, X, XI, XIV, XX and XXX Rules	Rule amendments may be needed to meet the requirements of state and federal laws, to address variance issues/technology-forcing limits, to abate a substantial endangerment to public health or welfare, or to seek additional reductions to meet the SIP short-term measure commitments. The associated rule development or amendments include, but are not limited to, SCAQMD existing rules listed in Table 1 of the December 6, 2013 Rule and Control Measure Forecast and new or amended rules to implement the 2012 AQMP measures in Table 2 of the December 6, 2013 Rule and Control Measure Forecast. The Clean Communities Plan (CCP) has been updated to include new measures to address toxic emissions in the basin. The CCP measures will reduce exposure to air toxics from stationary, mobile, and area sources (Table 3 of the December 6, 2013 Rule and Control Measure Forecast). Rule amendments also include updates to provide consistency with CARB Statewide Airborne Toxic Control Measures (ATCMs).	√	√	√	√

# ATTACHMENT A

## AQMP Rule Activity Schedule

This attachment lists those control measures that are being developed into rules or rule amendments for Governing Board consideration that are designed to implement the amendments to the 2012 Air Quality Management Plan.

### 2014

<b>October</b>	
1161	<p><b>VOC Reductions from Mold Release Agents (CTS-03)</b>  <i>[Projected Emission Reduction: TBD]</i>                      The proposed rule will establish requirements for mold release products used in composite, fiberglass, metal and plastic manufacturing, and concrete stamping operations.  <i>Naveen Berry 909.396.2363 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>
Reg. XX <sup>1</sup>	<p><b>Regional Clean Air Incentives Market (RECLAIM) (CMB-01)</b>  <i>[Projected Emission Reduction: 3-5 TPD]</i>                      Proposed amendments to Regulation XX will seek to implement a minimum contingency measure CMB-01 of the 2012 AQMP and possibly Phase II of the control measure if the technology assessment can be completed within the allotted time for this rulemaking.  <i>Joe Cassmassi 909.396.3155 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>
<b>November</b>	
1188	<p><b>VOC Reductions from Vacuum Trucks (FUG-01)</b>  <i>[Projected Emission Reduction: TBD]</i>                      The proposed rule will establish VOC emission standards and other requirements associated with the operation of vacuum trucks not covered by Rule 1149 – Storage Tank and Pipeline Cleaning and Degassing.  <i>Naveen Berry 909.396.2363 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>
4001	<p><b>Backstop to Ensure AQMP Emission Reduction Targets Are Met at Commercial Marine Ports (IND-01)</b>  <i>[Projected Emission Reduction: TBD]</i>                      If triggered, the proposed rule will address cost-effective NO<sub>x</sub>, SO<sub>x</sub>, and PM<sub>2.5</sub> emission reduction strategies from port-related sources to ensure emission reductions claimed or emission targets assumed in the 2012 AQMP for the 24-hour PM<sub>2.5</sub> standard are maintained.  <i>Randall Pasek 909.396.2251 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>

# ATTACHMENT A

## AQMP Rule Activity Schedule (continued)

**2014**

December	
1111.1	<p><b>NO<sub>x</sub> Reductions from Commercial Space Heating (CMB-03)</b>  <i>[Projected Emission Reduction: N/A]</i>                      Proposed Rule 1111.1 will establish equipment-specific nitrogen oxides emission limits and other requirements for the operation of commercial space heaters.  <i>Joe Cassmassi 909.396.3155 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>
1123	<p><b>Refinery Process Turnarounds (MCS-03)</b>  <i>[Projected Emission Reduction: N/A]</i>                      Proposed amendments, if needed, will implement Control Measure MSC-03 of the 2007 AQMP by establishing procedures that better quantify emission impacts from start-up, shutdown or turnaround activities.  <i>Naveen Berry 909.396.2363 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>
2301	<p><b>Control of Emissions from New or Redevelopment Projects (EGM-01)</b>  <i>[Projected Emission Reduction: Committed to reduce 0.5 tons per day of VOC, 0.8 tons per day of NO<sub>x</sub>, and 0.5 tons per day of PM<sub>2.5</sub> in 2023.]</i>                      The proposed rule will implement the 2007 AQMP Control Measure EGM-01 – Emission Reductions from New or Redevelopment Projects. Since the initial proposal was released for Proposed Rule 2301, CARB in compliance with an SB 375 requirement has set greenhouse gas emission reduction targets for each metropolitan planning organization (MPO). SCAG’s 2012 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) contains the plan for how these emission reductions targets will be met. In light of these developments, Proposed Rule 2301 will consider the implementation of a menu of mitigation measures as well as capture the co-benefits of VOC, NO<sub>x</sub>, and PM 2.5 emission reductions from SB 375 and the 2012 RTP/SCS.  <i>Carol Gomez 909.396.3264 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>

# ATTACHMENT A

## AQMP Rule Activity Schedule (continued)

### To-Be Determined 2014

To-Be Determined	
<p>1124</p> <p>1162</p> <p>1171</p>	<p><b>Aerospace Assembly and Component Manufacturing Operations (CTS-02)</b></p> <p><b>Polyester Resin Operations (CTS-02)</b></p> <p><b>Solvent Cleaning Operations (CTS-02)</b>  <i>[Projected Emission Reduction: TBD]</i></p> <p>Amendments may be necessary to integrate requirements associated with Proposed Rule 1161 – VOC Reductions from Mold Release Agents.  <i>Naveen Berry 909.396.2363 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>
<p>1168<sup>1</sup></p>	<p><b>Adhesive and Sealant Applications (CTS-02)</b>  <i>[Projected Emission Reduction: N/A]</i></p> <p>Amendments to Rule 1168 will partially implement CTS-02 and reflect improvements in adhesive and sealants technology, as well as remove outdated provisions and include minor clarifications.  <i>Naveen Berry 909.396.2363 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>
<p>4010<sup>*+</sup></p> <p>4020<sup>*+</sup></p>	<p><b>General Provisions and Requirements for Ports of Los Angeles and Long Beach (IND-01)</b></p> <p><b>Backstop Requirements for Ports of Los Angeles and Long Beach (IND-01)</b>  <i>[Projected Emission Reduction: TBD]</i></p> <p>If triggered, the proposed rules will address cost-effective NOx, SOx, and PM2.5 emission reduction strategies from port-related sources to ensure emission reductions claimed or emission targets assumed in the AQMP are maintained.  <i>Susan Nakamura 909.396.3105 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>
<p>Reg. IV, IX, X, XI, XIV, XX and XXX Rules</p>	<p>Rule amendments may be needed to meet the requirements of state and federal laws, to address variance issues/technology-forcing limits, to abate a substantial endangerment to public health or welfare, or to seek additional reductions to meet the SIP short-term measure commitments. The associated rule development or amendments include, but are not limited to, SCAQMD existing rules listed in Table 1 of the December 6, 2013 Rule and Control Measure Forecast and new or amended rules to implement the 2012 AQMP measures in Table 2 of the December 6, 2013 Rule and Control Measure Forecast.</p>

## ATTACHMENT B

### Toxics Rule Activity Schedule

This attachment lists those rules or rule amendments for Governing Board consideration that are designed to implement the Air Toxics Control Plan.

**2014**

<b>November</b>	
1401 1402	<p><b>New Source Review of Toxic Air Contaminants</b>  <b>Control of Toxic Air Contaminants from Existing Sources</b>  <i>[Projected Emission Reduction: TBD]</i>                      Amendments to Rules 1401 and 1402 will address new or revised toxic air contaminants that have been approved by OEHHA.  <i>Susan Nakamura 909.396.3105 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>
1420 1420.2	<p><b>Emissions Standard for Lead</b>  <b>Emissions Standard for Lead from Medium Sources</b>  <i>[Projected Emission Reduction: TBD]</i>                      In October 2008, U.S. EPA lowered the National Ambient Air Quality Standard for lead from 1.5 to 0.15 ug/m<sup>3</sup>. Proposed Amended Rule 1420 and Proposed Rule 1420.2 will apply to lead sources and will include requirements to ensure the Basin meets the new lead standard.  <i>Susan Nakamura 909.396.3105 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>
2305*	<p><b>Indirect Sources</b>  <i>[Projected Emission Reduction: TBD]</i>                      Proposed Rule 2305 will identify approaches to reduce exposure to diesel particulate emissions and localized NO<sub>2</sub> emissions from facilities associated with large indirect sources (i.e. facilities that attract mobile sources).  <i>Susan Nakamura 909.396.3105 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>
<b>December</b>	
1430	<p><b>Control of Toxic Air Contaminants from Metal Forging, Shredding, Grinding and Other Metal Processing Operations</b>  <i>[Projected Emission Reduction: TBD]</i>                      Proposed Rule 1430 will establish requirements to control toxic air contaminants from metal forging, shredding, grinding, and other metal processing operations.  <i>Susan Nakamura 909.396.3105 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>
1450	<p><b>Control of Methylene Chloride Emissions</b>  <i>[Projected Emission Reduction: N/A]</i>                      Proposed Rule 1450 will establish requirements to control methylene chloride from furniture stripping operations and other sources.  <i>Susan Nakamura 909.396.3105 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>

## ATTACHMENT B

### Toxics Rule Activity Schedule (continued)

#### To-Be Determined 2014

<b>To-Be Determined</b>	
1420.1	<p><b>Emission Standard for Lead from Large Lead-Acid Battery Recycling Facilities</b>  <i>[Projected Emission Reduction: TBD]</i>                      The proposed amendment will reduce arsenic, benzene, and 1,3-butadiene emissions from large lead-acid battery recycling facilities.  <i>Susan Nakamura 909.396.3105 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>
4010 <sup>*+</sup> 4020 <sup>*+</sup>	<p><b>General Provisions and Requirements for Ports of Los Angeles and Long Beach (IND-01)</b>  <b>Backstop Requirements for Ports of Los Angeles and Long Beach (IND-01)</b>  <i>[Projected Emission Reduction: TBD]</i>                      If triggered, the proposed rules will address cost-effective NO<sub>x</sub>, SO<sub>x</sub>, and PM<sub>2.5</sub> emission reduction strategies from port-related sources to ensure emission reductions claimed or emission targets assumed in the AQMP are maintained.  <i>Susan Nakamura 909.396.3105 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>
Reg. IV, IX, X, XI, XIV, XX and XXX Rules	<p>The Clean Communities Plan (CCP) has been updated to include new measures to address toxic emissions in the basin. The CCP measures will reduce exposure to air toxics from stationary, mobile, and area sources (Table 3 of the December 6, 2013 and Control Measure Forecast). Rule amendments also include updates to provide consistency with CARB Statewide Air Toxic Control Measures (ATCMs).</p>

# ATTACHMENT C

## Other Rule Activity Schedule

This attachment lists those rules or rule amendments for the Governing Board consideration that are designed to improve rule enforceability, SIP corrections, or implementing state or federal regulations.

**2014**

<b>September</b>	
1111	<p><b>Reduction of NO<sub>x</sub> Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces</b>  <i>[Projected Emission Reduction: N/A]</i>                      Amendments may be necessary to reflect the findings of the ongoing technology assessment.  <i>Joe Cassmassi 909.396.3115 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>
1151 <sup>*+</sup>	<p><b>Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations</b>  <i>[Projected Emission Reduction: N/A]</i>                      The proposed amendments to the rule will remove language associated with outdated requirements and may also be necessary to reflect further findings relative to recordkeeping requirements for tertiary butyl acetate (TBAC), as well as include minor clarifications.  <i>Naveen Berry 909.396.2363 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>
<b>October</b>	
415	<p><b>Odors from Rendering Plants</b>  <i>[Projected Emission Reduction: TBD]</i>                      Proposed Rule 415 will address odors from rendering plants.  <i>Phil Fine 909.396.2239 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>
Reg. IX X	<p><b>Standards of Performance for New Stationary Sources (NSPS) National Emission Standards for Hazardous Air Pollutants (NESHAPS)</b>  <i>[Projected Emission Reduction: N/A]</i>                      Regulation IX - Standards of Performance for New Stationary Sources and Regulation X - National Emission Standards for Hazardous Air Pollutants, incorporate by reference the corresponding federal requirements. Amendments are being proposed to incorporate the latest federal revisions.  <i>Naveen Berry 909.396.2363 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>
1153.1 <sup>1</sup>	<p><b>Emissions of Oxides of Nitrogen from Commercial Food Ovens</b>  <i>[Projected Emission Reduction: N/A]</i>                      Proposed Rule 1153.1 will establish equipment-specific nitrogen oxides emission limits and other requirements for the operation of commercial food ovens.  <i>Joe Cassmassi 909.396.3155 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>



## ATTACHMENT C

### Other Rule Activity Schedule (continued)

**2014**

<b>November</b>	
2305*	<p><b>Indirect Sources</b>  <i>[Projected Emission Reduction: TBD]</i>                      Proposed Rule 2305 will identify approaches to reduce exposure to diesel particulate emissions and localized NO<sub>2</sub> emissions from facilities associated with large indirect sources (i.e. facilities that attract mobile sources).</p> <p><i>Susan Nakamura 909.396.3105 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>
<b>December</b>	
1325 <sup>1</sup>	<p><b>Federal PM 2.5 New Source Review Program</b>  <i>[Projected Emission Reduction: TBD]</i>                      Amendments may be necessary to address U.S. EPA comments on SIP approvability issues and/or requirements. Amendments may also be proposed for clarity and improved enforceability.</p> <p><i>Naveen Berry 909.396.2363 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>

### To-Be Determined 2014

<b>To-Be Determined</b>	
219	<p><b>Equipment Not Requiring a Written Permit Pursuant to Regulation II</b>  <i>[Projected Emission Reduction: N/A]</i>                      Amendments to Rule 219 may be proposed to exclude equipment with de minimis emissions from the requirement to obtain written permits.</p> <p><i>Naveen Berry 909.396.2363 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>
222.1	<p><b>Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation I</b>  <i>[Projected Emission Reduction: N/A]</i>                      Amendments for Rule 222 may be proposed to add additional equipment categories to the streamlined filing/registration program of Rule 222.</p> <p><i>Naveen Berry 909.396.2363 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>
1107	<p><b>Coating of Metal Parts and Products</b>  <i>[Projected Emission Reduction: N/A]</i>                      Potential amendments to Rule 1107 would further reduce VOC emissions and improve rule clarity and enforceability.</p> <p><i>Naveen Berry 909.396.2363 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>

# ATTACHMENT C

## Other Rule Activity Schedule (continued)

### To-Be Determined 2014

To-Be Determined	(continued)
1113	<p><b>Architectural Coatings</b>  <i>[Projected Emission Reduction: N/A]</i>                      Potential amendments may be proposed to include administrative fixes and/or any clarifications that may arise due to compliance verification activities or manufacturer and public input.  <i>Naveen Berry 909.396.2363 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>
1118	<p><b>Control of Emissions from Refinery Flares</b>  <i>[Projected Emission Reduction: TBD]</i>                      Amendments may be necessary to address results of the additional analysis required by the adopting resolution for the last amendment. Amendments may also be necessary to implement an AB 32 measure.  <i>Naveen Berry 909.396.2363 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>
1124 1162 1171	<p><b>Aerospace Assembly and Component Manufacturing Operations (CTS-02)</b>  <b>Polyester Resin Operations (CTS-02)</b>  <b>Solvent Cleaning Operations (CTS-02)</b>  <i>[Projected Emission Reduction: N/A]</i>                      Amendments may be necessary to integrate requirements associated with Proposed Rule 1161 – VOC Reductions from Mold Release Agents. The proposed amendment may consider technology assessments for the cleanup of affected equipment.  <i>Naveen Berry 909.396.2363 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>
1147	<p><b>NOx Reductions from Miscellaneous Sources</b>  <i>[Projected Emission Reduction: N/A]</i>                      Amendments may be necessary to address findings of ongoing technology assessment.  <i>Joe Cassmassi 909.396.3155 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>
1148.1	<p><b>Oil and Gas Production Wells</b>  <i>[Projected Emission Reduction: N/A]</i>                      Amendments may be necessary to improve rule effectiveness in reducing emissions from production wells and associated equipment and improving housekeeping activities.  <i>Susan Nakamura 909.396.3105 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>
1177	<p><b>Liquefied Petroleum Gas Transfer and Dispensing</b>  <i>[Projected Emission Reduction: N/A]</i>                      Potential amendments may be proposed to include administrative fixes and/or any clarifications that may arise due to compliance verification activities or manufacturer and public input.  <i>Naveen Berry 909.396.2363 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>

# ATTACHMENT C

## Other Rule Activity Schedule (continued)

### To-Be Determined 2014

<b>To-Be Determined</b>	<b>(continued)</b>
1190 Series	<p><b>Fleet Vehicle Requirements</b>  <i>[Projected Emission Reduction: TBD]</i>                      Amendments to Rule 1190 series fleet rules may be necessary to address remaining outstanding implementation issues and in the event the court's future action requires amendments. In addition, the current fleet rules may be expanded to achieve additional air quality and air toxic benefits.  <i>Dean Saito 909.396.2647 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>
1304.2	<p><b>Greenfield or Existing Electrical Generating Facility Fee for Use of Offsets</b>  <i>[Projected Emission Reduction: TBD]</i>                      Proposed Rule 1304.2 would provide for new, greenfield or additions at existing electrical generating facilities access to the SCAQMD's internal offset account, subject to qualifying conditions, eligibility, and the payment of a fee to invest in air quality improvement projects consistent with the AQMP. This rule is a companion provision to recently adopted Rule 1304.1 and will provide that new, proposed and other existing electrical generating facilities can compete on a level playing field with existing generating facilities with utility steam boilers, and implement the State's plan to maintain grid reliability.  <i>Naveen Berry 909.396.2363 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>
Reg. XIII	<p><b>New Source Review</b>  <i>[Projected Emission Reduction: TBD]</i>                      Amendments may be necessary to address U.S. EPA comments on SIP approvability issues and/or requirements. Amendments may also be proposed for clarity and improved enforceability.  <i>Naveen Berry 909.396.2363 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>
1902	<p><b>Transportation Conformity</b>  <i>[Projected Emission Reduction: TBD]</i>                      Amendments to Rule 1902 may be necessary to bring the District's Transportation Conformity rule in line with current U.S. EPA requirements.  <i>Susan Nakamura 909.396.3105 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>
2511	<p><b>Credit Generation Program for Locomotive Head End Power Unit Engines</b>  <i>[Projected Emission Reduction: TBD]</i>                      Develop a rule to allow generation of PM mobile source emission reduction credits from Locomotive Head End Power Unit Engines. Credits will be generated by retrofitting engines with PM controls or replacing the engines with new lower-emitting engines.  <i>Randall Pasek 909.396.2251 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>

## ATTACHMENT C

### Other Rule Activity Schedule (continued)

#### To-Be Determined 2014

To-Be Determined	(continued)
2512	<p><b>Credit Generation Program for Ocean-Going Vessels at Berth</b>  <i>[Projected Emission Reduction: TBD]</i>                      Develop a rule to allow generation of PM, NO<sub>x</sub> and SO<sub>x</sub> emission reduction credits from ocean-going vessels while at berth. Credits will be generated by controlling the emissions from auxiliary engines and boilers of ships while docked.  <i>Randall Pasek 909.396.2251 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i></p>
Reg. IV, IX, X, XI, XIV, XX and XXX Rules	<p>Rule amendments may be needed to meet the requirements of state and federal laws, to address variance issues/technology-forcing limits, to abate a substantial endangerment to public health or welfare, or to seek additional reductions to meet the SIP short-term measure commitments. The associated rule development or amendments include, but are not limited to, SCAQMD existing rules listed in Table 1 of the December 6, 2013 Rule and Control Measure Forecast and new or amended rules to implement the 2012 AQMP measures in Table 2 of the December 6, 2013 Rule and Control Measure Forecast. The Clean Communities Plan (CCP) has been updated to include new measures to address toxic emissions in the basin. CCP measures will reduce exposure to air toxics from stationary, mobile, and area sources (Table 3 of the December 6, 2013 Rule and Control Measure Forecast). Rule amendments also include updates to provide consistency with CARB Statewide Airborne Toxic Control Measures (ATCMs).</p>

# ATTACHMENT D

## Climate Change

This attachments lists rules or rule amendments for Governing Board consideration that are designed to implement SCAQMD's Climate Change Policy or for consistency with state or federal rules.

### To-Be Determined 2014

<b>To-Be Determined</b>	
1118	<b>Control of Emissions from Refinery Flares</b> <i>[Projected Emission Reduction: TBD]</i> Amendments may be necessary to address findings from the additional analysis required by the adopting resolution for the last amendment. Amendments may also be necessary to implement an AB 32 measure. <i>Naveen Berry 909.396.2363 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i>
Reg. XXVII	<b>Climate Change</b> <i>[Projected Emission Reduction: TBD]</i> Additional protocols may be added to Rules 2701 and 2702. <i>Susan Nakamura 909.396.3105 CEQA: Krause 909.396.2706 Socio: Cassmassi 909.396.3155</i>
Reg. IV, IX, X, XI, XIV, XX and XXX Rules	Rule developments/amendments may be needed to meet the requirements of state and federal laws related to climate change air pollutants.

BOARD MEETING DATE: July 11, 2014

AGENDA NO. 25

PROPOSAL: Report of RFPs Scheduled for Release in July

SYNOPSIS: This report summarizes the RFPs for budgeted services over \$75,000 scheduled to be released for advertisement for the month of July.

COMMITTEE: Administrative, June 13, 2014; Recommended for Approval

**RECOMMENDED ACTION:**

Approve the release of RFPs for the month of July.

Barry R. Wallerstein, D.Env.  
Executive Officer

MBO:lg

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**Background**

At its January 8, 2010 meeting, the Board approved a revised Procurement Policy and Procedure. Under the revised policy, RFPs for budgeted items over \$75,000, which follow the Procurement Policy and Procedure, no longer require individual Board approval. However, a monthly report of all RFPs over \$75,000 is included as part of the Board agenda package and the Board may, if desired, take individual action on any item. The report provides the title and synopsis of the RFP, the budgeted funds available, and the name of the Deputy Executive Officer/Asst. Deputy Executive Officer responsible for that item. Further detail including closing dates, contact information, and detailed proposal criteria will be available online at <http://www.aqmd.gov/grants-bids> following Board approval on July 11, 2014.

**Outreach**

In accordance with SCAQMD's Procurement Policy and Procedure, a public notice advertising the RFP and inviting bids will be published in the Los Angeles Times, the Orange County Register, the San Bernardino Sun, and Riverside County Press Enterprise newspapers to leverage the most cost-effective method of outreach to the South Coast Basin.

Additionally, potential bidders may be notified utilizing SCAQMD's own electronic listing of certified minority vendors. Notice of the RFP will be e-mailed to the Black and Latino Legislative Caucuses and various minority chambers of commerce and business associations, and placed on the Internet at SCAQMD's website (<http://www.aqmd.gov>) where it can be viewed by making the selection "Grants & Bids." Information is also available on SCAQMD's bidder's 24-hour telephone message line (909) 396-2724.

**Proposal Evaluation**

Proposals received will be evaluated by applicable diverse panels of technically qualified individuals familiar with the subject matter of the project or equipment and may include outside public sector or academic community expertise.

**Attachment**

Report of RFPs Scheduled for Release in July 2014

**July 11, 2014 Board Meeting  
Report on RFPs Scheduled for Release on July 11, 2014**

(For detailed information visit SCAQMD's website at  
<http://www.aqmd.gov/grants-bids> following Board approval on July 11, 2014)

**STANDARDIZED SERVICES**

RFP #P2015-03      Issue Request for Proposal to Audit AB 2766 Fee Revenue Recipients for FYs 2011-12 and 2012-13      O'KELLY/2828

AB 2766 requires any agency that receives fee revenues subvned to SCAQMD from the Department of Motor Vehicles to be audited once every two years. This action is to issue an RFP for an independent Certified Public Accountant to conduct the audits. Funds for this expense are included in the FY 2014-15 Budget.

**RESEARCH AND DEVELOPMENT OR SPECIAL TECHNICAL EXPERTISE**

RFP #P2015-01      Issue Request for Proposal for Systems Development, Maintenance and Support Services      MARLIA/3148

This action is to issue an RFP to solicit bids for one or more vendors to provide a full range of high-quality systems development, maintenance and support; enterprise resource planning; and customer relationship management services on a task order basis. Funds for this service are included in the FY 2014-15 Budget.



BOARD MEETING DATE: July 11, 2014

AGENDA NO. 26

**PROPOSAL:** Report on Major Projects for Information Management Scheduled to Start During First Six Months of FY 2014-15

**SYNOPSIS:** Information Management is responsible for data systems management services in support of all SCAQMD operations. This action is to report on major automation contracts and projects to be initiated by Information Management during the first six months of FY 2014-15.

**COMMITTEE:** Administrative, June 13, 2014, Recommended for Approval

**RECOMMENDED ACTION:**  
Receive and file.

Barry R. Wallerstein, D.Env.  
Executive Officer

JCM:MAH:OSM:nv

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### **Background**

Information Management (IM) provides a wide range of information systems and services in support of all SCAQMD operations. IM's primary goal is to provide automated tools and systems to implement Board-approved rules and regulations, and to improve internal efficiencies. The annual Budget specifies projects planned during the fiscal year to develop, acquire, enhance, or maintain mission-critical information systems.

### **Summary of Report**

The attached report identifies each of the major projects/contracts or purchases that are expected to come before the Board between July 1 and December 31, 2014. Information provided for each project includes a brief project description, FY 2014-15 Budget, and the schedule associated with known major milestones (issue RFP/RFQ, execute contract, etc.).

### **Attachment**

Information Management Major Projects for Period July 1 through December 31, 2014

**ATTACHMENT**  
**July 11, 2014 Board Meeting**  
**Information Management Major Projects**  
**for the Period of July 1 through December 31, 2014**

<b>Item</b>	<b>Brief Description</b>	<b>Budgeted Funds</b>	<b>Schedule of Board Actions</b>	<b>Status</b>
PeopleSoft and Oracle Software Support	Purchase PeopleSoft and Oracle software support maintenance for the integrated HR/Finance system.	\$238,800	Approve Sole Source Purchase July 11, 2014	On Schedule
OnBase Software Support	Authorize the sole source purchase of OnBase software subscription and support for one year.	\$120,380	Approve Purchase July 11, 2014	On Schedule
Systems Maintenance, Enhancements and Support	Provide Maintenance, Enhancements and Support for: <ul style="list-style-type: none"> <li>• CLASS System(s)</li> <li>• eGovernment Applications &amp; Infrastructure</li> <li>• System Replacement RAD &amp; Technology Evaluation</li> <li>• Software Version Upgrades</li> </ul>	TBD	September 5, 2014	On Schedule
CLASS Database Software Support	Purchase Ingres database software support and maintenance for the CLASS system.	\$140,000	Approve purchase November 7, 2014	On Schedule

Double-lined Rows - Board Agenda items current for this month

Shaded Rows - activities completed

 [Back to Agenda](#)

BOARD MEETING DATE: July 11, 2014

AGENDA NO. 28

REPORT: Administrative Committee

SYNOPSIS: The Administrative Committee met on Friday, June 13, 2014. The Committee discussed various issues detailed in the Committee report. The next Administrative Committee meeting is scheduled for Friday, July 18, 2014 at 10:00 a.m.

RECOMMENDED ACTION:

Receive and file.

Dr. William A. Burke, Chair  
Administrative Committee

GC

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**Attendance:** Attending the June 13, 2014 meeting were Committee Members Mayor Dennis Yates and Supervisor Josie Gonzales at SCAQMD headquarters, and Chairman William Burke and Dr. Clark E. Parker, Sr. via videoconference.

**ACTION/DISCUSSION ITEMS:**

1. **Board Members' Concerns:** None
2. **Chairman's Report of Approved Travel:** There were two trips reported. Supervisor Josie Gonzales traveled to Sacramento regarding various legislative issues on June 4, 2014. Mayor Judith Mitchell anticipated a trip to Sacramento to attend the CARB Board meeting on June 25-27, 2014.
3. **Approval of Compensation for Board Member Assistant(s)/Consultant(s):** None to report.
4. **Report of Approved Out-of-Country Travel:** None to report.

5. **Pre-Audit Conference (Presenter: Melba Simpson):** Chief Financial Officer Michael O'Kelly reported that the Governing Board has engaged Simpson and Simpson, CPAs, to perform the annual Financial Statement Audit for Fiscal Year 2013-14 and introduced Melba Simpson to present plans for performing the audit. Ms. Simpson reported that they have prepared the engagement letter and have met with the controller to set the schedule to begin on August 11, 2014. All of the necessary audit procedures will be completed and performed timely so that the audit reports can be issued by October 17. The draft report will be presented at the November Administrative Committee meeting. Overall, the plan is to continue to make sure that the District has discharged its responsibility to present their financial statements in accordance with all of the government accounting standards and they are in agreement, materially correct and reasonably stated. They will continue to meet with management to update their understanding of any change in the District's internal controls, as applicable, and review any new contracts or extended contract agreements to make sure that on the single audit report they are in compliance with all of the laws and regulations.
  
6. **Update on AB 1318 Emission Mitigation Projects in Coachella Valley:** Director of Technology Implementation Fred Minassian reported on the status of 26 projects approved by the Board for funds totaling \$50,652,440 to be apportioned as follows: 30% in Environmental Justice areas, 30% in areas in close proximity to power plants, and the remaining 40% in the Coachella Valley. In addition, \$418,818 in interest funds were awarded to augment one project and initiate a new project. Of the 26 contracts awarded, 25 have been executed. Five of the executed contracts have been completed, their projects implemented and funds paid totaling \$4.9 million. The remaining 20 executed contracts are in progress. To date \$1.8 million has been paid as progress payments on different projects. Others are moving forward, but are not at the payment stage. Most of the projects have their contractors selected, have had RFPs issued, and have been approved by their cities.

Mr. Minassian mentioned that the Border Valley Trading project was awarded \$900,000, but they have been able to acquire more co-funding from other sources. This project will be completed with less money than awarded because of the co-funding they received from other sources. Summit Insulation is another project in progress, but staff has not been happy with the quality of work that has been done; staff would like to negotiate the price with the contractor lower than the amount awarded.

Regarding the once-planned solar contract with SunWize, staff is recommending that it not be executed. Staff has been negotiating with them since July 2013 for a Boys and Girls Club in each area of the Coachella Valley and have amended the draft contract approximately 29 times. The last proposed amendment was out

of scope and could not be accepted since this was a fixed-price contract. Additionally, there was a conditional \$200,000 rebate available for the project, but because of their delays, about \$170,000 of the \$200,000 rebate they were qualified for had been lost.

To date, the actual project funds available are \$785,000 (from the aforementioned SunWize project). The remaining amount of \$517,438 is interest accrued. As requested by CVAG, staff has tracked the interest funds on the CVAG project separate from the remaining interest funds and will await the Board's direction on how to use the interest funds in the future.

In summary, staff is recommending that the contract with SunWize not be executed and that staff contact the Boys and Girls Club directly to assist them in finding a new contractor for the solar project in that area. Additionally, because projects are still evolving with regard to co-funding, staff is recommending a delay for a few months to clarify optimal funding allocations and then come back to the Board with proposed revisions.

Chairman Burke sought and was provided clarification regarding intended funding for the solar projects at the Boys and Girls Club sites. Chairman Burke emphasized that we will fulfill the commitment of the project review Committee.

Supervisor Gonzales sought and was provided clarification regarding the non-executed contract with SunWize. Staff will be bringing a Board Letter to the Governing Board stating that the previous award is proposed to be changed, with an accompanying proposed revised award.

Supervisor Gonzales pressed staff regarding the expired rebate related to the SunWize negotiations. Mr. Minassian acknowledged that loss of supplemental funding should not have occurred.

Chairman Burke commented that Supervisor Gonzales is absolutely correct in her observation that an ultimatum should have been presented to the contractor. Chairman Burke directed staff to try to cover all three Boys and Girls Clubs with remaining funds.

7. **Recommendation to Amend Governing Board Meeting Procedures:**  
Dr. Wallerstein informed the Committee that the Legal Office is requesting that this item be continued for one month so that they may further review it.

## JULY AGENDA ITEMS

8. **Establish List of Prequalified Counsel to Represent and Advise SCAQMD on Legal Matters Related to Environmental Law and Represent and Advise SCAQMD Hearing Board:** Chief Deputy Counsel Barbara Baird reported that every three years staff releases an RFP to create a prequalified list of outside counsel having expertise in air quality, the California Environmental Quality Act (CEQA), rulemaking, administrative law, and other issues we deal with at the District and in our litigation. At the same time in this RFP, staff sought firms able to provide services to the Hearing Board, which occasionally requires advice from outside counsel and where District Counsel cannot be used because we appear in front of them. Staff is recommending that the Board approve the prequalified list consisting of the top-scoring firms, and also approve the single firm, Atkinson, Andelson, Loya, Ruud & Romo for the Hearing Board as prequalified to assist in litigation representation in the future. Staff will come back to the Board if more than \$250,000 is needed. Chairman Burke commented that next year the Committee would like to see an ethnic breakout of applicant firms.

Moved by Yates; seconded by Gonzales; unanimously approved.

9. **Issue RFP to Solicit Proposals to Develop Marketing, Advertising and Communications Plans for SCAQMD Outreach Campaigns:** Dr. Wallerstein requested that this item be delayed for one month. However, he informed the committee that given some acute timing issues for outreach on the Check Before You Burn Program, staff is going to the Stationary Source Committee with a recommendation to renew the existing contract and then bring it to the full Board. Chairman Burke commented that he is not opposed to that, but mentioned that for ongoing projects where advertising is involved, there should be an annual assessment where Board Members are able to evaluate the project on its totality for the year. Dr. Wallerstein responded that was the intent of the conversation at the Board Retreat. However, there was so much feedback from the Board that staff did not have adequate time to have it agendaized for the Committee's June meeting. For the Check Before You Burn Program where the contractor has done a very good job, staff would like to retain that contractor so we can do a well-timed outreach and notification program.

This item is being delayed for one month.

10. **Authorize Purchase of PeopleSoft and Oracle Software Support:** Assistant Deputy Executive Officer Chris Marlia reported on Items 10, 11 and 12 simultaneously. This item is to renew the PeopleSoft Software used to manage

SCAQMD's financial systems, general ledger, and human resource functionality. The Oracle Database supports the PeopleSoft system. Staff is requesting approval to renew this software support for another year. (Please see item #10 for outcome.)

11. **Authorize Purchase of OnBase Software Support:** Mr. Marlia reported that that this item is to renew the OnBase Software support used to manage critical documents and to support the Record Retention Policy. Staff is requesting approval to renew this software for another year.
12. **Report on Major Projects for Information Management Scheduled to Start During First Six Months of FY 2014-15:** Mr. Marlia advised that this item is to report on projects to be initiated by Information Management during the first six months of FY 2014-15.

Barbara Baird mentioned that she was under the impression that the contractor for Item 10 had not yet submitted their Campaign Contribution Form. Mr. Marlia affirmed that this was pending. Ms. Baird recommended that, because they have not yet submitted their Campaign Contribution Form, we not take action on this item other than to forward it to the full Board and, assuming that they provide their form at that time, then we act on the item. Therefore, no action was taken on Item 10; this item is to be held for forwarding to the full Board pending submittal of the contractor's Campaign Contribution Form.

In response to a query from Dr. Parker, Mr. Marlia said that staff is negotiating the final price, and item #10 is in an amount not-to-exceed \$208,000 for the PeopleSoftware and not-to-exceed \$30,400 for the Oracle Software.

Moved by Gonzales; seconded by Parker; unanimously approved on both Items 11 and 12.

13. **Recognize Revenue and Appropriate Funds for Enhanced Particulate Monitoring Programs, National Air Toxics Trends Stations, Photochemical Assessment Monitoring Stations, PM2.5 and Near-Road NO2 Programs; and Issue Purchase Orders for Air Monitoring Equipment:** Assistant Deputy Executive Officer Laki Tisopulos reported that this item is to recognize funding from the U.S. EPA as well as other federal agencies to operate the various monitoring networks in support of a national monitoring program and to appropriate this funding for the various program accounts. Staff is also requesting monies to procure air monitoring equipment to upgrade our monitoring network, which will be done through competitive bids where possible. Both agencies are in agreement with the allotment.

Dr. Wallerstein mentioned that Dr. Lyou had an inquiry regarding the overtime expenditure allotment shown in Attachment 1 for Enhanced Particulate Monitoring. Dr. Lyou was sent a response prepared by staff and he was generally satisfied. Dr. Wallerstein advised the Committee that Enhanced Particulate Monitoring is the way we phrase SCAQMD's implementation of BioWatch, a federal grant program to detect biological agents. The District operates the samplers and then takes the samples to very specialized labs for analysis.

Dr. Parker questioned whether the total amount of \$2,968,841 is directly related to doing work for Homeland Security and U.S. EPA pursuant to a subcontract or is a portion of that money for the District to carry on its own activities to improve air quality. Dr. Wallerstein responded that the funding is for us to assist them with their work, that we are paid for all the materials and our time.

Dr. Wallerstein added that we do not charge the federal government any additional administrative costs above our actual costs including overhead.

Dr. Parker asked if we have an indirect cost. Dr. Wallerstein responded that it is the last line on Attachment 1, Indirect Costs. Dr. Tisopulos added that out of slightly less than \$3 million dollars that we are receiving from the federal government, \$2.3 million are going straight to staff time, salaries, benefits and other indirect costs. Dr. Parker asked what our indirect costs percentage was for our operation. Mr. O'Kelly responded that for this program we charge an overhead rate against a direct cost and it is 83% of salaries and employee benefits. All the contracted efforts' direct costs are covered by the federal government; all of the indirect costs, including overhead, parts of the building, and parts of the utilities are all paid for by the federal government.

Moved by Yates; seconded by Gonzales; unanimously approved.

14. **Issue RFP for Operation of Diamond Bar Headquarters Cafeteria:** Assistant Deputy Executive Officer Bill Johnson reported that staff is requesting release of an RFP to obtain a management firm to manage cafeteria operations. We currently are at the end of the 5-year contract for California Dining Services and we are going to survey the market to determine what options are currently available. Dr. Wallerstein mentioned that Dr. Lyou raised an issue regarding the desire to potentially see the vendor accept ATM and credit cards. Dr. Wallerstein directed staff to look into that matter, as the current manager on site was concerned about the cost impact to the cafeteria from processing fees, and a potential need to raise their prices.



Moved by Yates; seconded by Parker; unanimously approved.

15. **Report of RFPs and RFQs Scheduled for Release in July:** Chief Financial Officer Michael O’Kelly reported that this item requests approval to issue two RFPs, one for the Audit of AB 2766 Program monies and one for Systems Development, Maintenance and Support Services. Dr. Parker commented that two RFPS were reported, but the title mentions an RFP and an RFQ. He asked which one was the RFQ. Mr. O’Kelly responded that he did not have an RFQ listed and explained that this is a standard report title in which we have RFPs and RFQs on any given month. However, he will start removing that RFQ designation if no RFQs are reported.

Moved by Gonzales; seconded by Yates; unanimously approved.

16. **Environmental Justice Advisory Group Draft Minutes from the April 25, 2014 Meeting (written report):** Attached for information only are the draft minutes from the April 25, 2014 meeting of the Environmental Justice Advisory Group.
17. **Review of the July 11, 2014 Governing Board Agenda:** There were no questions on the July 11, 2014 Governing Board Agenda.
18. **Other Business:** Dr. Wallerstein informed the Committee that he and CFO Mike O’Kelly attended the SBCERA Special Emergency Meeting where they adopted new actuarial data and calculations, with minimal process for stakeholder comment. On July 1, 2015, we will see a decrease in the assumed rate of return on investment by the retirement fund, from 7-3/4% to 7-1/2%, which means there will be approximately an additional \$2.5 million impact on our budget above and beyond all the other increases that they have previously approved, and it will be \$2.5 million going forward. We were also forewarned that when they review this issue again in three years, there is a reasonable likelihood that they will decrease the rate from 7-1/2% to 7-1/4% and we will take an additional impact of about an equivalent amount. Staff will be discussing this issue further with the Board in the upcoming weeks and months.

19. **Public Comment:** None.

Meeting adjourned at 11:05 a.m.

**Attachment**

Environmental Justice Advisory Group Draft Minutes from the April 25, 2014 Meeting

# DRAFT



## South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • www.aqmd.gov

### ENVIRONMENTAL JUSTICE ADVISORY GROUP FRIDAY, APRIL 25, 2014 MEETING MINUTES

#### **MEMBERS PRESENT:**

Dr. Joseph Lyou, AQMD Governing Board Member, EJAG Chairman  
Rhetta Alexander, San Fernando Valley Interfaith Council  
Dr. Lawrence Beeson, Loma Linda University, School of Public Health  
Judy Bergstresser, Member of the Public  
Suzanne Bilodeau, Knott's Berry Farm  
Arnold Butler, Inglewood Unified School District  
Paul Choe, Korean Drycleaners & Laundry Association  
Dr. Afif El-Hasan, American Lung Association  
Mary Figueroa, Riverside Community College  
Andrea Hricko, Southern California Environmental Health Sciences  
Evelyn Knight, Long Beach Economic Development Commission  
Daniel Morales, National Alliance for Human Rights

#### **MEMBERS ABSENT:**

Micah Ali, Compton Unified School District  
Alycia Enciso, Small Business Owner  
Rudy Gutierrez, Member of the Public  
Maria Elena Kennedy, Quail Valley Task Force  
Angelo Logan, East Yard Communities for Environmental Justice  
Msgr. John Moretta, Resurrection Church  
Lizette Navarette, University of California, Riverside  
William Nelson, OC Signature Properties  
Woodie Rucker-Hughes, NAACP – Riverside Branch  
Brenda Threatt, S. Los Angeles Service Representative for L.A. Mayor  
Rafael Yanez, Member of the Public

#### **OTHERS PRESENT:**

Mark Abramowitz, Board Member Assistant (*Lyou*)  
Earl Elrod, Board Member Assistant (*Yates*)  
Susan Stark, TSO

#### **SCAQMD STAFF:**

Jill Whynot, Assistant Deputy Executive Officer  
Susan Nakamura, Director of Strategic Initiatives  
Fed Minassian, Director of Technology Implementation  
Nancy Feldman, Principal Deputy District Counsel  
Guillermo Sanchez, Sr. Public Affairs Manager  
Drue Hargis, Sr. Public Information Specialist  
Nicole Soto, Secretary

### **Agenda Item #1 - Call to Order/Opening Remarks**

Chair Dr. Joseph Lyou called the meeting to order at 12:30 PM. Chair Lyou informed members that the California Environmental Protection Agency (EPA) has released its updated version of CalEnviroScreen.

### **Agenda Item #2 – Approval of January 24, 2014 Meeting Minutes**

Chair Lyou called for the approval of the meeting minutes. The January 24, 2014 meeting minutes were approved.

### **Agenda Item #3 – Review of Follow-Up/Action Items**

Mr. Guillermo Sanchez reviewed the action items from the January 24, 2014 meeting. Mr. Sanchez announced the July 25, 2014 meeting would begin at 12:30 PM due to scheduling conflicts and announced the Clean Air Awards nominations, State Refinery Task Force Meetings, and Lawn Mower Exchanges.

### **Agenda Item #4 – Member Updates**

Mr. Daniel Morales updated members on recent environmental justice issues that have been occurring in South Colton and the community's success in preventing industrial businesses from locating in the area, which could lead to additional diesel truck traffic.

Dr. Andrea Hricko said she is having problems retrieving lead data on CalEnviroScreen and asked if staff had any information. Ms. Jill Whynot replied she can speak to Dr. Hricko after the meeting in more detail, but noted a Public Records Request can be submitted through SCAQMD asking for facilities with lead emissions or FIND can be used on SCAQMD's website. Ms. Susan Nakamura also suggested using EPA's Toxics Release Inventory. Ms. Nakamura further explained that Rule 1420.1 was adopted when exceedances were found at Exide Technologies after EPA lowered the Lead standard, and soon they will begin working on a rule that identifies small, medium, and large facilities.

Ms. Mary Figueroa informed members there are with warehousing issues in Moreno Valley, but said that community members have expressed their gratitude to the SCAQMD for speaking out on the health impacts of the projects.

### **Agenda Item #5 – Update on the 2016 Air Quality Management Plan**

Ms. Nakamura provided an update on the 2016 Air Quality Management Plan (AQMP).

Dr. Lawrence Beeson asked if the standards required for the 2016 AQMP are state standards. Ms. Nakamura responded they are federal standards.

Ms. Rhetta Alexander asked about the membership of the AQMP working group. Ms. Nakamura said the members are listed on the website, but can be emailed to members and Chair Lyou said members consist of businesses, regulated entities, agency stakeholders.

*Action Item: Email members the list of AQMP working group members.*

Dr. Beeson asked how hydrocarbon emissions stand in addition to NOx emissions. Ms. Nakamura replied there are strategies to reduce Volatile Organic Compounds (VOC's) and hydrocarbon emissions from coatings, solvents, and stationary sources, but consumer products are regulated at the state level, and tailpipe emissions are controlled by the California Air Resources Board (CARB).

Ms. Judy Bergstresser asked if the Scientific, Technical & Modeling Peer Review (STMPR) Advisory Group is governed by the state. Ms. Nakamura responded it's a subset of the AQMP Advisory Group

and is a technical group that consists of people who conduct the modeling and socioeconomic analysis. Ms. Bergstresser asked if the members are modelers, which Ms. Nakamura said generally they are. Ms. Nakamura said SCAG along with academic and other organizations are on the STMPR Advisory Group.

Ms. Alexander asked if both mobile and stationary fuel cell technologies are included in the strategies. Ms. Nakamura said all technologies are being reviewed and noted that the 21<sup>st</sup> Century Goods Movement System and Air Quality White Paper will incorporate all modes of transportation and infrastructure, and possibly will include aviation.

Chair Lyou asked Ms. Nakamura to explain the White Paper on “A Business Case for Clean Air.” Ms. Nakamura explained it looks at the costs and benefits of clean air including who pays for the benefits and whether or not additional business opportunities are created.

Ms. Bergstresser asked if the White Papers will be published in a staggered fashion and available online, which Ms. Nakamura confirmed.

Mr. Morales asked if SCAQMD is aware of and involved in the natural gas storage issue related to the Omnitrans bus facility in San Bernardino. Ms. Nakamura said she is aware of the issue and it is one of the top ten issues in the Clean Communities Program in San Bernardino. Ms. Nakamura continued to explain that the community is very concerned; and, the facility has been working with the communities to address the issues. Mr. Morales asked if the explosion that occurred in New York is potentially an issue for San Bernardino. Ms. Nakamura explained she is not aware of the types of tanks involved in the New York explosion.

Mr. Arnold Butler asked if academic representatives can be encouraged to participate in the AQMP process, which Ms. Nakamura confirmed.

Dr. Andrea Hricko referred to a report on fracking in Texas and asked what the potential is for new fracking in the District that will impact the AQMP. Ms. Nakamura explained Rule 1148.2 requires notification of any drilling or well stimulation which includes hydraulic fracturing, acidizing, and gravel packing. There have been only 18 events hydraulic fracturing events based on the notifications received in over the first six month period, and even in the most recent data there is not much fracking. Ms. Nakamura continued to say the SCAQMD is not seeing the same amount of fracking as other states, but there are other activities, gravel packing and matrix acidizing, which are similar to hydraulic fracturing and while not as intense, they still include a lot of chemicals and potential emission sources. Chair Lyou asked Dr. Hricko to provide the article to staff, so they can distribute to members and also asked staff to provide the presentation.

**Action Item:** *Email members the fracking report and AQMP presentation.*

Ms. Evelyn Knight asked about the potential long term impacts from slant drilling. Ms. Nakamura said when developing Rule 1148.2 staff realized the potential for emissions from drilling operations as well.

Ms. Nakamura continued to say they are in the process of sampling and monitoring the drilling operations and will be reporting their findings to the Governing Board for further direction.

Ms. Bergstresser asked which agency has jurisdiction over fracking. Chair Lyou replied the Department of Conservation - Division of Oil, Gas & Geothermal Resources and Ms. Nakamura added that the SCAQMD is looking at air emissions from fracking and other well operations.

#### **Agenda Item #6 – Update on the Carl Moyer Program**

Mr. Fred Minassian provided an update on the Carl Moyer Program.

Ms. Suzanne Bilodeau asked what size vehicles are applicable. Mr. Minassian replied gross vehicles weights of over 14,000 lbs.

Dr. Beeson asked what happens to the old trucks. Mr. Minassian explained the program also includes construction equipment and engines from marine vessels, which are crushed and rendered unusable.

Ms. Bilodeau asked about the application and approval process. Mr. Minassian explained that in the early years nearly all applicants were awarded since many of them were not subject to regulations. Since then CARB has implemented various regulations, and the applications are now reviewed vigorously to ensure they're not already required to be operating cleaner equipment. Mr. Minassian added that only those that meet the requirements may be funded and said of the \$30 million incentive dollars that may be available, \$60-\$70 million dollars in applications are received, but approximately \$25 million in applications are disqualified due to applicable regulations.

Ms. Bergstresser asked if tow truck companies qualify. Mr. Minassian responded that tow trucks are usually below the minimum weight requirement, but as long as they are mobile sources and meet the 14,000 lb threshold, they may qualify. Ms. Bergstresser asked for an explanation of cost effectiveness per ton. Mr. Minassian explained that most projects have a five year contract life, so a dollar amount and incremental costs are applied for lower emitting technologies, and then required in the contract that the project be operated in the basin for at least five years. Mr. Minassian continued to explain the cost effectiveness is the amount of emissions reduced relative to the contract amount. Ms. Bergstresser asked if it is measured after the five years. Mr. Minassian responded after the project has been implemented, the applicant is required to submit an annual report each year, and are audited by CARB and the Department of Finance every four years.

Ms. Alexander asked if school buses weren't included in the program because they are required under regulations. Mr. Minassian explained school buses are a large part of the program, and AB 923 allows about \$24 million to be collected each year through the \$2 Department of Motor Vehicles Fee.

Ms. Bilodeau asked if all the money is usually allocated. Mr. Minassian responded if their targets are not met, the funds should be returned to CARB, but so far they have been successful in allocating all the funds. Ms. Bilodeau asked about the funding for the conversions of locomotives to tier four engines. Mr. Minassian indicated that the funding amount is different depending on the equipment category and operation.

#### **Agenda Item #7 – Update on the AB 1318 Mitigation Fees Fund**

Ms. Connie Day provided an update on the AB 1318 Mitigation Fees Fund program.

Chair Lyou asked Ms. Day to provide a description of the Polanco locations. Ms. Day explained the locations as very small properties where city land use planning was suspended by the Polanco Bill so lower income people can have more housing on a piece of property, and noted you see a lot of mobile homes with no paving or facilities around the properties.

Dr. Afif El-Hasan asked if the dust around the mobile homes has been analyzed for mold. Chair Lyou responded the dust is considered road dust and Ms. Day replied it's mostly sand.

Ms. Bergstresser asked if the CV Link is considered an electric vehicle pathway because that's all that will be allowed. Ms. Day confirmed that only non-combustion engines and active transportation will be allowed.

Mr. Morales asked what was completed in the 333 homes under the weatherization project. Ms. Day said the attics of the homes were insulated.

Mr. Butler asked about the scope of the weatherization program. Ms. Day explained that it is to bring the home up to current standards to help reduce energy usage. Mr. Butler questioned if windows and doors were included in the program, which Ms. Day responded they are not because the energy companies have programs that already replace those items.

Chair Lyou asked if the program demand has been good and Ms. Day replied the funds have already been exhausted. Chair Lyou requested the presentation be emailed to EJAG member Rudy Gutierrez who was unable to attend the meeting.

***Action Item:** Provide EJAG member Rudy Gutierrez the AB 1318 Mitigation Fees Fund presentation.*

Mr. Butler asked if the CNG upgrade projects were initially funded from a different program. Ms. Day said she is unsure of the equipment history, but it is possible they were funded through SCAQMD.

Ms. Figueroa asked how many applications were submitted through the program. Chair Lyou responded over \$100 million in projects were submitted. Ms. Figueroa asked how the outreach was conducted. Ms. Day said a lot of advertising and media was conducted including various weekend workshops in the community.

Ms. Evelyn Knight asked if the AB 1318 program is ongoing. Ms. Day explained that it was one time funding, but there are remaining funds in the account, that the Governing Board will decide how to spend the money after all current projects have been funded. Ms. Knight asked if the impacts from the power plant are ongoing and if they are, if the pollution will outlast the benefits. Ms. Day explained the intent is that the projects will have ongoing emission reductions.

Ms. Alexander asked what type of power plant it is, which Chair Lyou responded a large peaker plant.

#### **Agenda Item #8 – Other Business**

Ms. Alexander asked for an update on Exide Technologies. Ms. Nancy Feldman said the facility is currently not operating and explained they have two pending Order for Abatements - one for their furnace operations and the other for lead exceedances during construction. Ms. Feldman continued to explain the civil penalty is still pending, and noted they will continue to be shutdown until all their upgrades are completed, and cannot do any construction or maintenance activities until measures are in place to ensure there is no excess lead. Chair Lyou noted open discussion on this item can be done at a future meeting when it is on the agenda and asked staff to arrange a presentation.

Mr. Morales requested a presentation on the Omnitrans issue, which Chair Lyou asked to be arranged.

Ms. Knight requested a Southern California International Gateway update, which Chair Lyou confirmed.

Ms. Figueroa requested an update on the Moreno Valley warehouse issues, and Chair Lyou explained there was a recent update, but asked staff to see if there is new information to present from the community perspective.

Dr. Hricko noted she completed an article on environmental justice and people who live near railyards, and Chair Lyou asked her to send it to staff for distribution.

Dr. Afif El-Hasan said he would like to present on a community service website. Chair Lyou responded the EPA is doing outreach on CalEnviroScreen and will check if EPA is willing to co-present on the tools available to the community.

***Action Items:** 1) Agendize an update on Exide Technologies.*

*2) Agendize a presentation on the natural gas storage issue at the Omnitrans facility in San Bernardino.*

*3) Agendize a presentation on the Southern California International Gateway.*

*4) Check with staff if new information is available on the warehousing projects in Moreno Valley.*

*5) Distribute Dr. Hricko's environmental justice and railyards article to members.*

*6) Check with EPA if they can co-present with Dr. El-Hasan on the community service website and CalEnviroScreen.*

**Agenda Item #9 – Public Comment**

No Comments.

**Agenda Item #10 – Adjournment**

The meeting adjourned at 2:50 PM.

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BOARD MEETING DATE: July 11, 2014

AGENDA NO. 29

REPORT: Investment Oversight Committee

SYNOPSIS: The Investment Oversight Committee met Friday, May 30, 2014 and discussed various issues detailed in the Committee report. The next Investment Oversight Committee meeting is scheduled for Friday, November 21, 2014 at 12:00 noon in Conference Room CC2.

RECOMMENDED ACTION:  
Receive and file this report.

Dr. Joseph K. Lyou, Acting Chair  
Investment Oversight Committee

MBO:lg

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**Attendance:** Present at SCAQMD were Committee members Gary Burton, Richard Dixon, and Brent Mason. Councilmember Michael A. Cacciotti, and Dr. Joseph K. Lyou attended by teleconference. Absent were Supervisor Michael Antonovich (Chair) and Committee Member Dr. William Burke.

**Investment Committee Action Items:**

Quarterly Report of Investments: The Committee reviewed the quarterly investment report that was provided to the Governing Board. For the month of December 2013, the SCAQMD's weighted average yield on total investments of \$555,996,982.01 from all sources was .69%. The allocation by investment type was 85% in the Los Angeles County Pooled Surplus Investment Fund (PSI) and 15% in the State of California Local Agency Investment Fund (LAIF) and Special Purpose Investments (SPI). The one-year Treasury Bill rate as of December 31, 2013 was .13%. The Committee unanimously approved the quarterly report.



**Investment Committee Discussion Item:**

Cash Flow Forecast: Michael O’Kelly reported on the cash flows for the current year and projected for the next three years. SCAQMD Investment Policy limits its Special Purpose investments to 75% of the minimum amount of funds available for investment during the Cash Flow Horizon. That limit, which includes all funds (General, MSRC, Clean Fuels), is \$133.4 million.

Treasury Operations and Contingency Plan and Procedures: The Committee discussed the need to revise the Treasury Operations Contingency Plan and Procedures primarily due to an issue related to SCAQMD’s account with the State of California Local Agency Investment Fund (LAIF) where the Los Angeles County Treasurer (Treasurer) is not comfortable with SCAQMD employees as signatories on the LAIF account. The Chief Financial Officer (CFO), Michael O’Kelly, stated that he has discussed the issue with the Treasurer, SCAQMD Legal Counsel, and the Executive Officer. Based on these discussions, the Treasurer has confirmed that they will not allow SCAQMD employees as signatories on the LAIF account for their internal control reasons, but it has been determined that SCAQMD does have the ability to access the LAIF account in the event of an emergency under the current Treasury Operations Contingency Plan and Procedures even though SCAQMD are not currently signatories. Nonetheless, a revised Treasury Operations Contingency Plan and Procedures and emergency authority Governing Board Resolution will be presented at the February 2015 Investment Oversight Committee.

Financial Market Update: Sarah Meacham from PFM Asset Management provided the Committee with information on current investment markets, economic conditions, and the overall outlook. She presented market information on current low but rising Treasury yields, continued steepening Treasury yield curve, and increased levels of corporate debt issuance. Economic indicators were also presented showing flat economic growth, improving unemployment rate, rising home prices, and a shrinking supply of Federal Agency Debt.

**Other Business:** None

**Public Comment:** None

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BOARD MEETING DATE: July 11, 2014

AGENDA NO. 30

REPORT: Legislative Committee

SYNOPSIS: The Legislative Committee held a meeting on Friday, June 13, 2014. The next Legislative Committee meeting is scheduled for Friday, July 18, 2014 at 9 a.m. in Conference Room CC8.

The Committee deliberated on the following agenda items for Board consideration and recommended the following actions:

<b>Agenda Item</b>	<b>Recommended Action</b>
Amend Existing Contract with the Carmen Group Incorporated for Legislative Representation in Washington, D.C.	Approve
AB 1720 (Bloom) Vehicles: Bus Gross Weight	Support
AB 1857 (Frazier) Department of Transportation: Vehicle and Equipment Procurement	Support
AB 2565 (Muratsuchi) Rental Property: Electric Vehicle Charging Stations	Move to Board for Discussion

**RECOMMENDED ACTION:**

Receive, file this report, and approve agenda items as specified in this letter.

Josie Gonzales  
Chair  
Legislative Committee

LBS:GS:PFC:jf

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**Attendance [Attachment 1]**

The Legislative Committee met on June 13, 2014. Committee Chair Supervisor Josie Gonzales was present at SCAQMD's Diamond Bar headquarters. Committee Members, Mayor Judy Mitchell, Supervisor Michael Antonovich, Dr. Clark E. Parker, Sr. and Dr. William Burke, Governing Board Chair, who was appointed to the committee, attended via teleconference.

**Update on Federal Legislative Issues**

Chris Kierig of Kadash & Associates, SCAQMD federal legislative consultant, updated the Committee on key Washington D.C. issues.

Mr. Kierig reported that Rep. Eric Cantor has submitted his resignation from his U.S. House of Representatives leadership post and it appears that Rep. Kevin McCarthy from California has the votes to replace him as majority leader of the U.S. House.

With regard to the Congressional FY 2015 appropriations process, Mr. Kierig reported the U.S. House has passed a number of bills and has others in process. The U.S. Senate will soon be starting the process for a "minibus" appropriations bill on the Senate Floor, including possibly the areas of transportation, commerce, justice, and agriculture.

The U.S. Senate Appropriations Energy and Water Subcommittee is expected to mark up its appropriations bill soon. There is optimism that funding for the \$10 million zero-emissions goods movement grant program will receive continued funding under this new FY 2015 bill. In fact, the Request for Proposals for the FY 2014 version of that program had a recent application deadline of June 11, 2014. Congress is moving forward with the agreed-upon discretionary spending cap of \$1.014 trillion; however, there may be policy differences that delay the finalization of the appropriations process until possibly after the November elections.

Mr. Kierig also informed the Committee that the Highway Trust Fund (HTF) will run out of money sometime around this July or August, so there is a need to identify additional funding that will maintain the solvency of the Fund. The U.S. House has

proposed eliminating Saturday U.S. Postal Service delivery, which would save \$10 billion that would then be used for the HTF. The Senate Finance Committee has been holding weekly meetings on the issue. Senator Majority Leader Harry Reid proposed a corporate tax holiday that he estimates would generate about \$3 billion over 10 years. All of the discussion regarding possible solutions have centered around the short term rather than the long term.

Warren Weinstein also of Kadesh & Associates, reported that the House Energy and Commerce Committee marked up a bill this week entitled the “Promoting New Manufacturing Act” which would expedite pre-construction permits that are issued when entities modify a new or existing facility or stationary source of pollution. It is expected that the House will pass this bill, but that it will not move in the Senate.

The House Energy and Commerce Committee’s Subcommittee on Energy and Power is holding a hearing with the EPA Administrator Janet McCabe regarding the new U.S. EPA proposed power plant carbon rules. The Senate Environment & Public Works (EPW) Committee will also be holding a committee hearing on this issue to demonstrate that there is bipartisan support for these proposed rules.

Mia O’Connell of the Carmen Group, SCAQMD federal legislative consultant, also provided the Committee with updates on key Washington D.C. issues.

She reported on the efforts in the U.S. House in relation to the reauthorization of the current surface transportation law, MAP-21. Because of the difficulty of funding a long-term reauthorization bill, the House --like the Senate -- has now decided to seek a short-term extension of existing programs. This will be the priority in the coming weeks leading up to the August recess, with a long-term bill that includes policy and program changes likely deferred until after the November elections.

As discussed earlier, Ms. O’Connell reported that Speaker Boehner and other House GOP leaders have proposed to transfer billions in new money into the Highway Trust Fund which would be enough to maintain current programs and spending levels through May 2015. The funds would be generated from savings attributed to reform of the U.S. Postal Service (ending Saturday deliveries). However, this option appears unlikely to occur. Rather, a more likely scenario is that Congress will appropriate new money from the General Fund to cover the shortfall in the HTF for the short term.

Ms. O’Connell informed the Committee that the U.S. House approved their FY 2015 Transportation, Housing, and Urban Development (THUD) funding bill, which includes significant cuts to TIGER grants and Amtrak, and also included Rep. Jeff Denham's amendment to prohibit any funding for the California High Speed Rail project. A separate Senate bill, without the TIGER and Amtrak cuts and without any rider

affecting California High Speed Rail, was approved in committee and now awaits a full Senate floor vote.

Ms. O'Connell stated that SCAQMD continues to work with the offices of Congressmen Gary Miller and Duncan Hunter, and others in the delegation, regarding SCAQMD's legislative proposals for MAP-21 and the Rail reauthorization bill. The substantive issue that has been raised about the proposals has been the cost and identifying exactly where the money to pay for the proposals would come from. The idea was proposed to set aside money directly from funds to be authorized for freight transportation programs.

Ms. O'Connell reported that SCAQMD continues to work with Chairman Ken Calvert's office regarding language we submitted earlier for inclusion in the FY15 House Interior, Environment, and related agencies appropriations bill to target Diesel Emission Reduction Act (DERA) or State and Tribal Assistance Grant funding to ensure that the South Coast region gets treated fairly in terms of focused resources to address air quality issues. Through discussions with staff, the subcommittee is working to refine the language developed by SCAQMD staff for possible inclusion in the bill. It is expected that the bill will be marked up before the August recess.

Finally, Chairman Calvert's office has been informed that the District is developing a proposal for the FY14 DERA grant funding opportunity and that we will be seeking the Chairman's support of the District's proposal.

### **Update on Sacramento Legislative Issues**

Jason Gonsalves of Joe A. Gonsalves & Son, SCAQMD state legislative consultant, briefed the Committee on key Sacramento issues.

He reported that June 15<sup>th</sup> is the deadline for the state budget to be passed. The last day for the Legislature to qualify measures for the November 4, 2014 ballot is June 26<sup>th</sup>, however that can be moved to as late as July 3<sup>rd</sup>. A controversial related issue is whether the Legislature can come together on a water bond by this deadline. Assembly leadership has indicated that it does not want to go past this deadline and incur the additional cost that would be required to then do a supplemental ballot. The Legislature is on recess in between July 3<sup>rd</sup> and August 4<sup>th</sup>. The last day for fiscal committees to handle bills is August 15<sup>th</sup>. Further, August 31<sup>st</sup> is the last day of the two-year legislative session, and no bills except urgency bills and constitutional amendments can be passed after that date.

The framework for an agreement on the state budget has been agreed to by the Governor and legislative leaders. The Governor's proposal to spend 33% of the cap and trade funding on high speed rail has been negotiated down to 25%. Further, 15% of those funds will go to transit, 20% will go to affordable housing near transit, and 40%

will go to transit and energy efficiency/natural resources projects. There has also been an agreement to provide more funding for pre-kindergarten education for low income children.

Dr. Parker asked if the budget negotiations resulted in a reduction of funding for air pollution control. Mr. Gonsalves responded in the negative. Dr. Burke asked if the vote for the next president pro-tem of the Senate was scheduled to happen on June 16th. Mr. Gonsalves responded in the positive. Dr. Parker asked when the transition would take place and Mr. Gonsalves responded that he was not aware. Dr. Burke stated that this would occur in November.

Will Gonzalez of Gonzalez, Quintana & Hunter, SCAQMD state legislative consultant, also briefed the Committee on key Sacramento issues.

He reported on the following bills that have now passed out of their house of origin:

- 1) SB 1077 (DeSaulnier) – Vehicles: mileage based fee pilot program – This bill requires a pilot program to study the feasibility of a mileage based fee by the California Department of Transportation (Caltrans) to replace the current fuel excise tax. There is no opposition to this bill.
- 2) SB 1121 (de León) – The California Green Bank Board – This bill creates a centralized funding program to pay for greenhouse gas emission reduction projects. This bill, which has no specific funding source specified as of yet, is an issue that the Senator has championed for a couple of years.
- 3) SB 1228 (Hueso) – Trade Corridor Improvement Fund – This bill would maintain the Trade Corridor Improvement Fund in state law so that future monies could be directed to it. The Governor’s office opposes the bill because the Department of Finance has concerns that maintaining this fund would create competition with other transportation priorities and funds.
- 4) AB 1102 (Allen) – This bill passed out of the Senate Environmental Quality Committee; it will be heard next on June 24th in the Senate Natural Resources and Water Committee.

Dr. Burke asked about the prospects of AB 1102 in the Senate Natural Resources and Water Committee. Executive Officer Dr. Barry R. Wallerstein responded that this is still being discussed. The committee analysis and proposed amendments are still pending at this time.

**Amend Existing Contract with the Carmen Group Incorporated for Legislative Representation in Washington, D.C.**

Deputy Executive Officer Lisha B. Smith presented this item to the Committee for consideration. She indicated that the six-month extension of the Carmen Group's contract expires on July 14, 2014 and based upon the consultant's performance and initiated outreach and projects, staff is recommending a second six-month contract extension, through January 14, 2015, for the Carmen Group at a cost of \$109,620.

*The Legislative Committee approved staff's recommendation to APPROVE a second six-month contract extension, through January 14, 2015, for the Carmen Group at a cost of \$109,620.*

*AYES: Antonovich, Burke, Gonzales, Mitchell, and Parker*

*NOES: None.*

*(Refer to July 11, 2014 Governing Board Agenda Item 16 for additional information.)*

**Recommend Position on Bills: [Attachment 2]**

**AB 1720 (Bloom) Vehicles: Bus Gross Weight**

Sr. Public Affairs Manager Guillermo Sanchez presented AB 1720 (Bloom) to the Committee.

This bill would extend a temporary exemption from the 20,500 lb. per axle limit to transit buses through 2015. Cleaner fuel systems, including compressed natural gas tanks, have been identified as a source of additional weight on the buses.

**Staff recommended a SUPPORT position on AB 1720.**

Supervisor Gonzales inquired regarding details of the bill's timing and purpose. Mr. Sanchez responded that the bill extends through the end of 2015 and will allow a relevant study to be completed before the exemption expires.

*The Legislative Committee approved staff's recommended position of SUPPORT on AB 1720.*

*AYES: Antonovich, Burke, Gonzales, Mitchell, and Parker*

*NOES: None.*

**AB 1857 (Frazier) Department of Transportation: Vehicle and Equipment Procurement**

Sr. Public Affairs Manager Guillermo Sanchez presented AB 1857 (Frazier) to the Committee.

This bill would establish a four-year pilot program at Caltrans to test the effectiveness of the "best value" procurement method for purchasing and equipping heavy mobile fleet vehicles and special equipment. This method would allow Caltrans to consider value-related considerations in addition to the lowest responsible bid. Such additional considerations would include overall life-cycle costs related to operations and maintenance, including initial price, equipment performance, fuel efficiency, and warranty benefits.

**Staff recommended a SUPPORT position on AB 1857.**

Dr. Parker inquired as to which state code is being affected by this bill. Dr. Wallerstein responded that it affects the Streets and Highway code.

*The Legislative Committee approved staff's recommended position of SUPPORT on AB 1857.*

*AYES: Antonovich, Burke, Gonzales, Mitchell, and Parker*

*NOES: None.*

**AB 2565 (Muratsuchi) Rental Property: Electric Vehicle Charging Stations**

Community Relations Manager Philip Crabbe presented AB 2565 (Muratsuchi) to the Committee.

This bill would allow a commercial or residential tenant to install an electric vehicle charging station in a leased parking space if the tenant is willing to pay for all the costs associated with installation and operation of the charging station.

**Staff recommended a SUPPORT position on AB 2565.**

Supervisor Gonzales inquired as to whether this bill could create an infringement on property owners' rights. Barbara Baird, Chief Deputy Counsel, responded that when the Legislative Counsel reviews submitted bills, they generally will call attention to a provision of a bill that they believe might be unconstitutional, notifying the bill's author. However, this was not done in the case of this bill.

Mayor Mitchell commented that multi-family residential unit buildings often cannot accommodate residents with plug-in electric vehicles. This bill is a reasonable accommodation in that it requires the tenant to pay for all costs, although it does require the landlord to accommodate installation of charging infrastructure. Dr. Parker commented that there are multiple options now for finding ways for tenants to pay for the use of electricity. He also inquired to the status of the bill. Mr. Crabbe responded that the bill was awaiting hearing in the Senate Judiciary Committee.



Dr. Wallerstein suggested that if this bill is supported by the District, then staff also could be directed to work with the bill's author to explore broader approaches on how electric vehicle charging infrastructure could be expanded. Dr. Parker and Mayor Mitchell agreed with this suggestion.

Ms. Smith commented that this bill is consistent with other bills that have been brought before the Committee and that were supported by the Members.

Supervisor Antonovich commented that the intent of the bill is worthwhile; however this bill practically may impose extensive increased costs on landlords. Dr. Parker and Supervisor Gonzales agreed with this comment. Further, Supervisor Gonzales re-emphasized that this bill infringes upon the rights of property owners and thus she does not support the bill.

***The Legislative Committee rejected staff's recommended position of SUPPORT on AB 2565.***

***AYES:*** Mitchell and Parker

***NOES:*** Antonovich, Burke, and Gonzales

***The Legislative Committee approved moving AB 2565 on to the full Board for discussion.***

***AYES:*** Antonovich, Burke, Gonzales, Mitchell, and Parker

***NOES:*** None.

### **AB 1330 (John Pérez) Environmental Justice**

Ms. Baird provided an update on negotiations with the Speaker's staff and interested stakeholders relating to AB 1330. While SCAQMD has shared its input, no new bill language has been released.

### **Report from SCAQMD Home Rule Advisory Group [Attachment 3]**

Please refer to Attachment 3 for written report.

### **Other Business:**

None

### **Public Comment Period:**

No public comment.

### **Attachments**

1. Attendance Record
2. Bill and Bill Analyses
3. SCAQMD Home Rule Advisory Group Report

## ATTACHMENT 1

### ATTENDANCE RECORD –June 13, 2014

#### **DISTRICT BOARD MEMBERS:**

Supervisor Josie Gonzales  
Supervisor Michael Antonovich (teleconference)  
Mayor Judy Mitchell (teleconference)  
Dr. Clark E. Parker, Sr. (teleconference)

#### **STAFF TO COMMITTEE:**

Lisha B. Smith, Deputy Executive Officer  
Guillermo Sanchez, Senior Public Affairs Manager  
Julie Franco, Senior Administrative Secretary

#### **DISTRICT STAFF:**

Barry R. Wallerstein, Executive Officer  
Barbara Baird, Chief Deputy Counsel  
Elaine Chang, Deputy Executive Officer  
Philip Fine, Assistant Deputy Executive Officer  
Chris Marlia, Assistant Deputy Executive Officer  
Laki Tisopulos, Assistant Deputy Executive Officer  
Jill Whynot, Assistant Deputy Executive Officer  
Sam Atwood, Media Manager  
Marc Carrel, Program Supervisor  
Philip Crabbe, Community Relations Manager  
Robert Paud, Telecommunications Technician II  
Danielle Soto, Senior Public Information Specialist  
Kim White, Public Affairs Specialist  
Patti Whiting, Staff Specialist  
Bill Wong, Principal Deputy District Counsel

#### **OTHERS PRESENT:**

Mark Abramowitz, Governing Board Member Consultant (Lyou)  
Tricia Almiron, SANBAG  
Jason Gonsalves, Gonsalves & Son (teleconference)  
Will Gonzalez, Gonzalez, Quintana & Hunter (teleconference)  
Tom Gross, SCE  
Stewart Harris, Carmen Group (teleconference)  
Gary Hoitsma, Carmen Group (teleconference)  
Chris Kierig, Kadesh & Associates (teleconference)  
Rita Loof, RadTech  
Margot Malarkey, Association of Amerian RRS  
Mia O'Connell, Carmen Group (teleconference)  
Andy Silva, Governing Board Assistant (Gonzales)  
Lee Wallace, So. Cal Gas  
Warren Weinstein, Kadesh & Associates (teleconference)

## **ATTACHMENT 2**

### **AB 1720 (Bloom)**

Vehicles: bus gross weight

**Summary:** This bill will extend a temporary exemption from the 20,500 lb. per axle limit to transit buses through 2015. Cleaner fuel systems, including compressed natural gas tanks, have been identified as a source of additional weight on the buses.

**Background:** Since 1975, state law has prohibited the gross weight on any single axle of a transit bus from exceeding 20,500 lbs. Due to numerous state and federal mandates, including mandated emissions reduction equipment, transit buses today often exceed that weight, especially when carrying a large number of passengers. According to the bill sponsor, the California Transit Association, as many as half of the transit buses in California operating at peak commute times may exceed the state weight limit of 20,500 lb per axle.

Several years ago, some local police departments began citing transit buses for violating the weight limit that was created over 35 years ago. Likewise, it would be costly and time consuming for transit agencies and other local governments to seek thousands of annual overweight vehicle permits. Moreover, increasing the weight limit for transit buses would lead to greater wear and tear on local streets and roads.

AB 1706 (Eng), Chapter 771, Statutes of 2012, provided a short-term solution to the bus axle weight issue by exempting all existing transit buses from the state weight limit. Additionally, it allowed for procurement of new buses exceeding the weight limit if they were replacing existing overweight buses or if the transit operator was introducing a new fleet class. The procurement provisions are scheduled to sunset at the end of the year.

The federal Transit Cooperative Research Program (TCRP), an arm of the Transportation Research Board backed by the National Academy of Sciences, is currently overseeing a detailed national study on the bus axle weight issue, which has been a subject of concern in California as well as nationwide. The final report, due in May 2014, could be slightly delayed. This bill extends the procurement provisions of AB 1706 for an additional year in order to provide adequate time for stakeholders to work out a permanent solution while ensuring that transit operators can continue to procure buses should it take beyond this year for an agreement to be reached.

**Status:** May 8: Read third time. Passed. Ordered to the Senate. (Ayes 71. Noes 0.)  
In Senate. Referred to SEN Com. on Trans and Housing (June 17 hearing).

**Specific Provisions:**

Specifically, this bill:

- a) Extends for one more year, through 2015, interim transit bus procurement procedures under which transit agencies may procure potentially non-weight-limit-compliant buses.
- b) Allows, for one more year, through 2015, the governing board of a transit system to procure and operate new transit buses that could possibly exceed axle weight limits, under one of two circumstances:
  - If the new bus weighs the same or less than the bus it is replacing; or,
  - If the board makes a public finding that it must incorporate a new fleet class into its inventory, to serve a new or existing market differently, or to meet a statutory or regulatory requirement, after considering vehicle weight and size.
- c) Requires for one more year, through 2015, a transit agency board of directors so procuring transit buses, to provide notice of the pending public hearing at which such procurement decision will be made, to the cities and counties on whose roads the new buses would travel, and to place in the public record any comment of concern the board receives about the procurement.

**Discussion:** This legislation would help avoid any potential delay in the transition to cleaner fuel transit buses. SCAQMD has supported the use of cleaner fuel in transit buses as a strategy to meet air quality standards, and this bill will provide additional time to study the bus weight issue.

**Recommended Position:**  
**SUPPORT**

**Support:**

California Transit Association (sponsor)  
Orange County Transportation Authority  
Los Angeles County Metropolitan Transportation Authority  
Transportation Authority of Marin  
California State Association of Counties

**Opposition:**

Unknown

**ASSEMBLY BILL**

**No. 1720**

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**Introduced by Assembly Member Bloom**

February 13, 2014

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An act to amend Section 35554 of the Vehicle Code, relating to vehicles.

LEGISLATIVE COUNSEL'S DIGEST

AB 1720, as introduced, Bloom. Vehicles: bus gross weight.

Existing law generally prohibits a publicly owned or operated transit system from procuring a transit bus whose weight on any single axle exceeds 20,500 pounds. Existing law, until January 1, 2015, exempts from this prohibition a transit system that is procuring a new bus that is of the same or lesser weight than the bus it is replacing, or if it is incorporating a new fleet class into its inventory and its governing board makes certain findings.

This bill would extend the operation of those exceptions until January 1, 2016.

Vote: majority. Appropriation: no. Fiscal committee: no.  
State-mandated local program: no.

*The people of the State of California do enact as follows:*

- 1 SECTION 1. Section 35554 of the Vehicle Code, as amended
- 2 by Section 3 of Chapter 771 of the Statutes of 2012, is amended
- 3 to read:
- 4 35554. (a) (1) Notwithstanding Section 35550, the gross
- 5 weight on any one axle of a bus shall not exceed 20,500 pounds.

1 (2) A transit bus procured through a solicitation process  
2 pursuant to which a solicitation was issued before January 1, 2013,  
3 or ~~though~~ *through* a solicitation process pursuant to subdivision  
4 (d) is not subject to this subdivision.

5 (b) A transit bus is not subject to Section 35550.

6 (c) A transit bus shall not operate on the Dwight D. Eisenhower  
7 System of Interstate and Defense Highways in excess of the weight  
8 limitation for transit buses specified in federal law.

9 (d) (1) A publicly owned or operated transit system or an  
10 operator of a transit system under contract with a publicly owned  
11 or operated transit system shall not procure, through a solicitation  
12 process pursuant to which a solicitation is issued on or after January  
13 1, 2013, a transit bus whose *gross* weight on any single axle  
14 exceeds 20,500 pounds except as follows:

15 (A) It may procure and operate a new bus ~~exceeding~~ *whose*  
16 *gross weight exceeds* 20,500 pounds *on any single axle* that is of  
17 the same or lesser *gross weight per axle* than the bus it is replacing.

18 (B) It may procure and operate a new transit bus ~~exceeding~~  
19 *whose gross weight exceeds* 20,500 pounds *on any single axle* in  
20 order to incorporate a new fleet class into its inventory if its  
21 governing board adopts a finding at a public hearing that the fleet  
22 class expansion or change in fleet classes is necessary to address  
23 a need to serve a new or existing market pursuant to its most  
24 recently adopted short-range transit plan, or to meet a federal, state,  
25 or regional statutory or regulatory requirement, and includes a  
26 consideration of vehicle needs and fleet size.

27 (2) If the governing board of the publicly owned or operated  
28 transit system holds a public hearing to consider a procurement  
29 made pursuant to subparagraph (A) or (B) of paragraph (1), the  
30 board shall provide written notice to those cities and counties on  
31 whose roads the bus would travel of the public hearing at which  
32 this procurement is to be considered and shall place in the public  
33 record any comment of concern the board receives about the  
34 procurement.

35 (3) For purposes of this subdivision “fleet class” means a group  
36 of transit buses designated by a publicly owned or operated transit  
37 system or an operator under contract with a publicly owned or  
38 operated transit system that owns those transit buses, if the transit  
39 buses have a combination of two or more of the following similar  
40 defining characteristics:

- 1 (A) Length.
- 2 (B) Seating capacity.
- 3 (C) Number of axles.
- 4 (D) Fuel or power system.
- 5 (E) Width.
- 6 (F) Structure.
- 7 (G) Equipment package.

8 (e) This section shall remain in effect only until January 1, ~~2015~~  
9 2016, and as of that date is repealed, unless a later enacted statute,  
10 that is enacted before January 1, ~~2015~~ 2016, deletes or extends  
11 that date.

12 SEC. 2. Section 35554 of the Vehicle Code, as added by  
13 Section 4 of Chapter 771 of the Statutes of 2012, is amended to  
14 read:

15 35554. (a) (1) Notwithstanding Section 35550, the gross  
16 weight on any one axle of a bus shall not exceed 20,500 pounds.

17 (2) A transit bus procured through a solicitation process pursuant  
18 to which a solicitation was issued before January 1, 2013, is not  
19 subject to this subdivision.

20 (b) A transit bus is not subject to Section 35550.

21 (c) This section shall become operative on January 1, ~~2015~~  
22 2016.

## **AB 1857 (Frazier)**

Department of Transportation: vehicle and equipment procurement.

**Summary:** This bill would establish a four-year pilot program at the California Department of Transportation (Caltrans) to test the effectiveness of the "best value" procurement method for purchasing and equipping heavy mobile fleet vehicles and special equipment. This method would allow Caltrans to consider value-related considerations in addition to lowest responsible bid. Such additional considerations would include overall life-cycle costs related to operations and maintenance, including initial price, equipment performance, fuel efficiency, and warranty benefits.

**Background:** Existing law requires Caltrans to purchase heavy equipment, such as large dump trucks, graders, snow removal equipment, loaders, and other construction equipment, using the standard lowest responsible bid procurement process. The author argues that while this method provides a clear and objective measure to ensure the lowest initial procurement cost, it forces Caltrans, when purchasing heavy mobile fleet vehicles and special equipment, to select the lowest bidder regardless of whether or not the equipment being purchased performs better, gets better gas mileage, has fewer greenhouse gas (GHG) emissions, has improved warranties, or has higher salvage or resale value. The author argues that as a result, Caltrans is often forced to work with less than adequate equipment, unreliable suppliers, limited warranties and performance, and higher than normal maintenance costs. This, in turn, increases costs and adversely affects Caltrans' ability to operate at peak performance to complete critical work with minimal disruption to the travelling public.

**Status:** 6/24/14 – Senate Transportation and Housing Committee Hearing

**Specific Provisions:** Specifically, this bill would:

- 1) Authorize Caltrans to purchase and equip heavy mobile fleet vehicles and special equipment using the "best value" procurement method.
- 2) Define "best value" procurement as a method of selecting a proposal based on an evaluation of the following factors in addition to price:
  - a) Total cost of ownership, including warranty, under which all repair costs are covered by the provider, other repair costs, maintenance costs, fuel consumption, and salvage value;
  - b) Product performance, productivity, and safety standards;
  - c) The supplier's ability to perform to contract requirements; and,
  - d) Environmental benefits, including reduction of GHG emissions, criteria pollutant emissions, or of toxic or hazardous materials.
- 3) Limit total procurements using the "best value" procurement method to \$20 million annually.



- 4) Require, on June 1, 2018, the Department of General Services (DGS) to prepare an evaluation of the "best value" procurement pilot, including a recommendation on whether or not the process should be continued by Caltrans.
- 5) Require the DGS evaluation to be posted on Caltrans' Internet Web site by June 30, 2018.
- 6) Sunset and repeal these provisions on January 1, 2019.

**Discussion:**

This bill would allow Caltrans to consider the environmental benefits, including reduction of GHG emissions, criteria pollutant emissions, or of toxic or hazardous materials, as part of the selection criteria, when it comes to purchasing and equipping heavy mobile fleet vehicles and special equipment. Such a provision could help increase the number of alternative fuel vehicles in that fleet, and thereby reduce harmful air pollutant emissions in the South Coast region. Thus, this bill is consistent with the SCAQMD policy priorities focused on reducing mobile source pollution, including from heavy duty vehicles such as construction equipment.

**Recommended Position: SUPPORT**

**Support:**

Transportation California (Sponsor)  
AFSCME  
CA Manufacturers & Technology Assn  
CalTax  
Caterpillar, Inc.  
John Deere & Company

**Opposition:**

Unknown

AMENDED IN ASSEMBLY MARCH 28, 2014

CALIFORNIA LEGISLATURE—2013–14 REGULAR SESSION

**ASSEMBLY BILL**

**No. 1857**

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**Introduced by Assembly Member Frazier**

February 19, 2014

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An act to add and repeal Section 140.2 of the Streets and Highways Code, relating to transportation.

LEGISLATIVE COUNSEL'S DIGEST

AB 1857, as amended, Frazier. Department of Transportation: vehicle and equipment procurement.

Existing law generally requires public contracts to be awarded by competitive bidding pursuant to procedures set forth in the Public Contract Code, subject to certain exceptions.

Until January 1, 2019, this bill would authorize the Department of Transportation to purchase and equip heavy mobile fleet vehicles and special equipment by means of best value procurement, as defined, subject to an annual limitation of \$20,000,000. The bill would require ~~the department to report to the Legislature~~ *Department of General Services to prepare an evaluation* with regard to this process, as specified.

Vote: majority. Appropriation: no. Fiscal committee: yes.  
State-mandated local program: no.

*The people of the State of California do enact as follows:*

- 1 SECTION 1. Section 140.2 is added to the Streets and
- 2 Highways Code, to read:

1 140.2. (a) Notwithstanding any other law, except Section  
2 13332.09 of the Government Code, the department may purchase  
3 and equip heavy mobile fleet vehicles and special equipment by  
4 means of best value procurement. As used in this section, “best  
5 value procurement” means a method of selecting a proposal based  
6 on an evaluation of the following factors in addition to price:

7 (1) Total cost of ownership, including warranty, under which  
8 all repair costs are borne solely by the warranty provider, repair  
9 costs, maintenance costs, fuel consumption, and salvage value.

10 (2) Product performance, productivity, and safety standards.

11 (3) The supplier’s ability to perform to the contract requirements.

12 (4) Environmental benefits, including reduction of greenhouse  
13 gas emissions, reduction of air pollutant emissions, or reduction  
14 of toxic or hazardous materials.

15 (b) In addition to disclosure of the minimum requirements for  
16 qualification, the solicitation document provided to a prospective  
17 bidder shall specify that one or more of the factors described in  
18 subdivision (a), as applicable to the bidder’s product, shall be given  
19 a weighted value. The department shall then utilize a scoring  
20 method based on those factors and price in determining the  
21 successful bid.

22 (c) Best value procurements shall be limited to twenty million  
23 dollars (\$20,000,000) annually.

24 ~~(d) On or before October 1, 2018, the department shall submit~~  
25 ~~a report to the Legislature that includes an evaluation of the best~~  
26 ~~value procurement bidding process June 1, 2018, the Department~~  
27 ~~of General Services shall prepare an evaluation of the best value~~  
28 ~~procurement pilot authorized by this section, including a~~  
29 ~~recommendation on whether or not the process should be continued~~  
30 ~~at the Department of Transportation. The evaluation shall be~~  
31 ~~posted on the Department of Transportation’s Internet Web site~~  
32 ~~on or before June 30, 2018.~~

33 (e) This section shall remain in effect only until January 1, 2019,  
34 and as of that date is repealed, unless a later enacted statute, that  
35 is enacted before January 1, 2019, deletes or extends that date.

**AB 2565 (Muratsuchi)**

Rental property: electric vehicle charging stations.

**Summary:** This bill would allow a commercial or residential tenant to install an electric vehicle charging station in a leased parking space if the tenant is willing to pay for all the costs associated with installation and operation of the charging station.

**Background:** According to a 2012 study completed by the California Center for Sustainable Energy in coordination with the California Air Resources Board (CARB), Californians own more than 12,000 plug-in EVs, roughly 35% of all plug-in vehicles in the United States. Approximately 1,000 new plug-in vehicles are being sold in the state every month.

In 2012, the Governor issued an Executive Order directing CARB, the California Energy Commission, the California Public Utilities Commission, and other relevant agencies working with the Plug-in Electric Vehicle Collaboration and the Fuel Cell Partnership to develop benchmarks to help support and facilitate the rapid commercialization of zero-emission vehicles. The order directed these agencies to establish benchmarks to help the state's zero-emission vehicle infrastructure support 1.5 million EVs by 2025. The Office of Planning and Research and the State Architect published guidelines to address physical accessibility standards and design guidelines for the installation of plug-in EV charging stations throughout California. These guidelines are voluntary and apply to public and private sites and eventually could become regulations within the California Building Code.

According to ChargePoint, Inc. (ChargePoint), the bill's sponsor, EV charging infrastructure is not keeping up with electric vehicle adoption. In 2013, there were 75,000 EVs registered in California and 7,542 charging ports for a ratio of nearly 10 vehicles for every port, causing congestion at charging stations. The sponsor states that individual businesses have realized the financial and environmental incentive of offering EV charging. By offering EV charging, an employer can give employees the equivalent of a 5% raise through reduced fuel and maintenance costs and time saved through HOV lane access. Further, 41% of California residents live in multi-family housing. The sponsor contends that without the ability to charge at home, Californians are unlikely to purchase EVs and therefore do not get the benefits which include saving thousands on gas and maintenance costs and helping the environment.

**Status:** 5/29/14 In Senate. Read first time. To Com. on RLS. for assignment.

**Specific Provisions:** Specifically, this bill would:

- 1) Make a term in a lease of a commercial or residential property, executed, renewed, or extended on or after January 1, 2015, void and unenforceable if it prohibits or unreasonably restricts the installation of an EV charging station in a parking space.
- 2) Define "reasonable restrictions" or "reasonable standards" as restrictions or standards that do not significantly increase the cost of the EV charging station, its installation, or significantly decrease the charging station's efficiency or performance.
- 3) Exempt the following types of properties from the bill:
  - a) Commercial property where EV charging stations already exist for use by tenants in a ratio that is equal to or greater than two available parking spaces for every 100 parking spaces;
  - b) Commercial properties with less than 50 parking spaces; and
  - c) Residential properties with less than five rental units.
- 4) Require that the lessee is responsible for the following:
  - a) Costs for damage to property and the EV charging station resulting from the installation, maintenance, repair, removal, or replacement of the EV charging station;
  - b) Costs for maintenance, repair, and replacement of the EV charging station; and
  - c) The cost of electricity associated with the EV charging station.
  - d) Maintain lessee liability coverage for \$1,000,000 naming the lessor as an additional insured under the policy with a right to notice of cancellation and property insurance covering any damage or destruction caused by the EV charging station.

**Discussion:** In order to address the lack of EV infrastructure, this bill seeks to remove an impediment to charging station installation. Currently, property owners may refuse to allow the installation of a charging station even if the commercial or residential tenant is willing to pay for the installation and operation of the station. This bill would remove this impediment by stating that a property owner cannot unreasonably deny a tenant the ability to install a charging station if the tenant is willing to pay for all expenses related to the installation and operation of the station.

This bill would be in line with the SCAQMD's policy priorities for reducing air pollution within the region, especially from mobile sources, through the development and deployment of clean transportation technology, i.e. clean vehicles and infrastructure.

**Recommended Position: SUPPORT**

**Support:**

ChargePoint, Inc. (Sponsor)  
CalSTART

South Coast Air Quality Management District  
Legislative Analysis Summary – AB 2565 (Muratsuchi)  
Bill Version: As amended on May 27, 2014  
PC – June 4, 2014

National Electrical Manufacturers Association  
Plug-in America  
Powertree Services Inc.  
California Energy Storage Alliance

**Opposition:**

California Business Property Owners Association et al

**JUNE 13, 2014 LEGISLATIVE COMMITTEE RECOMMENDATION:**

The committee members rejected staff's recommended position of Support and, instead approved moving AB 2565 to the full Board without a recommendation.

AMENDED IN ASSEMBLY MAY 27, 2014  
AMENDED IN ASSEMBLY APRIL 21, 2014  
AMENDED IN ASSEMBLY MARCH 28, 2014  
CALIFORNIA LEGISLATURE—2013–14 REGULAR SESSION

**ASSEMBLY BILL**

**No. 2565**

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**Introduced by Assembly Member Muratsuchi**

February 21, 2014

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An act to add ~~Section~~ *Sections 1947.6 and 1952.7* to the Civil Code, relating to tenancy.

LEGISLATIVE COUNSEL'S DIGEST

AB 2565, as amended, Muratsuchi. Rental property:—~~electronic~~ *electric* vehicle charging stations.

*Existing law generally regulates the hiring of real property.*

*This bill would require a lessor of a dwelling to approve a written request of a lessee to install an electric vehicle charging station at the lessee's designated parking space if the electric vehicle charging station and all modifications and improvements made to the leased premises meet all applicable health and safety standards and requirements imposed by federal, state, and local law, and all applicable zoning requirements, land use requirements, and covenants, conditions, and restrictions, the lessee's written request to make a modification to the leased premises in order to install and use an electric vehicle charging station includes his or her consent to enter into a written agreement including specified provisions, including compliance with the lessor's requirements for the installation, use, and removal of the charging station and installation of the infrastructure for the charging station,*

*and the lessee maintains in full force and effect a \$1,000,000 lessee liability coverage policy, as specified.*

Existing law regulates the terms and conditions of residential and commercial tenancies. Existing law defines and regulates common interest developments and voids any condition affecting the transfer or sale of an interest in a common interest development that prohibits or unreasonably restricts the installation or use of an electric vehicle charging station in a designated parking space in the development, as specified.

~~This bill would void any term in a lease, contract, or other instrument affecting the lease of lease renewed or extended on or after January 1, 2015, that conveys any possessory interest in commercial or residential property that either effectively prohibits or unreasonably restricts, as defined, the installation or use of an electric vehicle charging station in a lessee’s designated parking space or a parking space in a common area or that is otherwise in conflict with its provisions. associated with the commercial or residential property. The bill would prescribe requirements for lessor approval of a lessee request to install or use an electronic vehicle charging station and would require that a lessor approve a request to install a charging station if the lessee agrees in writing to do specified acts, including paying for various costs associated with the charging station and maintaining insurance naming the lessee lessor as an insured. The bill would provide that a lessor that willfully violates its provisions is liable to a lessee applying to install the electric vehicle charging station for actual damages and a civil penalty not to exceed \$1,000. The bill would require, in any action to enforce compliance with these provisions, that a prevailing plaintiff be awarded reasonable attorney’s fees.~~

Vote: majority. Appropriation: no. Fiscal committee: no.  
 State-mandated local program: no.

*The people of the State of California do enact as follows:*

- 1     SECTION 1. Section 1947.6 is added to the Civil Code, to read:
- 2     1947.6. (a) A lessor of a dwelling shall approve a written
- 3     request of a lessee to install an electric vehicle charging station
- 4     at the lessee’s designated parking space in accordance with this
- 5     section and in the same manner as a lessee’s request to make a
- 6     modification to the leased premises.



1 (b) *This section does not apply to residential rental properties*  
2 *where an electric vehicle charging station has already been*  
3 *installed or where parking is not provided as part of the lease*  
4 *agreement.*

5 (c) *For purposes of this section, “electric vehicle charging*  
6 *station” or “charging station” means an electric vehicle supply*  
7 *equipment station that is designed and built in compliance with*  
8 *the Article 625 of the National Electrical Code, as it reads on the*  
9 *effective date of this section, and delivers electricity from a source*  
10 *outside an electrical vehicle into a plug-in electrical vehicle.*

11 (d) *An electric vehicle charging station and all modifications*  
12 *and improvements made to the leased premises shall meet all*  
13 *applicable health and safety standards and requirements imposed*  
14 *by federal, state, and local law, and all applicable zoning*  
15 *requirements, land use requirements, and covenants, conditions,*  
16 *and restrictions.*

17 (e) *A lessee’s written request to make a modification to the*  
18 *leased premises in order to install and use an electric vehicle*  
19 *charging station shall include, but is not limited to, his or her*  
20 *consent to enter into a written agreement that includes, but is not*  
21 *limited to, the following:*

22 (1) *Compliance with the lessor’s requirements for the*  
23 *installation, use, and removal of the charging station and*  
24 *installation of the infrastructure for the charging station.*

25 (2) *Compliance with the lessor’s requirements for the lessee to*  
26 *provide an analysis of the financial and physical feasibility of the*  
27 *installation of the charging station and its infrastructure.*

28 (3) *Obligation of the lessee to pay the lessor all costs associated*  
29 *with installing the charging station and its infrastructure prior to*  
30 *any modification or improvement being made to the leased*  
31 *premises. The costs associated with installation shall include, but*  
32 *are not limited to, written identification of how, where, and when*  
33 *the modifications and improvements will be made, and the permits,*  
34 *construction contracts, performance bond, and assessments*  
35 *identified for the proposed modifications.*

36 (4) *Obligation of the lessee to pay for the costs associated with*  
37 *the electrical usage of the charging station, damage, maintenance,*  
38 *repair, removal, and replacement of the charging station, and*  
39 *modifications or improvements made to the leased premises*  
40 *associated with the charging station.*

1 (f) *The lessee shall maintain in full force and effect a lessee*  
 2 *liability coverage policy in the amount of one million dollars*  
 3 *(\$1,000,000) and shall name the lessor as a named additional*  
 4 *insured under the policy commencing with the date of approval of*  
 5 *construction until the lessee forfeits possession of the dwelling to*  
 6 *the lessor.*

7 **SECTION 1.**

8 *SEC. 2.* Section 1952.7 is added to the Civil Code, to read:

9 1952.7. (a) (1) Any term in a ~~lease, contract, security~~  
 10 ~~instrument, or other instrument affecting the lease of any lease~~  
 11 ~~that is executed, renewed, or extended on or after January 1, 2015,~~  
 12 ~~that conveys any possessory interest in commercial or residential~~  
 13 ~~property that either effectively prohibits or unreasonably restricts~~  
 14 ~~the installation or use of an electric vehicle charging station in a~~  
 15 ~~lessee's designated parking space, including, but not limited to,~~  
 16 ~~an assigned parking space, a parking space in a common area, or~~  
 17 ~~a parking space that is specifically designated for use by a particular~~  
 18 ~~lessee, or is parking space associated with the commercial or~~  
 19 ~~residential property, or that is otherwise in conflict with the~~  
 20 ~~provisions of this section, is void and unenforceable.~~

21 (2) This subdivision does not apply to provisions that impose  
 22 reasonable restrictions on the installation of electric vehicle  
 23 charging stations. However, it is the policy of the state to promote,  
 24 encourage, and remove obstacles to the use of electric vehicle  
 25 charging stations.

26 (3) *This subdivision shall not grant the holder of a possessory*  
 27 *interest under the lease described in paragraph (1) the right to*  
 28 *install electric vehicle charging stations in more parking spaces*  
 29 *than are allotted to the lease holder in his or her lease, or, if no*  
 30 *parking spaces are allotted, a number of parking spaces determined*  
 31 *by multiplying the total number of parking spaces located at the*  
 32 *commercial or residential property by a fraction, the numerator*  
 33 *of which is the total rentable square feet at the property, and the*  
 34 *denominator of which is the number of total square feet rented by*  
 35 *the lease holder.*

36 (4) *If the installation of an electric vehicle charging station has*  
 37 *the effect of granting the lease holder a reserved parking space*  
 38 *and a reserved parking space is not allotted to the lease holder in*  
 39 *the lease, the owner of the commercial or residential property may*  
 40 *charge a reasonable monthly rental amount for the parking space.*

1 (b) This section shall not apply to any of the following:

2 (1) A commercial property where charging stations already  
3 exist for use by tenants in a ratio that is equal to or greater than  
4 two available parking spaces for every 100 parking spaces at the  
5 commercial property.

6 (2) A commercial property where there are less than 50 parking  
7 spaces.

8 (3) A residential property where there are less than 5 parking  
9 spaces.

10 ~~(b)~~

11 (c) For purposes of this section:

12 (1) “Electric vehicle charging station” or “charging station”  
13 means a station that is designed in compliance with the California  
14 Building Standards Code Article 625 of the National Electrical  
15 Code, as it reads on the effective date of this section, and delivers  
16 electricity from a source outside an electric vehicle into one or  
17 more electric vehicles.

18 (2) “Reasonable costs” includes, but is not limited to, costs  
19 associated with those items specified in the “Permitting Checklist”  
20 of the “Zero-Emission Vehicles in California: Community  
21 Readiness Guidebook” published by the Office of Planning and  
22 Research.

23 ~~(2)~~

24 (3) “Reasonable restrictions” or “reasonable standards” are  
25 restrictions or standards that do not significantly increase the cost  
26 of the electric vehicle charging station or its installation or  
27 significantly decrease the charging station’s efficiency or specified  
28 performance.

29 ~~(e)~~

30 (d) An electric vehicle charging station shall meet applicable  
31 health and safety standards and requirements imposed by state and  
32 local authorities as well as all other applicable zoning, land use,  
33 or other ordinances, or land use permit requirements.

34 ~~(d)~~

35 (e) If lessor approval is required for the installation or use of an  
36 electric vehicle charging station, the application for approval shall  
37 be processed and approved by the lessor in the same manner as an  
38 application for approval of a lessee modification to the property,  
39 and shall not be willfully avoided or delayed. The approval or  
40 denial of an application shall be in writing. If an application is not

1 ~~denied in writing within 60 days from the date of receipt of the~~  
2 ~~application, the application shall be deemed approved, unless that~~  
3 ~~delay is the result of a reasonable request for additional~~  
4 ~~information.~~

5 (e)

6 (f) An electric vehicle charging station installed by a lessee shall  
7 satisfy the following provisions:

8 (1) If lessor approval is required, the lessee first shall obtain  
9 approval from the lessor to install the electric vehicle charging  
10 station and the lessor shall approve the installation if the lessee  
11 *complies with the applicable provisions of the lease consistent*  
12 *with the provisions of this section and agrees in writing to do all*  
13 *of the following:*

14 (A) Comply with the lessor's reasonable standards for the  
15 installation of the charging station.

16 (B) Engage a licensed contractor to install the charging station.

17 (C) Within 14 days of approval, provide a certificate of  
18 insurance that names the lessor as an additional insured under the  
19 lessee's insurance policy in the amount set forth in paragraph (3).

20 ~~(D) Pay for the electricity usage associated with the charging~~  
21 ~~station.~~

22 (2) The lessee shall be responsible for all of the following:

23 (A) Costs for damage to property and the charging station  
24 resulting from the installation, maintenance, repair, removal, or  
25 replacement of the charging station.

26 (B) Costs for the maintenance, repair, and replacement of the  
27 charging station.

28 (C) The cost of electricity associated with the charging station.

29 (3) The lessee at all times, shall maintain a lessee liability  
30 coverage policy in the amount of one million dollars (\$1,000,000),  
31 and shall name the lessor as a named additional insured under the  
32 policy with a right to notice of ~~cancellation~~. *cancellation and*  
33 *property insurance covering any damage or destruction caused*  
34 *by the charging station, naming the lessor as its interests may*  
35 *appear.*

36 ~~(f) Except as provided in subdivision (g), installation of an~~  
37 ~~electric vehicle charging station for the exclusive use of a lessee~~  
38 ~~in a common area, that is not an exclusive use common area, shall~~  
39 ~~be authorized by the lessor if installation in the lessee's designated~~  
40 ~~parking space is impossible or unreasonably expensive and the~~

1 lessor complies with the requirements in subdivision (e). In this  
2 case, the lessor shall enter into a license agreement with the lessee  
3 for the use of the space in the common area.

4 ~~(g) The lessor or the lessee may install an electric vehicle~~  
5 ~~charging station in the common area for the use of all lessees of~~  
6 ~~the lessor and, in that case, the lessor shall develop appropriate~~  
7 ~~terms of use for the charging station.~~

8 ~~(h)~~

9 ~~(g) A lessor may may, in its sole discretion, create a new parking~~  
10 ~~space where one did not previously exist to facilitate the installation~~  
11 ~~of an electric vehicle charging station. station, in compliance with~~  
12 ~~all applicable laws.~~

13 ~~(i) A lessor that willfully violates this section shall be liable to~~  
14 ~~the lessee applying to install the electric vehicle charging station~~  
15 ~~for actual damages, and shall pay a civil penalty to the lessee in~~  
16 ~~an amount not to exceed one thousand dollars (\$1,000). In any~~  
17 ~~action to enforce compliance with this section, the prevailing~~  
18 ~~plaintiff shall be awarded reasonable attorney's fees.~~

19 ~~(h) Any installation by a lessor or a lessee of an electric vehicle~~  
20 ~~charging station in a common interest development is also subject~~  
21 ~~to all of the requirements of subdivision (f) of Section 4745 of the~~  
22 ~~Civil Code.~~

## ATTACHMENT 3

### **SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

#### **LEGISLATIVE REPORT FROM HOME RULE ADVISORY GROUP MEETING OF MAY 20, 2014**

HRAG members present:

Dr. Joseph Lyou, Chairman

Elizabeth Adams, EPA (participated by phone)

Mike Carroll, Latham & Watkins on behalf of the Regulatory Flexibility Group

Chris Gallenstein, CARB (participated by phone)

Jayne Joy, Eastern Municipal Water District

Bill LaMarr, California Small Business Alliance

Joy Langford, Vasari Energy Capital

Rongsheng Luo, SCAG (participated by phone)

Susan Nakamura on behalf of Dr. Elaine Chang, SCAQMD

Bill Quinn, CCEEB (participated by phone)

David Rothbart, Los Angeles County Sanitation Districts

Larry Rubio, Riverside Transit Agency (participated by phone)

Lee Wallace, So Cal Gas and SDG&E

SCAQMD staff: Jill Whynot, Bill Wong, and Marilyn Traynor (Philip Crabbe participated by phone)

#### **LEGISLATIVE UPDATE**

Philip Crabbe provided a report on items that were discussed at the Legislative Committee meeting on May 9, 2014.

#### **Federal**

The consultants provided updates on MAP-21, the Grow America Act, and DERA program funding opportunities. The consultants also reported on the following federal issues:

#### **Shaheen-Portman Energy Efficiency Bill**

SCAQMD took a prior position of support on this bill, which has been amended to include additional energy efficiency provisions. Despite broad bipartisan support, controversies regarding the bill may block any vote on it.

#### **Draft Surface Transportation Reauthorization Bill**

The Senate Environment and Public Works (EPW) Committee released their draft surface transportation reauthorization bill on May 12, 2014, and the Senate Finance Committee held a recent hearing exploring possible funding options for the bill. The Senate Commerce Committee also held a recent hearing on a number of rail and freight proposals in relation to the MAP-21 reauthorization. EPW Committee Chair, Senator Barbara Boxer, has indicated that she is going to support a simple extension of the current surface transportation bill.

#### **Zero Emissions Goods Movement Funding**

SCAQMD and port staffs are exploring possibilities for funding which are currently available as part of Fiscal Year 2014 zero emissions goods movement appropriations grant funding.

## State

The consultants provided an update on the following state issues:

### SB 1275 (DeLeon), the “Charge Ahead Initiative”

The goal of this bill is to place a million electric or partial electric vehicles on California roads by 2023. There is a large coalition of support for this bill. The funds for the bill will most likely come from cap-and-trade auction revenue. However, funding issues will ultimately be decided when the state budget is negotiated.

### SB 1204 (Lara)

This bill deals with funding clean truck, bus, and off-road equipment to help with the development of zero and near-zero emission medium-duty vehicles. The bill is criticized as being too similar to the AB 118 program. A focus of the bill is to ensure that moderate and lower income communities benefit from the clean vehicle program in the bill.

### AB 2013 (Muratsuchi)

This bill would increase the number of stickers available for partial zero-emission vehicles, which allow single occupancy driving of those stickered vehicles in the HOV lane. The stickers would increase from 40,000 to 85,000. After a delay, the bill has now passed through the Assembly and is headed to the Senate.

### SB 1139 (Hueso)

This recently amended bill deals with geothermal power. The bill passed through the Senate Energy Committee and is headed to the Senate Appropriations Committee for hearing.

The state consultants also reported on the May Budget Revise and a special session called by the Governor related to the “rainy day fund.” The Governor and legislative leadership reached an agreement which includes increasing deposits when the state experiences spikes in capital gains, raising the size of the “rainy day fund” to 10% of the General Fund and creating a Proposition 98 reserve for education, among other things. This item will be voted on by the Legislature and then, if passed, will ultimately be placed on the ballot for the voters to decide in November.

On May 12, 2014, Toni Atkins became California Assembly Speaker. The transition of Senator Kevin de León to replace Senate President pro Tem Darrell Steinberg as leader of the Senate is expected later this year.

Senator Steinberg has devised a long-term investment strategy for cap-and-trade revenue funds, estimated to be approximately \$5 billion. The proposed strategy represents the emerging Senate plan on the topic; however, the Senate is still negotiating this issue of how cap-and-trade revenue should be spent. The plan designates the following percentages for about \$4.4 billion of the overall pot of funds: 20% of the funds for affordable housing; 20% for sustainable communities; 30% for transit; 20% for high-speed rail; and 10% for highway and road rehabilitation. The remaining funds are broken up into four categories as follows: \$200 million annually for natural resource, water and waste; \$200 million annually for climate dividend for transportation fuel consumers; \$200 million annually for the Charge Ahead Initiative; and \$10 million annually for green bank funding.

SCAQMD staff provided an update on AB 2242 (Perea) regarding the Air Quality Improvement Program (AQIP). As a result of this bill, the Legislative Committee discussed and adopted “Principles Regarding SCAQMD’s Position on Funding Related Issues.”

The Legislative Committee also took action on the following bills:

Bill	Action
AB 1499 (Skinner) Electricity: Self-Generation Incentive Program ( <i>rate payer</i> )	Support
AB 1624 (Gordon) Self-Generation Incentive Program ( <i>cap-and-trade revenue</i> )	Support
SB 1265 (Hueso) State Vehicle Fleet Purchases: Minimum Fuel Economy Standard	Support
AB 1330 (Pérez) Environmental Justice-Guidance on legislative language	Approval in Concept

Discussion on State Issues

With regard to the long-term investment strategy for cap-and-trade revenue, Mr. Rothbart commented that stationary sources would like to see the green bank funding increased for advancing new technology.



BOARD MEETING DATE: July 11, 2014

AGENDA NO. 31

REPORT: Mobile Source Committee

SYNOPSIS: The Mobile Source Committee met on Friday, June 20, 2014. Following is a summary of that meeting. The next Mobile Source Committee meeting is scheduled for Friday, July 25, 2014 at 9:00 a.m.

RECOMMENDED ACTION:  
Receive and file.

Dr. Clark E. Parker, Sr., Chair  
Mobile Source Committee

EC:fmt

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### **Attendance**

Committee Chair Dr. Clark E. Parker, Sr., Committee Members Mayor Judith Mitchell, Mayor Pro Tem Ben Benoit and Supervisor Shawn Nelson attended via videoconference. Committee Member Dr. Joseph Lyou was absent.

The following items were presented:

### **INFORMATIONAL ITEMS:**

#### **2) Rule 2449 – Control of Oxides of Nitrogen Emissions from Off-Road Diesel Vehicles**

Dr. Randall Pasek, Planning and Rules Manager, provided an update on the implementation of the Surplus Off-road Opt-in for NO<sub>x</sub> (SOON) Program and an overview of the proposed amendments to Rule 2449. The SOON Program is part of the Statewide In-Use Off-Road Diesel Fleet Regulation adopted by CARB in July 2007. The SCAQMD adopted Rule 2449 to implement the SOON Program in May 2008. CARB subsequently amended the Statewide Regulation in December 2011 with no changes to the SOON Program requirements, but revised the SOON Program section reference (to Section 2449.2 from Section 2449.3). CARB submitted the amended Statewide Regulation to U.S. EPA requesting a waiver under the Clean Air Act Section 209(e) authorizing the amended regulation. U.S. EPA granted a waiver

in 2013. U.S. EPA staff is currently reviewing SCAQMD Rule 2449 for approval into the SIP. In its review, U.S. EPA staff indicated that SCAQMD Rule 2449 be amended to reflect the appropriate reference to the SOON Program Section in the Statewide Rule.

The SOON Program is an innovative approach that requires fleets with 20,000 hp or more to submit off-road vehicles that are not needed to meet the statewide regulation into a funding program to further reduce NOx emissions. While not required to submit vehicles, fleets under 20,000 hp can voluntarily participate in the Program. If awarded, the fleet must complete the project. Typical projects are the repowering or replacement of Tier 0 and Tier 1 vehicles to cleaner Tier 3 and Tier 4 vehicles. Staff estimated that about \$120 million in funding would be needed to achieve 4 to 8 tons/day of NOx reductions depending on the pace of the economic recovery.

There are around 126 fleets statewide that are over 20,000 hp and could potentially be subject to the SOON Program requirements. Of the 126 fleet, 52 fleets operate in the SCAQMD and are subject to the rule. To date, ten fleets with over 20,000 hp have cost-effective projects and participated in the SOON Program. In addition, 37 fleets are voluntarily participating in the Program. There have been nine rounds of funding for the SOON Program and participating fleets have received over \$50 million for repower and replacement projects producing NOx emission reductions of 2.1 tons/day and concurrent reductions of 0.12 tons/day of PM emissions.

Staff conducted an extensive outreach to encourage fleets' participation. Over 25 public workshops have been held as well as meetings with industry associations. Additionally, approximately 10,000 mailings and e-mail notices were sent to licensed contractors throughout the state. A smaller list of fleets operating in the South Coast Air Basin was developed and each fleet is contacted each time a Program Announcement is released. Phone calls are placed to all fleets over 10,000 hp and face-to-face meetings were held with over 100 fleets.

Despite the extensive outreach efforts, participation in the Program is lower than anticipated. Conditions contributing to this include the impacts of the economic downturn, which make it difficult for fleets to meet the co-funding requirements. Also, the equipment activity (hours of operation) is down significantly and as the cost-effectiveness is directly related to equipment activity, fewer cost-effective projects are available for inclusion in the SOON program. Finally, the cleanest Tier 4 engines are more technically advanced than the earlier Tiers, but more difficult to repower, limiting their availability.

Staff believes that the participation rate will improve as indicated by the jump in applications for the most recent round of SOON funding and will continue to improve as the economy picks up. CARB has revised their Moyer Funding Guidelines to add

more flexibility to fleets to receive funding (Moyer funds are used in the SOON program). This increased flexibility will make projects available for the SOON Program. In addition, many projects now require equipment to meet minimum “green” standards to be used on the project and fleets are seeking methods and assistance in cleaning their fleets to be able to compete for these jobs. Finally, some fleets believe that the worst of the recession is over and are beginning to improve their equipment in anticipation of more work.

Staff is continuing its ongoing efforts to meet with fleets on a one-to-one basis and participate in industry association meetings. Staff indicated that they will continue to outreach to fleets through targeted e-mails and phone calls to increase participation in the SOON Program. As part of this effort, staff will also work with industry associations to post funding opportunities in newsletters and e-mails, as well as meet with associations and fleets to discuss how to improve the program so that more fleets will participate.

Dr. Pasek concluded with an overview of the proposed amendments to Rule 2449. The proposed amendment is administrative only and would revise the reference to the State Rule from Section 2449.3 to the appropriate reference - Section 2449.2. As the amendment is administrative only, it is ministerially exempt from CEQA and will have no socioeconomic impacts.

Dr. Parker asked what is the percentage of co-pay that fleets are required to pay to participate in the program and who are some of the largest fleets that have participated in the SOON program. Staff responded that fleets are required to pay at a minimum 15% of the cost of the project, but based on the cost effectiveness requirements, fleets may have to co-fund significantly more. Some of the very large fleets that are participating include Sukut, Coburn, and the Sanitation Districts of Los Angeles and Orange County. Staff indicated that rental companies have also participated to provide cleaner equipment since many of the construction companies have been downsizing their fleet with the economic downturn.

Dr. Parker also inquired if fleets working on the many government projects such as the I-405 widening project were required to use cleaner equipment, and if the SCAQMD could work with project sponsors to ensure that the contractors used clean construction equipment. Staff responded that many of the projects require fleets to meet green construction policies that mandate use of the cleanest Tier 3 and Tier 4 equipment to qualify to bid on the projects. The Los Angeles County Metropolitan Transit Authority (LACMTA) established a “Green Construction” Policy to require prospective bidders on construction projects to use the cleanest equipment. Staff worked closely with LACMTA during the development of the Policy and continues to work with LACMTA in its implementation of the Policy.

Dr. Parker mentioned that tunneling operations are about to begin along Crenshaw Blvd. in south Los Angeles to the airport, and he asked that staff request that LACMTA ensure that the equipment are retrofitted. Staff indicated that a follow-up will be made with LACMTA staff to see if the construction fleets are using the cleanest equipment on the project.

Mayor Mitchell asked whether any requirements are in place to ensure that the bid awardees use the cleanest construction equipment, since most government funded projects are put out to competitive bid and are awarded to the lowest bidder. Staff responded that many project solicitations do require fleets to use the cleanest construction equipment to be considered for an award.

Mayor Mitchell asked if the SCAQMD has any influence over Caltrans projects. Staff indicated that historically, staff has been commenting under CEQA regarding the need to use the cleanest construction equipment. Staff has been commenting on the development of the I-710 Freeway Expansion Project Environmental Assessment indicating that any construction would need to be with cleanest equipment available. To the extent that LACMTA is the lead agency and a “Green Construction” Policy is in place, there is some assurance that the cleanest equipment will be used.

In closing, Dr. Parker expressed some concern that Rule 2449 is designed to benefit the contractors in terms of their minimal financial contribution for the cleaner equipment. However, what are the disincentives if the contractors do not participate in the program given the limited ability to require the use of cleaner equipment. With future expansion such as the high-speed rail, there will be increased construction that will result in greater construction emissions that the region will have to mitigate. Dr. Parker indicated that staff needs to look at how our programs can be made more effective to ensure that emissions are mitigated or reduced to the greatest extent possible and how public funding is best expended.

### **ACTION ITEM:**

#### **1) Issue Program Announcement for Low-Emission Leaf Blower Vendors**

Mr. Shashi Singeetham, Air Quality Specialist, provided a brief summary of the Leaf Blower Exchange Program since its inception, a recap of the 2013 Leaf Blower Exchange Program, and a brief summary of the Proposed 2014 events. Mr. Singeetham presented the requirements of the Program Announcement, the project selection criteria and the formulas to calculate the cost-effectiveness of proposals and staff recommendation for the approval of the release of the Program Announcement.

Dr. Parker asked if 1,500 blowers was the maximum limit and if the program was oversubscribed. Mr. Singeetham responded that the number of the blowers to be

exchanged was limited only by the funds available under Air Quality Investment Program (AQIP). Dr. Parker asked why the same vendor has been used over the years. Mr. Singeetham responded that the Stihl Company had the cleanest CARB-certified blower in the market. In addition, Mr. Singeetham stated that the German designed blower was the only known blower that was manufactured in the United States.

Mayor Pro Tem Benoit asked whether the proposal was technology neutral and if electric blowers would also be considered. Mr. Singeetham commented that the program was open to any technology, but at this time the electric versions were about three times the cost of the blower being used. Dr. Matt Miyasato, Deputy Executive Officer/Science & Technology Advancement, added that another RFP is being released that would cover the prototype zero- emission blowers and other commercial garden equipment. He also stated that the SCAQMD would like to test the durability and reliability of the commercial equipment prior to offering incentives. Mayor Mitchell then asked whether this was an annual program and if the blowers had to be CARB-certified. Dr. Miyasato responded that it was an annual program and that the blowers had to be CARB-certified. Mayor Mitchell asked if the least expensive model was chosen. Dr. Elaine Chang, Deputy Executive Officer/Planning, Rule Development & Area Sources, responded that being the least expensive was not the criteria, but that the Rule 2202 AQIP requires that certain emission reduction targets be met.

Moved by Benoit; seconded by Mitchell; and unanimously approved

### **INFORMATIONAL ITEMS:**

#### **3) Health Studies Update**

Dr. Jean Ospital, Health Effects Officer, presented a brief overview of a recently completed study on a health assessment of residential proximity to a railyard in San Bernardino. There were three components in the study report. A survey of respiratory health among children going to a nearby school was compared to those going to a school several miles distance. It was reported that the children from the nearby school showed elevated levels for a number of respiratory effects, including lower lung function, cough and wheeze. A survey of households in the vicinity of the railyard found that in adults there appeared to be a trend of increased respiratory effects with increased proximity of the residence to the railyard, however these were not statistically significant differences. An analysis of cancer incidence was conducted using data from the regional California Cancer Registry. Incidence was compared to the expected number of cancers based on the overall incidence in the region standardized for demographic variables such as age, gender, and ethnicity. No clear evidence of a trend in cancer incidence was found based on the estimated

gradient of railyard related exposures. Within the overall study area of the 16 census tracts surrounding the railyard, there was a modest elevation in the incidence of all cancers, and elevations for all cancers among some ethnic classifications; however, there was also a lower incidence in other ethnic classification.

Dr. Parker asked whether the study looked at any of the small PM2.5 emissions. Dr. Ospital replied that the study looked at the nitric oxide in the exhaled breath of the subjects as a marker for lung inflammation, and that peak expiratory flow meters were used to measure lung function. Dr. Ospital noted that the study was a health study and not an air quality study. Dr. Parker also asked whether African Americans were included in the study. Dr. Ospital replied that the study included African Americans, but there were no statistically significant findings.

Mayor Mitchell asked if one could make conclusions regarding causality for the results observed. Dr. Ospital replied that this was a cross sectional study that looked at a particular time period, and no cause-effect conclusions could be made.

Supervisor Nelson asked whether there was enough data to compare to people living elsewhere. Dr. Ospital indicated that the respiratory effects study used distance from the railyard to determine the comparison groups, and that the statistical analyses included other variables such as demographic information, income, use of tobacco to account for other factors that could be related to health effects. Regarding cancer incidence, the comparison group used to estimate the expected cancer incidence was the population in the regional Cancer Registry that included San Bernardino, Riverside, Mono and Inyo counties. Dr. Parker asked what could be concluded from the report. Dr. Ospital replied that the findings indicated a difference in respiratory health associated with school and residential proximity to the railyard. Regarding the cancer study, staff opinion was that the findings were inconclusive regarding any potential causative role related to railyard emissions.

[Supervisor Shawn Nelson arrived at the videoconference site at 9:32 a.m.]

#### **WRITTEN REPORTS:**

##### **4) Rule 2202 Activity Report**

The report was received as submitted.

##### **5) Monthly Report on Environmental Justice Initiatives – CEQA Document Commenting Update**

The report was received as submitted.

#### **OTHER BUSINESS:**

None

**PUBLIC COMMENT:**

None

The meeting was adjourned at 10:00 a.m.

**Attachment**

Attendance Roster

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
MOBILE SOURCE COMMITTEE MEETING  
Attendance Roster- June 20, 2014**

NAME	AFFILIATION
Chair Dr. Clark E. Parker, Sr.	SCAQMD Governing Board ( <i>via videoconference</i> )
Committee Member Ben Benoit	SCAQMD Governing Board ( <i>via videoconference</i> )
Committee Member Judith Mitchell	SCAQMD Governing Board ( <i>via videoconference</i> )
Committee Member Shawn Nelson	SCAQMD Governing Board ( <i>via videoconference</i> )
Board Asst/Consultant Chung Liu	SCAQMD Governing Board ( <i>Mitchell/ via videoconference</i> )
Christine Truong	Los Angeles Department of Water and Power
David Rothbart	Los Angeles County Sanitation District
Susan Stark	Tesoro
Curtis Coleman	Southern California Air Quality Alliance
Peter Herzog	NAIOP, Commercial Real Estate Development Association ( <i>via videoconference</i> )
Elaine Chang	SCAQMD Staff
Philip Fine	SCAQMD Staff
Kurt Wiese	SCAQMD Staff
Bayron Gilchrist	SCAQMD Staff
Matt Miyasato	SCAQMD Staff
Henry Hogo	SCAQMD Staff
Laki Tisopulos	SCAQMD Staff
Chris Marlia	SCAQMD Staff
Jean Ospital	SCAQMD Staff
Randall Pasek	SCAQMD Staff
Joe Cassmassi	SCAQMD Staff
Dean Saito	SCAQMD Staff
Kathryn Higgins	SCAQMD Staff
Kim White	SCAQMD Staff
Todd Warden	SCAQMD Staff
Debra Ashby	SCAQMD Staff
Shashi Singeetham	SCAQMD Staff



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BOARD MEETING DATE: July11, 2014

AGENDA NO. 32

REPORT: Stationary Source Committee

SYNOPSIS: The Stationary Source Committee met Friday, June 20, 2014.  
Following is a summary of that meeting.

RECOMMENDED ACTION:  
Receive and file.

Dennis Yates, Chair  
Stationary Source Committee

MN:am

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### **Attendance**

The meeting began at 10:30 a.m. Present were Mayor Dennis Yates, Mayor Pro Tem Ben Benoit (VT), Supervisor Shawn Nelson (VT) and Mayor Judith Mitchell (VT). Absent was Dr. Joseph Lyou.

### **ACTION ITEM**

#### **1. Renew Contract for Media Advertising and Public Outreach for the Check Before You Burn Program**

Tina Cox, Senior Public Information Specialist, presented this item. Last year, following an RFP process, the Board awarded a contract to Sensis to develop and implement an outreach campaign for the 2013-14 Check Before You Burn program. Sensis developed and implemented a comprehensive media, advertising and public outreach campaign which included paid advertisements on TV, radio, Internet, electronic billboards and social media. Looking ahead to the 2014-15 Check Before Your Burn season, there is a strong need to continue to increase awareness of the program among residents and build on the momentum gained during last season's outreach campaign, which was the first dedicated outreach campaign for the

program. The current contract with Sensis includes an option to renew the contract for two additional one-year contracts.

Based on the overall quality and comprehensive design of the campaign last year, staff is recommending that the contract with Sensis be renewed for one year in an amount not to exceed \$493,000. This will allow sufficient time for an outreach campaign to be developed and in place before the season begins on November 1<sup>st</sup>.

Mayor Mitchell commented on the importance of encouraging people to sign up for Air Alerts so they can receive notification when a no-burn alert has been issued. Ms. Cox added that this was part of the previous campaign and there was an increase in signups to Air Alerts during the four month campaign. The next campaign will also focus on encouraging signups for no-burn alerts.

*Moved (Mitchell), seconded (Benoit), and unanimously recommended for approval.*

## **INFORMATIONAL ITEMS**

### **2. Permit Processing Update**

Mohsen Nazemi, Deputy Executive Officer for Engineering & Compliance, provided a status update on permit applications filed and processed at SCAQMD and described past, ongoing, and future efforts to streamline the permitting process and improve efficiency. Mayor Pro Tem Benoit asked when the streamlining measures outlined on one of the slides had been implemented and if additional business members could be added to the Permit Streamlining Task Force (Task Force). Mr. Nazemi explained that some of the measures were implemented immediately, while others took longer to put in place. Task Force meetings are open to the public, and participation is encouraged. Suggestions for additional members will be considered. The next meeting will be in July, date to be determined.

Mayor Mitchell asked if Discover is the only credit card being accepted by SCAQMD and Mr. Nazemi responded that in addition to Discover all other Visa, Master Card and American Express credit cards are also accepted by SCAQMD. Mayor Mitchell stated that it is good that other, more commonly used, credit cards can be used for online payments. Supervisor Nelson suggested that there should be an automatic approval of a permit if staff does not act within a specific time period after submittal of a complete application. Mr. Nazemi responded that there is an appeal process before the Hearing Board if permits are not granted within a certain time and that an automatic approval of a permit is not recommended since permit conditions are necessary to ensure proper operation of the equipment. Supervisor Nelson emphasized that there is a need to reduce the permit application backlog and he encourages staff to use creative approaches to balance the workload better. Mayor Mitchell agreed and asked if hiring extra people or other actions could help

reduce the backlog. Mr. Nazemi stated that temporary engineering staff has been used in the past, but that takes resources for training. Hiring new engineers has been approved and is under way and that will help this situation. Mr. Nazemi also said that he has received some additional suggestions for permit streamlining, but SCAQMD has also received some satisfactory and positive feedback from industry groups about SCAQMD staff's timely processing of permit applications. The Task Force will consider all ideas.

Curt Coleman, Southern California Air Quality Alliance, commented and indicated that he appreciates the Board giving this issue priority and looks forward to working with staff. Bill LaMarr, California Small Business Alliance, supports staff's efforts and asked about the District's goal of expanding small business assistance, since he believes some small businesses are still concerned about permitting. He indicated that small businesses want to participate in the process to help resolve rule and permitting issues. Derrick Alatorre, Assistant Deputy Executive Officer of Legislative and Public Affairs, described a pilot program that has helped small businesses in the City of Industry and Whittier through field days in coordination with local Chambers of Commerce. No permit assistance has been requested to date, but many clearance letters have been provided. Rita Loof, RadTech International, emphasized that the best streamlining method is to exempt low emitting equipment from permit requirements.

### **3. Hexavalent Chromium Air Monitoring Bi-Annual Report and Cement Facility Closure Plan**

Dr. Philip Fine, Assistant Deputy Executive Officer for Planning, Rule Development and Area Sources, gave the staff presentation. This is the second bi-annual report, committed to in a previous Board resolution, on hexavalent chromium monitoring at cement manufacturing facilities. Rule 1156 affects two facilities, TXI and California Portland Cement Company. The rule was amended in 2009 as a result of a MATES III finding regarding elevated levels of hexavalent chromium at the Rubidoux monitoring station that were subsequently determined to be coming from the cement manufacturing facilities, mostly from TXI. That amendment required, among other things, fence-line monitoring for hexavalent chromium against a  $0.7 \text{ ng/m}^3$  30-day rolling-average upwind/downwind differential standard. Since beginning monitoring in March of 2010, neither facility has exceeded the standard. As a part of the 2009 amendment resolution, staff committed to developing a plan to address the monitoring and other requirements in the case of facility closure. To that end, staff had previously conducted a working group process and created a closure plan document. However, due to having less than one year of monitoring data, facilities lack of activity, and uncertain future, it was left as a "living document." Currently, monitoring is in its fifth year and it is timely for staff to re-engage the working group regarding amending the rule to incorporate closure provisions,

including a pathway for reduction or elimination of monitoring. There were no Committee or public comments on this informational item.

#### **4. Rule 1111 – NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces**

Joe Cassmassi, Planning and Rules Manager provided an update to the Committee on Proposed Amended Rule 1111 - NOx Emissions from Natural-Gas-Fired Fan-Type Central Furnaces. The proposed amendments to the rule would provide a six-month delay in the compliance date for condensing furnaces. In addition, the proposed amended rule would add a mitigation fee option to allow the sale of non-compliant furnaces for up to three-years. Mr. Cassmassi indicated that the proposed six month compliance delay represented an extension of the initial three-month delay proposal presented at the May 22 Public Workshop in response to industry comments that implementation during the peak season would be problematic. He further noted that manufacturers raised concern that the additional cost of manufacturing compliant furnaces might delay consumer purchases and that the proposed mitigation fee was too high. Mr. Cassmassi pointed out that since there would be compliant units available for implementation, the stakeholders had varied comments on the desired amount of delay in the implement dates due to their progress in developing compliant units, ranging from no delay to at least one year of delay. The mitigation fee is designed to provide compliance flexibility, but not to penalize those with compliant products.

Mayor Mitchell asked to confirm the amount of time provided by the rule to sell through existing units and what was the response from the manufactures to the proposed sell through period. Mr. Cassmassi responded that the manufacturers would have ten months of sell-through beyond the implementation date and that the manufacturers had commented favorably on the option.

#### **WRITTEN REPORTS**

All written reports were acknowledged by the Committee.

#### **PUBLIC COMMENTS**

There were no public comments.

Mayor Yates announced that the next Stationary Source Committee meeting is scheduled for July 25, 2014 and adjourned the meeting at 11:15 a.m.

#### **Attachments**

Attendance Roster

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
STATIONARY SOURCE COMMITTEE  
June 20, 2014  
ATTENDANCE ROSTER (Voluntary)**

NAME	AFFILIATION
Mayor Dennis Yates	SCAQMD Governing Board
Mayor Pro Tem Benoit (VT)	SCAQMD Governing Board
Mayor Judith Mitchell (VT)	SCAQMD Governing Board
Supervisor Shawn Nelson (VT)	SCAQMD Governing Board
Ron Ketcham	SCAQMD Governing Board (Cacciotti)
Mohsen Nazemi	SCAQMD Staff
Kurt Wiese	SCAQMD Staff
Bill Wong	SCAQMD Staff
Elaine Chang	SCAQMD Staff
Jill Whynot	SCAQMD Staff
Tina Cox	SCAQMD Staff
Derrick Alatorre	SCAQMD Staff
Joe Cassmassi	SCAQMD Staff
Philip Fine	SCAQMD Staff
Chris Marlia	SCAQMD Staff
Tracy Goss	SCAQMD Staff
Laki Tisopulos	SCAQMD Staff
Mike O'Kelly	SCAQMD Staff
Kim White	SCAQMD Staff
Curtis Coleman	So. Calif. Air Quality Alliance
Barbara McBride	Calpine
Grant Aguinaldo	Envera Consulting
Susan Stark	Tesoro

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
STATIONARY SOURCE COMMITTEE  
June 20, 2014  
ATTENDANCE ROSTER (Voluntary)**

Bill Pearce	Boeing
David Rothbart	LA County Sanitation District
Bill LaMarr	California Small Business Alliance
Rita Loof	RadTech International

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BOARD MEETING DATE: July 11, 2014

AGENDA NO. 33

REPORT: Technology Committee

SYNOPSIS: The Technology Committee met on June 20, 2014. Major topics included Technology Advancement items reflected in the regular Board Agenda for the July Board meeting. A summary of these topics with the Committee's comments is provided. The next Technology Committee meeting will be on July 25, 2014.

RECOMMENDED ACTION:

Receive and file.

John J. Benoit  
Technology Committee Chair

MMM:pmk

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**Attendance:** Supervisor John J. Benoit and Mayor Judith Mitchell participated by videoconference. Councilman Joe Buscaino, Mayor Miguel Pulido, and Mayor Dennis Yates were absent due to a conflict with their schedules. Chair Supervisor Benoit appointed Councilman Michael Cacciotti as a one-time Committee Member for today's meeting.

## **JULY BOARD AGENDA ITEMS**

### **1. Transfer and Appropriate Funding to Establish Air Quality Sensor Performance Evaluation Center**

Manufacturers have begun marketing "low-cost" air monitoring sensors to measure air pollution, and local environmental groups and the public are considering them as inexpensive options to independently evaluate air quality. However, there are no ongoing established local, state or federal programs to evaluate the validity of data obtained from such devices or their overall performance. This action is to establish an Air Quality Sensor Performance Evaluation Center (AQ-SPEC) to perform systematic, detailed characterizations of currently available air monitoring sensors using both field- and laboratory-based testing and to communicate the results to the public. This action is to also transfer and appropriate funding up to \$852,000 from

the BP ARCO Settlement Projects Fund (46) to release solicitation documents and issue purchase orders or contracts for equipment and web development, fund program implementation costs and create and fill two new positions to support the AQ-SPEC.

*Supervisor Benoit inquired about funding availability from the BP ARCO Settlement Projects Fund (46). Mayor Mitchell noted that some of the proposed expenses are related to funding two new positions and also inquired about funding availability. Dr. Wallerstein confirmed that there is sufficient funding to cover all implementation, operation and maintenance costs associated with the development of this program.*

*Supervisor Benoit suggested that potential funding opportunities should be pursued to defray ongoing costs, and to sustain AQ-SPEC in future years. Dr. Wallerstein agreed that staff should pursue cost-sharing opportunities with other agencies (e.g., CARB, U.S. EPA, etc.) as well as consider charging a “fee-for-service” to interested air quality sensor manufacturers. Dr. Wallerstein added that EPA has just announced a funding opportunity for community air monitoring using low-cost portable sensors, and indicated that staff will apply for this grant.*

*Moved by Mitchell; seconded by Cacciotti; unanimously approved with recommendation that the long-term goal of this program is for it to become self-sustaining.*

## **2. Issue RFP to Implement Enhanced Fleet Modernization Program**

There is strong interest from the state legislature to provide incentives for eligible low-income owners of older passenger cars to scrap and replace their vehicles with newer, cleaner and more fuel-efficient vehicles. To address this, CARB is amending its AB 118 Enhanced Fleet Modernization Program (EFMP) Regulation to focus on providing greater incentives for older vehicle scrapping and replacement to eligible low- and middle-income owners. Funding to implement the EFMP is available from AB 118, including funding to conduct a pilot program to assess innovative approaches targeting outreach to low- and middle-income vehicle owners for participation in the EFMP. This action is to issue an RFP to solicit proposals to implement one or more pilot programs under the AB 118 EFMP in the South Coast Air Basin in an amount up to \$1.5 million.

*Councilman Cacciotti inquired about aspects of the consumer protection component proposed in the EFMP program. Staff responded that much of the consumer protection focuses on the financing of the replacement vehicle and the protection of the consumer against dealership financing that may take advantage of low-income consumers.*



*Mayor Mitchell indicated that the state legislature has a high interest in accelerating the turnover of high-emitting cars and replacing them with cleaner, more advanced technology vehicles, especially for low-income consumers. Mayor Mitchell indicated that outreach will be critical to getting a broader participation in the program.*

*Councilman Cacciotti asked if the outreach will be multilingual. Staff indicated it will be. The Councilman indicated that the outreach needs to be “simple” to ensure consumer interest.*

*Moved by Mitchell; seconded by Cacciotti; unanimously approved.*

**3. Issue RFPs to Demonstrate Commercial-Grade Electric Lawn and Garden Equipment**

Implementing a Commercial-Grade Electric Lawn and Garden Equipment Demonstration Program with local landscape professionals as well as municipalities will promote zero emission lawn and garden equipment and accelerate market penetration in the South Coast Air Basin. This action is to issue two RFPs: the first RFP will solicit proposals from qualified manufacturers and vendors to identify and procure commercial-grade electric lawn mowers; the second RFP will solicit proposals for commercial-grade cordless electric hand-held lawn and garden equipment. The equipment will be loaned on a rotating basis to eligible participating local gardening and landscape professionals and the manufacturers and vendors will provide training and technical support to participants.

*Moved by Cacciotti; seconded by Mitchell; unanimously approved.*

**4. Recognize Revenue, Amend Air Filtration Contract and Execute New Contract to Upgrade and Demonstrate Zero-Emission Heavy-Duty Vehicles **

The SCAQMD applied for and expects to receive a \$500,000 award from U.S. EPA under Section 105 of the Clean Air Act to sponsor Clean Air Technology Initiative projects. Staff proposes to utilize these funds to cosponsor school bus air filtration and zero-emission yard tractor projects. This action is to recognize the \$500,000 award from U.S. EPA into the Advanced Technology, Outreach and Education Fund (17). Secondly, this action is to amend a contract with IQAir to add \$170,000 from the Advanced Technology, Outreach and Education Fund (17) to install and test air filtration systems in school buses. Lastly, this action is to execute a new contract with TransPower to upgrade and demonstrate two electric yard tractors at a cost not to exceed \$405,000, comprised of \$330,000 from the Advanced Technology, Outreach and Education Fund (17) and \$75,000 from the Clean Fuels Fund (31).

*Moved by Benoit; seconded by Mitchell; unanimously approved.*

**5. Recognize Revenue and Appropriate Funds from Clean Fuels, Carl Moyer AB 923 and Proposition 1B-Goods Movement for Administrative Support, Outreach and Education, and Related Activities**

The Technology Advancement Office executes hundreds of contracts annually to implement incentive, demonstration and technology transfer projects, involving ongoing administrative support, outreach and education, and other related activities. This action is to recognize up to \$1,250,000 in revenue in the General Fund and appropriate \$1,250,000 to the Science & Technology Advancement FY 2014-15 Budget, Services and Supplies Major Object, Professional and Special Services Account, from the following special revenue funds: \$850,000 from the Clean Fuels Program Fund (31); \$100,000 from the Carl Moyer Program AB 923 Special Revenue Fund (80); and \$300,000 from the Prop 1B Funding-Goods Movement Fund (81). The appropriations will ensure flexibility and expediency in administering and addressing implementation issues for these programs.

*Moved by Benoit; seconded by Mitchell; unanimously approved.*

**6. Recognize Revenue from Participating Members of California Natural Gas Vehicle Partnership and Approve Expenditures for Activities and Projects during FYs 2014-15 and 2015-16** 

The SCAQMD Board established the California Natural Gas Vehicle Partnership (CNGVP) to promote greater deployment of natural gas vehicles in California. The participating members pay two-year membership fees to fund program administration and activities and projects to achieve the goals of the CNGVP. This action is to recognize revenue from participating and future CNGVP members; transfer \$25,000 from the Clean Fuels Fund (31) into the Natural Gas Vehicle Partnership Fund (40) for SCAQMD's two-year membership for FYs 2014-15 and 2015-16; approve the FYs 2014-15 and 2015-16 CNGVP budget; amend the contract for CNGVP website maintenance; and authorize the Executive Officer to approve individual expenditures, as selected by the CNGVP for FYs 2014-15 and 2015-16, up to \$75,000 but not to exceed \$225,000 for each fiscal year.

*Moved by Cacciotti; seconded by Mitchell; unanimously approved.*

**7. Approve Truck Projects under “Year 4” Proposition 1B-Goods Movement Program**

At its April 4, 2014 meeting, the Board approved a list of heavy-duty truck projects under the “Year 4” Proposition 1B-Goods Movement Program, subject to CARB's final approval. Some truck projects were not included in the recommended list either because of missing information for completion of evaluations or for not furnishing the campaign contribution disclosure forms on time. Since then staff has continued working with these applicants and more truck projects have become eligible. These actions are to augment the list of truck projects, previously approved

by the Board, with additional truck projects as outlined in Table 1, subject to CARB's final approval, and to approve a name change for a truck project. These additional projects will not delay the program implementation schedule, as the final approval will be subsequent to completion of compliance checks by CARB, after which contracts will be executed.

*Moved by Cacciotti; seconded by Mitchell; unanimously approved.*

## **8. California Fuel Cell Partnership Executive Board Meeting Notes and Quarterly**

### **Update**

This report summarizes the California Fuel Cell Partnership Executive Board meeting held April 15, 2014, and provides quarterly updates for the periods beginning October 2013 and January 2014.

*This was a Receive and File item.*

## **9. Other Business**

*There was no other business.*

## **10. Public Comment Period**

*There was no public comment.*

**Next Meeting: July 25, 2014**

### **Attachment**

Attendance

## Attachment A – Attendance

Supervisor John J. Benoit.....	SCAQMD Governing Board (via VT)
Councilman Michael Cacciotti.....	SCAQMD Governing Board
Mayor Judith Mitchell.....	SCAQMD Governing Board (via VT)
Buford Crites .....	Board Assistant (JBenoit)
Chung Liu.....	Board Assistant (Mitchell)
Bob Ulloa .....	Board Assistant (Yates)
Barry Wallerstein, Executive Officer.....	SCAQMD
John Olvera, Principal Deputy District Counsel .....	SCAQMD
Matt Miyasato, STA.....	SCAQMD
Henry Hogo, STA.....	SCAQMD
Laki Tisopulos, STA .....	SCAQMD
Randall Pasek, STA.....	SCAQMD
Andrea Polidori, STA.....	SCAQMD
Dean Saito, STA.....	SCAQMD
Connie Day, STA .....	SCAQMD
Drue Hargis, STA.....	SCAQMD
Lisa Mirisola, STA.....	SCAQMD
Adewale Oshinuga, STA.....	SCAQMD
Anita Shabandari, STA.....	SCAQMD
Shashi Singeetham, STA.....	SCAQMD
Greg Ushijima, STA.....	SCAQMD
Mary Leonard, FIN.....	SCAQMD
Donna Peterson, FIN .....	SCAQMD
Olga Pikelnaya, PRDAS.....	SCAQMD
Robert Paud, IM .....	SCAQMD
Donna Vernon, STA.....	SCAQMD
Pat Krayser, STA.....	SCAQMD
Danielle Robinson .....	CARB
Susan Stark .....	Tesoro
Oscar Abarca .....	TSC-Top Shelf Consulting
PomPom Ganguli .....	TSC-Top Shelf Consulting

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BOARD MEETING DATE: July 11, 2014

AGENDA NO. 34

REPORT: Mobile Source Air Pollution Reduction Review Committee

SYNOPSIS: Below is a summary of key issues addressed at the MSRC's meeting on June 19, 2014. Since the MSRC's meeting in July has been canceled, the next meeting is scheduled for Thursday, August 21, 2014, at 2:00 p.m. in Conference Room CC8.

RECOMMENDED ACTION:

Receive and file.

Michael D. Antonovich  
SCAQMD Representative on MSRC

MM:HH:DAH

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### **Meeting Minutes Approved**

The MSRC unanimously approved the minutes from its May 15, 2014 meeting. Those approved minutes are attached for your information (*Attachment 1*).

### **Traffic Signal Synchronization Program under FYs 2012-14 Work Program**

The FYs 2012-14 Work Program included \$5 million for projects that improve traffic flow along corridors by coordinating traffic signals and associated signal control facilities. The Program was intended to work in partnership with each county transportation commission (CTC) in an effort to enhance or augment their existing signal synchronization efforts and leverage other sources of funding. A geographic minimum of \$1.25 million was set aside for each of the four counties and the MSRC issued an Invitation to Negotiate seeking responses from each CTC. To date the MSRC has approved work plans for each CTC and awarded \$4,689,625, but held \$310,375 in reserve until the Riverside County Transportation Commission (RCTC) completed its Call for Projects in the Coachella Valley. On June 19, 2014, the MSRC awarded the remaining \$310,375 to RCTC for traffic signal synchronization projects in the Coachella Valley. The SCAQMD Board will consider this award to RCTC at its July 11, 2014 meeting.

### **Next Work Program and Update on Regional Workshops**

At its June 19, 2014 meeting, the MSRC discussed the merits of one- and two-year work programs and based on feedback from last year's regional workshops and given that two-year programs may reduce staff costs, the MSRC unanimously concurred that the next work program should be designed on a two-year basis. Additionally, at its last meeting the MSRC had approved a task order for its Outreach Coordinator, The Better World Group, to plan and host regional workshops to solicit stakeholder input on work program categories. Six workshops were scheduled, one in Orange County, one in western Riverside County, one in San Bernardino County, one in the Coachella Valley, and two in Los Angeles County. The workshops have been ongoing since mid-June and will wrap up in early July. The date and location for the MSRC's annual off-site retreat with its Technical Advisory Committee to brainstorm development of its FYs 2014-16 Work Program has yet to be determined, but it will be sometime in August or September.

### **Approval of FY 2014-15 Administrative Budget**

Administrative costs for the AB 2766 Discretionary Program are limited by state to five percent annually of the overall budget. Every year, the MSRC adopts an Administrative Budget for the upcoming fiscal year to ensure costs remain within this limitation. On June 15, 2014, the MSRC adopted its FY 2014-15 Administrative Budget in the amount of \$682,719, which is more \$73,000 below the five percent cap. One MSRC member inquired whether additional resources should be considered in the near future given that over the last few years, like so many agencies, staff has been doing more with less. It was noted that should the MSRC desire to seek additional resources, such as part-time staff, there are sufficient funds in the Administrative Budget. As part of the adoption of the FY 2014-15 Administrative Budget, the MSRC included an allocation of \$56,000 for miscellaneous expenditures, such as postage, office supplies and equipment, advertising, travel, etc. These funds will be transferred to the Science & Technology Advancements FY 2014-15 Budget. Expenses will be tracked and any funds not expended by the end of the fiscal year will be returned to the MSRC. The SCAQMD Board will consider authorization of the fund transfer at its July 11, 2014 meeting.

### **Received and Approved Final Reports**

The MSRC received and unanimously approved nine final report summaries this month as follows:

1. Rim of the World Unified School District Contract #MS12012, which provided \$75,000 for maintenance facility modifications;
2. Los Angeles Service Authority of Freeway Emergencies Contract #MS11058, which provided \$123,395 to develop and deploy a 511 mobile application;
3. Waste Management Collection and Recycling, Inc. Contract #MS11009, which provided \$125,000 to expand an LNG fueling station;

4. USA Waste of California, Inc. Contract #MS11008, which provided \$125,000 to expand an LNG fueling station;
5. Los Angeles County MTA Contract #MS08001, which provided \$1,500,000 to implement big rig freeway service patrols;
6. Orange County Transportation Authority Contract #MS14002, which provided \$576,883 for an Orange County Fair Express Service;
7. Orange County Transportation Authority Contract #MS14004, which provided \$36,800 for an express bus service for the Solar Decathalon;
8. Temecula Valley Unified School District Contract #MS11065, which provided \$50,000 for an expansion of existing CNG infrastructure; and
9. Foothill Transit Contract #MS10012, which provided \$85,399 towards the purchase of 9 electric buses.

### **Contract Modification Requests**

The MSRC considered two contract modification requests and took the following unanimous actions:

1. For California State University, Los Angeles Contract #MS07022, which provides \$250,000 to install a hydrogen station, approval of a 34-month contract term extension; and
2. For Border Valley Trading Contract #MS11010, which provides \$150,000 to construct an LNG fueling station, approval of an 18-month contractual term extension.

### **Contracts Administrator's Report**

The MSRC's AB 2766 Contracts Administrator provides a written status report on all open contracts from FY 2004-05 through the present. The Contracts Administrator's Report for June 2014 is attached (*Attachment 2*) for your information.

### **Attachments**

Attachment 1 – Approved May 15, 2014 Meeting Minutes

Attachment 2 – June 2014 Contracts Administrator's Report



**MOBILE SOURCE AIR POLLUTION REDUCTION REVIEW COMMITTEE  
THURSDAY, MAY 15, 2014 MEETING MINUTES**

21865 Copley Drive, Diamond, Bar, CA 91765- Conference Room CC-8

**MEMBERS PRESENT:**

Michael Antonovich, representing SCAQMD (via v/c)  
Brad McAllester (Alt.), representing LA County MTA (via v/c)  
Larry McCallon, representing SANBAG  
April McKay (Alt.), representing LA County MTA (via v/c)  
Adam Rush (Alt.), representing RCTC  
Greg Winterbottom, representing OCTA  
Earl Withycombe, representing CARB (via v/c)

**MSRC MEMBERS ABSENT:**

(Chair) Greg Pettis, rep. RCTC  
(Vice Chair) Steve Veres, rep. LA County MTA  
Ron Roberts, representing SCAG

**MSRC-TAC MEMBERS PRESENT:**

(MSRC-TAC Chair) Gretchen Hardison, rep. City of Los Angeles (via v/c)  
Kelly Lynn, representing SANBAG  
Dean Saito, representing SCAQMD

**OTHERS PRESENT:**

Debra Ashby, SCAQMD  
Lauren Dunlap, Southern California Gas  
Ric Teano, OCTA

**SCAQMD STAFF & CONTRACTORS**

Ray Gorski, MSRC Technical Advisor-Contractor  
Drue Hargis, Acting Senior Public Information Specialist  
John Kampa, Financial Analyst  
Matt MacKenzie, MSRC Contracts Assistant  
Robert Paud, Telecommunications Technician II  
Ana Ponce, MSRC Administrative Liaison  
Cynthia Ravenstein, MSRC Contracts Administrator  
Veera Tyagi, Senior Deputy District Counsel  
Rachel Valenzuela, MSRC Contracts Assistant



**CALL TO ORDER**

- Call to Order

ON MOTION BY MSRC ALTERNATE ADAM RUSH, AND SECONDED BY MSRC MEMBER LARRY MCCALLON, THE MSRC UNANIMOUSLY APPROVED MSRC MEMBER GREG WINTERBOTTOM TO RUN THE MEETING IN THE ABSENCE OF MSRC CHAIR GREG PETTIS AND MSRC VICE-CHAIR STEVE VERES.

AYES: MCCALLON, WINTERBOTTOM, WITHYCOMBE, MCKAY, MCALLESTER, RUSH

NOES: NONE.

MSRC Member Greg Winterbottom called the meeting to order at 2 p.m.

- Election of MSRC Chair and Vice Chair

[This item was taken out of order following Agenda Item #6.]

The meeting was turned over to Veera Tyagi, Senior Deputy District Counsel, to conduct annual elections.

Nominations for the Chair position were opened.

A MOTION WAS INTRODUCED BY MSRC MEMBER GREG WINTERBOTTOM, AND SECONDED BY MSRC ALTERNATE ADAM RUSH, TO NOMINATE GREG PETTIS AS CHAIR FOR ANOTHER TERM.

No further nominations were offered, so nominations were closed.

THE ABOVE MOTION WAS UNANIMOUSLY APPROVED.  
AYES: MCCALLON, WINTERBOTTOM, WITHYCOMBE, MCKAY, MCALLESTER, RUSH.  
NOES: NONE.

Nominations for the Vice Chair position were opened.

A MOTION WAS INTRODUCED BY MSRC MEMBER GREG WINTERBOTTOM, AND SECONDED BY MSRC ALTERNATE ADAM RUSH, TO NOMINATE MSRC MEMBER LARRY MCCALLON AS VICE CHAIR.

No further nominations were offered, so nominations were closed.

THE ABOVE MOTION WAS UNANIMOUSLY APPROVED.

AYES: MCCALLON, WINTERBOTTOM, WITHYCOMBE,  
MCKAY, MCALLESTER, RUSH.  
NOES: NONE.

Ms. Tyagi turned the meeting over to the newly-elected Vice Chair,  
Larry McCallon.

### **PUBLIC COMMENT PERIOD**

Public comments were allowed during the discussion of each agenda item. No comments were made on non-agenda items.

### **CONSENT CALENDAR (Items 1 through 4)**

#### **Receive and Approve Items**

#### **Agenda Item #1 – Minutes of the April 17, 2014 MSRC Meeting**

The minutes of the April 17, 2014 MSRC meeting were distributed at the meeting. Copies were made available to the public.

ON MOTION BY MSRC MEMBER LARRY MCCALLON, AND  
SECONDED BY MSRC MEMBER EARL WITHYCOMBE, UNDER  
APPROVAL OF CONSENT CALENDAR ITEMS 1 THROUGH 4, THE  
MSRC UNANIMOUSLY APPROVED THE APRIL 17, 2014 MEETING  
MINUTES.

AYES: MCCALLON, WINTERBOTTOM, WITHYCOMBE, MCKAY,  
MCALLESTER, RUSH  
NOES: NONE.

**ACTION:** Staff will place the minutes on the MSRC's website.

#### **Agenda Item #2 – Summary of Final Reports by MSRC Contractors**

The agenda package included two final report summaries: 1) EDCO Disposal Corporation, Contract #MS11011, which provided \$100,000 to construct a CNG fueling station; and 2) City of Los Angeles, Department of Transportation, Contract #MS07008, which provided \$2,040,000 for the purchase of 102 transit buses.

ON MOTION BY MSRC MEMBER LARRY MCCALLON, AND  
SECONDED BY MSRC MEMBER EARL WITHYCOMBE, UNDER  
APPROVAL OF CONSENT CALENDAR ITEMS 1 THROUGH 4, THE  
MSRC UNANIMOUSLY APPROVED THE FINAL REPORTS ABOVE.  
AYES: MCCALLON, WINTERBOTTOM, WITHYCOMBE, MCKAY,  
MCALLESTER, RUSH.  
NOES: NONE.

**ACTION:** MSRC staff will file the final reports and release any retention on the contracts.

**Receive and File Items****Agenda Item #3 – MSRC Contracts Administrator’s Report**

The MSRC AB 2766 Contracts Administrator’s Report for March 27 through April 23, 2014 was included in the agenda package.

ON MOTION BY MSRC MEMBER LARRY MCCALLON, AND SECONDED BY MSRC MEMBER EARL WITHYCOMBE, UNDER APPROVAL OF CONSENT CALENDAR ITEMS 1 THROUGH 4, THE MSRC UNANIMOUSLY APPROVED TO RECEIVE AND FILE THE CONTRACTS ADMINISTRATOR’S REPORT FOR MARCH 27 THROUGH APRIL 23, 2014.

AYES: MCCALLON, WINTERBOTTOM, WITHYCOMBE, MCKAY, MCALLESTER, RUSH.

NOES: NONE.

**ACTION:** SCAQMD staff will include the MSRC Contracts Administrator’s Report in the MSRC Committee Report for the June 6, 2014 SCAQMD Board meeting.

**Agenda Item #4 – Financial Report on AB 2766 Discretionary Fund**

A financial report on the AB 2766 Discretionary Fund for the period ending April 30, 2014 was included in the agenda package.

ON MOTION BY MSRC MEMBER LARRY MCCALLON, AND SECONDED BY MSRC MEMBER EARL WITHYCOMBE, UNDER APPROVAL OF CONSENT CALENDAR ITEMS 1 THROUGH 4, THE MSRC UNANIMOUSLY APPROVED TO RECEIVE AND FILE THE FINANCIAL REPORT FOR THE PERIOD ENDING APRIL 30, 2014.

AYES: MCCALLON, WINTERBOTTOM, WITHYCOMBE, MCKAY, MCALLESTER, RUSH.

NOES: NONE.

**ACTION:** No further action is required.

**ACTION CALENDAR (Items 5 through 7)****Agenda Item #5 – Consider Contract Value Increase by A-Z Bus Sales, Contract #MS14009 (\$160,000 – Incentives for Alternative Fuel School Buses)**

Cynthia Ravenstein, MSRC Contracts Administrator, reported that this request is from A-Z Bus Sales. They are one of two school bus vendors that the MSRC has deemed qualified to provide incentives under the Alternative Fuel School Bus Incentive Program. The contract is funded as purchase orders are received from qualified providers of transportation services. The existing contract has been funded in the amount of \$160,000. Now they received a purchase order from Tumbleweed Transportation for 10 Type C propane school buses, which qualifies for an incentive amount of \$9,000 per bus.

Therefore, in order to provide incentives for those buses, they are requesting an additional \$90,000 to their contract. The MSRC-TAC has reviewed their request, and recommended approval.

MSRC Member Greg Winterbottom said that leaves \$1.3 million still in the budget. Ray Gorski, MSRC Technical Advisor added that the contracts go to December 31, 2014.

ON MOTION BY MSRC ALTERNATE ADAM RUSH, AND  
SECONDED BY MSRC MEMBER LARRY MCCALLON, THE MSRC  
UNANIMOUSLY APPROVED A-Z BUS SALES' REQUEST FOR A  
CONTRACT VALUE INCREASE OF \$90,000 TO PROVIDE  
INCENTIVES FOR THE PURCHASE OF 10 ALTERNATIVE FUEL  
SCHOOL BUSES BY TUMBLEWEED TRANSPORTATION, AS  
PART OF THE FYS 2012-14 ALTERNATIVE FUEL SCHOOL BUS  
INCENTIVES PROGRAM.

AYES: MCCALLON, WINTERBOTTOM, WITHYCOMBE, MCKAY,  
MCALLESTER, RUSH.

NOES: NONE.

**ACTION:** SCAQMD staff will request approval of this award at the June 6, 2014 SCAQMD Board meeting.

#### **Agenda Item #6 – Consider Workshops to Solicit Input for FY 2014-15 Work Program**

Cynthia Ravenstein, MSRC Contracts Administrator, presented this item on behalf of MSRC-TAC Chair Gretchen Hardison, who was participating in the meeting from a remote location. Plans are underway to get started on the next Work Program cycle. Still to be determined by the MSRC is whether it will be a one-year or two-year work program. It is not a decision that needs to be made at this point. Prior to approving the past couple of work programs, the MSRC conducted workshops to solicit input from stakeholders throughout the geographic region. The idea is to move forward with those workshops prior to the MSRC retreat. There is funding available in the contract with The Better World Group (BWG), the Programmatic Outreach Coordinator, which is not currently allocated to any tasks. They provided a quote for doing five workshops or six workshops. The MSRC-TAC considered that input and recommended to have six workshops. That would provide one workshop in every county, a second one in Los Angeles County at a different location, plus an extra one in the Coachella Valley. Anybody can attend any workshop. If the date in their county is not convenient for them, they can attend at another location. All the information will be brought back to the MSRC.

The TAC recommended going with the six-workshop approach for a total of \$18,720. Some work has already begun in terms of coordinating dates for workshops in Riverside and San Bernardino to be in the morning and afternoon of June 25; and tentatively scheduled in the Coachella Valley on June 24. Since this staff report went to print, the workshop in Orange County has been scheduled for June 18. They are still working on getting the L.A. County workshops scheduled. The hope is to have them in June, or July at the latest. This request and the recommendation from the TAC is to authorize issuing a

Task Order against BWG's contract. Therefore, additional funds do not have to be allocated. This request is to issue a Task Order in the amount of \$18,720 for BWG to coordinate and implement the six workshops.

MSRC Alternate Adam Rush asked if staff could provide a little bit of background on the last few workshops that were done; what has been done since then, the pluses and minuses; and what may need to be carried over to the third set of workshops; a chronology. Ray Gorski, MSRC Technical Advisor, replied that staff has written documentation or reports that summarize the last two events. They recently went through an exercise to assess what they have accomplished during this Work Program period as a result of those workshops and what they feel were outstanding items that they want to bring forth for MSRC consideration, as unmet need. That information can be sent to the MSRC members immediately, because it has already been written.

Larry McCallon asked where the workshops are being held. Ms. Ravenstein replied that the one in Riverside will be at RCTC; at SANBAG in San Bernardino; at City of Cathedral City in Coachella Valley; and at OCTA Headquarters in Orange County. One of the Los Angeles workshops will be at Metro, and the other one is being considered someplace in the San Fernando Valley.

Mr. McCallon asked how well the workshops are attended. Mr. Gorski said that attendance varies. They were all very well attended last year. At one of the venues, in Los Angeles County, the large conference room was almost full to capacity. There was very good press coverage at the Coachella Valley, which was hosted by Cathedral City. Attendance was in the tens. A lot of times attendees are representing an agency, so they send a spokesperson from that agency to provide perspective on how the MSRC can best invest their resources. San Bernardino's was very well attended. Mr. McCallon indicated that SCAG has a good videoconferencing network that goes out to five or six locations, to every county, and has a nice venue in Downtown Los Angeles, to get even more participation. He's sure SCAG would be willing to make the venue available and all the videoconferencing available throughout the region. Mr. Gorski said they would work with SCAG to find out when it would be within their operations to host the MSRC and provide an update at the next MSRC meeting. MSRC Member Greg Winterbottom added that rarely does the public attend. It is usually staff from the different communities that bring information.

MSRC-TAC Member Dean Saito asked if it was known last year, before the workshops took place, whether the MSRC was doing a one- or two-year work program. Mr. Gorski said no.

MSRC Member Earl Withycombe asked if discussions have commenced on holding a retreat to review the material, analysis of workshop comments, and presentations from my agency, SCAQMD, and others, in putting together a workplan for the next one or two years? Mr. Gorski stated that typically they try to host the workshops, compile the information, publish it in the form of a report and then take that to the MSRC as the point of departure for deliberations. Looking at the timeline, considering we are starting in June, we are probably looking at August as being a realistic time to get everything ready for MSRC consideration.

MSRC Member Greg Winterbottom asked if the two-year work program could be addressed today, if it is not agendaized. Veera Tyagi, Senior Deputy District Counsel, indicated that the item would have to be on the agenda. Mr. Winterbottom would like to have the one or two-year work program discussion added to the agenda next month.

ON MOTION BY MSRC ALTERNATE ADAM RUSH, AND  
SECONDED BY MSRC MEMBER EARL WITHYCOMBE, THE  
MSRC UNANIMOUSLY APPROVED THE ISSUANCE OF A TASK  
ORDER TO THE BETTER WORLD GROUP TO COORDINATE AND  
IMPLEMENT SIX WORKSHOPS FOR THE MSRC'S FY 2014-15  
WORK PROGRAM, IN AN AMOUNT NOT TO EXCEED \$18,720.  
AYES: MCCALLON, WINTERBOTTOM, WITHYCOMBE, MCKAY,  
MCALLESTER, RUSH.  
NOES: NONE.

**ACTION:** MSRC staff will issue a Task Order to The Better World Group.

[After completion of Agenda Item #6, the Committee returned to the Election of MSRC Chair and Vice Chair.]

### **FYs 2012-14 WORK PROGRAM**

#### **Agenda Item #7 – Consider Work Plan Received under the Signal Synchronization Program**

Ray Gorski, MSRC Technical Advisor, reported that this is a continuation of one of the Work Program elements for regional signal coordination. This was a program in which the County Transportation Commissions (CTCs) were each asked to bring forth a set of programs which would benefit from signal synchronization and signal coordination. To date, the MSRC has already entertained programs put forth by Metro and OCTA. The Riverside County Transportation Commission has put forth a program which the MSRC has approved in part. RCTC has made their final submission, and it is being reviewed by the TCM Subcommittee. A recommendation will be forthcoming on next month's agenda.

[MSRC Member Michael Antonovich arrived at the videoconference site at 2:20 p.m.; a quorum was already present. MSRC Member Greg Winterbottom informed Mr. Antonovich that Larry McCallon was elected the new MSRC Vice-Chair and is running today's meeting.]

Mr. Gorski said that the MSRC set aside \$5 million total for this Work Program category. Today for consideration is the program which was presented from San Bernardino on behalf of SANBAG. It begins on superpage 43, but the real information is on superpage 45. San Bernardino is recommending 7 specific projects, totaling \$1.25 million in MSRC money, which is also leveraged with over 0.75 million dollars in local match for an overall program with a value of greater than \$2 million. The 7 projects are listed on superpage 45, but you can see that project 1 is from the City of Yucaipa; Project 2 is in the City of Highland, as is Project 3; Project 4 which is going to be looking at traffic coordination along a corridor which is in Colton; and then Ontario and Chino round out

Projects 5 and 6; Project 7 is one that is in cooperation with CalTrans and this will be implemented within Rancho Cucamonga. To select these projects SANBAG held a Call for Projects in which all the jurisdictions were able to put forth their needs relative to signal coordination and synchronization. They held an evaluation committee meeting and picked what they felt were the best seven projects. This represents San Bernardino's best estimate of where the MSRC moneys can most effectively help alleviate traffic congestion leading towards air quality improvements.

MSRC Member Greg Winterbottom asked if all the counties have reached their \$1.25 million set aside. Mr. Gorski said yes, with the exception of RCTC. They have a little over \$300,000 reserved for them; however, staff has received their supplemental proposal. It is for a project that is going to be developed within the Coachella Valley. It is currently going through the TCM Subcommittee process. It will be brought to the MSRC for consideration next month.

Mr. Winterbottom asked if there is any other money to put into Signal Synchronization. Mr. Gorski said that there are several options which are available to the MSRC. This program, for all intents and purposes, has fulfilled the Opportunity to Negotiate which was sent to the CTCs. Therefore, this one, as of the next MSRC meeting, will be 100 percent complete. We are on top of the next work program. There are, however, additional unallocated funds, at least a small amount, within the MSRC balance. There are projects in categories that will not happen, as has been discussed in prior meetings, because of conflicts that have been encountered. Therefore, expect to have a healthy pot of funding to start considering new program categories coincident with the retreat which will be held in a couple of months. That money could just roll over.

Mr. Winterbottom asked how the two-year versus the one-year work program worked. Mr. Gorski indicated that from staff's perspective we are developing much more complex programs, and they take longer time. Additionally, projects such as the one the MSRC just considered, also take additional coordination and time to implement. In his perspective, it has some charm. Also, when the MSRC goes out into the communities and says that they have on the order of in excess of \$30 million dollars, that really gets people's attention and it gives the MSRC the ability to consider very robust programs, which a lot of agencies do not have the ability to implement. Mr. Winterbottom added that the programs are longer-ranging, as well.

ON MOTION BY MSRC MEMBER GREG WINTERBOTTOM, AND  
SECONDED BY MSRC ALTERNATE ADAM RUSH, THE MSRC  
UNANIMOUSLY APPROVED AN AWARD TO SANBAG IN THE  
AMOUNT OF \$1.25 MILLION FOR TRAFFIC SIGNAL  
COORDINATION AND RELATED PROJECTS, AS PART OF THE  
FY 2012-2014 TRAFFIC SIGNAL COORDINATION CTC  
PARTNERSHIP PROGRAM.

AYES: MCCALLON, ANTONOVICH, WINTERBOTTOM,  
WITHYCOMBE, MCKAY, MCALLESTER, RUSH.

NOES: NONE.

Veera Tyagi, Senior Deputy District Council reminded MSRC Vice Chair Larry McCallon of the new disclosure requirement and offered to do it for him. Mr. McCallon agreed. Ms. Tyagi stated that for Agenda Item #7, Mr. McCallon is not required to recuse himself but needs to disclose for the record that he is a member of the Board of Directors for San Bernardino Association of Governments, which is involved in the item. Mr. McCallon added that he is also Mayor Pro Tem of the City of Highland, which has two projects.

**ACTION:** SCAQMD staff will request approval of this award at the June 6, 2014 SCAQMD Board meeting.

### **OTHER BUSINESS**

#### **Item #8 – Other Business**

- Ray Gorski mentioned that April 23 was the grand opening of the new hydrogen refueling station at Cal State Los Angeles. The MSRC was represented by MSRC Chair Greg Pettis. The Executive Director of the California Air Resources Board, elected officials from the Assembly, as well as faculty and administrators from Cal State L.A. also attended. This event drew very favorable press. It was widely reported that the MSRC had made a funding contribution to this project. According to the University, the MSRC was instrumental in bringing this station to fruition.
- MSRC Member Greg Winterbottom reported that he and MSRC Alternate Tim Shaw attended the dedication of the Timco CNG station in Santa Ana on Earth Day, April 22. The MSRC received some good press at this event, as well.

### **ADJOURNMENT**

THERE BEING NO FURTHER BUSINESS, THE MSRC MEETING  
ADJOURNED AT 2:29 P.M.

### **NEXT MEETING:**

Thursday, June 19, 2014, 2:00 p.m., Conference Room CC8

[Prepared by Ana Ponce]





MSRC Agenda Item No. 3

**DATE:** June 19, 2014

**FROM:** Cynthia Ravenstein

**SUBJECT:** AB 2766 Contracts Administrator's Report

**SYNOPSIS:** This report covers key issues addressed by MSRC staff, status of open contracts, and administrative scope changes from April 24 through May 28, 2014.

**RECOMMENDATION:** Receive and file report

**WORK PROGRAM IMPACT:** None

**Contract Execution Status**

**2012-14 Work Program**

On April 5, 2013, the SCAQMD Governing Board approved three awards under the Event Center Transportation Program. These contracts are undergoing internal review or executed.

On July 5, 2013, the SCAQMD Governing Board approved an additional award to Orange County Transportation Authority under the Event Center Transportation Program. This contract is executed.

On September 6, 2013, the SCAQMD Governing Board approved an award to Transit Systems Unlimited under the Event Center Transportation Program. This contract is executed.

On November 1, 2013, the SCAQMD Governing Board approved two awards under the Event Center Transportation Program. These contracts are with the prospective contractor or SCAQMD Board Chair for signature.

On December 6, 2013, the SCAQMD Governing Board approved 25 awards under the Local Government Match Program, 12 awards under the Alternative Fuel Infrastructure Program, one award under the Alternative Fuel School Bus Incentives Program, and one award under the Event Center Transportation Program. These contracts are under development, undergoing internal review, with the prospective contractor for signature, with the SCAQMD Board Chair for signature, or executed.

On January 10, 2014, the SCAQMD Governing Board approved three awards under the Local Government Match Program, one award under the Alternative Fuel Infrastructure Program, and one award under the Alternative Fuel School Bus Incentives Program. These contracts are undergoing internal review, with the prospective contractor for signature, or executed.

On February 7, 2014, the SCAQMD Governing Board approved two awards under the Local Government Match Program and one award under the Alternative Fuel Infrastructure Program. These contracts are undergoing internal review or with the prospective contractor for signature.

On April 4, 2014, the SCAQMD Governing Board approved two awards under the Local Government Match Program and three awards under the Traffic Signal Synchronization Partnership Program. These contracts are under development or undergoing internal review.

On May 2, 2014, the SCAQMD Governing Board approved 12 awards under the Local Government Match Program. These contracts are under development.

### **Work Program Status**

Contract Status Reports for work program years with open and pending contracts are attached. MSRC or MSRC-TAC members may request spreadsheets covering any other work program year.

#### ***FY 2004-05 Work Program Contracts***

One contract from this work program year is open.

#### ***FY 2004-05 Invoices Paid***

No invoices were paid during this period.

#### ***FY 2005-06 Work Program Contracts***

4 contracts from this work program year are open; and 9 are in "Open/Complete" status, having completed all obligations save ongoing operation.

#### ***FY 2005-06 Work Program Invoices Paid***

No invoices were paid during this period.

#### ***FY 2006-07 Work Program Contracts***

7 contracts from this work program year are open; and 27 are in "Open/Complete" status.

#### ***FY 2006-07 Invoices Paid***

One invoice in the amount of \$190,000.00 was paid during this period.

#### ***FY 2007-08 Work Program Contracts***

12 contracts from this work program year are open; and 41 are in "Open/Complete" status.

#### ***FY 2007-08 Invoices Paid***

No invoices were paid during this period.

#### ***FY 2008-09 Work Program Contracts***

7 contracts from this work program year are open; and 13 are in "Open/Complete" status.

#### ***FY 2008-09 Invoices Paid***

No invoices were paid during this period.

#### ***FY 2009-10 Work Program Contracts***

8 contracts from this work program year are open; and 9 are in "Open/Complete" status.

*FY 2009-10 Invoices Paid*

One invoice in the amount of \$9,489.00 was paid during this period.

***FY 2010-11 Work Program Contracts***

44 contracts from this work program year are open; and 11 are in “Open/Complete” status. One proposed contract with the County of Los Angeles Department of Public Works is still with them for signature; the County estimates it will be considered for approval by their Board in May or June 2014. One proposed contract with the Los Angeles Unified School District is with them for signature following MSRC approval of modifications. Lastly, one proposed contract with Ivanhoe Energy Services and Development is still with the prospective contractor for signature. Ivanhoe indicates that one of their supplier companies is undergoing a reorganization; Ivanhoe is waiting to learn whether they can move forward and will provide an answer by July 31, 2014.

*FY 2010-11 Invoices Paid*

5 invoices totaling \$247,363.75 were paid during this period.

***FY 2011-12 Work Program Contracts***

65 contracts from this work program year are open, and 7 are in “Open/Complete” status. One contract passed into “Open/Complete” status during this period: City of Chino Hills, Contract #ML12042 – Expand Existing CNG station. Two proposed contracts, one with the City of Rialto and one with Brea Olinda Unified School District, are with the prospective contractors following approval of modifications.

*FY 2011-12 Invoices Paid*

3 invoices totaling \$105,600.00 were paid during this period.

***FYs 2012-14 Work Program Contracts***

8 contracts from this work program year are open.

*FYs 2012-14 Invoices Paid*

One invoice in the amount of \$124,000.00 was paid during this period.

***Administrative Scope Changes***

No administrative scope changes were initiated during the period of April 24 to May 28, 2014.

***Infrastructure Throughput Resolution***

Letters concerning the potential for negotiating alternative remedies were previously sent to all MSRC Infrastructure Program contractors who have open contracts and have received reimbursements for their projects (i.e. stations have commenced operation). During this reporting period:

- A tentative agreement has been negotiated with one contractor, and a corresponding contract modification has been sent out for signature.

***Attachments***

- FY 2004-05 through FYs 2012-14 Contract Status Reports



## AB2766 Discretionary Fund Program Invoices

April 24, 2014 to May 28, 2014

Contract Admin.	MSRC Chair	MSRC Liaison	Finance	Contract #	Contractor	Invoice #	Amount
<i>2006-2007 Work Program</i>							
5/16/2014	5/23/2014	5/27/2014	5/27/2014	MS07008	City of Los Angeles, Department of Transportati	Final	\$190,000.00
<b>Total: \$190,000.00</b>							
<i>2009-2010 Work Program</i>							
4/30/2014	5/2/2014	5/9/2014	5/13/2014	MS10021	City of Glendora	111000010-F	\$9,489.00
<b>Total: \$9,489.00</b>							
<i>2010-2011 Work Program</i>							
5/23/2014	5/23/2014	5/27/2014	5/27/2014	MS11056	The Better World Group	1306	\$12,063.75
5/23/2014	5/23/2014	5/27/2014	5/27/2014	MS11001	Mineral LLC	100618	\$300.00
5/16/2014	5/23/2014	5/27/2014	5/27/2014	MS11011	EDCO Disposal Corporation	Final	\$10,000.00
4/29/2014	5/2/2014	5/9/2014	5/13/2014	MS11009	USA Waste of California, Inc.	1	\$112,500.00
4/29/2014	5/2/2014	5/9/2014	5/13/2014	MS11008	USA Waste of California, Inc.	1	\$112,500.00
<b>Total: \$247,363.75</b>							
<i>2011-2012 Work Program</i>							
5/27/2014	6/11/2014	6/12/2014		MS12012	Rim of the World Unified School District	5826	\$71,250.00
5/16/2014	5/23/2014	5/27/2014	5/27/2014	MS12087	Los Angeles County MTA	70267-Final	\$4,350.00
5/16/2014	5/23/2014	5/27/2014	5/27/2014	ML12047	City of Orange	IL-12047-Fin	\$30,000.00
<b>Total: \$105,600.00</b>							
<i>2012-2014 Work Program</i>							
5/21/2014	5/23/2014	5/27/2014	5/27/2014	MS14009	A-Z Bus Sales, Inc.	B2271	\$124,000.00
<b>Total: \$124,000.00</b>							

**Total This Period: \$676,452.75**

## FYs 2004-05 Through 2012-14 AB2766 Contract Status Report

6/12/2014

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
<b>FY 2004-2005 Contracts</b>									
<b>Open Contracts</b>									
ML05014	Los Angeles County Department of	5/21/2007	11/20/2008	3/20/2016	\$204,221.00	\$0.00	Traffic Signal Synchronization	\$204,221.00	No
<b>Total: 1</b>									
<b>Declined/Cancelled Contracts</b>									
ML05005	City of Highland				\$20,000.00	\$0.00	2 Medium Duty CNG Vehicles	\$20,000.00	No
ML05008	Los Angeles County Department of				\$140,000.00	\$0.00	7 Heavy Duty LPG Street Sweepers	\$140,000.00	No
ML05010	Los Angeles County Department of				\$20,000.00	\$0.00	1 Heavy Duty CNG Bus	\$20,000.00	No
<b>Total: 3</b>									
<b>Closed Contracts</b>									
ML05006	City of Colton Public Works	7/27/2005	7/26/2006		\$30,000.00	\$30,000.00	3 Medium Duty CNG Vehicles	\$0.00	Yes
ML05011	Los Angeles County Department of	8/10/2006	12/9/2007	6/9/2008	\$52,409.00	\$51,048.46	3 Heavy Duty LPG Shuttle Vans	\$1,360.54	Yes
ML05013	Los Angeles County Department of	1/5/2007	7/4/2008	1/4/2013	\$313,000.00	\$313,000.00	Traffic Signal Synchronization	\$0.00	Yes
ML05015	City of Lawndale	7/27/2005	7/26/2006		\$10,000.00	\$10,000.00	1 Medium Duty CNG Vehicle	\$0.00	Yes
ML05016	City of Santa Monica	9/23/2005	9/22/2006	9/22/2007	\$350,000.00	\$350,000.00	6 MD CNG Vehicles, 1 LPG Sweep, 13 CNG	\$0.00	Yes
ML05017	City of Signal Hill	1/16/2006	7/15/2007		\$126,000.00	\$126,000.00	Traffic Signal Synchronization	\$0.00	Yes
ML05018	City of San Bernardino	4/19/2005	4/18/2006		\$40,000.00	\$40,000.00	4 M.D. CNG Vehicles	\$0.00	Yes
ML05019	City of Lakewood	5/6/2005	5/5/2006		\$10,000.00	\$10,000.00	1 M.D. CNG Vehicle	\$0.00	Yes
ML05020	City of Pomona	6/24/2005	6/23/2006		\$10,000.00	\$10,000.00	1 M.D. CNG Vehicle	\$0.00	Yes
ML05021	City of Whittier	7/7/2005	7/6/2006	4/6/2008	\$100,000.00	\$80,000.00	Sweeper, Aerial Truck, & 3 Refuse Trucks	\$20,000.00	Yes
ML05022	City of Claremont	9/23/2005	9/22/2006		\$20,000.00	\$20,000.00	2 M.D. CNG Vehicles	\$0.00	Yes
ML05024	City of Cerritos	4/18/2005	3/17/2006		\$10,000.00	\$10,000.00	1 M.D. CNG Vehicle	\$0.00	Yes
ML05025	City of Malibu	5/6/2005	3/5/2006		\$10,000.00	\$10,000.00	1 Medium-Duty CNG Vehicle	\$0.00	Yes
ML05026	City of Inglewood	1/6/2006	1/5/2007	2/5/2009	\$60,000.00	\$60,000.00	2 CNG Transit Buses, 1 CNG Pothole Patch	\$0.00	Yes
ML05027	City of Beaumont	2/23/2006	4/22/2007	6/22/2010	\$20,000.00	\$20,000.00	1 H.D. CNG Bus	\$0.00	Yes
ML05028	City of Anaheim	9/8/2006	9/7/2007	5/7/2008	\$85,331.00	\$85,331.00	Traffic signal coordination & synchronization	\$0.00	Yes
ML05029	Los Angeles World Airports	5/5/2006	9/4/2007		\$140,000.00	\$140,000.00	Seven CNG Buses	\$0.00	Yes
ML05071	City of La Canada Flintridge	1/30/2009	1/29/2011		\$20,000.00	\$20,000.00	1 CNG Bus	\$0.00	Yes
ML05072	Los Angeles County Department of	8/24/2009	5/23/2010	1/23/2011	\$349,000.00	\$349,000.00	Traffic Signal Synchronization (LADOT)	\$0.00	Yes
<b>Total: 19</b>									
<b>Closed/Incomplete Contracts</b>									

<b>Cont.#</b>	<b>Contractor</b>	<b>Start Date</b>	<b>Original End Date</b>	<b>Amended End Date</b>	<b>Contract Value</b>	<b>Remitted</b>	<b>Project Description</b>	<b>Award Balance</b>	<b>Billing Complete?</b>
ML05007	Los Angeles County Dept of Beache	6/23/2006	6/22/2007	12/22/2007	\$50,000.00	\$0.00	5 Medium Duty CNG Vehicles	\$50,000.00	No
ML05009	Los Angeles County Department of	6/22/2006	12/21/2007	9/30/2011	\$56,666.00	\$0.00	2 Propane Refueling Stations	\$56,666.00	No
ML05012	Los Angeles County Department of	11/10/2006	5/9/2008	1/9/2009	\$349,000.00	\$0.00	Traffic Signal Synchronization (LADOT)	\$349,000.00	No
ML05023	City of La Canada Flintridge	3/30/2005	2/28/2006	8/28/2008	\$20,000.00	\$0.00	1 CNG Bus	\$20,000.00	No

**Total: 4**

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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### **FY 2005-2006 Contracts**

#### **Open Contracts**

ML06031	City of Inglewood	4/4/2007	6/3/2013	9/3/2015	\$150,000.00	\$65,602.40	Purchase 4 H-D LPG Vehicles & Install LPG	\$84,397.60	No
ML06035	City of Hemet, Public Works	11/10/2006	12/9/2012	10/9/2014	\$414,000.00	\$175,000.00	7 Nat Gas Trucks & New Nat Gas Infrastruct	\$239,000.00	No
ML06054	Los Angeles County Department of	6/17/2009	6/16/2016		\$150,000.00	\$0.00	3 CNG & 3 LPG HD Trucks	\$150,000.00	No
ML06070	City of Colton	4/30/2008	2/28/2015	4/30/2015	\$50,000.00	\$0.00	Two CNG Pickups	\$50,000.00	No

**Total: 4**

#### **Pending Execution Contracts**

ML06071	City of Santa Monica				\$149,925.00	\$0.00	3 H.D. CNG Trucks & CNG Fueling Station	\$149,925.00	No
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**Total: 1**

#### **Declined/Cancelled Contracts**

ML06018	Los Angeles County Dept of Beache				\$375,000.00	\$0.00	New CNG Station & 2 CNG Dump Trucks	\$375,000.00	No
ML06019	Los Angeles County Dept of Beache				\$250,000.00	\$0.00	New CNG Station & 2 CNG Dump Trucks	\$250,000.00	No
ML06023	City of Baldwin Park	6/16/2006	9/15/2012		\$20,000.00	\$0.00	CNG Dump Truck	\$20,000.00	No
ML06024	City of Pomona	8/3/2007	7/2/2013	7/2/2014	\$286,450.00	\$0.00	New CNG Station	\$286,450.00	No
ML06030	City of Burbank	3/19/2007	9/18/2011		\$287,700.00	\$0.00	New CNG Fueling Station	\$287,700.00	No
ML06037	City of Lynwood				\$25,000.00	\$0.00	1 Nat Gas Dump Truck	\$25,000.00	No
ML06039	City of Inglewood	2/9/2007	2/8/2008	4/8/2011	\$50,000.00	\$0.00	Modify Maintenance Facility for CNG Vehicle	\$50,000.00	No
ML06055	City of Los Angeles, Dept. of Genera				\$125,000.00	\$0.00	5 Gas-Electric Hybrid Buses	\$125,000.00	No
ML06059	City of Fountain Valley				\$25,000.00	\$0.00	One H.D. CNG Truck	\$25,000.00	No
MS06009	Clean Energy Fuels Corp.	6/23/2006	12/22/2012		\$250,000.00	\$0.00	New CNG Station - Laguna Niguel	\$250,000.00	Yes
MS06040	Capistrano Unified School District				\$136,000.00	\$0.00	New CNG Fueling Station	\$136,000.00	No
MS06041	Clean Energy Fuels Corp.	12/1/2006	3/31/2013	6/18/2009	\$250,000.00	\$0.00	New CNG Station-Newport Beach	\$250,000.00	No
MS06046	City of Long Beach, Dept. of Public				\$250,000.00	\$0.00	LNG Fueling Station	\$250,000.00	No
MS06051	Menifee Union School District	3/2/2007	7/1/2014		\$150,000.00	\$0.00	CNG Fueling Station	\$150,000.00	No

**Total: 14**

#### **Closed Contracts**

ML06016	City of Whittier	5/25/2006	5/24/2012	11/24/2012	\$50,000.00	\$50,000.00	2 CNG Refuse Trucks	\$0.00	Yes
ML06017	City of Claremont	8/2/2006	4/1/2012		\$50,000.00	\$50,000.00	2 CNG Refuse Trucks	\$0.00	Yes
ML06020	Los Angeles Department of Water a	3/19/2007	9/18/2013	4/18/2014	\$25,000.00	\$25,000.00	CNG Aerial Truck	\$0.00	Yes
ML06021	Los Angeles World Airports	9/13/2006	5/12/2013		\$150,000.00	\$150,000.00	6 CNG Buses	\$0.00	Yes
ML06022	City of Los Angeles, Bureau of Sanit	5/4/2007	1/3/2014		\$1,250,000.00	\$1,250,000.00	50 LNG Refuse Trucks	\$0.00	Yes
ML06026	City of Cerritos	10/27/2006	9/26/2010		\$60,500.00	\$60,500.00	CNG Station Upgrade	\$0.00	Yes
ML06027	City of Redondo Beach	9/5/2006	5/4/2012	10/4/2012	\$50,000.00	\$50,000.00	2 Heavy-Duty CNG Trucks	\$0.00	Yes
ML06028	City of Pasadena	9/29/2006	11/28/2012	3/28/2014	\$245,000.00	\$245,000.00	New CNG Station & Maint. Fac. Upgrades	\$0.00	Yes
ML06029	City of Culver City Transportation De	9/29/2006	8/28/2012	12/28/2012	\$50,000.00	\$50,000.00	2 CNG Heavy-Duty Trucks	\$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML06032	City of Rancho Cucamonga	2/13/2007	3/12/2013	2/12/2014	\$237,079.00	\$237,079.00	New CNG Station & 2 CNG Dump Trucks	\$0.00	Yes
ML06033	City of Cathedral City	11/17/2006	12/16/2012	12/16/2013	\$125,000.00	\$125,000.00	5 Heavy-Duty CNG Trucks	\$0.00	Yes
ML06034	City of South Pasadena	9/25/2006	9/24/2012		\$16,422.42	\$16,422.42	2 Nat. Gas Transit Buses	\$0.00	Yes
ML06036	City of Riverside	3/23/2007	3/22/2013		\$200,000.00	\$200,000.00	8 Heavy-Duty Nat Gas Vehicles	\$0.00	Yes
ML06038	City of Los Angeles, Department of	5/21/2007	1/20/2014		\$625,000.00	\$625,000.00	25 CNG Street Sweepers	\$0.00	Yes
ML06044	City of Pomona	12/15/2006	3/14/2013		\$50,000.00	\$50,000.00	2 CNG Street Sweepers	\$0.00	Yes
ML06052	City of Hemet, Public Works	4/20/2007	2/19/2013		\$25,000.00	\$25,000.00	Purchase One CNG Dump Truck	\$0.00	Yes
ML06053	City of Burbank	5/4/2007	7/3/2013		\$125,000.00	\$125,000.00	Five Nat. Gas Refuse Trucks	\$0.00	Yes
ML06056	City of Los Angeles, Dept. of Genera	11/30/2007	11/29/2008		\$350,000.00	\$350,000.00	Maintenance Facility Mods.	\$0.00	Yes
ML06058	City of Santa Monica	7/12/2007	7/11/2013		\$149,925.00	\$0.00	3 H.D. CNG Trucks & CNG Fueling Station	\$149,925.00	No
ML06060	City of Temple City	6/12/2007	6/11/2013		\$31,885.00	\$0.00	Upgrade existing CNG infrastructure	\$31,885.00	No
ML06061	City of Chino Hills	4/30/2007	4/29/2013		\$25,000.00	\$25,000.00	One H.D. CNG Vehicle	\$0.00	Yes
ML06062	City of Redlands	5/11/2007	5/10/2013		\$100,000.00	\$100,000.00	4 H.D. LNG Vehicles	\$0.00	Yes
ML06063	City of Moreno Valley	3/23/2007	11/22/2012		\$25,000.00	\$25,000.00	One H.D. CNG Vehicle	\$0.00	Yes
ML06065	City of Walnut	6/29/2007	6/28/2013		\$44,203.00	\$44,203.00	Upgrade Existing CNG Infrastructure	\$0.00	Yes
ML06066	City of Ontario	5/30/2007	1/29/2013		\$125,000.00	\$125,000.00	5 H.D. CNG Vehicles	\$0.00	Yes
ML06068	City of Claremont	8/28/2007	6/27/2013		\$60,000.00	\$60,000.00	Expand existing CNG infrastructure	\$0.00	Yes
ML06069	City of Palos Verdes Estates	11/19/2007	11/18/2013		\$25,000.00	\$25,000.00	One H.D. CNG Vehicle	\$0.00	Yes
MS06001	Riverside County Transportation Co	8/3/2007	9/2/2011		\$825,037.00	\$825,037.00	New Freeway Service Patrol	\$0.00	Yes
MS06002	Orange County Transportation Autho	11/7/2007	11/6/2013		\$928,740.00	\$925,091.00	New Freeway Service Patrol	\$3,649.00	Yes
MS06003	San Bernardino Associated Govern	10/19/2006	6/18/2010		\$804,240.00	\$804,239.87	New Freeway Service Patrol	\$0.13	Yes
MS06004	Los Angeles County MTA	8/10/2006	7/9/2010		\$1,391,983.00	\$1,391,791.98	New Freeway Service Patrol	\$191.02	Yes
MS06010	US Airconditioning Distributors	12/28/2006	6/27/2012		\$83,506.00	\$83,506.00	New CNG Station - Industry	\$0.00	Yes
MS06011	County Sanitation Districts of L.A. C	6/1/2006	7/31/2012		\$150,000.00	\$150,000.00	New CNG Station - Carson	\$0.00	Yes
MS06042	Clean Energy Fuels Corp.	1/5/2007	1/4/2013		\$150,000.00	\$150,000.00	New CNG Station-Baldwin Park	\$0.00	Yes
MS06043X	Westport Fuel Systems, Inc.	2/3/2007	12/31/2010	9/30/2011	\$2,000,000.00	\$2,000,000.00	Advanced Natural Gas Engine Incentive Pro	\$0.00	Yes
MS06045	Orange County Transportation Autho	8/17/2007	12/16/2013		\$200,000.00	\$200,000.00	CNG Fueling Station/Maint. Fac. Mods	\$0.00	Yes
MS06047	Hemet Unified School District	9/19/2007	11/18/2013		\$125,000.00	\$125,000.00	CNG Refueling Station	\$0.00	Yes
MS06050	Rossmoor Pastries	1/24/2007	10/23/2012		\$18,750.00	\$14,910.50	CNG Fueling Station	\$3,839.50	Yes

**Total: 38**

**Open/Complete Contracts**

ML06025	City of Santa Monica	1/5/2007	11/4/2012	12/14/2014	\$300,000.00	\$300,000.00	12 H.D. CNG Vehicles	\$0.00	Yes
ML06057	City of Rancho Cucamonga	8/28/2007	6/27/2013	8/27/2014	\$100,000.00	\$100,000.00	4 H.D. Nat. Gas Vehicles	\$0.00	Yes
ML06064	City of South Pasadena	1/25/2008	11/24/2013	11/24/2014	\$50,000.00	\$50,000.00	2 H.D. CNG Vehicles	\$0.00	Yes
ML06067	City of El Monte	3/17/2008	5/16/2014	11/16/2014	\$157,957.00	\$157,957.00	Upgrade existing CNG infrastructure	\$0.00	Yes
MS06012	Consolidated Disposal Service	7/14/2006	9/13/2012	9/13/2014	\$297,981.00	\$297,981.00	New LNG Station & Facility Upgrades	\$0.00	Yes
MS06013	City of Commerce	1/9/2008	7/8/2014	7/8/2015	\$350,000.00	\$350,000.00	New L/CNG Station - Commerce	\$0.00	Yes



<b>Cont.#</b>	<b>Contractor</b>	<b>Start Date</b>	<b>Original End Date</b>	<b>Amended End Date</b>	<b>Contract Value</b>	<b>Remitted</b>	<b>Project Description</b>	<b>Award Balance</b>	<b>Billing Complete?</b>
MS06048	Newport-Mesa Unified School Distric	6/25/2007	8/24/2013	8/24/2014	\$50,000.00	\$50,000.00	CNG Fueling Station	\$0.00	Yes
MS06049	Clean Energy Fuels Corp.	4/20/2007	7/19/2013	11/30/2015	\$250,000.00	\$228,491.18	CNG Fueling Station - L.B.P.D.	\$21,508.82	Yes

**Total: 8**

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
<b>FY 2006-2007 Contracts</b>									
<b>Open Contracts</b>									
ML07044	City of Santa Monica	9/8/2008	3/7/2015	3/7/2017	\$600,000.00	\$50,000.00	24 H.D. Nat. Gas Vehicles	\$550,000.00	No
ML07045	City of Inglewood	2/6/2009	4/5/2015		\$75,000.00	\$25,000.00	3 H.D. Nat. Gas Vehicles	\$50,000.00	No
MS07022	California State University, Los Ange	10/30/2009	12/29/2015	12/29/2016	\$250,000.00	\$0.00	New Hydrogen Fueling Station	\$250,000.00	No
MS07061	City of Los Angeles, Department of	10/31/2008	8/30/2010	2/28/2013	\$40,626.00	\$40,626.00	Off-Road Diesel Equipment Retrofit Program	\$0.00	No
MS07070	Griffith Company	4/30/2008	2/28/2010	8/28/2012	\$168,434.00	\$125,504.00	Off-Road Diesel Equipment Retrofit Program	\$42,930.00	No
MS07080	City of Los Angeles, Bureau of Sanit	10/31/2008	8/30/2010	2/28/2015	\$63,192.00	\$62,692.00	Off-Road Diesel Equipment Retrofit Program	\$500.00	No
<b>Total: 6</b>									
<b>Declined/Cancelled Contracts</b>									
ML07031	City of Santa Monica				\$180,000.00	\$0.00	Upgrade N.G. Station to Add Hythane	\$180,000.00	No
ML07032	City of Huntington Beach Public Wor				\$25,000.00	\$0.00	One H.D. CNG Vehicle	\$25,000.00	No
ML07035	City of Los Angeles, General Service				\$350,000.00	\$0.00	New CNG Refueling Station/Southeast Yard	\$350,000.00	No
ML07038	City of Palos Verdes Estates				\$25,000.00	\$0.00	One H.D. LPG Vehicle	\$25,000.00	No
MS07010	Palos Verdes Peninsula Transit Auth				\$80,000.00	\$0.00	Repower 4 Transit Buses	\$80,000.00	No
MS07014	Clean Energy Fuels Corp.				\$350,000.00	\$0.00	New L/CNG Station - SERRF	\$350,000.00	No
MS07015	Baldwin Park Unified School District				\$57,500.00	\$0.00	New CNG Station	\$57,500.00	No
MS07016	County of Riverside Fleet Services D				\$36,359.00	\$0.00	New CNG Station - Rubidoux	\$36,359.00	No
MS07017	County of Riverside Fleet Services D				\$33,829.00	\$0.00	New CNG Station - Indio	\$33,829.00	No
MS07018	City of Cathedral City				\$350,000.00	\$0.00	New CNG Station	\$350,000.00	No
MS07021	City of Riverside				\$350,000.00	\$0.00	New CNG Station	\$350,000.00	No
MS07050	Southern California Disposal Co.				\$320,000.00	\$0.00	Ten Nat. Gas Refuse Trucks	\$320,000.00	No
MS07062	Caltrans Division of Equipment				\$1,081,818.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$1,081,818.00	No
MS07065	ECCO Equipment Corp.				\$174,525.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$174,525.00	No
MS07067	Recycled Materials Company of Calif				\$99,900.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$99,900.00	No
MS07069	City of Burbank	5/9/2008	3/8/2010	9/8/2011	\$8,895.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$8,895.00	No
MS07074	Albert W. Davies, Inc.	1/25/2008	11/24/2009		\$39,200.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$39,200.00	No
MS07081	Clean Diesel Technologies, Inc.				\$240,347.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$240,347.00	No
MS07082	DCL International, Inc.				\$153,010.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$153,010.00	No
MS07083	Dinex Exhausts, Inc.				\$52,381.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$52,381.00	No
MS07084	Donaldson Company, Inc.				\$42,416.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$42,416.00	No
MS07085	Engine Control Systems Limited				\$155,746.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$155,746.00	No
MS07086	Huss, LLC				\$84,871.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$84,871.00	No
MS07087	Mann+Hummel GmbH				\$189,361.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$189,361.00	No
MS07088	Nett Technologies, Inc.				\$118,760.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$118,760.00	No
MS07089	Rypos, Inc.				\$68,055.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$68,055.00	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
MS07090	Sud-Chemie				\$27,345.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$27,345.00	No

**Total: 27**

**Closed Contracts**

ML07025	City of San Bernardino	8/12/2008	7/11/2010		\$350,000.00	\$350,000.00	Maintenance Facility Modifications	\$0.00	Yes
ML07028	City of Los Angeles, General Service	3/13/2009	3/12/2014		\$350,000.00	\$350,000.00	New CNG Refueling Station/Hollywood Yard	\$0.00	Yes
ML07029	City of Los Angeles, General Service	3/13/2009	3/12/2014		\$350,000.00	\$350,000.00	New CNG Refueling Station/Venice Yard	\$0.00	Yes
ML07033	City of La Habra	5/21/2008	6/20/2014	11/30/2013	\$25,000.00	\$25,000.00	One H.D. Nat Gas Vehicle	\$0.00	Yes
ML07034	City of Los Angeles, General Service	3/13/2009	3/12/2014		\$350,000.00	\$350,000.00	New CNG Refueling Station/Van Nuys Yard	\$0.00	Yes
ML07042	City of La Quinta	8/15/2008	9/14/2010		\$100,000.00	\$100,000.00	Street Sweeping Operations	\$0.00	Yes
ML07046	City of Culver City Transportation De	5/2/2008	5/1/2014		\$25,000.00	\$25,000.00	One H.D. Nat. Gas Vehicle	\$0.00	Yes
ML07048	City of Cathedral City	9/19/2008	10/18/2010		\$100,000.00	\$84,972.45	Street Sweeping Operations	\$15,027.55	Yes
MS07001	A-Z Bus Sales, Inc.	12/28/2006	12/31/2007	2/29/2008	\$1,920,000.00	\$1,380,000.00	CNG School Bus Buydown	\$540,000.00	Yes
MS07002	BusWest	1/19/2007	12/31/2007	3/31/2008	\$840,000.00	\$840,000.00	CNG School Bus Buydown	\$0.00	Yes
MS07003	Westport Fuel Systems, Inc.	11/2/2007	12/31/2011	6/30/2013	\$1,500,000.00	\$1,499,990.00	Advanced Nat. Gas Engine Incentive Progra	\$10.00	Yes
MS07005	S-W Compressors	3/17/2008	3/16/2010		\$60,000.00	\$7,500.00	Mountain CNG School Bus Demo Program-	\$52,500.00	Yes
MS07006	Coachella Valley Association of Gov	2/28/2008	10/27/2008		\$400,000.00	\$400,000.00	Coachella Valley PM10 Reduction Street Sw	\$0.00	Yes
MS07011	L A Service Authority for Freeway E	3/12/2010	5/31/2011	9/30/2011	\$700,000.00	\$700,000.00	"511" Commuter Services Campaign	\$0.00	Yes
MS07012	City of Los Angeles, General Service	6/13/2008	6/12/2009	6/12/2010	\$50,000.00	\$50,000.00	Maintenance Facility Modifications	\$0.00	Yes
MS07019	City of Cathedral City	1/9/2009	6/8/2010		\$32,500.00	\$32,500.00	Maintenance Facility Modifications	\$0.00	Yes
MS07058	The Better World Group	11/17/2007	11/16/2009	11/16/2011	\$247,690.00	\$201,946.21	MSRC Programmatic Outreach Services	\$45,743.79	Yes
MS07059	County Sanitation Districts of L.A. C	9/5/2008	9/4/2010	7/14/2012	\$231,500.00	\$231,500.00	Off-Road Diesel Equipment Retrofit Program	\$0.00	Yes
MS07060	Community Recycling & Resource R	3/7/2008	1/6/2010	7/6/2011	\$177,460.00	\$98,471.00	Off-Road Diesel Equipment Retrofit Program	\$78,989.00	Yes
MS07063	Shimmick Construction Company, In	4/26/2008	2/25/2010	8/25/2011	\$80,800.00	\$11,956.37	Off-Road Diesel Equipment Retrofit Program	\$68,843.63	No
MS07064	Altfillisch Contractors, Inc.	9/19/2008	7/18/2010	1/18/2011	\$160,000.00	\$155,667.14	Off-Road Diesel Equipment Retrofit Program	\$4,332.86	Yes
MS07068	Sukut Equipment Inc.	1/23/2009	11/22/2010	5/22/2012	\$26,900.00	\$26,900.00	Off-Road Diesel Equipment Retrofit Program	\$0.00	Yes
MS07071	Tiger 4 Equipment Leasing	9/19/2008	7/18/2010	1/18/2013	\$210,937.00	\$108,808.97	Off-Road Diesel Equipment Retrofit Program	\$102,128.03	Yes
MS07072	City of Culver City Transportation De	4/4/2008	2/3/2010	8/3/2011	\$72,865.00	\$72,865.00	Off-Road Diesel Equipment Retrofit Program	\$0.00	Yes
MS07075	Dan Copp Crushing	9/17/2008	7/16/2010	1/16/2012	\$73,600.00	\$40,200.00	Off-Road Diesel Equipment Retrofit Program	\$33,400.00	No
MS07076	Reed Thomas Company, Inc.	8/15/2008	6/14/2010	3/14/2012	\$339,073.00	\$100,540.00	Off-Road Diesel Equipment Retrofit Program	\$238,533.00	No
MS07079	Riverside County Transportation Co	1/30/2009	7/29/2013	12/31/2011	\$20,000.00	\$15,165.45	BikeMetro Website Migration	\$4,834.55	Yes
MS07091	BusWest	10/16/2009	3/15/2010		\$33,660.00	\$33,660.00	Provide Lease for 2 CNG School Buses	\$0.00	Yes
MS07092	Riverside County Transportation Co	9/1/2010	10/31/2011		\$350,000.00	\$350,000.00	"511" Commuter Services Campaign	\$0.00	Yes

**Total: 29**

**Closed/Incomplete Contracts**

MS07004	BusWest	7/2/2007	7/1/2009		\$90,928.00	\$68,196.00	Provide Lease for 2 CNG School Buses	\$22,732.00	No
MS07066	Skanska USA Civil West California D	6/28/2008	4/27/2010	10/27/2010	\$111,700.00	\$36,128.19	Off-Road Diesel Equipment Retrofit Program	\$75,571.81	No
MS07073	PEED Equipment Co.	10/31/2008	8/30/2010		\$11,600.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$11,600.00	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
<b>Total: 3</b>									
<b>Open/Complete Contracts</b>									
ML07023	City of Riverside	6/20/2008	10/19/2014	7/19/2016	\$462,500.00	\$461,476.42	CNG Station Expansion/Purch. 14 H.D. Vehi	\$1,023.58	No
ML07024	City of Garden Grove	3/7/2008	9/6/2014	7/6/2016	\$75,000.00	\$75,000.00	Three H.D. CNG Vehicles	\$0.00	Yes
ML07026	City of South Pasadena	6/13/2008	6/12/2014		\$25,000.00	\$25,000.00	One H.D. CNG Vehicle	\$0.00	Yes
ML07027	Los Angeles World Airports	6/3/2008	7/2/2014		\$25,000.00	\$25,000.00	One H.D. LNG Vehicle	\$0.00	Yes
ML07030	County of San Bernardino Public Wo	7/11/2008	9/10/2015		\$200,000.00	\$200,000.00	8 Natural Gas H.D. Vehicles	\$0.00	Yes
ML07036	City of Alhambra	1/23/2009	2/22/2015		\$50,000.00	\$50,000.00	2 H.D. CNG Vehicles	\$0.00	Yes
ML07037	City of Los Angeles, General Service	10/8/2008	10/7/2015		\$255,222.00	\$255,222.00	Upgrade LNG/LCNG Station/East Valley Yar	\$0.00	Yes
ML07039	City of Baldwin Park	6/6/2008	6/5/2014	8/5/2015	\$50,000.00	\$50,000.00	Two N.G. H.D. Vehicles	\$0.00	Yes
ML07040	City of Moreno Valley	6/3/2008	9/2/2014		\$25,000.00	\$25,000.00	One Heavy-Duty CNG Vehicle	\$0.00	Yes
ML07041	City of La Quinta	6/6/2008	6/5/2014		\$25,000.00	\$25,000.00	One CNG Street Sweeper	\$0.00	Yes
ML07043	City of Redondo Beach	9/28/2008	7/27/2014	10/27/2016	\$125,000.00	\$125,000.00	Five H.D. CNG Transit Vehicles	\$0.00	Yes
ML07047	City of Cathedral City	6/16/2008	9/15/2014	3/15/2015	\$225,000.00	\$225,000.00	Two H.D. Nat. Gas Vehicles/New CNG Fueli	\$0.00	Yes
MS07007	Los Angeles World Airports	5/2/2008	11/1/2014		\$420,000.00	\$420,000.00	Purchase CNG 21 Transit Buses	\$0.00	Yes
MS07008	City of Los Angeles, Department of T	9/18/2009	5/17/2020		\$2,040,000.00	\$1,900,000.00	Purchase 102 Transit Buses	\$140,000.00	No
MS07009	Orange County Transportation Autho	5/14/2008	4/13/2016		\$800,000.00	\$800,000.00	Purchase 40 Transit Buses	\$0.00	Yes
MS07013	Rainbow Disposal Company, Inc.	1/25/2008	3/24/2014	9/24/2014	\$350,000.00	\$350,000.00	New High-Volume CNG Station	\$0.00	Yes
MS07020	Avery Petroleum	5/20/2009	7/19/2015		\$250,000.00	\$250,000.00	New CNG Station	\$0.00	Yes
MS07049	Palm Springs Disposal Services	10/23/2008	11/22/2014	9/22/2016	\$96,000.00	\$96,000.00	Three Nat. Gas Refuse Trucks	\$0.00	Yes
MS07051	City of San Bernardino	8/12/2008	12/11/2014		\$480,000.00	\$480,000.00	15 Nat. Gas Refuse Trucks	\$0.00	Yes
MS07052	City of Redlands	7/30/2008	11/29/2014		\$160,000.00	\$160,000.00	Five Nat. Gas Refuse Trucks	\$0.00	Yes
MS07053	City of Claremont	7/31/2008	12/30/2014		\$96,000.00	\$96,000.00	Three Nat. Gas Refuse Trucks	\$0.00	Yes
MS07054	Republic Services, Inc.	3/7/2008	9/6/2014	9/6/2016	\$1,280,000.00	\$1,280,000.00	40 Nat. Gas Refuse Trucks	\$0.00	Yes
MS07055	City of Culver City Transportation De	7/8/2008	9/7/2014		\$192,000.00	\$192,000.00	Six Nat. Gas Refuse Trucks	\$0.00	Yes
MS07056	City of Whittier	9/5/2008	3/4/2015		\$32,000.00	\$32,000.00	One Nat. Gas Refuse Trucks	\$0.00	Yes
MS07057	CR&R, Inc.	7/31/2008	8/30/2014	6/30/2015	\$896,000.00	\$896,000.00	28 Nat. Gas Refuse Trucks	\$0.00	No
MS07077	USA Waste of California, Inc.	5/1/2009	12/31/2014		\$160,000.00	\$160,000.00	Five Nat. Gas Refuse Trucks (Santa Ana)	\$0.00	Yes
MS07078	USA Waste of California, Inc.	5/1/2009	12/31/2014	12/31/2015	\$256,000.00	\$256,000.00	Eight Nat. Gas Refuse Trucks (Dewey's)	\$0.00	Yes
<b>Total: 27</b>									

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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### **FY 2007-2008 Contracts**

#### **Open Contracts**

ML08028	City of Santa Monica	9/11/2009	9/10/2016	5/10/2019	\$600,000.00	\$0.00	24 CNG Heavy-Duty Vehicles	\$600,000.00	No
ML08030	City of Azusa	5/14/2010	3/13/2016		\$25,000.00	\$0.00	1 CNG Heavy-Duty Vehicle	\$25,000.00	No
ML08040	City of Riverside	9/11/2009	9/10/2016		\$505,500.00	\$28,124.80	16 CNG Vehicles, Expand CNG Station & M	\$477,375.20	No
ML08043	City of Desert Hot Springs	9/25/2009	3/24/2016		\$25,000.00	\$0.00	1 CNG Heavy-Duty Vehicle	\$25,000.00	No
ML08080	City of Irvine	5/1/2009	5/31/2015		\$50,000.00	\$0.00	Two Heavy-Duty Nat. Gas Vehicles	\$50,000.00	No
MS08001	Los Angeles County MTA	12/10/2010	6/9/2014		\$1,500,000.00	\$1,416,666.66	Big Rig Freeway Service Patrol	\$83,333.34	No
MS08007	United Parcel Service West Region	12/10/2008	10/9/2014	4/9/2019	\$300,000.00	\$0.00	10 H.D. Nat. Gas Vehicles	\$300,000.00	No
MS08013	United Parcel Service West Region	12/10/2008	10/9/2014	3/9/2019	\$480,000.00	\$216,000.00	12 H.D. Nat. Gas Yard Tractors	\$264,000.00	No
MS08015	Yosemite Waters	5/12/2009	5/11/2015		\$180,000.00	\$117,813.60	11 H.D. Propane Vehicles	\$62,186.40	No
MS08018	Los Angeles County Department of	8/7/2009	10/6/2016	4/6/2018	\$60,000.00	\$0.00	3 CNG Vehicles	\$60,000.00	No
MS08058	Clean Energy Fuels Corp.	11/26/2009	3/25/2016	3/25/2017	\$400,000.00	\$160,000.00	New CNG Station - Ontario Airport	\$240,000.00	No
MS08068	Regents of the University of Californi	11/5/2010	11/4/2017	11/4/2019	\$400,000.00	\$0.00	Hydrogen Station	\$400,000.00	No

**Total: 12**

#### **Declined/Cancelled Contracts**

ML08032	City of Irvine	5/1/2009	8/31/2010		\$9,000.00	\$0.00	36 Vehicles (Diagnostic)	\$9,000.00	No
ML08041	City of Los Angeles, Dept of Transpo	8/6/2010	7/5/2011	12/5/2011	\$8,800.00	\$0.00	73 Vehicles (Diagnostic)	\$8,800.00	No
ML08049	City of Cerritos	3/20/2009	1/19/2015	2/19/2017	\$25,000.00	\$0.00	1 CNG Heavy-Duty Vehicle	\$25,000.00	No
ML08051	City of Colton				\$75,000.00	\$0.00	3 CNG Heavy-Duty Vehicles	\$75,000.00	No
MS08002	Orange County Transportation Autho				\$1,500,000.00	\$0.00	Big Rig Freeway Service Patrol	\$1,500,000.00	No
MS08008	Diversified Truck Rental & Leasing				\$300,000.00	\$0.00	10 H.D. Nat. Gas Vehicles	\$300,000.00	No
MS08010	Orange County Transportation Autho				\$10,000.00	\$0.00	20 H.D. Nat. Gas Vehicles	\$10,000.00	No
MS08011	Green Fleet Systems, LLC				\$10,000.00	\$0.00	30 H.D. Nat. Gas Vehicles	\$10,000.00	No
MS08052	Burrtec Waste Industries, Inc.	12/24/2008	11/23/2014	11/23/2015	\$100,000.00	\$0.00	New CNG Station - Fontana	\$100,000.00	No
MS08054	Clean Energy Fuels Corp.				\$400,000.00	\$0.00	New LNG Station - Fontana	\$400,000.00	No
MS08055	Clean Energy Fuels Corp.	11/26/2009	3/25/2016	3/25/2017	\$400,000.00	\$0.00	New LNG Station - Long Beach-Pier S	\$400,000.00	No
MS08059	Burrtec Waste Industries, Inc.	12/24/2008	11/23/2014		\$100,000.00	\$0.00	New CNG Station - San Bernardino	\$100,000.00	No
MS08060	Burrtec Waste Industries, Inc.	12/24/2008	11/23/2014		\$100,000.00	\$0.00	New CNG Station - Azusa	\$100,000.00	No
MS08062	Go Natural Gas	9/25/2009	1/24/2016	1/24/2017	\$400,000.00	\$0.00	New CNG Station - Rialto	\$400,000.00	No
MS08074	Fontana Unified School District	11/14/2008	12/13/2014		\$200,000.00	\$0.00	Expansion of Existing CNG station	\$200,000.00	No
MS08077	Hythane Company, LLC				\$144,000.00	\$0.00	Upgrade Station to Hythane	\$144,000.00	No

**Total: 16**

#### **Closed Contracts**

ML08023	City of Villa Park	11/7/2008	10/6/2012		\$6,500.00	\$5,102.50	Upgrade of Existing Refueling Facility	\$1,397.50	Yes
ML08027	Los Angeles County Department of	7/20/2009	1/19/2011	1/19/2012	\$6,901.00	\$5,124.00	34 Vehicles (Diagnostic)	\$1,777.00	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML08033	County of San Bernardino Public Wo	4/3/2009	2/2/2010		\$14,875.00	\$14,875.00	70 Vehicles (Diagnostic)	\$0.00	Yes
ML08035	City of La Verne	3/6/2009	11/5/2009		\$11,925.00	\$11,925.00	53 Vehicles (Diagnostic)	\$0.00	Yes
ML08036	City of South Pasadena	5/12/2009	7/11/2013		\$169,421.00	\$169,421.00	New CNG Station	\$0.00	Yes
ML08045	City of Santa Clarita	2/20/2009	6/19/2010		\$3,213.00	\$3,150.00	14 Vehicles (Diagnostic)	\$63.00	Yes
MS08003	A-Z Bus Sales, Inc.	5/2/2008	12/31/2008	2/28/2009	\$1,480,000.00	\$1,400,000.00	Alternative Fuel School Bus Incentive Progr	\$80,000.00	Yes
MS08004	BusWest	5/2/2008	12/31/2008		\$1,440,000.00	\$1,440,000.00	Alternative Fuel School Bus Incentive Progr	\$0.00	Yes
MS08016	TransVironmental Solutions, Inc.	1/23/2009	12/31/2010	9/30/2011	\$227,198.00	\$80,351.34	Rideshare 2 School Program	\$146,846.66	Yes
MS09002	A-Z Bus Sales, Inc.	11/7/2008	12/31/2009	12/31/2010	\$2,520,000.00	\$2,460,000.00	Alternative Fuel School Bus Incentive Progr	\$60,000.00	No
MS09004	A-Z Bus Sales, Inc.	1/30/2009	3/31/2009		\$156,000.00	\$156,000.00	Alternative Fuel School Bus Incentive Progr	\$0.00	Yes
MS09047	BusWest	7/9/2010	12/31/2010	4/30/2011	\$480,000.00	\$480,000.00	Alternative Fuel School Bus Incentive Progr	\$0.00	Yes

**Total: 12**

#### Closed/Incomplete Contracts

ML08025	Los Angeles County Department of	10/30/2009	3/29/2011		\$75,000.00	\$0.00	150 Vehicles (Diagnostic)	\$75,000.00	No
MS08079	ABC Unified School District	1/16/2009	12/15/2009	12/15/2010	\$50,000.00	\$0.00	Maintenance Facility Modifications	\$50,000.00	No

**Total: 2**

#### Open/Complete Contracts

ML08024	City of Anaheim	7/9/2010	7/8/2017	1/8/2018	\$425,000.00	\$425,000.00	9 LPG Buses and 8 CNG Buses	\$0.00	No
ML08026	Los Angeles County Department of	7/20/2009	7/19/2016		\$250,000.00	\$250,000.00	10 LPG Heavy-Duty Vehicles	\$0.00	Yes
ML08029	City of Gardena	3/19/2009	1/18/2015		\$25,000.00	\$25,000.00	1 Propane Heavy-Duty Vehicle	\$0.00	Yes
ML08031	City of Claremont	3/27/2009	3/26/2013	3/26/2015	\$97,500.00	\$97,500.00	Upgrade of Existing CNG Station, Purchase	\$0.00	Yes
ML08034	County of San Bernardino Public Wo	3/27/2009	7/26/2015		\$150,000.00	\$150,000.00	8 CNG Heavy-Duty Vehicles	\$0.00	Yes
ML08037	City of Glendale	5/20/2009	5/19/2015		\$325,000.00	\$325,000.00	13 CNG Heavy-Duty Vehicles	\$0.00	Yes
ML08038	Los Angeles Department of Water a	7/16/2010	7/15/2017		\$1,050,000.00	\$1,050,000.00	42 CNG Heavy-Duty Vehicles	\$0.00	Yes
ML08039	City of Rancho Palos Verdes	6/5/2009	8/4/2015		\$50,000.00	\$50,000.00	2 LPG Transit Buses	\$0.00	Yes
ML08042	City of Ontario	5/1/2009	1/31/2016		\$175,000.00	\$175,000.00	7 CNG Heavy-Duty Vehicles	\$0.00	Yes
ML08044	City of Chino	3/19/2009	3/18/2015		\$25,000.00	\$25,000.00	1 CNG Heavy-Duty Vehicle	\$0.00	Yes
ML08046	City of Paramount	2/20/2009	2/19/2015		\$25,000.00	\$25,000.00	1 CNG Heavy-Duty Vehicle	\$0.00	Yes
ML08047	City of Culver City Transportation De	5/12/2009	8/11/2015		\$150,000.00	\$150,000.00	6 CNG Heavy-Duty Vehicles	\$0.00	Yes
ML08048	City of Santa Clarita	2/20/2009	6/19/2015		\$25,000.00	\$25,000.00	1 CNG Heavy-Duty Vehicle	\$0.00	Yes
ML08050	City of Laguna Beach Public Works	8/12/2009	4/11/2016	10/11/2016	\$75,000.00	\$75,000.00	3 LPG Trolleys	\$0.00	Yes
MS08005	Burrtec Waste Industries, Inc.	10/23/2008	11/22/2014	10/22/2015	\$450,000.00	\$450,000.00	15 H.D. Nat. Gas Vehicles - Azusa	\$0.00	Yes
MS08006	Burrtec Waste Industries, Inc.	10/23/2008	11/22/2014	10/22/2015	\$450,000.00	\$450,000.00	15 H.D. Nat. Gas Vehicles - Saugus	\$0.00	Yes
MS08009	Los Angeles World Airports	12/24/2008	12/23/2014		\$870,000.00	\$870,000.00	29 H.D. Nat. Gas Vehicles	\$0.00	Yes
MS08012	California Cartage Company, LLC	12/21/2009	10/20/2015	4/20/2016	\$480,000.00	\$480,000.00	12 H.D. Nat. Gas Yard Tractors	\$0.00	Yes
MS08014	City of San Bernardino	12/5/2008	6/4/2015		\$390,000.00	\$360,000.00	13 H.D. Nat. Gas Vehicles	\$30,000.00	Yes
MS08017	Omnitrans	12/13/2008	12/12/2015	12/12/2016	\$900,000.00	\$900,000.00	30 CNG Buses	\$0.00	Yes
MS08019	Enterprise Rent-A-Car Company of L	2/12/2010	7/11/2016		\$300,000.00	\$300,000.00	10 CNG Vehicles	\$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
MS08020	Ware Disposal Company, Inc.	11/25/2008	2/24/2016		\$900,000.00	\$900,000.00	30 CNG Vehicles	\$0.00	Yes
MS08021	CalMet Services, Inc.	1/9/2009	1/8/2016	7/8/2016	\$900,000.00	\$900,000.00	30 CNG Vehicles	\$0.00	Yes
MS08022	SunLine Transit Agency	12/18/2008	3/17/2015		\$311,625.00	\$311,625.00	15 CNG Buses	\$0.00	Yes
MS08053	City of Los Angeles, Bureau of Sanit	2/18/2009	12/17/2015		\$400,000.00	\$400,000.00	New LNG/CNG Station	\$0.00	Yes
MS08056	Clean Energy Fuels Corp.	11/26/2009	2/25/2015		\$400,000.00	\$400,000.00	New LNG Station - POLB-Anah. & I	\$0.00	Yes
MS08057	Orange County Transportation Autho	5/14/2009	7/13/2015		\$400,000.00	\$400,000.00	New CNG Station - Garden Grove	\$0.00	Yes
MS08061	Clean Energy Fuels Corp.	12/4/2009	3/3/2015		\$400,000.00	\$400,000.00	New CNG Station - L.A.-La Cienega	\$0.00	Yes
MS08063	Go Natural Gas	9/25/2009	1/24/2016	1/24/2017	\$400,000.00	\$400,000.00	New CNG Station - Moreno Valley	\$0.00	Yes
MS08064	Hemet Unified School District	1/9/2009	3/8/2015		\$75,000.00	\$75,000.00	Expansion of Existing Infrastructure	\$0.00	Yes
MS08065	Pupil Transportation Cooperative	11/20/2008	7/19/2014		\$10,500.00	\$10,500.00	Existing CNG Station Modifications	\$0.00	Yes
MS08066	Clean Energy Fuels Corp.	11/26/2009	2/25/2015		\$400,000.00	\$400,000.00	New CNG Station - Palm Spring Airport	\$0.00	Yes
MS08067	Trillium CNG	3/19/2009	6/18/2015		\$311,600.00	\$254,330.00	New CNG Station	\$57,270.00	Yes
MS08069	Perris Union High School District	6/5/2009	8/4/2015	8/4/2016	\$225,000.00	\$225,000.00	New CNG Station	\$0.00	Yes
MS08070	Clean Energy Fuels Corp.	11/26/2009	2/25/2015		\$400,000.00	\$400,000.00	New CNG Station - Paramount	\$0.00	Yes
MS08071	ABC Unified School District	1/16/2009	1/15/2015		\$63,000.00	\$63,000.00	New CNG Station	\$0.00	Yes
MS08072	Clean Energy Fuels Corp.	12/4/2009	3/3/2015		\$400,000.00	\$354,243.38	New CNG Station - Burbank	\$45,756.62	Yes
MS08073	Clean Energy Fuels Corp.	11/26/2009	2/25/2015		\$400,000.00	\$400,000.00	New CNG Station - Norwalk	\$0.00	Yes
MS08075	Disneyland Resort	12/10/2008	2/1/2015		\$200,000.00	\$200,000.00	Expansion of Existing CNG Infrastructure	\$0.00	Yes
MS08076	Azusa Unified School District	10/17/2008	11/16/2014	1/31/2017	\$172,500.00	\$172,500.00	New CNG station and maint. Fac. Modificati	\$0.00	Yes
MS08078	SunLine Transit Agency	12/10/2008	6/9/2015	2/9/2016	\$189,000.00	\$189,000.00	CNG Station Upgrade	\$0.00	Yes

**Total: 41**

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
<b>FY 2008-2009 Contracts</b>									
<b>Open Contracts</b>									
ML09009	City of South Pasadena	11/5/2010	12/4/2016	3/4/2019	\$137,500.00	\$0.00	CNG Station Expansion	\$137,500.00	No
ML09010	City of Palm Springs	1/8/2010	2/7/2016		\$25,000.00	\$0.00	1 Nat. Gas Heavy-Duty Vehicle	\$25,000.00	No
ML09023	Los Angeles County Department of	12/10/2010	12/9/2017		\$50,000.00	\$0.00	2 Heavy-Duty Alternative Fuel Transit Vehic	\$50,000.00	No
ML09026	Los Angeles County Department of	10/15/2010	10/14/2017	4/14/2019	\$150,000.00	\$0.00	3 Off-Road Vehicle Repowers	\$150,000.00	No
ML09032	Los Angeles World Airports	4/8/2011	4/7/2018		\$175,000.00	\$0.00	7 Nat. Gas Heavy-Duty Vehicles	\$175,000.00	No
ML09033	City of Beverly Hills	3/4/2011	5/3/2017	5/3/2018	\$550,000.00	\$100,000.00	10 Nat. Gas Heavy-Duty Vehicles & CNG St	\$450,000.00	No
ML09036	City of Long Beach Fleet Services B	5/7/2010	5/6/2017	5/6/2020	\$875,000.00	\$525,000.00	Purchase 35 LNG Refuse Trucks	\$350,000.00	No
<b>Total: 7</b>									
<b>Pending Execution Contracts</b>									
ML09047	Los Angeles County Department of				\$400,000.00	\$0.00	Maintenance Facility Modifications	\$400,000.00	No
<b>Total: 1</b>									
<b>Declined/Cancelled Contracts</b>									
ML09017	County of San Bernardino Public Wo	1/28/2010	7/27/2016		\$200,000.00	\$0.00	8 Nat. Gas Heavy-Duty Vehicles	\$200,000.00	No
ML09018	Los Angeles Department of Water a	7/16/2010	9/15/2012		\$850,000.00	\$0.00	Retrofit 85 Off-Road Vehicles w/DECS	\$850,000.00	No
ML09019	City of San Juan Capistrano Public	12/4/2009	11/3/2010		\$10,125.00	\$0.00	Remote Vehicle Diagnostics/45 Vehicles	\$10,125.00	No
ML09022	Los Angeles County Department of				\$8,250.00	\$0.00	Remote Vehicle Diagnostics/15 Vehicles	\$8,250.00	No
ML09025	Los Angeles County Department of	10/15/2010	12/14/2012	6/14/2013	\$50,000.00	\$0.00	Remote Vehicle Diagnostics/85 Vehicles	\$50,000.00	No
ML09028	Riverside County Waste Manageme				\$140,000.00	\$0.00	Retrofit 7 Off-Road Vehicles w/DECS	\$140,000.00	No
ML09039	City of Inglewood				\$310,000.00	\$0.00	Purchase 12 H.D. CNG Vehicles and Remot	\$310,000.00	No
ML09040	City of Cathedral City				\$83,125.00	\$0.00	Purchase 3 H.D. CNG Vehicles and Remote	\$83,125.00	No
ML09044	City of San Dimas				\$425,000.00	\$0.00	Install CNG Station and Purchase 1 CNG S	\$425,000.00	No
ML09045	City of Orange				\$125,000.00	\$0.00	Purchase 5 CNG Sweepers	\$125,000.00	No
MS09003	FuelMaker Corporation				\$296,000.00	\$0.00	Home Refueling Apparatus Incentives	\$296,000.00	No
<b>Total: 11</b>									
<b>Closed Contracts</b>									
ML09007	City of Rancho Cucamonga	2/26/2010	4/25/2012		\$117,500.00	\$62,452.57	Maintenance Facility Modification	\$55,047.43	Yes
ML09013	City of Riverside Public Works	9/10/2010	12/9/2011	7/31/2013	\$144,470.00	\$128,116.75	Traffic Signal Synchr./Moreno Valley	\$16,353.25	Yes
ML09014	City of Riverside Public Works	9/10/2010	12/9/2011	7/31/2013	\$113,030.00	\$108,495.94	Traffic Signal Synchr./Corona	\$4,534.06	Yes
ML09015	City of Riverside Public Works	9/10/2010	12/9/2011	7/31/2013	\$80,060.00	\$79,778.52	Traffic Signal Synchr./Co. of Riverside	\$281.48	Yes
ML09016	County of San Bernardino Public Wo	1/28/2010	3/27/2014		\$50,000.00	\$50,000.00	Install New CNG Station	\$0.00	Yes
ML09020	County of San Bernardino	8/16/2010	2/15/2012		\$49,770.00	\$49,770.00	Remote Vehicle Diagnostics/252 Vehicles	\$0.00	Yes
ML09021	City of Palm Desert	7/9/2010	3/8/2012		\$39,450.00	\$38,248.87	Traffic Signal Synchr./Rancho Mirage	\$1,201.13	Yes
ML09024	Los Angeles County Department of	10/15/2010	12/14/2012	6/14/2013	\$400,000.00	\$0.00	Maintenance Facility Modifications	\$400,000.00	No
ML09027	Los Angeles County Department of	7/23/2010	3/22/2012	6/22/2012	\$150,000.00	\$150,000.00	Freeway Detector Map Interface	\$0.00	Yes



Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML09030	City of Los Angeles GSD/Fleet Servi	6/18/2010	6/17/2011		\$22,310.00	\$22,310.00	Remote Vehicle Diagnostics/107 Vehicles	\$0.00	No
MS09001	Administrative Services Co-Op/Long	3/5/2009	6/30/2012	12/31/2013	\$225,000.00	\$150,000.00	15 CNG Taxicabs	\$75,000.00	Yes
MS09005	Gas Equipment Systems, Inc.	6/19/2009	10/18/2010		\$71,000.00	\$71,000.00	Provide Temp. Fueling for Mountain Area C	\$0.00	Yes

**Total: 12**

**Open/Complete Contracts**

ML09008	City of Culver City Transportation De	1/19/2010	7/18/2016	7/18/2017	\$175,000.00	\$175,000.00	8 Nat. Gas Heavy-Duty Vehicles	\$0.00	No
ML09011	City of San Bernardino	2/19/2010	5/18/2016		\$250,000.00	\$250,000.00	10 Nat. Gas Heavy-Duty Vehicles	\$0.00	Yes
ML09012	City of Gardena	3/12/2010	11/11/2015		\$25,000.00	\$25,000.00	1 Nat. Gas Heavy-Duty Vehicle	\$0.00	Yes
ML09029	City of Whittier	11/6/2009	4/5/2016		\$25,000.00	\$25,000.00	1 Nat. Gas Heavy-Duty Vehicle	\$0.00	Yes
ML09031	City of Los Angeles, Department of	10/29/2010	10/28/2017		\$825,000.00	\$825,000.00	33 Nat. Gas Heavy-Duty Vehicles	\$0.00	Yes
ML09034	City of La Palma	11/25/2009	6/24/2015		\$25,000.00	\$25,000.00	1 LPG Heavy-Duty Vehicle	\$0.00	Yes
ML09035	City of Fullerton	6/17/2010	6/16/2017	12/16/2018	\$450,000.00	\$450,000.00	2 Heavy-Duty CNG Vehicles & Install CNG	\$0.00	Yes
ML09037	City of Redondo Beach	6/18/2010	6/17/2016		\$50,000.00	\$50,000.00	Purchase Two CNG Sweepers	\$0.00	Yes
ML09038	City of Chino	9/27/2010	5/26/2017		\$250,000.00	\$250,000.00	Upgrade Existing CNG Station	\$0.00	Yes
ML09041	City of Los Angeles, Bureau of Sanit	10/1/2010	9/30/2017		\$875,000.00	\$875,000.00	Purchase 35 H.D. Nat. Gas Vehicles	\$0.00	Yes
ML09042	Los Angeles Department of Water a	12/10/2010	12/9/2017		\$1,400,000.00	\$1,400,000.00	Purchase 56 Dump Trucks	\$0.00	Yes
ML09043	City of Covina	10/8/2010	4/7/2017	10/7/2018	\$179,591.00	\$179,591.00	Upgrade Existing CNG Station	\$0.00	Yes
ML09046	City of Newport Beach	5/20/2010	5/19/2016		\$162,500.00	\$162,500.00	Upgrade Existing CNG Station, Maintenance	\$0.00	Yes

**Total: 13**

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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### **FY 2009-2010 Contracts**

#### **Open Contracts**

MS10003	City of Sierra Madre	5/11/2012	3/10/2018		\$13,555.00	\$0.00	Purchase 1 H.D. CNG Vehicle	\$13,555.00	No
MS10004	Linde LLC	3/2/2012	6/1/2018		\$56,932.00	\$0.00	Purchase 6 H.D. CNG Vehicles	\$56,932.00	No
MS10005	Domestic Linen Supply Company, In	10/8/2010	7/7/2016		\$47,444.00	\$0.00	Purchase 5 Gas-Electric Hybrid Vehicles	\$47,444.00	No
MS10006	Nationwide Environmental Services	11/19/2010	4/18/2017	9/18/2019	\$94,887.00	\$85,398.30	Purchase Three Street Sweepers	\$9,488.70	No
MS10012	Foothill Transit Agency	3/9/2012	3/8/2019		\$85,392.00	\$0.00	Purchase 9 H.D. Electric Vehicles	\$85,392.00	No
MS10015	County of Los Angeles Department o	3/14/2014	5/13/2016		\$37,955.00	\$0.00	Purchase 2 H.D. CNG Vehicles	\$37,955.00	No
MS10017	Ryder System Inc.	12/30/2011	6/29/2018	12/29/2018	\$651,377.00	\$0.00	Purchase 19 H.D. Natural Gas Vehicles	\$651,377.00	No

**Total: 7**

#### **Declined/Cancelled Contracts**

MS10013	City of San Bernardino				\$68,834.00	\$0.00	Purchase 9 H.D. LNG Vehicles	\$68,834.00	No
MS10014	Serv-Wel Disposal				\$18,977.00	\$0.00	Purchase 2 H.D. CNG Vehicles	\$18,977.00	No
MS10018	Shaw Transport Inc.				\$81,332.00	\$0.00	Purchase 6 H.D. LNG Vehicles	\$81,332.00	No
MS10022	Los Angeles World Airports				\$123,353.00	\$0.00	Purchase 13 H.D. CNG Vehicles	\$123,353.00	No
MS10023	Dix Leasing				\$105,000.00	\$0.00	Purchase 3 H.D. LNG Vehicles	\$105,000.00	No

**Total: 5**

#### **Closed Contracts**

MS10001	Los Angeles County MTA	3/19/2010	2/28/2011	4/28/2011	\$300,000.00	\$196,790.61	Clean Fuel Transit Bus Service to Dodger St	\$103,209.39	Yes
MS10002	Coachella Valley Association of Gov	6/18/2010	2/17/2011		\$400,000.00	\$400,000.00	Coachella Valley PM10 Reduction Street Sw	\$0.00	Yes
MS10025	Elham Shirazi	2/18/2011	10/17/2012	2/17/2014	\$199,449.00	\$188,413.05	Telework Demonstration Program	\$11,035.95	No

**Total: 3**

#### **Open/Complete Contracts**

MS10007	Enterprise Rent-A-Car Company of L	7/15/2011	10/14/2017		\$18,976.00	\$18,976.00	Purchase 2 H.D. CNG Vehicles	\$0.00	No
MS10008	Republic Services, Inc.	12/10/2010	5/9/2017		\$123,354.00	\$123,354.00	Purchase 4 CNG Refuse Collection Vehicles	\$0.00	Yes
MS10009	Ware Disposal Company, Inc.	10/29/2010	3/28/2017		\$123,353.00	\$123,352.00	Purchase 4 CNG Refuse Trucks	\$1.00	No
MS10010	New Bern Transport Corporation	10/29/2010	3/28/2017		\$113,864.00	\$113,864.00	Repower 4 Heavy-Duty Vehicles	\$0.00	Yes
MS10011	Foothill Transit Agency	3/9/2012	2/8/2018		\$113,865.00	\$113,865.00	Purchase 12 H.D. CNG Vehicles	\$0.00	Yes
MS10016	Rio Hondo Community College	11/5/2010	5/4/2017		\$16,077.00	\$16,077.00	Purchase 1 CNG Shuttle Bus	\$0.00	Yes
MS10019	EDCO Disposal Corporation	11/19/2010	2/18/2017		\$379,549.00	\$379,283.81	Purchase 11 H.D. CNG Refuse Trucks	\$265.19	Yes
MS10020	American Reclamation, Inc.	5/6/2011	2/5/2018		\$18,977.00	\$18,977.00	Purchase 1 H.D. CNG Vehicle	\$0.00	Yes
MS10021	City of Glendora	10/29/2010	11/28/2016		\$9,489.00	\$9,489.00	Purchase 1 H.D. CNG Vehicle	\$0.00	Yes
MS10024	Frito-Lay North America	7/29/2011	9/28/2017		\$47,444.00	\$47,444.00	Purchase 5 Electric Vehicles	\$0.00	Yes

**Total: 10**

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
<b>FY 2010-2011 Contracts</b>									
<b>Open Contracts</b>									
ML11020	City of Indio	2/1/2013	3/31/2019		\$30,000.00	\$0.00	Retrofit one H.D. Vehicles w/DECS, repower	\$30,000.00	No
ML11021	City of Whittier	1/27/2012	9/26/2018		\$210,000.00	\$120,000.00	Purchase 7 Nat. Gas H.D. Vehicles	\$90,000.00	No
ML11023	City of Rancho Cucamonga	4/20/2012	12/19/2018		\$260,000.00	\$60,000.00	Expand Existing CNG Station, 2 H.D. Vehicl	\$200,000.00	No
ML11025	County of Los Angeles Department o	3/14/2014	9/13/2021		\$150,000.00	\$0.00	Purchase 5 Nat. Gas H.D. Vehicles	\$150,000.00	No
ML11027	City of Los Angeles, Dept. of Genera	5/4/2012	7/3/2015		\$300,000.00	\$0.00	Maintenance Facility Modifications	\$300,000.00	No
ML11029	City of Santa Ana	9/7/2012	3/6/2020		\$262,500.00	\$0.00	Expansion of Existing CNG Station, Install N	\$262,500.00	No
ML11032	City of Gardena	3/2/2012	9/1/2018		\$102,500.00	\$0.00	Modify Maint. Facility, Expand CNG station,	\$102,500.00	No
ML11034	City of Los Angeles, Department of	5/4/2012	1/3/2019		\$630,000.00	\$0.00	Purchase 21 H.D. CNG Vehicles	\$630,000.00	No
ML11036	City of Riverside	1/27/2012	1/26/2019		\$670,000.00	\$0.00	Install New CNG Station, Purchase 9 H.D. N	\$670,000.00	No
ML11038	City of Santa Monica	5/18/2012	7/17/2018		\$400,000.00	\$0.00	Maintenance Facility Modifications	\$400,000.00	No
ML11040	City of South Pasadena	5/4/2012	1/3/2019		\$30,000.00	\$0.00	Purchase 1 Nat. Gas H.D. Vehicle	\$30,000.00	No
ML11041	City of Santa Ana	9/7/2012	11/6/2018		\$265,000.00	\$34,651.86	Purchase 7 LPG H.D. Vehicles, Retrofit 6 H.	\$230,348.14	No
ML11042	City of Chino	2/17/2012	4/16/2018		\$35,077.00	\$30,000.00	Purchase 1 Nat. Gas H.D. Vehicle, Repower	\$5,077.00	No
ML11043	City of Hemet Public Works	2/3/2012	2/2/2019		\$60,000.00	\$30,000.00	Purchase 2 H.D. Nat. Gas Vehicles	\$30,000.00	No
ML11045	City of Newport Beach	2/3/2012	8/2/2018	8/2/2019	\$30,000.00	\$0.00	Purchase 1 Nat. Gas H.D. Vehicle	\$30,000.00	No
MS11001	Mineral LLC	4/22/2011	4/30/2013	4/30/2015	\$111,827.00	\$95,936.83	Design, Develop, Host and Maintain MSRC	\$15,890.17	No
MS11008	USA Waste of California, Inc.	10/24/2013	4/23/2020		\$125,000.00	\$112,500.00	Expansion of Existing LCNG Station	\$12,500.00	No
MS11009	USA Waste of California, Inc.	10/24/2013	4/23/2020		\$125,000.00	\$112,500.00	Expansion of Existing LCNG Station	\$12,500.00	No
MS11010	Border Valley Trading	8/26/2011	10/25/2017	10/25/2018	\$150,000.00	\$0.00	New LNG Station	\$150,000.00	No
MS11016	CR&R Incorporated	4/12/2013	10/11/2019		\$100,000.00	\$0.00	New CNG Station - Perris	\$100,000.00	No
MS11019	City of Corona	11/29/2012	4/28/2020		\$225,000.00	\$0.00	Expansion of Existing CNG Station	\$225,000.00	No
MS11055	KEC Engineering	2/3/2012	8/2/2018		\$250,000.00	\$135,000.00	Repower 5 H.D. Off-Road Vehicles	\$115,000.00	No
MS11056	The Better World Group	12/30/2011	12/29/2013	12/29/2015	\$196,836.00	\$110,337.00	Programmatic Outreach Services	\$86,499.00	No
MS11058	L A Service Authority for Freeway E	5/31/2013	4/30/2014		\$123,395.00	\$0.00	Implement 511 "Smart Phone" Application	\$123,395.00	No
MS11060	Rowland Unified School District	8/17/2012	1/16/2019	1/16/2020	\$175,000.00	\$0.00	New Limited Access CNG Station	\$175,000.00	No
MS11061	Eastern Municipal Water District	3/29/2012	5/28/2015		\$11,659.00	\$1,450.00	Retrofit One Off-Road Vehicle under Showc	\$10,209.00	No
MS11062	Load Center	9/7/2012	1/6/2016		\$194,319.00	\$45,433.00	Retrofit Six Off-Road Vehicles under Showc	\$148,886.00	No
MS11064	City of Hawthorne	7/28/2012	8/27/2018	8/27/2019	\$175,000.00	\$0.00	New Limited Access CNG Station	\$175,000.00	No
MS11065	Temecula Valley Unified School Distr	8/11/2012	1/10/2019		\$50,000.00	\$0.00	Expansion of Existing CNG Station	\$50,000.00	No
MS11066	Torrance Unified School District	11/19/2012	9/18/2018		\$42,296.00	\$0.00	Expansion of Existing CNG Station	\$42,296.00	No
MS11067	City of Redlands	5/24/2012	11/23/2018	11/23/2019	\$85,000.00	\$0.00	Expansion of Existing CNG Station	\$85,000.00	No
MS11068	Ryder System Inc.	7/28/2012	10/27/2018		\$175,000.00	\$157,500.00	New Public Access L/CNG Station (Fontana	\$17,500.00	No
MS11069	Ryder System Inc.	7/28/2012	8/27/2018		\$175,000.00	\$157,500.00	New Public Access L/CNG Station (Orange)	\$17,500.00	No
MS11071	City of Torrance Transit Department	12/22/2012	1/21/2019		\$175,000.00	\$0.00	New Limited Access CNG Station	\$175,000.00	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
MS11076	SA Recycling, LLC	5/24/2012	9/23/2015		\$424,801.00	\$0.00	Retrofit of 13 Off-Road Diesel Vehicles with	\$424,801.00	No
MS11079	Bear Valley Unified School District	2/5/2013	10/4/2019		\$175,000.00	\$157,500.00	New Limited Access CNG Station	\$17,500.00	No
MS11081	Metropolitan Stevedore Company	9/7/2012	1/6/2016		\$45,416.00	\$0.00	Install DECS on Two Off-Road Vehicles	\$45,416.00	No
MS11082	Baumot North America, LLC	8/2/2012	12/1/2015		\$65,958.00	\$0.00	Install DECS on Four Off-Road Vehicles	\$65,958.00	No
MS11085	City of Long Beach Fleet Services B	8/23/2013	12/22/2016		\$159,012.00	\$0.00	Retrofit Seven H.D. Off-Road Vehicles Unde	\$159,012.00	No
MS11086	DCL America Inc.	6/7/2013	10/6/2016		\$500,000.00	\$0.00	Retrofit Eight H.D. Off-Road Vehicles Under	\$500,000.00	No
MS11091	California Cartage Company, LLC	4/5/2013	8/4/2016		\$55,000.00	\$0.00	Retrofit Two H.D. Off-Road Vehicles Under	\$55,000.00	No
MS11092	Griffith Company	2/5/2013	6/4/2016		\$390,521.00	\$0.00	Retrofit 17 H.D. Off-Road Vehicles Under Sh	\$390,521.00	No

**Total: 42**

#### Pending Execution Contracts

ML11024	County of Los Angeles, Dept of Publi				\$90,000.00	\$0.00	Purchase 3 Nat. Gas H.D. Vehicles	\$90,000.00	No
MS11073	Los Angeles Unified School District				\$175,000.00	\$0.00	Expansion of Existing CNG Station	\$175,000.00	No
MS11084	Ivanhoe Energy Services and Develo				\$66,750.00	\$0.00	Retrofit One H.D. Off-Road Vehicle Under S	\$66,750.00	No

**Total: 3**

#### Declined/Cancelled Contracts

MS11013	Go Natural Gas, Inc.				\$150,000.00	\$0.00	New CNG Station - Huntington Beach	\$150,000.00	No
MS11014	Go Natural Gas, Inc.				\$150,000.00	\$0.00	New CNG Station - Santa Ana	\$150,000.00	No
MS11015	Go Natural Gas, Inc.				\$150,000.00	\$0.00	New CNG Station - Inglewood	\$150,000.00	No
MS11046	Luis Castro				\$40,000.00	\$0.00	Repower One Heavy-Duty Vehicle	\$40,000.00	No
MS11047	Ivan Borjas				\$40,000.00	\$0.00	Repower One Heavy-Duty Vehicle	\$40,000.00	No
MS11048	Phase II Transportation				\$1,080,000.00	\$0.00	Repower 27 Heavy-Duty Vehicles	\$1,080,000.00	No
MS11049	Ruben Caceras				\$40,000.00	\$0.00	Repower One Heavy-Duty Vehicle	\$40,000.00	No
MS11050	Carlos Arrue				\$40,000.00	\$0.00	Repower One Heavy-Duty Vehicle	\$40,000.00	No
MS11051	Francisco Vargas				\$40,000.00	\$0.00	Repower One Heavy-Duty Vehicle	\$40,000.00	No
MS11053	Jose Ivan Soltero				\$40,000.00	\$0.00	Repower One Heavy-Duty Vehicle	\$40,000.00	No
MS11054	Albino Meza				\$40,000.00	\$0.00	Repower One Heavy-Duty Vehicle	\$40,000.00	No
MS11059	Go Natural Gas				\$150,000.00	\$0.00	New Public Access CNG Station - Paramou	\$150,000.00	No
MS11063	Standard Concrete Products				\$310,825.00	\$0.00	Retrofit Two Off-Road Vehicles under Show	\$310,825.00	No
MS11070	American Honda Motor Company				\$100,000.00	\$0.00	Expansion of Existing CNG Station	\$100,000.00	No
MS11072	Trillium USA Company DBA Californi				\$150,000.00	\$0.00	New Public Access CNG Station	\$150,000.00	No
MS11077	DCL America Inc.				\$263,107.00	\$0.00	Retrofit of 13 Off-Road Diesel Vehicles with	\$263,107.00	No
MS11083	Catrac Construction, Inc.				\$500,000.00	\$0.00	Install DECS on Eight Off-Road Vehicles	\$500,000.00	No
MS11088	Diesel Emission Technologies				\$32,750.00	\$0.00	Retrofit Three H.D. Off-Road Vehicles Under	\$32,750.00	No
MS11089	Diesel Emission Technologies				\$9,750.00	\$0.00	Retrofit One H.D. Off-Road Vehicle Under S	\$9,750.00	No
MS11090	Diesel Emission Technologies				\$14,750.00	\$0.00	Retrofit One H.D. Off-Road Vehicle Under S	\$14,750.00	No

**Total: 20**

#### Closed Contracts

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML11007	Coachella Valley Association of Gov	7/29/2011	7/28/2012		\$250,000.00	\$249,999.96	Regional PM10 Street Sweeping Program	\$0.04	Yes
ML11035	City of La Quinta	11/18/2011	11/17/2012		\$25,368.00	\$25,368.00	Retrofit 3 On-Road Vehicles w/DECS	\$0.00	Yes
MS11002	A-Z Bus Sales, Inc.	7/15/2011	12/31/2011	6/30/2013	\$1,705,000.00	\$1,705,000.00	Alternative Fuel School Bus Incentive Progr	\$0.00	Yes
MS11003	BusWest	7/26/2011	12/31/2011	12/31/2012	\$1,305,000.00	\$1,305,000.00	Alternative Fuel School Bus Incentive Progr	\$0.00	Yes
MS11004	Los Angeles County MTA	9/9/2011	2/29/2012		\$450,000.00	\$299,743.34	Clean Fuel Transit Service to Dodger Stadiu	\$150,256.66	Yes
MS11006	Orange County Transportation Autho	10/7/2011	2/29/2012	8/31/2012	\$268,207.00	\$160,713.00	Metrolink Service to Angel Stadium	\$107,494.00	Yes
MS11018	Orange County Transportation Autho	10/14/2011	1/31/2012		\$211,360.00	\$211,360.00	Express Bus Service to Orange County Fair	\$0.00	Yes
MS11052	Krisda Inc	9/27/2012	6/26/2013		\$120,000.00	\$120,000.00	Repower Three Heavy-Duty Vehicles	\$0.00	Yes
MS11057	Riverside County Transportation Co	7/28/2012	3/27/2013		\$100,000.00	\$89,159.40	Develop and Implement 511 "Smart Phone"	\$10,840.60	Yes
MS11074	SunLine Transit Agency	5/11/2012	7/31/2012		\$41,849.00	\$22,391.00	Transit Service for Coachella Valley Festival	\$19,458.00	Yes
MS11080	Southern California Regional Rail Au	4/6/2012	7/31/2012		\$26,000.00	\$26,000.00	Metrolink Service to Auto Club Speedway	\$0.00	Yes

**Total: 11**

**Open/Complete Contracts**

ML11022	City of Anaheim	3/16/2012	7/15/2018		\$150,000.00	\$150,000.00	Purchase of 5 H.D. Vehicles	\$0.00	No
ML11026	City of Redlands	3/2/2012	10/1/2018		\$90,000.00	\$90,000.00	Purchase 3 Nat. Gas H.D. Vehicles	\$0.00	Yes
ML11028	City of Glendale	1/13/2012	5/12/2018		\$300,000.00	\$300,000.00	Purchase 10 H.D. CNG Vehicles	\$0.00	Yes
ML11030	City of Fullerton	2/3/2012	3/2/2018		\$109,200.00	\$109,200.00	Purchase 2 Nat. Gas H.D. Vehicles, Retrofit	\$0.00	Yes
ML11031	City of Culver City Transportation De	12/2/2011	12/1/2018		\$300,000.00	\$300,000.00	Purchase 10 H.D. Nat. Gas Vehicles	\$0.00	Yes
ML11033	City of Los Angeles, Bureau of Sanit	3/16/2012	1/15/2019		\$1,080,000.00	\$1,080,000.00	Purchase 36 LNG H.D. Vehicles	\$0.00	Yes
ML11037	City of Anaheim	12/22/2012	12/21/2019		\$300,000.00	\$300,000.00	Purchase 12 Nat. Gas H.D. Vehicles	\$0.00	Yes
ML11039	City of Ontario	1/27/2012	9/26/2018		\$180,000.00	\$180,000.00	Purchase 6 Nat. Gas H.D. Vehicles	\$0.00	Yes
ML11044	City of Ontario	1/27/2012	6/26/2019		\$400,000.00	\$400,000.00	Expand Existing CNG Station	\$0.00	Yes
MS11011	EDCO Disposal Corporation	12/30/2011	4/29/2019		\$100,000.00	\$100,000.00	New CNG Station - Signal Hill	\$0.00	Yes
MS11012	EDCO Disposal Corporation	12/30/2011	4/29/2019		\$100,000.00	\$100,000.00	New CNG Station - Buena Park	\$0.00	Yes
MS11017	CR&R, Inc.	3/2/2012	2/1/2018		\$100,000.00	\$100,000.00	Expansion of existing station - Garden Grov	\$0.00	Yes
MS11087	Cemex Construction Material Pacific,	10/16/2012	2/15/2016		\$448,766.00	\$448,760.80	Retrofit 13 H.D. Off-Road Vehicles Under Sh	\$5.20	Yes

**Total: 13**

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
<b>FY 2011-2012 Contracts</b>									
<b>Open Contracts</b>									
ML12013	City of Pasadena	10/19/2012	3/18/2015		\$200,000.00	\$0.00	Electric Vehicle Charging Infrastructure	\$200,000.00	No
ML12014	City of Santa Ana	11/8/2013	8/7/2020		\$384,000.00	\$4,709.00	9 H.D. Nat. Gas & LPG Trucks, EV Charging	\$379,291.00	No
ML12015	City of Fullerton	4/25/2013	11/24/2020		\$40,000.00	\$0.00	HD CNG Vehicle, Expand CNG Station	\$40,000.00	No
ML12016	City of Cathedral City	1/4/2013	10/3/2019		\$60,000.00	\$0.00	CNG Vehicle & Electric Vehicle Infrastructur	\$60,000.00	No
ML12017	City of Los Angeles, Bureau of Sanit	6/26/2013	5/25/2020		\$950,000.00	\$0.00	32 H.D. Nat. Gas Vehicles	\$950,000.00	No
ML12018	City of West Covina	10/18/2013	10/17/2020		\$300,000.00	\$0.00	Expansion of Existing CNG Station	\$300,000.00	No
ML12019	City of Palm Springs	9/6/2013	7/5/2015		\$38,000.00	\$0.00	EV Charging Infrastructure	\$38,000.00	No
ML12020	City of Los Angeles, Department of	9/27/2012	3/26/2019		\$450,000.00	\$0.00	15 H.D. Nat. Gas Vehicles	\$450,000.00	No
ML12021	City of Rancho Cucamonga	9/14/2012	1/13/2020		\$40,000.00	\$30,000.00	Four Medium-Duty Nat. Gas Vehicles	\$10,000.00	No
ML12022	City of La Puente	12/6/2013	6/5/2020		\$110,000.00	\$0.00	2 Medium-Duty and Three Heavy-Duty CNG	\$110,000.00	No
ML12023	County of Los Angeles Internal Servi	8/1/2013	2/28/2015		\$250,000.00	\$0.00	EV Charging Infrastructure	\$250,000.00	No
ML12039	City of Redlands	2/8/2013	10/7/2019		\$90,000.00	\$0.00	Three Heavy-Duty Nat. Gas Vehicles	\$90,000.00	No
ML12041	City of Anaheim Public Utilities Depa	4/4/2014	10/3/2015		\$68,977.00	\$0.00	EV Charging Infrastructure	\$68,977.00	No
ML12043	City of Hemet	6/24/2013	9/23/2019		\$60,000.00	\$0.00	Two Heavy-Duty Nat. Gas Vehicles	\$60,000.00	No
ML12045	City of Baldwin Park DPW	2/14/2014	12/13/2020		\$400,000.00	\$0.00	Install New CNG Station	\$400,000.00	No
ML12046	City of Irvine	8/11/2013	3/10/2021		\$30,000.00	\$0.00	One Heavy-Duty Nat. Gas Vehicle	\$30,000.00	No
ML12048	City of La Palma	1/4/2013	11/3/2018		\$20,000.00	\$0.00	Two Medium-Duty LPG Vehicles	\$20,000.00	No
ML12050	City of Baldwin Park	4/25/2013	4/24/2014	10/24/2014	\$402,400.00	\$0.00	EV Charging Infrastructure	\$402,400.00	No
ML12051	City of Bellflower	2/7/2014	2/6/2016		\$270,000.00	\$0.00	EV Charging Infrastructure	\$270,000.00	No
ML12052	City of Whittier	3/14/2013	7/13/2019		\$165,000.00	\$0.00	Expansion of Existing CNG Station	\$165,000.00	No
ML12054	City of Palm Desert	9/30/2013	2/28/2015		\$77,385.00	\$0.00	EV Charging Infrastructure	\$77,385.00	No
ML12057	City of Coachella	8/28/2013	8/27/2019		\$57,456.00	\$0.00	Purchase One Nat. Gas H.D. Vehicle/Street	\$57,456.00	No
ML12066	City of Manhattan Beach	1/7/2014	4/6/2015		\$5,900.00	\$0.00	Electric Vehicle Charging Infrastructure	\$5,900.00	No
MS12001	Los Angeles County MTA	7/1/2012	4/30/2013		\$300,000.00	\$0.00	Clean Fuel Transit Service to Dodger Stadiu	\$300,000.00	No
MS12004	USA Waste of California, Inc.	10/24/2013	11/23/2019		\$175,000.00	\$0.00	Construct New Limited-Access CNG Station	\$175,000.00	No
MS12008	Bonita Unified School District	7/12/2013	12/11/2019		\$175,000.00	\$0.00	Construct New Limited-Acess CNG Station	\$175,000.00	No
MS12009	Sysco Food Services of Los Angeles	1/7/2014	4/6/2020		\$150,000.00	\$0.00	Construct New Public-Access CNG Station	\$150,000.00	No
MS12010	Murrieta Valley Unified School Distric	4/5/2013	9/4/2019		\$242,786.00	\$218,507.40	Construct New Limited-Access CNG Station	\$24,278.60	No
MS12011	Southern California Gas Company	6/14/2013	6/13/2019	6/13/2020	\$150,000.00	\$0.00	Construct New Public-Access CNG Station -	\$150,000.00	No
MS12012	Rim of the World Unified School Dist	12/20/2012	5/19/2014		\$75,000.00	\$71,250.00	Vehicle Maintenance Facility Modifications	\$3,750.00	No
MS12024	Southern California Gas Company	6/13/2013	12/12/2019		\$150,000.00	\$0.00	Construct New Public-Access CNG Station -	\$150,000.00	No
MS12026	U-Haul Company of California	3/14/2013	3/13/2019		\$500,000.00	\$317,743.43	Purchase 23 Medium-Heavy Duty Vehicles	\$182,256.57	No
MS12027	C.V. Ice Company, Inc.	5/17/2013	11/16/2019		\$75,000.00	\$0.00	Purchase 3 Medium-Heavy Duty Vehicles	\$75,000.00	No
MS12029	Community Action Partnership of Or	11/2/2012	11/1/2018		\$25,000.00	\$14,850.00	Purchase 1 Medium-Heavy Duty Vehicle	\$10,150.00	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
MS12031	Final Assembly, Inc.	11/2/2012	11/1/2018		\$100,000.00	\$29,201.40	Purchase 4 Medium-Heavy Duty Vehicles	\$70,798.60	No
MS12033	Mike Diamond/Phace Management	12/22/2012	12/21/2018		\$500,000.00	\$21,735.00	Purchase 20 Medium-Heavy Duty Vehicles	\$478,265.00	No
MS12034	Ware Disposal Company, Inc.	11/2/2012	11/1/2018		\$133,070.00	\$74,763.00	Purchase 8 Medium-Heavy Duty Vehicles	\$58,307.00	No
MS12060	City of Santa Monica	4/4/2014	8/3/2017		\$500,000.00	\$0.00	Transit-Oriented Bicycle Sharing Program	\$500,000.00	No
MS12061	Orange County Transportation Autho	3/14/2014	3/13/2017		\$224,000.00	\$0.00	Transit-Oriented Bicycle Sharing Program	\$224,000.00	No
MS12062	Fraser Communications	12/7/2012	5/31/2014		\$998,669.00	\$964,687.47	Develop & Implement "Rideshare Thursday"	\$33,981.53	No
MS12063	Custom Alloy Light Metals, Inc.	8/16/2013	2/15/2020		\$100,000.00	\$100,000.00	Install New Limited Access CNG Station	\$0.00	No
MS12064	Anaheim Transportation Network	3/26/2013	12/31/2014		\$127,296.00	\$46,944.56	Implement Anaheim Circulator Service	\$80,351.44	No
MS12067	Leatherwood Construction, Inc.	11/8/2013	3/7/2017		\$122,719.00	\$0.00	Retrofit Six Vehicles w/DECS - Showcase III	\$122,719.00	No
MS12071	Transit Systems Unlimited, Inc.	5/17/2013	12/16/2018		\$21,250.00	\$21,250.00	Expansion of Existing CNG Station	\$0.00	No
MS12072	99 Cents Only Stores	4/5/2013	9/4/2019		\$100,000.00	\$0.00	Construct New CNG Station	\$100,000.00	No
MS12073	FirstCNG, LLC	7/27/2013	12/26/2019		\$150,000.00	\$0.00	Construct New CNG Station	\$150,000.00	No
MS12074	Arcadia Unified School District	7/5/2013	9/4/2019		\$175,000.00	\$166,250.00	Expansion of Existing CNG Infrastructure	\$8,750.00	No
MS12075	CR&R Incorporated	7/27/2013	1/26/2021		\$100,000.00	\$0.00	Expansion of Existing CNG Infrastructure	\$100,000.00	No
MS12076	City of Ontario	3/8/2013	4/7/2015		\$75,000.00	\$0.00	Maintenance Facilities Modification	\$75,000.00	No
MS12077	City of Coachella	6/14/2013	6/13/2020		\$225,000.00	\$0.00	Construct New CNG Station	\$225,000.00	No
MS12078	Penske Truck Leasing Co., L.P.	1/7/2014	1/6/2016		\$75,000.00	\$0.00	Maintenance Facility Modifications - Vernon	\$75,000.00	No
MS12079	Penske Truck Leasing Co., L.P.	1/7/2014	1/6/2016		\$75,000.00	\$0.00	Maintenance Facility Modifications - Boyle H	\$75,000.00	No
MS12080	City of Pasadena	11/8/2013	8/7/2020		\$225,000.00	\$0.00	Expansion of Existing CNG Infrastructure	\$225,000.00	No
MS12081	Penske Truck Leasing Co., L.P.	1/7/2014	1/6/2016		\$75,000.00	\$0.00	Maintenance Facility Modifications - Santa A	\$75,000.00	No
MS12082	City of Los Angeles, Bureau of Sanit	11/20/2013	2/19/2021		\$175,000.00	\$0.00	Install New CNG Infrastructure	\$175,000.00	No
MS12084	Airport Mobil Inc.	12/6/2013	5/5/2020		\$150,000.00	\$0.00	Install New CNG Infrastructure	\$150,000.00	No
MS12085	Bear Valley Unified School District	4/25/2013	6/24/2014		\$75,000.00	\$67,500.00	Maintenance Facility Modifications	\$7,500.00	No
MS12086	SuperShuttle International, Inc.	3/26/2013	3/25/2019		\$225,000.00	\$202,500.00	Purchase 23 Medium-Heavy Duty Vehicles	\$22,500.00	No
MS12087	Los Angeles County MTA	8/29/2013	11/28/2015		\$125,000.00	\$125,000.00	Implement Rideshare Incentives Program	\$0.00	No
MS12088	Orange County Transportation Autho	12/6/2013	3/5/2016		\$125,000.00	\$0.00	Implement Rideshare Incentives Program	\$125,000.00	No
MS12089	Riverside County Transportation Co	10/18/2013	9/17/2015		\$250,000.00	\$0.00	Implement Rideshare Incentives Program	\$250,000.00	No
MS12Hom	Mansfield Gas Equipment Systems				\$296,000.00	\$0.00	Home Refueling Apparatus Incentive Progra	\$296,000.00	No

**Total: 62**

**Pending Execution Contracts**

ML12049	City of Rialto Public Works				\$30,432.00	\$0.00	EV Charging Infrastructure	\$30,432.00	No
MS12083	Brea Olinda Unified School District				\$59,454.00	\$0.00	Install New CNG Infrastructure	\$59,454.00	No

**Total: 2**

**Declined/Cancelled Contracts**

ML12038	City of Long Beach Public Works				\$26,000.00	\$0.00	Electric Vehicle Charging Infrastructure	\$26,000.00	No
ML12040	City of Duarte Transit				\$30,000.00	\$0.00	One Heavy-Duty Nat. Gas Vehicle	\$30,000.00	No
ML12044	County of San Bernardino Public Wo				\$250,000.00	\$0.00	Install New CNG Station	\$250,000.00	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML12053	City of Mission Viejo				\$60,000.00	\$0.00	EV Charging Infrastructure	\$60,000.00	No
MS12007	WestAir Gases & Equipment				\$100,000.00	\$0.00	Construct New Limited-Access CNG Station	\$100,000.00	No
MS12030	Complete Landscape Care, Inc.				\$150,000.00	\$0.00	Purchase 6 Medium-Heavy Duty Vehicles	\$150,000.00	No
MS12070	Valley Music Travel/CID Entertainme				\$99,000.00	\$0.00	Implement Shuttle Service to Coachella Mus	\$99,000.00	No

**Total: 7**

**Closed Contracts**

ML12037	Coachella Valley Association of Gov	3/14/2013	3/13/2014		\$250,000.00	\$250,000.00	Street Sweeping Operations	\$0.00	Yes
ML12056	City of Cathedral City	3/26/2013	5/25/2014		\$25,000.00	\$25,000.00	Regional Street Sweeping Program	\$0.00	Yes
MS12002	Orange County Transportation Autho	9/7/2012	4/30/2013		\$342,340.00	\$333,185.13	Express Bus Service to Orange County Fair	\$9,154.87	Yes
MS12003	Orange County Transportation Autho	7/20/2012	2/28/2013		\$234,669.00	\$167,665.12	Implement Metrolink Service to Angel Stadiu	\$67,003.88	Yes
MS12005	USA Waste of California, Inc.	10/19/2012	8/18/2013		\$75,000.00	\$75,000.00	Vehicle Maintenance Facility Modifications	\$0.00	Yes
MS12006	Waste Management Collection & Re	10/19/2012	8/18/2013		\$75,000.00	\$75,000.00	Vehicle Maintenance Facility Modifications	\$0.00	Yes
MS12059	Orange County Transportation Autho	2/28/2013	12/27/2014		\$75,000.00	\$75,000.00	Maintenance Facilities Modifications	\$0.00	No
MS12065	Orange County Transportation Autho	7/27/2013	11/30/2013		\$43,933.00	\$14,832.93	Ducks Express Service to Honda Center	\$29,100.07	Yes
MS12068	Southern California Regional Rail Au	3/1/2013	9/30/2013		\$57,363.00	\$47,587.10	Implement Metrolink Service to Autoclub Sp	\$9,775.90	Yes
MS12069	City of Irvine	8/11/2013	2/28/2014		\$45,000.00	\$26,649.41	Implement Special Transit Service to Solar	\$18,350.59	Yes

**Total: 10**

**Open/Complete Contracts**

ML12042	City of Chino Hills	1/18/2013	3/17/2017		\$87,500.00	\$87,500.00	Expansion of Existing CNG Station	\$0.00	Yes
ML12047	City of Orange	2/1/2013	1/31/2019		\$30,000.00	\$30,000.00	One Heavy-Duty Nat. Gas Vehicle	\$0.00	No
ML12055	City of Manhattan Beach	3/1/2013	12/31/2018		\$10,000.00	\$10,000.00	One Medium-Duty Nat. Gas Vehicle	\$0.00	Yes
MS12025	Silverado Stages, Inc.	11/2/2012	7/1/2018		\$150,000.00	\$150,000.00	Purchase Six Medium-Heavy Duty Vehicles	\$0.00	Yes
MS12028	Dy-Dee Service of Pasadena, Inc.	12/22/2012	1/21/2019		\$45,000.00	\$40,000.00	Purchase 2 Medium-Duty and 1 Medium-He	\$5,000.00	Yes
MS12032	Fox Transportation	12/14/2012	12/13/2018		\$500,000.00	\$500,000.00	Purchase 20 Medium-Heavy Duty Vehicles	\$0.00	Yes
MS12035	Disneyland Resort	1/4/2013	7/3/2019		\$25,000.00	\$18,900.00	Purchase 1 Medium-Heavy Duty Vehicle	\$6,100.00	Yes
MS12036	Jim & Doug Carter's Automotive/VS	1/4/2013	11/3/2018		\$50,000.00	\$50,000.00	Purchase 2 Medium-Heavy Duty Vehicles	\$0.00	Yes
MS12058	Krisda Inc	4/24/2013	1/23/2019		\$25,000.00	\$25,000.00	Repower One Heavy-Duty Off-Road Vehicle	\$0.00	Yes

**Total: 9**



Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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## FY 2012-2014 Contracts

### Open Contracts

MS14002	Orange County Transportation Autho	9/6/2013	4/30/2014		\$576,833.00	\$576,833.00	Clean Fuel Transit Service to Orange Count	\$0.00	No
MS14003	Orange County Transportation Autho	8/1/2013	4/30/2014	10/30/2014	\$194,235.00	\$0.00	Implement Metrolink Service to Angel Stadiu	\$194,235.00	No
MS14004	Orange County Transportation Autho	9/24/2013	4/30/2014		\$36,800.00	\$35,485.23	Implement Express Bus Service to Solar De	\$1,314.77	No
MS14005	Transit Systems Unlimited, Inc.	4/11/2014	2/28/2016		\$515,200.00	\$0.00	Provide Expanded Shuttle Service to Hollyw	\$515,200.00	No
MS14009	A-Z Bus Sales, Inc.	1/17/2014	12/31/2014		\$160,000.00	\$160,000.00	Alternative Fuel School Bus Incentive Progr	\$0.00	No
MS14044	TIMCO CNG Fund I, LLC	5/2/2014	11/1/2020		\$150,000.00	\$135,000.00	New Public-Access CNG Station in Santa A	\$15,000.00	No
MS14047	Southern California Regional Rail Au	3/7/2014	9/30/2014		\$49,203.00	\$0.00	Special Metrolink Service to Autoclub Speed	\$49,203.00	No
MS14048	BusWest	3/14/2014	12/31/2014		\$62,000.00	\$62,000.00	Alternative Fuel School Bus Incentive Progr	\$0.00	No

**Total: 8**

### Pending Execution Contracts

ML14010	City of Cathedral City				\$25,000.00	\$0.00	Street Sweeping Operations	\$25,000.00	No
ML14011	City of Palm Springs				\$79,000.00	\$0.00	Bicycle Racks, Bicycle Outreach & Educatio	\$79,000.00	No
ML14012	City of Santa Ana				\$244,000.00	\$0.00	EV Charging and 7 H.D. LPG Vehicles	\$244,000.00	No
ML14013	City of Los Angeles, Bureau of Sanit				\$3,840,000.00	\$0.00	Purchase 128 H.D. Nat. Gas Vehicles	\$3,840,000.00	No
ML14014	City of Torrance				\$56,000.00	\$0.00	EV Charging Infrastructure	\$56,000.00	No
ML14015	Coachella Valley Association of Gov				\$250,000.00	\$0.00	Street Sweeping Operations	\$250,000.00	No
ML14016	City of Anaheim				\$380,000.00	\$0.00	Purchase 2 H.D. Vehicles, Expansion of Exi	\$380,000.00	No
ML14018	City of Los Angeles, Department of				\$810,000.00	\$0.00	Purchase 27 H.D. Nat. Gas Vehicles	\$810,000.00	No
ML14019	City of Corona Public Works				\$178,263.00	\$0.00	EV Charging, Bicycle Racks, Bicycle Locker	\$178,263.00	No
ML14020	County of Los Angeles Dept of Publi				\$150,000.00	\$0.00	San Gabriel BikeTrail Underpass Improvem	\$150,000.00	No
ML14021	Riverside County Regional Park and				\$250,000.00	\$0.00	Bicycle Trail Improvements	\$250,000.00	No
ML14022	County of Los Angeles Department o				\$300,000.00	\$0.00	Purchase 10 H.D. Nat. Gas Vehicles	\$300,000.00	No
ML14023	County of Los Angeles Department o				\$230,000.00	\$0.00	Maintenance Fac. Modifications-Westcheste	\$230,000.00	No
ML14024	County of Los Angeles Department o				\$230,000.00	\$0.00	Maintenance Fac. Modifications-Baldwin Par	\$230,000.00	No
ML14025	County of Los Angeles Dept of Publi				\$500,000.00	\$0.00	Construct New CNG Station in Malibu	\$500,000.00	No
ML14026	County of Los Angeles Dept of Publi				\$500,000.00	\$0.00	Construct New CNG Station in Castaic	\$500,000.00	No
ML14027	County of Los Angeles Dept of Publi				\$500,000.00	\$0.00	Construct New CNG Station in Downey	\$500,000.00	No
ML14028	City of Fullerton				\$126,950.00	\$0.00	Expansion of Existing CNG Infrastructure	\$126,950.00	No
ML14029	City of Irvine				\$90,500.00	\$0.00	Bicycle Trail Improvements	\$90,500.00	No
ML14030	County of Los Angeles Internal Servi				\$425,000.00	\$0.00	Bicycle Racks, Outreach & Education	\$425,000.00	No
ML14031	Riverside County Waste Manageme				\$90,000.00	\$0.00	Purchase 3 H.D. CNG Vehicles	\$90,000.00	No
ML14032	City of Rancho Cucamonga				\$226,770.00	\$0.00	Expansion of Existing CNG Infras., Bicycle L	\$226,770.00	No
ML14033	City of Irvine				\$60,000.00	\$0.00	Purchase 2 H.D. CNG Vehicles	\$60,000.00	No
ML14034	City of Lake Elsinore				\$56,700.00	\$0.00	EV Charging Stations	\$56,700.00	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML14049	City of Moreno Valley				\$105,000.00	\$0.00	One HD Nat Gas Vehicle, EV Charging, Bicy	\$105,000.00	No
ML14050	City of Yucaipa				\$84,795.00	\$0.00	Installation of Bicycle Lanes	\$84,795.00	No
ML14051	City of Brea				\$450,000.00	\$0.00	Installation of Bicycle Trail	\$450,000.00	No
ML14054	City of Torrance				\$350,000.00	\$0.00	Upgrade Maintenance Facility	\$350,000.00	No
ML14055	City of Highland				\$500,000.00	\$0.00	Bicycle Lanes and Outreach	\$500,000.00	No
ML14056	City of Redlands				\$125,000.00	\$0.00	Bicycle Lanes	\$125,000.00	No
ML14060	County of Los Angeles Internal Servi				\$104,400.00	\$0.00	Electric Vehicle Charging Infrastructure	\$104,400.00	No
ML14061	City of La Habra				\$60,000.00	\$0.00	Purchase Two Heavy-Duty Nat. Gas Vehicle	\$60,000.00	No
ML14062	City of San Fernando				\$500,000.00	\$0.00	Construct New CNG Fueling Station	\$500,000.00	No
ML14063	City of Hawthorne				\$32,000.00	\$0.00	Expansion of Existng CNG Infrastructure	\$32,000.00	No
ML14064	City of Claremont				\$60,000.00	\$0.00	Purchase Two Heavy-Duty Nat. Gas Vehicle	\$60,000.00	No
ML14065	City of Orange				\$10,000.00	\$0.00	Electric Vehicle Charging Infrastructure	\$10,000.00	No
ML14066	City of South Pasadena				\$142,096.00	\$0.00	Bicycle Trail Improvements	\$142,096.00	No
ML14067	City of Duarte Transit				\$60,000.00	\$0.00	Purchase Two Heavy-Duty Nat. Gas Vehicle	\$60,000.00	No
ML14068	City of South Pasadena				\$10,183.00	\$0.00	Electric Vehicle Charging Infrastructure	\$10,183.00	No
ML14069	City of Beaumont				\$200,000.00	\$0.00	Construct New CNG Infrastructure	\$200,000.00	No
ML14070	City of Rancho Cucamonga				\$365,245.00	\$0.00	Bicycle Trail Improvements	\$365,245.00	No
ML14071	City of Manhattan Beach				\$22,485.00	\$0.00	Electric Vehicle Charging Infrastructure	\$22,485.00	No
ML14072	City of Cathedral City				\$136,000.00	\$0.00	Medium & H.D. Vehicles, EV Charging, Bike	\$136,000.00	No
MS14001	Los Angeles County MTA				\$1,227,450.00	\$0.00	Clean Fuel Transit Service to Dodger Stadiu	\$1,227,450.00	No
MS14007	Orange County Transportation Autho				\$208,520.00	\$0.00	Implement Special Metrolink Service to Ang	\$208,520.00	No
MS14008	Orange County Transportation Autho				\$601,187.00	\$0.00	Implement Clean Fuel Bus Service to Orang	\$601,187.00	No
MS14035	Penske Truck Leasing Co., L.P.				\$75,000.00	\$0.00	Vehicle Maint. Fac. Modifications - Sun Valle	\$75,000.00	No
MS14036	Penske Truck Leasing Co., L.P.				\$75,000.00	\$0.00	Vehicle Maint. Fac. Modifications - La Mirad	\$75,000.00	No
MS14037	Penske Truck Leasing Co., L.P.				\$75,000.00	\$0.00	Vehicle Maint. Fac. Modifications - Carson	\$75,000.00	No
MS14038	Penske Truck Leasing Co., L.P.				\$75,000.00	\$0.00	Vehicle Maint. Fac. Modifications - Fontana	\$75,000.00	No
MS14039	Waste Management Collection and				\$75,000.00	\$0.00	Vehicle Maint. Fac. Modifications - Irvine	\$75,000.00	No
MS14040	Waste Management Collection and				\$75,000.00	\$0.00	Vehicle Maint. Fac. Modifications - Santa An	\$75,000.00	No
MS14041	USA Waste of California, Inc.				\$175,000.00	\$0.00	Limited-Access CNG Station, Vehicle Maint.	\$175,000.00	No
MS14042	Grand Central Recycling & Transfer				\$150,000.00	\$0.00	Expansion of Existing CNG Station	\$150,000.00	No
MS14045	TIMCO CNG Fund I, LLC				\$150,000.00	\$0.00	New Public-Access CNG Station in Inglewoo	\$150,000.00	No
MS14046	Ontario CNG Station Inc.				\$150,000.00	\$0.00	Expansion of Existing CNG Infrastructure	\$150,000.00	No
MS14052	Arcadia Unified School District				\$78,000.00	\$0.00	Expansion of an Existing CNG Fueling Statio	\$78,000.00	No
MS14053	Upland Unified School District				\$175,000.00	\$0.00	Expansion of Existing CNG Infrastructure	\$175,000.00	No
MS14057	Los Angeles County MTA				\$1,250,000.00	\$0.00	Implement Various Signal Synchronization P	\$1,250,000.00	No
MS14058	Orange County Transportation Autho				\$1,250,000.00	\$0.00	Implement Various Signal Synchronization P	\$1,250,000.00	No
MS14059	Riverside County Transportation Co				\$939,625.00	\$0.00	Implement Various Signal Synchronization P	\$939,625.00	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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Total: 61

**Declined/Cancelled Contracts**

MS14043	City of Anaheim				\$175,000.00	\$0.00	Expansion of Existing CNG Station	\$175,000.00	No
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Total: 1

 [Back to Agenda](#)

BOARD MEETING DATE: July 11, 2014

AGENDA NO. 35

REPORT: California Air Resources Board Monthly Meeting

SYNOPSIS: The California Air Resources Board met on June 26, 2014 in Sacramento. The following is a summary of this meeting.

RECOMMENDED ACTION:  
Receive and File.

Judith Mitchell, Member  
SCAQMD Governing Board

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The Air Resources Board's (ARB or Board) June meeting was held on June 26 in Sacramento, at the California Environmental Protection Agency Headquarters Building. Key items presented are summarized below.

### **1. Update on ARB Mobile Source Measurement Capabilities**

The Board heard an informational update on the broad range of measurement methods and tools that ARB staff and extramural researchers use to evaluate emissions from on- and off-road mobile sources in California. These tools include chassis dynamometers and other laboratory-scale equipment housed at ARB's three laboratory facilities, as well as portable systems that enable measurement of emissions in real-world traffic conditions. Many of these tools were on display for Board members during the Mobile Source Measurement Showcase at the May 2014 Board Meeting. The data collected by these tools provide scientific data for use in ARB's programs for on-and off-road mobile sources and fuels, and to inform enforcement efforts.

## **2. Amendments to the Enhanced Fleet Modernization Program**

The Board approved amendments to the Enhanced Fleet Modernization Program, which is a voluntary accelerated vehicle retirement program that provides incentives to vehicle owners to retire older, more polluting vehicles. The amendments include improvements identified through a 2013 program assessment and changes mandated by Senate Bill 459. New provisions focus program participation on low- and moderate-income motorists, help ensure emission reductions by verifying functionality of retired cars, and provide flexibility to air districts that implement the program.

**AQMD Staff Comments/Testimony:** Staff urged the CARB Board to adopt the proposed amendments to the Enhanced Fleet Modernization Program (EFMP). Staff indicated that in July 2014, the SCAQMD Governing Board will be considering the release of an RFP to implement the EFMP. The RFP was considered by the SCAQMD Governing Board Technology Committee on June 20, 2014 and the Committee recommended moving the item for the Governing Board's consideration. Staff indicated that the focus of the RFP is to solicit approaches to outreach to lower-income vehicle owners and to a broad spectrum of communities given the diverse demographics of the region. In addition, the RFP seeks approaches to assist lower-income vehicle owners in seeking a replacement vehicle and the associated financial assistance for the vehicle owners.

## **3. Fiscal Year 2014-2015 Funding Plan for the Air Quality Improvement Program and Low Carbon Transportation Greenhouse Gas Reduction Fund**

The Board approved the Fiscal Year 2014-2015 Funding Plan, which allocates \$22 million from the Governor's proposed budget for the Air Quality Improvement Program and \$200 million from Cap-and-Trade auction proceeds for low carbon transportation projects. The largest portion of the combined allocation continues to fund incentives for zero-emission and plug-in passenger cars and hybrid and zero-emission trucks and buses. Funding is also allocated for passenger vehicle pilot projects in disadvantaged communities, advanced technology freight demonstration projects, and a loan guarantee program for on-road trucks. About 50 percent of the total investments will especially benefit disadvantaged communities.

**AQMD Staff Comments/Testimony:** Staff urged the CARB Board to approve the CARB staff proposed Fiscal Year 2014-15 Funding Plan for the Air Quality Improvement Program and Low Carbon Transportation Greenhouse Gas Reduction Fund Investments. The Funding Plan sends a strong signal on the early deployment of zero-emission vehicle technologies and zero-emission equipment at goods movement

facilities. Staff indicated that recent goods movement project expansions are considering the deployment of zero-emission technologies. In particular, the I-710 Freeway Expansion Project proponents are considering analyzing a dedicated zero-emission truck corridor as part of the Environmental Assessment. Expenditures through the Funding Program send a strong signal that zero-emission trucks will be commercially available when a corridor is built-out.

#### **4. Update on Federal Climate Activities**

The Board heard an informational update on federal climate activities, including the President's Climate Action Plan and recent Supreme Court decisions that mandate federal action to reduce greenhouse gas emissions. Together, these federal actions target some of the largest emitters of greenhouse gases under federal jurisdiction. The update included a discussion of California's leadership role in helping shape the federal programs, and a discussion of opportunities for regional collaborations with other western states in implementing the new programs.

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#### Consent Items

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#### **1. 8-hour Ozone State Implementation Plan Emission Inventory Submittal**

The Board approved emission inventories for California's 8-hour ozone nonattainment areas for submittal to the U.S. Environmental Protection Agency as a revision to the California State Implementation Plan.

#### **Attachment**

CARB June 26, 2014 Meeting Agenda

**LOCATION:**

Air Resources Board  
Byron Sher Auditorium, Second Floor  
1001 I Street  
Sacramento, California 95814  
<http://www.calepa.ca.gov/EPAbldg/location.htm>

**PUBLIC MEETING AGENDA**

**Thursday, June 26, 2014**

[Webcast](#)  
[Board Book](#)

This facility is accessible by public transit. For transit information, call (916) 321-BUSS, website:

<http://www.sacrt.com>

(This facility is accessible to persons with disabilities.)

**TO SUBMIT WRITTEN COMMENTS ON AN AGENDA ITEM IN ADVANCE OF THE MEETING GO TO:** <http://www.arb.ca.gov/lispub/comm/bclist.php>

**Thursday**  
**June 26, 2014**  
**9:00 a.m.**

**CONSENT CALENDAR:**

The following item on the consent calendar will be presented to the Board immediately after the start of the public meeting, unless removed from the consent calendar either upon a Board member's request or if someone in the audience wishes to speak on it.

**Consent Item #**

**14-5-1: Public Meeting to Consider the Approval of the 8-Hour Ozone State Implementation Plan Emission Inventory Submittal**

*Staff recommends the Board approve the 2012 summer baseline planning emission inventories for the 8-hour ozone nonattainment areas in California for submittal to the United States Environmental Protection Agency.*

[More Information](#)

[Proposed Resolution](#)

**DISCUSSION ITEMS:**

**Note:** The following agenda items may be heard in a different order at the Board meeting.

**Agenda Item #**

**14-5-2: The Air Resources Board's Mobile Source Measurement Capabilities**

*Staff will present to the Board an informational item describing the range of mobile source emission measurement methods and tools that support the Board's on- and off-road regulatory programs. Staff will describe how these methods and tools have improved since the 1960s to address the Air Resources Board's changing mobile source program priorities and how they will need to continue to evolve to meet air quality and climate challenges in the coming decades.*

[Staff Presentation](#)

**14-5-3: Public Hearing to Consider Amendments to the Enhanced Fleet Modernization Program**

*The Enhanced Fleet Modernization Program (EFMP) is a voluntary accelerated vehicle retirement or “car scrap” program that provides monetary incentives to vehicle owners to retire older, more polluting vehicles. The program reduces emissions by accelerating the turnover and subsequent replacement of the existing light-duty fleet with newer, cleaner vehicles. Staff will present to the Board proposed amendments to improve EFMP by focusing the program on low-income participants, expanding program flexibility to improve program participation, enhancing emissions benefits by ensuring the vehicles that are retired are functional, and increasing outreach to community-based organizations.*

[More Information](#)

[Staff Presentation](#)

**14-5-4: Public Meeting to Consider the Approval of the Proposed Fiscal Year 2014-15 Funding Plan for the Air Quality Improvement Program and Low Carbon Transportation Greenhouse Gas Reduction Fund Investments**

*Staff will present to the Board the Proposed Fiscal Year 2014-15 Funding Plan which provides staff’s recommendations for allocating up to \$22 million identified in the Governor’s proposed budget for the Air Quality Implementation Plan (AQIP) and \$200 million from the Greenhouse Gas Reduction Fund (GGRF) for low carbon transportation projects. Staff is combining the two funding sources (AQIP and GGRF) into one Funding Plan. AQIP provides incentive funding through 2023 for clean vehicle and equipment projects. GGRF receives Cap-and-Trade auction proceeds to support greenhouse gas emission reduction projects. Staff recommends directing most of this year’s combined funding to continue incentives for zero-emission and plug-in passenger cars and hybrid and zero-emission trucks and buses. A portion of funding would also be allocated to advanced technology freight demonstration projects and a loan guarantee program for on-road trucks.*

[More Information](#)

[Staff Presentation](#)

**14-5-5: Update to the Board on Federal Climate Activities**

*Staff will present to the Board an update on federal climate activities and the Air Resources Board’s role in coordinating State and federal programs.*

[Staff Presentation](#)

**CLOSED SESSION**

*The Board will hold a closed session, as authorized by Government Code section 11126(e), to confer with, and receive advice from, its legal counsel regarding the following pending or potential litigation, and as authorized by Government Code section 11126(a):*

*POET, LLC, et al. v. Corey, et al., Superior Court of California (Fresno County), Case No. 09CECG04850; plaintiffs’ appeal, California Court of Appeal, Fifth District, Case No. F064045; California Supreme Court, Case No. S213394.*

*Rocky Mountain Farmers Union, et al. v. Corey, U.S. District Court (E.D. Cal. Fresno), Case No. 1:09-CV-02234-LJO-DLB; ARB interlocutory appeal, U.S. Court of Appeals, Ninth Circuit, Case No. 09-CV-02234; plaintiffs’ petition for certiorari, U.S. Supreme Court, Case No. 13-1148.*



*American Fuels and Petrochemical Manufacturing Associations, et al. v. Corey, et al., U.S. District Court (E.D. Cal. Fresno), Case No. 1:10-CV-00163-AWI-GSA; ARB's interlocutory appeal, U.S. Court of Appeals, Ninth Circuit, Case No. 10-CV-00163; plaintiffs' petition for certiorari, U.S. Supreme Court, Case No. 13-11490.*

*California Dump Truck Owners Association v. Nichols, U.S. District Court (E.D. Cal. Sacramento), Case No. 2:11-CV-00384-MCE-GGH; plaintiffs' appeal, U.S. Court of Appeals, Ninth Circuit, Case No. 13-15175.*

*Engine Manufacturers Association v. California Air Resources Board, Sacramento Superior Court, Case No. 34-2010-00082774; ARB's appeal, California Court of Appeal, Third District, Case No. C071891.*

*Truck and Engine Manufacturers Association v. California Air Resources Board, Sacramento Superior Court, Case No. 34-2013-00150733.*

*Alliance of Automobile Manufacturers v. California Air Resources Board; Sacramento Superior Court, Case No. 34-2013-00152974.*

*Citizens Climate Lobby and Our Children's Earth Foundation v. California Air Resources Board, San Francisco Superior Court, Case No. CGC-12-519554, plaintiffs' appeal, California Court of Appeal, First District, Case No. A138830.*

*California Chamber of Commerce et al. v. California Air Resources Board, Sacramento Superior Court, Case No. 34-2012-80001313; plaintiffs' appeal, California Court of Appeal, Third District, Case No. C075930.*

*Morning Star Packing Company, et al. v. California Air Resources Board, et al., Sacramento Superior Court, Case No. 34-2013-800001464; plaintiffs' appeal, California Court of Appeal, Third District, Case No. C075954.*

*Delta Construction Company, et al. v. United States Environmental Protection Agency, U.S. Court of Appeals, District of Columbia Circuit, Case No. 11-1428.*

*City of Los Angeles through Department of Water and Power v. California Air Resources Board, et al., Los Angeles Superior Court, Case No. BS140620 (transferred to Sacramento Superior Court, Case No. 34-2013-80001451-CU-WM-GDS).*

*Alliance for California Business v. Nichols et al., Glenn County Superior Court, Case No. 13CV01232.*

*Dalton Trucking, Inc. v. United States Environmental Protection Agency, U.S. Court of Appeals, District of Columbia Circuit, Case No. 13-1283.*

*Owner-Operator Independent Drivers Association Inc. et al. v. Richard W. Corey et al., U.S. District Court, (E.D. Cal. Fresno) Case No. 1:13-CV-01998-LJO-SAB (transferred by court to E.D. Cal. Sacramento, Case No. 2:14-CV-00186-MCE-AC).*

*John R. Lawson Rock & Oil, Inc. et al. v. California Air Resources Board et al., Fresno Superior Court, Case No. 14-CECG01494.*

**OPPORTUNITY FOR MEMBERS OF THE BOARD TO COMMENT ON MATTERS OF INTEREST**

*Board members may identify matters they would like to have noticed for consideration at future meetings and comment on topics of interest; no formal action on these topics will be taken without further notice.*

**OPEN SESSION TO PROVIDE AN OPPORTUNITY FOR MEMBERS OF THE PUBLIC TO ADDRESS THE BOARD ON SUBJECT MATTERS WITHIN THE JURISDICTION OF THE BOARD**

*Although no formal Board action may be taken, the Board is allowing an opportunity to interested members of the public to address the Board on items of interest that are within the Board's jurisdiction, but that do not specifically appear on the agenda. Each person will be allowed a maximum of three minutes to ensure that everyone has a chance to speak.*

**TO ELECTRONICALLY SUBMIT WRITTEN COMMENTS ON AN AGENDA ITEM IN ADVANCE OF THE MEETING GO TO:**

<http://www.arb.ca.gov/lispub/comm/bclist.php>

(Note: not all agenda items are available for electronic submittals of written comments.)

**IF YOU HAVE ANY QUESTIONS, PLEASE CONTACT THE CLERK OF THE BOARD:**

**1001 I Street, 23<sup>rd</sup> Floor, Sacramento, California 95814**

**(916) 322-5594**

**ARB Homepage: [www.arb.ca.gov](http://www.arb.ca.gov)**

**SPECIAL ACCOMMODATION REQUEST**

Consistent with California Government Code Section 7296.2, special accommodation or language needs may be provided for any of the following:

- An interpreter to be available at the hearing;
- Documents made available in an alternate format or another language;
- A disability-related reasonable accommodation.

To request these special accommodations or language needs, please contact the Clerk of the Board at (916) 322-5594 or by facsimile at (916) 322-3928 as soon as possible, but no later than 7 business days before the scheduled Board hearing. TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.

Consecuente con la sección 7296.2 del Código de Gobierno de California, una acomodación especial o necesidades lingüísticas pueden ser suministradas para cualquiera de los siguientes:

- Un intérprete que esté disponible en la audiencia
- Documentos disponibles en un formato alterno u otro idioma
- Una acomodación razonable relacionados con una incapacidad

Para solicitar estas comodidades especiales o necesidades de otro idioma, por favor llame a la oficina del Consejo al (916) 322-5594 o envíe un fax a (916) 322-3928 lo más pronto posible, pero no menos de 7 días de trabajo antes del día programado para la audiencia del Consejo. TTY/TDD/Personas que necesiten este servicio pueden marcar el 711 para el Servicio de Retransmisión de Mensajes de California.

**SMOKING IS NOT PERMITTED AT MEETINGS OF THE CALIFORNIA AIR RESOURCES BOARD**

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BOARD MEETING DATE: July 11, 2014

AGENDA NO. 36

PROPOSAL: California Fuel Cell Partnership Executive Board Meeting Notes and Quarterly Updates

SYNOPSIS: This report summarizes the California Fuel Cell Partnership Executive Board meeting held April 15, 2014, and provides updates for quarters beginning October 2013 and January 2014.

COMMITTEE: Technology, June 20, 2014; Recommended for Approval

**RECOMMENDED ACTION:**

Receive and file the attached Executive Board meeting notes and quarterly updates.

Clark E. Parker, Ph.D.  
SCAQMD Representative to CaFCP

MMM:LHM

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The next California Fuel Cell Partnership (CaFCP) Executive Board meeting is scheduled for October 21, 2014, in Sacramento.

Additional information about the CaFCP can be found at <http://www.fuelcellpartnership.org>.

**Attachments**

- 1) California Fuel Cell Partnership Executive Board April 15, 2014 Meeting Notes
- 2) California Fuel Cell Partnership Quarterly Update (October–December 2013)
- 3) California Fuel Cell Partnership Quarterly Update (January–March 2014)

# MEETING NOTES

## CaFCP Executive Board

April 15, 2014

8:00am – 5:30pm

LOCATION: SCAQMD Headquarters, 21865 East Copley Drive, Diamond Bar, CA 91765, GB Conference Room

### Executive Board Attendees

Robert Bienenfeld, **Honda (Chair)** Ronald Grassman, **Mercedes**  
Bob Babik, **GM** Reg Modlin, **Chrysler**  
Gil Castillo, **Hyundai** Kenzo Oshihara, **Nissan**  
Justin Ward, **Toyota** Joerg Launer, **Volkswagen**  
Mary Nichols, **CARB** Janea Scott, **CEC**  
Clark Parker, **SCAQMD** Francisco Donez, **US EPA**

Executive Board representatives from AFCC or US DOE were not present.

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### 8:30am – 8:40am

Robert Bienenfeld, Chair

### 1. Welcome

Welcome and remarks from the CaFCP Chair

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### 8:40am – 9:00am

Honda  
Hyundai  
Mercedes  
Toyota

### 2. Automaker briefing

Presentations from four automakers.

- Toyota discussed styling decisions for future vehicle
- Hyundai highlighted 10 vehicles deployed in Europe
- Honda highlighted that the FC stack in its new vehicles fits in engine compartment and will be an improvement of +35% in weight output density and +60% volume density since 2008 FCX Clarity.
- Mercedes said global activity is ~200 B Class and 30 Citaro bus. Have 69 B Class in CA now, over 1.2M miles and extending the lease program for two more years
- Infrastructure remains important for all OEMs

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### 9:00am – 9:45am

Tyson Eckerle, GO-Biz (lead)  
CEC  
CARB  
Air Liquide  
Air Products  
Linde

### 3. Hydrogen station briefing

- Current update on stations in construction and permitting; all 2010 funded stations must be operational by fall 2014.
  - 2012-funded stations must be operational by 2017
  - New fire code changes some setback distances that negatively impacts some station locations. Reviewing possible solutions.
  - Recap of GO-Biz event held the previous day; good attendance and interest. Following up with permitting workshops and Northern CA events
  - Current stations:  
In February 2014 Emeryville station conducted 51 fills 93 kg;  
Burbank 97 fills 157 kg; Harbor City 73 fills 153 kg; Fountain Valley 174 fills 507 kg.
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**9:45am – 10:15am**

Randall Winston, Governor's Office

**4. Briefing on Governor's Office ZEV Summit and next steps**

Participants in the March 7, 2014 ZEV Summit identified progress and new challenges in launching FCEVs and hydrogen into the early market.

Important next steps include:

- Issue a H2 permitting guidebook. Build upon 2013 ZEV guidebook, but more detailed.
  - Assuring network of stations in 2015-17.
  - Develop a FCV and H2 Roadmap. Including priority locations, raise awareness and metrics for success. Build off CaFCP RM and will be a state inter-agency plan.
  - As 8-state MOU moves forward, ensure that other state action plans include fuel cells and hydrogen.
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**10:15am – 11:45am**

Alex Keros, General Motors (lead)  
Gerhard Achtehlik, CARB (co-lead)  
CaFCP staff

**5. CaFCP Roadmap progress report**

In 2012 CaFCP published *A California Roadmap*. The CaFCP Roadmap Progress Report will document significant actions taken to meet the Roadmap goals and identify priorities for further action. Team leads will provide an overview of the project, current status and timeline for publication in late May-Early June

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**1:00pm – 2:30pm**

Matt Miyasato, SCAQMD (lead)  
CARB  
CEC  
USEPA  
DOE

**6. Strategies to reduce air quality impacts of medium- and heavy-duty vehicles**

Californians suffer the worst air quality in the nation. Medium- and heavy-duty vehicles are some of the biggest contributors to poor air quality, especially in disadvantaged communities and near freight centers. Speakers highlighted the current situation as well as actions and incentives to address these challenges in the medium- and heavy-duty vehicle sectors.

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**3:00pm – 4:30pm**

Fred Silver, CALSTART (lead)  
CTE  
Hydrogenics  
Sandia National Labs  
US Hybrid

**7. Getting to zero: Fuel cells in medium- and heavy-duty vehicles and port applications**

Companies and developers have made significant advancements using fuel cells for medium- and heavy-duty applications. These advancements provide new opportunities in dual platform cutaway chassis, delivery and drayage trucks, refueling vehicles and portside auxiliary power. Speakers will present their latest advancements, product demonstrations and new offerings for these market sectors.

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**4:30pm – 5:00pm**

CaFCP staff

**8. Business items**

- Highlighted 2013 accomplishments included the fuel cell bus roadmap and legislative outreach activities.
  - Reviewed 2013 financials
  - Reported that FTA is no longer a CaFCP member
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**Antitrust Guidelines**

*It is the express intent of the CaFCP and its members that none of the organization's activities will violate or be in conflict with any federal, state or local antitrust law, rule or policy (collectively, the antitrust laws). Each member will conduct its affairs in conformity with this intent. Each member is aware that there are significant civil and criminal penalties for violating antitrust laws. To the extent possible, the CaFCP and the members will act in a manner substantially in compliance with the policy entitled "Antitrust Guidelines for Collaboration Among Competitors" issued by the Federal Trade Commission and the Department of Justice and dated April 2000. This document is available for reference on CaFCP's member resources website.*

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**CaFCP Quarterly Update**  
October-December 2013

**Background**

The California Fuel Cell Partnership is a unique collaborative of auto manufacturers, energy companies, fuel cell technology companies, and government agencies, including SCAQMD. This report summarizes CaFCP activity in or related to Southern California for July to September 2013.

In its fourth phase, 2013-2016, CaFCP members, individually or in groups, will focus on meeting these goals to achieve market launch:

- Prepare for larger-scale manufacturing, which encompasses cost reduction, supply chain and production.
- Work on the customer channel, including identifying and training dealers and service technicians.
- Reduce costs of station equipment, increase supply of renewable hydrogen at lower cost, and develop new retail station approaches.
- Support cost reduction through incentives and targeted RD&D projects
- Continue research, development and demonstration of advanced concepts in renewable and other low-carbon hydrogen.
- Provide education and outreach to the public and community stakeholders on the role of FCVs and hydrogen in the evolution to electric drive.

CaFCP and members' activities fall within three main strategic directions:

1. Proving that hydrogen and fuel cell vehicles are undeniable and necessary
2. Convincing the public
3. Adapting to new realities

To successfully implement the vision, CaFCP activities must focus on technical, communications and business operations/strategies that require collaboration and coordination. A detailed CaFCP implementation plan is available as a separate document.

**2013 CaFCP Program Plan**

Goal	Description	Milestones	Q4 Status
<b>1. Facilitate member collaboration</b>			
The California Fuel Cell Partnership (CaFCP) facilitates members and stakeholder coordination on projects and activities of common interest in order to leverage resources, communicate progress, bring together new players, and overcome challenges more quickly than could be accomplished by individual action.			
1a. Operate and decommission WSS	Operate the WSS to support Sacramento area FCEVs and decommission after nine months	Q3: Develop decommissioning plan Q4: Finalize contract for decommissioning Q4: Station closed (Nov 30) Q4: Facilities restored to original	Decommissioning completed
1c. Gain support for California fuel cell bus roadmap	Complete the California fuel cell bus roll out plan through 2017 and in 2013 will work to gain support for implementing the plan.	Q1: Present draft "FCEB in CA" to ST for review & approval Q1: Support execution of National FCEB workshop Q2: Execute Spring Bus Team meeting Q4: Support execution of International FCEB workshop Q4: Execute Fall Bus Team meeting	Completed with Fuel Cell Bus Roadmap, two CA Bus Team meetings, one national (online) and one international (in-person) fuel cell bus workshop.  Conducted outreach to brief planning agencies, select transit agencies and local-level elected officials about road map.
1d. Support Gov's ZEV Action plan	Support implementation by providing a forum and pathway for coordinated action among H2 FCV stakeholders	tbd (based on action plan)	Completed by submitting hydrogen station section to the ZEV Guidebook and paying for printing. Working closely with Governor's office to implement.
1e. Develop innovative funding mechanisms for H2 infrastructure	Raise \$65M in additional incentive support for stations, and develop and analyze innovative funding mechanisms that may be more effective and efficient than current grant process	Q1: Phase II analysis by EIN Q2: Steering Team approves option(s) 2014: implement new mechanism(s)	Completed. Hydrogen Network Investment Plan available at <a href="http://www.einow.org/images/stories/factsheets/h2nip_full_paper_final.pdf">www.einow.org/images/stories/factsheets/h2nip_full_paper_final.pdf</a>

**2. Support Station implementation**

*CaFCP will monitor, coordinate and execute the activities to deploy stations for commercialization as outlined in the roadmap document.*

2a. Transition ER training to a national program	Begin implementation of the national program to extend the reach of CaFCP's approach. The new focus will include as much on stations as on vehicles.	Q1: Execute/participate in Firehouse World Q2: National ER program plan complete Q2: Participate in DOE AMR Q3: Implementation of plan begins	Plan completed in Q4
2b. Improve station performance	To improve station performance, CaFCP conducts projects related to fill performance (e.g. to SAE J2601 and J2601/2), metering and dispenser certification, H2 quality, HVAS and station commissioning. In 2013, member teams will continue to work towards specific tasks in these areas.	Q1: Engage contractor to do fuel modeling Q1: Present HVAS nozzle design to SAE project team Q2: J2601 published as a standard Q2: J2601/2 final draft guidelines available Q4: J2601/2 publish draft guideline for FCEB Q4: DMS finalizes their method for dispenser validation	Presented HVAS antenna to project team, handed off the design to WEH J2601 to be balloted with J2579 as they reference each other Draft v6 J2601-2 posted on SAE web site for review (to ballot in Feb '14) J1766 Posted for review and comment DMS Proposed changes to flow meter tolerance
2c. Integrate hydrogen into existing retail fuel market	Continue building relationships with fuel retailers and further reaching out into this supply chain and insurance companies to ensure that they are engaged and involved and hydrogen stations are deployed in early market communities.	Q1: Participate in WMPA National conference Q2: Complete and publish "Guide to Building Hydrogen Station" Q2: Conduct 1st Fueling the Future workgroup meeting; Q2: Participate in SIGMA Spring Convention Q3: Develop outreach materials & participate in POC Annual conference Q4: Develop outreach materials & participate in SIGMA Annual conference Q4: Conduct 2nd Fueling the Future workgroup meeting	Created fact sheets and station summaries. Conducted initial meetings with retailers. Participated at Pacific Oil Conference in September in Los Angeles Created fact sheets and station profiles. Conducted initial meetings with retailers. Participated in three industry events Obtained database of 8,000+ CA retail locations for future outreach Joined CIOMA, WPMA and Fuels Institute



<p>2d. Accelerate station implementation</p>	<p>Identify and address key barriers and prepare recommendations to improve timeline to 68 stations.</p>	<p>Q1: Complete stakeholder meetings on SI Lessons Learned                  Q2: Develop draft Station Implementation Lessons Learned                  Q3: Develop draft Station Implementation improvements doc                  Q4: Implement identified actions</p>	<p>Regularly updating timelines with funder/builder info. Recommended implementation of station progress tracking tool for CEC funded stations. Developed high level station implementation status overview tool.</p>
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**3. Implement hydrogen readiness**  
*CaFCP will focus outreach in early market communities with a goal of easing station implementation, including community acceptance and accessibility of funding. The ultimate goal is to increase awareness and understanding of hydrogen and fuel cells, especially regarding progress and next steps in California, with government officials in Sacramento and Washington, D.C.*

<p>3a. Conduct focused outreach in early market communities to prepare them for coming hydrogen stations</p>	<p>Build community readiness programs, deliver ER training and Permit workshops in early market communities, strengthen relationships with Clean Cities Coordinators, identify influencers and enroll them in Vehicle Loan Program (VLP).</p>	<p>Q2: Have 50 participants in the vehicle loan program                  Q2: First H2 readiness council in place                  Q1-Q4: Conduct 10 ER training and permitting workshops; begin transition to train the trainer                  Q1-Q4: Participate in 60 community events and meetings</p>	<p>Participated in predevelopment meetings for six station development projects                  Developed overall action plan and specific plans for communities with stations in development                  Participated in Firehouse World, Corona Auto-X, Continuing Challenge Haz Mat events</p>
<p>3b. Create Road Map follow-up on materials (parallel white papers)</p>	<p>Working with project teams, write, publish and disseminate materials that support the messages of the road map.</p>	<p>Create and publish one Road Map related document per quarter</p>	<p>Drafting roadmap progress report for 2014</p>
<p>3c. Expand and extend CaFCP applications</p>	<p>In 2013 we will further expand the capabilities improving the functionality and usability of the station map, SOSS and CRM capabilities</p>	<p>Q2: Expand functionality of CRM                  Q3: Improve interactive map applications on CaFCP website                  Q4: Extend capabilities of SOSS to support station performance and implementation projects</p>	<p>CRM implemented and in use                  Updated online station map                  Updated SOSS to allow manual station online/offline settings</p>

<p>3d. Build support in Sacramento and Washington DC</p>	<p>Continue working with a consultant, Political Solutions, at the state level and with FCHEA in Washington DC to provide education and information at state and federal level to elected officials represent early market areas.</p>	<p>Q1: Complete strategy for reaching all newly elected officials                  Q2: Provide education and information to targeted officials                  Q2: Host or participate in two briefing sessions                  Q3: Revise legislative outreach plan</p>	<p>Attended two briefings in Washington DC for federal government                  Participating on H2USA steering committee and two working groups</p>
<p>3e. Conduct high-value marketing and outreach</p>	<p>Participate in and sponsor conferences and expos primarily in California that reach our target audiences and further the message of the roadmap. Conduct a marketing campaign using social media to continue to build interest in FCVs and hydrogen</p>	<p>Q1-Q3: Speaking opportunities at 3-4 transportation conferences in US and overseas                  Q1-Q4: Conduct one social media campaign per quarter; post weekly blogs                  Q1-Q4: Participate in 10 targeted outreach events</p>	<p>Participated in DOE Solar Decathlon                  Participated in a variety of events in Northern California</p>

# Outreach Activities

## Outreach Activities

Activity	Target Audience	Picture
DOE Solar Decathlon	Early adopters, residents and stakeholders in early market communities, engineering students, local government	

## Government Outreach and Education

Because CaFCP includes government members, as a group we do not lobby or advocate for legislation or regulation. Throughout the year, we did provide outreach and education to members of the California Senate and Assembly, and their staff so that they had accurate and up-to-date information about hydrogen, fuel cell electric vehicles, including buses. We brought vehicles to their district offices and conducted outreach at the State Capitol, too. During the year, CaFCP directly contacted 44 legislators and 202 staff, as well as seven NOGs.

In October, Governor Brown signed Assembly Bill 8 into law. AB 8 (Perea, Chapter 401, Statutes of 2013) re-authorizes the ARFVTP through January 1, 2024, and specifies that the Energy Commission allocate up to \$20 million per year (or up to 20 percent of each fiscal year’s funds) in funding for hydrogen station development until at least 100 stations are operational.

The following is a list of all meetings with legislators, legislative staff and NGOs in Q4 2013.

<b>Meeting type</b>	<b>Date</b>	<b>CaFCP</b>	<b>Met with</b>
Community Meeting	10/16/13	Jennifer Hamilton	Invitation from Linde to meeting with CEC and Governor's office and the City of Cupertino re: proposed H2 fueling station. Provide support with fire/permitting information, Road Map, etc.
Community Meeting	10/17/13	Jennifer Hamilton	Invitation from Linde to meet with CEC and Governor's office with city of Mountain View re: proposed H2 fueling station. Provide support with fire/permitting information, Road Map, etc.
District meeting	10/17/2013	Keith Malone	Senator Richard Roth and staff member Tyler Madary
Capitol meeting	10/28/2013	Catherine Dunwoody	Chuck Dalldorf, office of Senator Richard Roth
District meeting	11/21/2013	Keith Malone	Raquel Maden, senior field representative to State Senator Ben Hueso.
District meeting	11/22/2013	Keith Malone	Jason Weisz, senior field representative to Assembly Member Toni Atkins
District meeting	11/22/2013	Keith Malone	Assembly Member Lorena Gonzales and Paul Ochoa, field representative
District meeting	12/2/2013	Keith Malone and Arjun Sarkar, UCSB sustainable transportation specialist	Assembly Member Das Williams (D-Santa Barbara) and Josh Molina, Communications Director
Capitol meeting	12/4/2013	Keith Malone and Teresa Cooke, Political Solutions	Jesse Cuevas, legislator director for Assembly Member Henry Perea (D-Fresno), author of AB 8
Capitol meeting	12/4/2013	Keith Malone and Teresa Cooke, Political Solutions	Dave Titus, chief of staff to Assembly Member Beth Gaines (R-Rocklin)
Capitol meeting	12/4/2013	Keith Malone and Teresa Cooke, Political Solutions	Assembly Member Richard Pan (D-Sacramento) and legislative aide Bernardette Lawrence
Capitol meeting	12/4/2013	Keith Malone and Teresa Cooke, Political Solutions	Assembly Member Rudy Salas (D-Bakersfield) and Yolanda Sandoval, chief of staff
Capitol meeting	12/4/2013	Keith Malone and Teresa Cooke, Political Solutions	Sharon Gonsalves, legislative director to State Senator Anthony Cannella (R-Ceres)
Capitol meeting	12/4/2013	Keith Malone and Teresa Cooke, Political Solutions	Assembly Member Ken Cooley (D-Rancho Cordova) and Brendan Repicky, legislative aide
Capitol meeting	12/4/2013	Keith Malone and Teresa Cooke, Political Solutions	Todd Moffitt, legislative director for State Senator Jean Fuller (R-Bakersfield)
Capitol	12/5/2013	Keith Malone and Holly	Taylor Woolfork, Legislative Aide to Senator

meeting		Langbein, Political Solutions	Cathleen (D-Stockton)
Capitol meeting	12/5/2013	Keith Malone, Chris White and Holly Langbein, Political Solutions	Dawn Isbell, legislative aide, and, later, Assembly Member Roger Dickenson (D-Sacramento)
Capitol meeting	12/5/2013	Keith Malone and Holly Langbein, Political Solutions	Matt Theis, capitol director for Assembly Member Kristen Olsen (R-Modesto)
Capitol meeting	12/5/2013	Keith Malone and Holly Langbein, Political Solutions	Erika Bustamante, Senior Leg Assistant for Assembly Member Luis Alejo (D-Salinas)
Capitol meeting	12/5/2013	Keith Malone, and Holly Langbein and Teresa Cooke, Political Solutions	Kip Lipper, legislative aide to President Pro Tempore of the Senate Darrell Steinberg (D-Sacramento). Lipper is an advisor on energy, environmental, and natural resources matters.
District meeting	12/6/2013	Keith Malone	Assembly Member Anthony Rendon, Ronald Gonzales-Lawrence and other district staff for Assembly Member Rendon
District meeting	12/11/2013	Keith Malone	State Senator Jerry Hill (D-San Mateo)
District meeting	12/11/2013	Keith Malone	Marc Hershman, district director and Lisa Chung, senior district representative to State Senator Jerry Hill. Also in contact with Cory Wolbach, field representative and Marina Gonzalez, scheduler.
District meeting	12/12/2013	Keith Malone	Nadia Conrad-Huayta, field representative for Assembly Member Tom Ammiano
Community meeting	12/17/2013	Keith Malone	Ryan Wiggins, cap and trade campaign manager for TRANSFORM California
Community meeting	12/18/2013	Keith Malone	Patricia Ochoa, deputy policy director for the Coalition for Clean Air
Community meeting	12/22/2013	Keith Malone	State Senator Carol Liu, Vickere Murphy, aide to Senator Liu

## Website and social media metrics

www.cafcp.org Q4, 2013	
<b>Number of visits</b>	17,723
<b>Average time spent on site</b>	1:53
<b>Most visited pages</b>	Station map Home page FAQ 10 Facts About H2 Blog
<b>Most searched keywords on Google to land on CaFCP website</b>	where does hydrogen come from california fuel cell partnership facts about hydrogen hydrogen facts interesting facts about hydrogen
<b>Most searched keywords on cafcfp.org search engine</b>	cost hydrogen careers biodiesel ethanol
<b>Most referred websites</b>	google.com newsletter t.co yahoo bing

FACEBOOK Q4, 2013	
<b>New likes</b>	76
<b>Lifetime likes</b>	2,399
<b>Post Views*</b>	28,673
<b>Top Page Posts*</b>	Eight-state MOU... (16,056) Did you make it out... (6460) Sperling described... (357) Excerpt: Like the... (319) Don't want to read... (276)
TWITTER Q3, 2013	
<b>Followers</b>	1313
<b>Tweets</b>	7553

# Station Implementation

CaFCP will monitor, coordinate and execute the activities to deploy stations for commercialization as outlined in the roadmap document.

## Infrastructure Status

At the end of Q4 2013, California had nine public hydrogen stations open and 19 in some stage of development. The open stations had technical challenges throughout the year and two are still closed at the writing of this report (Torrance and Newport Beach). Status of the 28 open and funded stations is:

#	Station Location	Operational Date	Current Status	Notes
1	Burbank	2006	350 bar – Open 700 bar – Closed for repair until week of Jan. 20.	700 bar dispenser expected back online week of Jan. 20.
2	Emeryville	2012	Open	
3	Fountain Valley	2011	Closed for repair	Defective circuit breaker on OCSD fuel cell prohibiting H2 production being fixed Expect refill of H2 storage tubes to begin Jan. 10. Station expected back to full pressure by Jan. 13 3-year operational requirement ends mid-2014 – looking at options to extend
4	Harbor City	2013	Open	
5	Irvine - UCI	2007 (3 <sup>rd</sup> gen.)	Open	Will be upgraded in 2014
6	Newport Beach	2012	Closed for repair	H2 compressor being repaired. Expected back online in early January 2014
7	Thousand Palms	2006	Open	
8	Torrance	2011	Open	
9	West LA	2008	Open	
10	Beverly Hills	Q4 2014	Design/Permitting	Beverly Blvd. Pre-appl. mtg Jan. 2014
11	Diamond Bar (upgrade)	Q3 2014	Design/Permitting	Permits submitted Nov. 13 Construction est. done by July 1, 2014 Commissioning after July 2014

12	Hawthorne	Q4 2014	Contracting	Possible site change
13	Hermosa Beach	Q4 2014	Contracting	Possible site change
14	Irvine (UCI upgrade)	Q3 2014	Design/Permitting	Q2 2014: construction
15	Irvine North	Q4 2014	Contracting	New site chosen by APCI – not public yet Construction: est. Sep. 2014
16	San Juan Capistrano	Sep. 2014	Design/Permitting	Ready to submit permit application in Q1 2014 Public hearing Spring 2014
17	Los Angeles	May 2014	Commissioning	CSULA
18	Santa Monica	Q3 2014	Design/Permitting	Cloverfield location. Permit filing – Jan. 2014 Construction – est. Q2 2014
19	West LA 2	Sep. 2014	Design/Permitting	Santa Monica Blvd. Construction: Q2 2014. Commissioning: Aug. 2014
20	West Sacramento	Sep. 2014	Contracting	Permit package est. complete Jan. 2014
21	Westwood	unknown	Funding	Project dormant
22	Anaheim	Oct. 2014	Design/Permitting	
23	Chino	Oct. 2014	Design/Permitting	Planning Commission approved project Jan. 2014. Permitted by May 2014 (est.)
24	Cupertino	Q1 2015	Contracting	
25	Foster City	Q1 2015	Contracting	
26	Mission Viejo	Oct. 2014	Design/Permitting	Equipment ordered, MOU with station owner complete, permit appl in Jan. 2014
27	Mountain View	Q1 2015	Contracting	
28	Woodland Hills (LA)	Q4 2014 (est.)	Design/Permitting	Permit appl. to City of LA in Jan. 2014

## 2013 Funding

In November, South Coast AQMD issued an RFP for upgrading existing hydrogen fueling infrastructure and conducting site evaluations for hydrogen station certification. SCAQMD is making \$6.6 million available through this grant, with most of it designated for station upgrades to eligible stations. Proposals were due on December 4, 2013 with awards anticipated in January, 2014.



In December, CEC issued a Program Opportunity Notice (PON) for \$29.9 million in co-funding for hydrogen stations in California. The solicitation has five separate funding categories:

1. O&M Support Grants
2. 100% Renewable Hydrogen Refueling Station
3. Mobile Refueler
4. Station Location Area
5. Unassigned Station

Applications for funding are due on February 14 and anticipated Notice of Proposed Award posting date is March 28, 2014. The PON includes, for the first time, an incentive for opening stations on or before October 31, 2015 and a penalty for opening after October 31, 2016.

## **HVAS**

The Hydrogen Vehicle Authorization System (HVAS) project was initiated in 2009, and assigned by the SAE Fuel Cell Interface Working Group to CaFCP to explore as a concept. The concept uses HVAS to identify and allow a hydrogen vehicle as an OEM-qualified vehicle to fuel at a station, thereby improving fueling safety by using an identification system that is integrated in the vehicle. The 2013 HVAS project goal was to present an optimized and rugged HVAS antenna design to the project team.

In 2013, under CaFCP management, we achieved this goal when Thinkify (RFID company) completed their contracted work on the HVAS antenna design for the 70 MPa WEH nozzle and presented the results to project team. As a final step, Thinkify handed off the developed antenna to the nozzle manufacturer WEH for integration in their commercially available nozzle. Please find more details about the HVAS project at [www.cafcp.org/hvas](http://www.cafcp.org/hvas).

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**CaFCP Quarterly Update**  
January-March 2014

**Background**

The California Fuel Cell Partnership is a unique collaborative of auto manufacturers, energy companies, fuel cell technology companies, and government agencies, including SCAQMD. This report summarizes CaFCP activity in or related to Southern California for January to March 2014.

In its fourth phase, 2013-2016, CaFCP members, individually or in groups, will focus on meeting these goals to achieve market launch:

- Prepare for larger-scale manufacturing, which encompasses cost reduction, supply chain and production.
- Work on the customer channel, including identifying and training dealers and service technicians.
- Reduce costs of station equipment, increase supply of renewable hydrogen at lower cost, and develop new retail station approaches.
- Support cost reduction through incentives and targeted RD&D projects
- Continue research, development and demonstration of advanced concepts in renewable and other low-carbon hydrogen.
- Provide education and outreach to the public and community stakeholders on the role of FCVs and hydrogen in the evolution to electric drive.

CaFCP and members' activities fall within three main strategic directions:

1. Support hydrogen station and vehicle deployment to enable commercial market launch in 2015 timeframe
2. Show feasibility and a clear value proposition to consumers, businesses and communities
3. Focus existing resources, engage new groups and pursue innovative concepts to overcome early market challenges




To successfully implement the vision, CaFCP activities must focus on technical, communications and business operations/strategies that require collaboration and coordination. A detailed CaFCP implementation plan is available as a separate document.

**2014 Program Plan  
Q1 accomplishments**

<p><b>1. Facilitate member collaboration</b></p> <p>The California Fuel Cell Partnership facilitates members and stakeholder coordination on projects and activities of common interest in order to leverage resources, communicate progress, bring together new players, and overcome challenges more quickly than could be accomplished by individual action.</p>	
Heavy duty Fuel Cell Program	<ul style="list-style-type: none"> <li>• CALSTART "FCEB US Transit Study" surveys sent to US transit agencies</li> <li>• Draft strategy for heavy duty vehicles presented at March WG</li> </ul>
Strategic Initiatives	<ul style="list-style-type: none"> <li>• Participated in two H2USA meetings</li> </ul>
<p><b>2. Support Station implementation</b></p> <p>CaFCP will monitor, coordinate and execute the activities to deploy stations for commercialization as outlined in the roadmap document.</p>	
National ER Program	<ul style="list-style-type: none"> <li>• Working with NFPA and DOE on updates to online training program</li> </ul>
Station Performance Codes & Standards	<ul style="list-style-type: none"> <li>• J2601 went through re-ballot and is being prepared for final publication</li> </ul>
Fuel retailers	<ul style="list-style-type: none"> <li>• Attended WPMA meeting in Las Vegas, planning for SIGMA ride &amp; drive</li> </ul>
Station implementation	<ul style="list-style-type: none"> <li>• Participated in DOE/NREL Workshop on H2 Transmission and Generation</li> </ul>
Workforce development	<ul style="list-style-type: none"> <li>• Participated in Firehouse World</li> <li>• Conducted workshop in Sacramento on Permitting and H2 Fueling Practices</li> </ul>

**3. Implement hydrogen readiness**

CaFCP will focus outreach in early market communities with a goal of easing station implementation, including community acceptance and accessibility of funding. The ultimate goal is to increase awareness and understanding of hydrogen and fuel cells, especially regarding progress and next steps in California, with government officials in Sacramento and Washington, D.C.

Activity	Description	Picture
Firehouse World, Feb 18-20	Exhibitor	
National Fuel Cell Symposium, Feb 27	Presenter	
South Bay Cities COG General Assembly, Feb 28	Sponsor	
Chino Corn Feed Run, March 22	Exhibitor w. SCAQMD	

Climatepalooza, March 28	Exhibitor	
Clean Air Partnership Luncheon, March 28	Presenter	

### Legislative Outreach

Title	Meeting Date	Meeting With
District Meeting	1/7/2014	Cine Ivery, chief of staff and Samahndi Cunningham, office of State Senator Rod Wright (D-Inglewood)
District Meeting	1/8/2014	Briefing with Rachel Zaiden, casework manager and Lisa Pinto, district director, office of Congressman Henry Waxman (D-Los Angeles). Ride...
District Meeting	1/9/2014	Carlos Urquiza, field representative, office of Congresswoman Loretta Sanchez (D-Garden Grove). Showed car to Gus Castellanos, district director
District Meeting	1/10/2014	Assembly Member Richard Bloom (D-Santa Monica) and Andrea Kune, district director.
District Meeting	1/13/2014	Ben Cardenas, district director, office of Congresswoman Grace Napolitano (D-El Monte)
District Meeting	1/14/2014	Rafel Elizalde, senior field representative to Congressman Mark Takano (D-Riverside). Ride and drive included Marisela Magana.
District Meeting	1/15/2014	Elison Swanson, district director, and Eric Boyd, deputy district director to Congresswoman Janice Hahn (D-San Pedro). Ride and drive with Eric....
District Meeting	1/15/2014	Hamilton Cloud, special projects director to Congresswoman Maxine Waters (D-South Los Angeles)
District Meeting	1/23/2014	Jesus Diaz, field representative for State Senator Ricardo Lara (D-Long Beach)
Capitol Meeting	1/27/2014	Henry Stern, office of State Senator Fran Pavley (D-Woodland Hills)
Capitol meeting	1/28/2014	Ryan Hanretty, office of Assembly Member Travis Allen (R-Huntington Beach). Briefly met Emanuel Patrascu, district director.
Capitol meeting	1/28/2014	Lawrence Cooper, legislative analyst for State Senator Ricardo Lara (D-Long Beach)

Capitol meeting	1/28/2014	Khaim Morton, legislative director for Assemblymember Sebastian Ridley-Thomas
Capitol meeting	1/28/2014	Juan Torres, chief of staff, and Roy Sianez, legislative director for State Senator Norma Torres (D-Chino)
Capitol meeting	1/28/2014	Matthew Powers, special assistant to Assembly Member Matt Dababneh (D-Van Nuys) and Assembly Member Dababneh
NGO meeting	1/31/2014	Anup Bandivadekar and Ben Sharpe with the International Center for Clean Transportation (ICCT)
NGO meeting	2/7/2014	Bill Magavern, public policy director for the Coalition for Clean Air
NGO meeting	2/13/2014	Jonathan Parfrey, Climate Resolve (Los Angeles)
Capitol meeting	2/24/2014	Assembly Member Anthony Rendon (D-South Gate) and Alf Brandt, legislative director
Capitol meeting	2/24/2014	Nidia Bautista, legislative aide to State Senator Kevin De Leon (D-Echo Park)
District Meeting	2/26/2014	Mike Auilera, district representative to Congressman Adam Schiff (D-Burbank) and Connor L, intern
NGO meeting	3/17/2014	Ryan Young, legal counsel and Roman Partida, legal fellow, The Greenlining Institute, and Max Baumhefner, Natural Resources Defense Counsel
District meeting	3/19/2014	Dan Bernal, chief of staff, Congresswoman Nancy Pelosi
Capitol meeting	3/20/2014	Shanna Ezzell, legislative aide to Assembly Member Freddie Rodriguez (D-Chino)
Capitol meeting	3/20/2014	Kelsy Castillo, legislative consultant to Assembly Ian Calderon (D-Industry)
Capitol meeting	3/20/2014	Katerina Robinson, senior legislative aide to Assembly Member Mike Gatto (D-Burbank)
Community meeting	3/21/2014	Steve Shea, office of Senate President Pro Tem Darrell Steinberg
District meeting	3/27/2014	John Alford, aide to Congressman Brad Sherman (D-Sherman Oaks)
District meeting	3/27/2014	Becky Chang, district director, four other district staff and interns to Congresswoman Judy Chu (D-Pasadena)

### Community Relations Outreach

	Title	Meeting Date
	LA Region, League of California Cities General Membership Meeting	1/2/2014
	LAEDC E-Mobility Task Force	1/9/2014
	Meeting with district staff for LA City Councilmember Bob Blumenfield (CD 3)	1/22/2014
	Meeting with Rick Teebay, Office of Sustainability, LA County	1/22/2014
	Conrado Terrazas, district director for Los Angeles City Council Member Gil Cedillo	1/24/2014
	US-Vehicle Incentive Program Kick-off Meeting	1/28/2014
	LAEDC Economic Forecast	2/19/2014
	Meeting with Los Angeles City Council Member Felipe Fuentes	2/22/2014
	Presentation to San Juan Capistrano City Council	3/4/2014

## Website and social media metrics

<b>PUBLIC WEBSITE</b>	<b>Jan-14</b>	<b>Feb-14</b>	<b>Mar-14</b>
<b>Number of unique visits</b>	9,518	7,524	8,210
<b>Visits (Cpanel)</b>	55,670	50,348	58,442
<b>Average time spent on site</b>	2:01	1:47	1:50
<b>Most visited pages</b>	Station map Home page FAQ 10 facts about hydrogen 2013 FC Progress Update Infographic	Station map Home page FAQ 10 facts about hydrogen A California Road Map	Station map Home page FAQ 10 facts about hydrogen Members
<b>Most searched keywords on Google to land on CaFCP website</b>	where does hydrogen come from california fuel cell partnership facts about hydrogen h2usa where is hydrogen found	where does hydrogen come from california fuel cell partnership difference between fuel cell and battery hydrogen facts facts about hydrogen	where does hydrogen come from california fuel cell partnership cafcp.org hydrogen facts difference between fuel cell and battery
<b>Most searched keywords on cafcp.org search engine</b>	Hydrogenics biodiesel cost cost of hydrogen electric	Hydrogenics 1/3 ab 8 EIN Ford	ab 8 DOE hydrogen highway jobs plug power
<b>Most referred websites</b>	google.com stumbleupon.com wired.com teslamotors.com t.co	google.com stumbleupon.com arb.ca.gov bing facebook.com	google.com bing arb.ca.gov stocktwits.com t.co
<b>FACEBOOK</b>			
<b>New likes</b>	38	35	27
<b>Lifetime likes</b>	2,428	2,448	2,469
<b>Lifetime Post Total Reach</b>	19,855	3,565	21,917
<b>Lifetime Engaged Users</b>	558	356	406
<b>TWITTER</b>			
<b>Total Followers</b>	1390	1458	1512
<b>Total Lifetime Tweets</b>	7786	7916	8213
<b>Link Clicks</b>	305	257	298

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BOARD MEETING DATE: July 11, 2014

AGENDA NO. 37

**PROPOSAL:** Report on Hexavalent Chromium Monitoring at Cement Manufacturing Facilities, Development of Cement Facility Closure Plan, and Recommendations Regarding Future Rulemaking Efforts

**SYNOPSIS:** In 2009, the Board adopted amendments to Rule 1156 - Further Reductions of Particulate Emissions from Cement Manufacturing Facilities to address the elevated hexavalent chromium (Cr<sup>+6</sup>) ambient concentrations found through MATES III sampling efforts. The amended rule requires the facilities to conduct ambient monitoring for Cr<sup>+6</sup>. Pursuant to the resolution commitments, staff presents the second biannual report to the Board on the monitoring results at the two impacted facilities. The resolution also required the development of a facility closure plan in the event a facility ceases all or partial operations. This report will discuss potential amendments to Rule 1156 to address monitoring requirements and the closure plan.

**COMMITTEE:** Stationary Source, June 20, 2014, Reviewed

**RECOMMENDED ACTION:**  
Receive and file.

Barry R. Wallerstein, D.Env.  
Executive Officer

EC:PF:TG:LP

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### **Background**

Rule 1156 - Further Reductions of Particulate Emissions from Cement Manufacturing Facilities was adopted by the SCAQMD Board in November 2005. Rule 1156 requires cement manufacturing facilities to comply with specific requirements applicable to various operations, including material handling, storage, and transport at the facilities.



Riverside Cement Company (TXI) in Riverside and California Portland Cement Company (CPCC) in Colton are the two cement manufacturing facilities in the SCAQMD's jurisdiction subject to Rule 1156.

Rule 1156 was amended in 2009 due to unexpected elevated ambient concentrations of the potent carcinogen hexavalent chromium ( $\text{Cr}^{+6}$ ) observed at the Rubidoux monitoring station as part of the third Multiple Air Toxics Emissions Study (MATES III). These elevated concentrations, in large part, were traced back to the cement manufacturing operations through an extensive investigation and monitoring effort.

To ensure public health protection, the amended Rule 1156 takes additional steps to further reduce particulate emissions and  $\text{Cr}^{+6}$  from cement manufacturing facilities. The amended rule requires various protections (total enclosure with contingencies, three-sided barrier with roof, wind fence, and/or tarping) at clinker storage and handling areas as well as wind monitoring. Rule 1156 also requires ambient  $\text{Cr}^{+6}$  monitoring at the property fence line on a one-in-three-day schedule. A fenceline standard of 0.7 nanograms per cubic meter ( $\text{ng}/\text{m}^3$ ), not including background levels, based on a 30-day rolling average, was established in the amended rule. Less frequent monitoring of once every six days can be conducted and the averaging period would change to a 90-day average if there are no  $\text{Cr}^{+6}$  exceedances during twelve continuous months of monitoring.

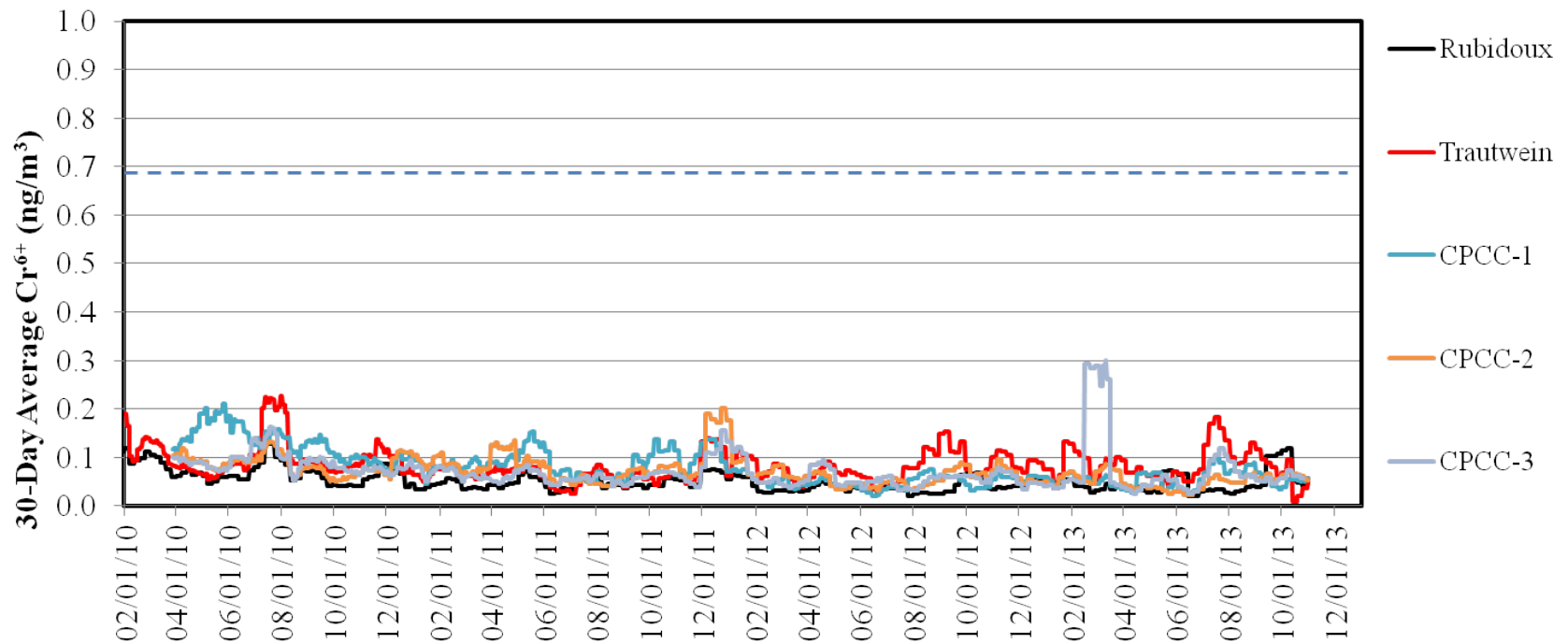
### **Ambient Monitoring Summary**

The monitoring network was established at both cement manufacturing facilities. Since its start in March 2010 and after 46 months of data collection, there have been no exceedances of the threshold. The sampling schedule was changed to one-in-six-days in April of 2011 due to no prior exceedances of  $\text{Cr}^{+6}$  standard. It should be noted that TXI, in fall 2012, had single 24-hour readings in excess of  $0.7 \text{ ng}/\text{m}^3$  and the facility reverted back to a 1:3 monitoring schedule. However, the 30-day average was not exceeded and the facility was found to be in compliance with applicable rule requirements.

Neither facility is manufacturing clinker presently. TXI no longer has such capability and has focused their operation solely on processing (grinding, blending) clinker from their Mojave Desert Plant and packaging cement for sale. CPCC is also only processing clinker brought from their Mojave Plant, but may consider starting one or both kilns when demand is sufficient.

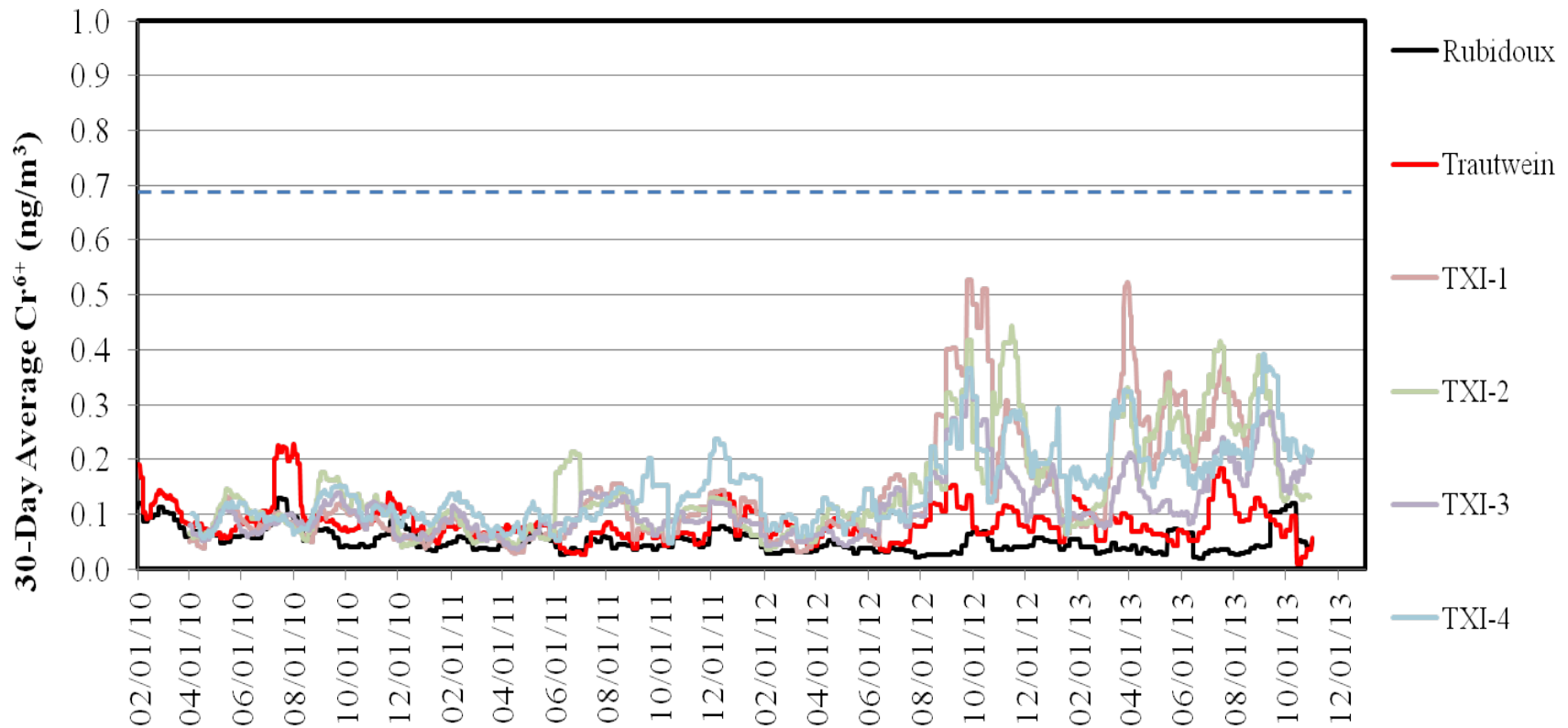
The following charts summarize the 30-day average ambient  $\text{Cr}^{+6}$  concentrations at both cement manufacturing plants during the last 46 months. For comparison, data from the SCAQMD Rubidoux monitoring station, as well as another hexavalent chromium monitoring station located between the two plants (Trautwein) are provided.

# Rule 1156 Monitoring (Cal-Portland)



Note: Includes Background

# Rule 1156 Monitoring (TXI - Riverside Cement)



Note: Includes Background

## **Conclusion**

The monitoring data indicates that neither facility has exceeded the 30-day average 0.7 ng/m<sup>3</sup> standard of Rule 1156. However, it should be noted that neither plant has been manufacturing clinker and both facilities are only processing clinker from other plants into cement product. The local demand is being met through clinker cement product imports into the region from Mojave Desert plants.

This report is part of an adopted resolution commitment to provide monitoring status reports to the Stationary Source Committee and bi-annual reports to the Board on Cr<sup>+6</sup> monitoring. Also, pursuant to the adoption resolution, staff is committed to reevaluate the continued need for Cr<sup>+6</sup> monitoring after 5 years of sampling and analysis, and the development of a rule amendment if needed. Staff is also committed to continuing development of a Cement Facility Closure Plan, a guideline for cement manufacturing facilities in the event of partial or complete facility shut down.

A working group comprised of representatives from CPCC and TXI, as well as staff from the Santa Ana Regional Water Quality Control Board, the San Bernardino County Land Use Services Department, and other agencies was established and provided input on the draft Closure Plan document. At that time, there was less than one year's worth of data, the facilities were virtually inactive due to the economy, and future activities were uncertain. As a result, the Draft Closure Plan was not submitted to the Board for consideration after review by the Stationary Source Committee in March 2011. Staff presented the first bi-annual report in April 2012 and due to continued lack of activity, no report to the Committee was made in 2013.

Currently, monitoring is in its fifth year. CPCC may restart their clinker manufacturing in the future and TXI will continue cement processing operations. Staff plans to re-engage the Working Group and finalize the Closure Plan document in conjunction with amendments to Rule 1156 in early 2015, considering sunset conditions for monitoring and other conditions of facility closure.

BOARD MEETING DATE: July 11, 2014

AGENDA NO. 38

**PROPOSAL:** Amend Rule 2449 – Control of Oxides of Nitrogen Emissions from Off-Road Diesel Vehicles

**SYNOPSIS:** In May 2008, the Board adopted Rule 2449 implementing the Surplus Off-Road Opt-in for NO<sub>x</sub> (SOON) provisions of the State In-Use Off-Road Diesel Vehicle Regulation. On December 14, 2011, CARB amended the In-Use Off-Road Diesel Vehicle Regulation and removed Section 2449.2, Title 13 of the California Code of Regulation (CCR). As part of that action, CARB renumbered the SOON Provision Section 2449.3 to Section 2449.2. Staff is proposing an administrative amendment to SCAQMD Rule 2449 to revise the reference from Section 2449.3 to Section 2449.2 of Title 13 of the California Code of Regulation. This action is to adopt the resolution: 1) Determining that the proposed amendments to Rule 2449 are exempt from the CEQA; and, 2) Amending Rule 2449.

**COMMITTEE:** Mobile Source, June 20, 2014; Reviewed

**RECOMMENDED ACTIONS:**

Adopt the attached resolution:

1. Determining that the proposed amendments to Rule 2449 are exempt from the California Environmental Quality Act (CEQA); and
2. Amending Rule 2449 - Control of Oxides of Nitrogen Emissions from Off-Road Diesel Vehicles.

Barry R. Wallerstein, D.Env.  
Executive Officer

## **Background**

Off-road diesel vehicles collectively represent one of the largest sources of NO<sub>x</sub> and significantly contributed to PM<sub>2.5</sub> and ozone air quality in the South Coast Air Basin. CARB adopted the “In-Use Off-road Diesel Vehicle” regulation to reduce these emissions statewide by requiring fleets to meet increasingly stringent PM and NO<sub>x</sub> fleet average targets or annual turnover requirements. In addition, the State Regulation included the Surplus Off-Road Opt-In for NO<sub>x</sub> (SOON) provisions contained in Section 2449.3, Title 13 of the California Code of Regulations (CCR), which allow air districts to opt-in to the SOON program to achieve additional NO<sub>x</sub> reductions from off-road diesel vehicles. The SOON provisions apply to affected fleets of off-road diesel vehicles as described in Section 2449.3(b). Once an air district has opted-in to the program, the SOON provisions require the affected fleets to submit an application for funding upon the District’s issuance of a solicitation for applications for funding. On May 2, 2008, the Board opted-in to the SOON program and adopted Rule 2449 by referencing the SOON provisions of the CARB Regulation (Title 13, CCR, Section 2449.3).

Rule 2449 was submitted to CARB on May 23, 2008 for approval. CARB approved Rule 2449 on July 2, 2008 and forwarded Rule 2449 on to U.S. EPA as a revision to the State Implementation Plan. In December 2011, prior to U.S. EPA review of Rule 2449, CARB amended the “In-Use Off-Road Diesel Vehicle” Regulation and removed Section 2449.2, Title 13 of the CCR, and renumbered the SOON Provision Section 2449.3 to Section 2449.2. CARB submitted the amended regulation on March 1, 2012 to U.S. EPA for authorization to implement the Regulation under Section 209(e) of the Clean Air Act. The U.S. EPA issued a “Notice of Decision” on September 30, 2013 granting CARB’s request for authorization of the Regulation. (78FR58090 *et. seq.*). As part of their review of the approvability of Rule 2449, U.S. EPA indicated that Rule 2449 should be amended to reference the appropriate section of the State Regulation.

## **Proposal**

This proposed amended rule would revise the reference from Section 2449.3 to Section 2449.2 of the State Regulation. As the provisions referred to in the proposed amendment are already in effect, they represent no change to existing requirements on affected fleets.

## **Public Process**

No public workshops were held by SCAQMD staff since the proposed amendments are administrative in nature and would only revise the reference from Section 2449.3 to Section 2449.2 of the State Regulation. In addition, the proposed amendments do not affect air quality, emissions limitations, or regulatory requirements.

## **California Environmental Quality Act (CEQA) and Socioeconomic Impacts**

The SCAQMD has reviewed the proposed project pursuant to the CEQA Guidelines §§ 15002 (k)(1) and 15061, the first step of a three-step process for deciding which document to prepare for a project subject to CEQA. Staff is proposing an administrative

amendment to SCAQMD Rule 2449 to revise the reference from Section 2449.3 to Section 2449.2 of Title 13 of the California Code of Regulations. Because the SCAQMD exercises no discretion with regard to the proposed project, it is considered to be ministerially exempt. Therefore, the SCAQMD has determined the proposed amendments are statutorily exempt from CEQA pursuant to CEQA Guidelines §15268 – Ministerial Projects. If approved, the Notice of Exemption will be filed with the county clerks of Los Angeles, Orange, Riverside and San Bernardino counties immediately following action on the proposed project.

The proposed amendments to Rule 2449 are administrative in nature and do not have any socioeconomic impacts.

### **Resource Impacts**

The proposed amendment is administrative in nature and has minimal administrative resource impacts. Existing SCAQMD resources are sufficient for continued implementation and enforcement of the rule.

### **Attachments**

- A. Notice of Exemption
- B. Resolution for Proposed Amended Rule 2449
- C. Proposed Amended Rule 2449
- D. Staff Report for Proposed Amended Rule 2449



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4182  
(909) 396-2000 • www.aqmd.gov

**SUBJECT: NOTICE OF EXEMPTION FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT**

**PROJECT TITLE: PROPOSED AMENDED RULE 2449 – CONTROL OF OXIDES OF NITROGEN EMISSIONS FROM OFF-ROAD DIESEL VEHICLES**

Pursuant to the California Environmental Quality Act (CEQA) Guidelines, the South Coast Air Quality Management District (SCAQMD) is the Lead Agency and will prepare a Notice of Exemption for the project identified above.

The provisions of Article 4.8, Chapter 9, Title 13 of the California Code of Regulations (CCR), Section 2449.3, in effect June 15, 2008, were adopted in full by the SCAQMD on May 2, 2008 through the “opt-in” provision provided in the regulation and were made part of the Rules and Regulations of the SCAQMD. CCR Section 2449.3 was renumbered to 2449.2 as part of amendments made to CCR Section 2449 on December 14, 2011. Staff is proposing an administrative amendment to SCAQMD Rule 2449 to revise the reference from Section 2449.3 to Section 2449.2 of Title 13 of the CCR.

The SCAQMD has reviewed the proposed project pursuant to CEQA Guidelines §§ 15002 (k)(1) and 15061, the first step of a three-step process for deciding which document to prepare for a project subject to CEQA. Because the proposed amendment to Rule 2449 is required in order to correctly reference state regulations, the SCAQMD exercises no discretion with regard to the proposed project; thus, the proposed project is considered to be ministerially exempt pursuant to CEQA Guidelines §15268 – Ministerial Projects. If approved, the Notice of Exemption will be filed with the county clerks of Los Angeles, Orange, Riverside and San Bernardino counties immediately following action on the proposed project.

Any questions regarding this Notice of Exemption should be sent to Jeff Inabinet (c/o Planning, Rule Development & Area Sources) at the above address. Mr. Inabinet can also be reached at (909) 396-2453.

**Date:** July 11, 2014

**Signature:** To be signed upon project approval

Michael Krause  
Program Supervisor, CEQA Section  
Planning, Rule Development &  
Area Sources



## NOTICE OF EXEMPTION

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<b>To:</b> County Clerks of Los Angeles, Orange, Riverside, San Bernardino	<b>From:</b> South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, CA 91765
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**Project Title:**

Proposed Amended Rule 2449 – Control of Oxides of Nitrogen Emissions from Off-Road Diesel Vehicles

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**Project Location:**

South Coast Air Quality Management District (SCAQMD) area of jurisdiction consisting of the four-county South Coast Air Basin (Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino counties), and the Riverside County portions of the Salton Sea Air Basin and the Mojave Desert Air Basin.

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**Description of Nature, Purpose, and Beneficiaries of Project:**

The provisions of Article 4.8, Chapter 9, Title 13 of the California Code of Regulations (CCR), Section 2449.3, in effect June 15, 2008, were adopted in full by the SCAQMD on May 2, 2008 through the “opt-in” provision provided in the regulation and were made part of the Rules and Regulations of the SCAQMD. CCR Section 2449.3 was renumbered to 2449.2 as part of amendments made to CCR Section 2449 on December 14, 2011. Staff is proposing an administrative amendment to SCAQMD Rule 2449 to revise the reference from Section 2449.3 to Section 2449.2 of Title 13 of the CCR.

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**Public Agency Approving Project:**

South Coast Air Quality Management District

**Agency Carrying Out Project:**

South Coast Air Quality Management District

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**Exempt Status:**

CEQA Guidelines §15002 (k)(1) – General Concepts  
CEQA Guidelines §15061 – Review for Exemption  
CEQA Guidelines §15268 – Ministerial Projects

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**Reasons why project is exempt:**

The SCAQMD has reviewed the proposed amendment to Rule 2449, pursuant to CEQA Guidelines §15002 (k)(1) – General Concepts, and CEQA Guidelines §15061 – Review for Exemption, and has determined that the proposed amendment is ministerially exempt from CEQA because the SCAQMD has no discretion with regard to the proposed project. Therefore, the SCAQMD has determined that the proposed project is exempt from CEQA pursuant to CEQA Guidelines §15268 – Ministerial Projects.

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**Project Approval Date:**

SCAQMD Governing Board Hearing: July 11, 2014, 9:00 a.m.; SCAQMD Headquarters

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<b>CEQA Contact Person:</b>	<b>Phone Number:</b>	<b>Fax Number:</b>	<b>Email:</b>
Mr. Jeffrey Inabinet	(909) 396-2453	(909) 396-3324	<a href="mailto:jinabinet@aqmd.gov">jinabinet@aqmd.gov</a>

---

<b>Rule Contact Person:</b>	<b>Phone Number:</b>	<b>Fax Number:</b>	<b>Email:</b>
Mr. Randall Pasek	(909) 396-2251	(909) 396-3324	<a href="mailto:rpasek@aqmd.gov">rpasek@aqmd.gov</a>

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Date Received for Filing \_\_\_\_\_

Signature To be signed upon project approval \_\_\_\_\_

Michael Krause  
Program Supervisor, CEQA Section  
Planning, Rule Development  
and Area Sources

**ATTACHMENT B**

RESOLUTION NO. 2014-xx

**A Resolution of the Governing Board amending Rule 2449 - Control of Oxides of Nitrogen from Off-Road Diesel Vehicles.**

**A Resolution of the South Coast Air Quality Management District Governing Board determining that the proposed amendments to Rule 2449 – Control of Oxides of Nitrogen from Off-Road Diesel Vehicles are exempt from the requirements of the California Environmental Quality Act (CEQA).**

**WHEREAS**, the California Air Resources Board adopted the In-Use Off-Road Diesel Vehicle Regulation in May 2008 and submitted the regulation to U.S. Environmental Protection Agency (EPA) for authorization to implement the regulation in July 2008; and

**WHEREAS**, Rule 2449 was adopted in May 2008 incorporating by reference and opting-in to Section 2449.3, Title 13 of the California Code of Regulation (CCR); and

**WHEREAS**, in December 2011, the California Air Resources Board (CARB) amended Title 13, CCR, Section 2449 *et. seq.* removing Section 2449.2 and renumbering Section 2449.3 to Section 2449.2 and submitted the amended regulation to the U.S. EPA on March 1, 2012 requesting authorization to implement the regulation; and

**WHEREAS**, on September 30, 2013, the U.S. EPA issued a “Notice of Decision” granting CARB’s request for authorization of the In-Use Off-Road Diesel Vehicle Regulation including Title 13, CCR, Section 2449.2 – Surplus Off-Road Opt-In for NOx Program; and

**WHEREAS**, in reviewing Rule 2449 for approvability into the State Implementation Plan (SIP), the U.S. EPA indicated that Rule 2449 needs to be amended to reference the appropriate section of the State In-Use Off-Road Diesel Vehicle Regulation (Title 13, CCR, Section 2449.2); and

**WHEREAS**, no public meeting was conducted since the proposed amendments to Rule 2449 are administrative in nature; and

**WHEREAS**, the SCAQMD has had its regulatory program certified pursuant to Public Resources Code §21080.5 and has conducted CEQA review and analysis pursuant to such program (SCAQMD Rule 110); and

**WHEREAS**, the SCAQMD Governing Board finds and determines that the proposed amendments to Rule 2449 is considered a "project" pursuant to the California Environmental Quality Act (CEQA); however, SCAQMD staff reviewed the proposed project and because the proposed project is required in order to correctly reference state regulations and because the SCAQMD exercises no discretion with regard to the project as proposed, the proposed project is considered to be ministerially exempt from CEQA pursuant to CEQA Guidelines §15268 – Ministerial Projects.

**WHEREAS**, SCAQMD staff has prepared a Notice of Exemption for Rule 2449, as proposed to be amended, that is completed in compliance with CEQA Guidelines §15002 (k)(1) – General Concepts, and §15061 – Review for Exemption; and

**WHEREAS**, the SCAQMD staff has reviewed Proposed Amended Rule 2449, and determined that no socioeconomic impact assessment needs to be performed for the proposed amendments because they are administrative in nature and seek to clarify that the existing rule requirements of Rule 2449 are already in effect; and

**WHEREAS**, the SCAQMD Governing Board has determined that a need exists to adopt Proposed Amended Rule 2449 to ensure that the proposed amendment addresses U.S. EPA's concerns relating to the appropriate reference to the State In-Use Off-Road Diesel Vehicle Regulation (13, CCR, Section 2449.2). The above amendment would refer to Section 2449.2 instead of Section 2449.3, which is necessary for approval in the State Implementation Plan; and

**WHEREAS**, California Health and Safety Code Section 40727 requires that prior to adopting, amending or repealing a rule or regulation, the SCAQMD Governing Board shall make findings of necessity, authority, clarity, consistency, non-duplication, and reference based on relevant information presented at the public hearing and in the staff report; and

**WHEREAS**, the SCAQMD Governing Board obtains its authority to adopt, amend, or repeal rules and regulations from Sections 39002, 40000, 40001, 40440, 40441, 40702, 40725 through 40728, 41508, and 41700 of the California Health and Safety Code; and

**WHEREAS**, the SCAQMD Governing Board has determined that Proposed Amended Rule 2449 – Control of Oxides of Nitrogen Emissions from Off-

Road Diesel Vehicles, as proposed to be adopted is written or displayed so that its meaning can be clearly understood by the persons directly affected by it; and

**WHEREAS**, the SCAQMD Governing Board has determined that Proposed Amended Rule 2449 – Control of Oxides of Nitrogen Emissions from Off-Road Diesel Vehicles, as proposed to be adopted is consistent with, and not in conflict with or contradictory to, existing federal or state statutes, court decisions, or regulations; and

**WHEREAS**, the SCAQMD Governing Board has determined that Proposed Amended Rule 2449 – Control of Oxides of Nitrogen Emissions from Off-Road Diesel Vehicles, as proposed to be adopted does not duplicate the requirements of existing state or federal regulation and the proposed amended rule is necessary and proper to execute the powers and duties granted to, and imposed upon, the District; and

**WHEREAS**, the SCAQMD Governing Board has determined that Proposed Amended Rule 2449 – Control of Oxides of Nitrogen Emissions from Off-Road Diesel Vehicles, as proposed to be adopted, references the following statutes which the SCAQMD hereby implements, interprets or makes specific: Health and Safety Code 40001 (a) (rules to meet air quality standards) and 40440 (a) (rules to carry out the AQMP); and

**WHEREAS**, Health and Safety Code Section 40727.2 requires the SCAQMD to prepare a written analysis of existing federal air pollution control requirements applicable to the same source type being regulated whenever it adopts, or amends a rule, such that the SCAQMD's analysis of Proposed Amended Rule 2449 is included in the staff report; and

**WHEREAS**, a public hearing has been properly noticed in accordance with the provisions of Health and Safety Code Section 40725; and

**WHEREAS**, the SCAQMD Governing Board has held a public hearing in accordance with all provisions of law; and

**WHEREAS**, the SCAQMD Governing Board specifies the Assistant Deputy Executive Officer of the Mobile Source Division as the custodian of the Rule 2449 documents or other materials which constitute the record of proceedings upon which the adoption of this proposed project is based, which are located at the SCAQMD, 21865 Copley Drive, Diamond Bar, California; and

**WHEREAS**, the Notice of Exemption, the July 11, 2014 Board letter, and other supporting documentation were presented to the SCAQMD Governing Board and

the Governing Board has reviewed and considered the entirety of this information prior to approving the project; and

**NOW, THEREFORE, BE IT RESOLVED** that the SCAQMD Governing Board does hereby determine, pursuant to the authority granted by law, that amendment to Rule 2449 is exempt from CEQA requirements pursuant to CEQA Guidelines §15002 (k)(1) – General Concepts, §15061 (b)(3) – Review for Exemption, and §15268 – Ministerial Projects.

**BE IT FURTHER RESOLVED**, that the SCAQMD Governing Board does hereby adopt, pursuant to the authority granted by law, Rule 2449 – Control of Oxides of Nitrogen Emissions from Off-Road Diesel Vehicles, as set forth in the attached and incorporated herein by reference.

**BE IT FURTHER RESOLVED**, that the South Coast Air Quality Management District Board requests that Proposed Amended Rule 2449 be submitted in the State Implementation Plan; and

**BE IT FURTHER RESOLVED**, that the Executive Officer is hereby directed to forward a copy of this Resolution and Proposed Amended Rule 2449 to the California Air Resources Board for approval and subsequent submittal to the U.S. Environmental Protection Agency for inclusion into the State Implementation Plan.

DATE: \_\_\_\_\_

\_\_\_\_\_  
Saundra McDaniel, Clerk of the Board

# ATTACHMENT C – DRAFT RULE LANGUAGE

(Adopted May 2, 2008)  
(PAR 2449 April 2014)

## **Proposed Amended Rule 2449.      **Control of Oxides of Nitrogen Emissions from Off-Road Diesel Vehicles****

The provisions of Article 4.8, Chapter 9, Title 13 of the California Code of Regulations (CCR), Section 2449.3, in effect June 15, 2008, were adopted in full by the South Coast Air Quality Management District on May 2, 2008 through the “opt-in” provision provided in the regulation and were made part of the Rules and Regulations of the South Coast Air Quality Management District.

Article 4.8, Chapter 9, Title 13 of the CCR, Section 2449.3 was amended in December 14, 2011 by the California Air Resources Board and renumbered to section 2449.2. Effective December 14, 2011 Section 2449.2 shall apply to the owner of any off-road diesel vehicle as described.

The provisions of this Regulation apply to the owner of any off-road diesel vehicle as described in Section 2449.32(b) operating in the South Coast Air Quality Management District. Upon the District’s issuance of a solicitation for applications for funding, fleet owners subject to Section 2449.32 shall submit applications for funding, in accordance with the Rule 2449 Administrative Guidelines developed to implement Section 2449.32.

### **Title 13, Chapter 9**

### **Motor Vehicles – Off-Road Vehicles and Engines Pollution Control Devices**

#### **Section 2449.3      **Surplus Off-Road Opt-In for NOx (SOON) Program****

(13 CCR 2449.3, June 15, 2008)      (SCAQMD Adopted May 2, 2008)

#### **Section 2449.2      **Surplus Off-Road Opt-In for NOx (SOON) Program****

(13 CCR 2449.2, December 14, 2011)      (SCAQMD Amended xxx)

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>
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**Draft Staff Report**

**Proposed Amended Rule 2449 – Control of Oxides of Nitrogen  
Emissions from Off-Road Diesel Vehicles**

**May 2014**

**Deputy Executive Officer**

Planning, Rule Development, and Area Sources  
Elaine Chang, DrPH

**Assistant Deputy Executive Officer**

Mobile Source Division  
Science and Technology Advancement  
Henry Hogo

**Planning and Rules Manager**

Mobile Source Division  
Science and Technology Advancement  
Randall Pasek, Ph.D.

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Mobile Source Division, Science and Technology Advancement

Adewale Oshinuga – Program Supervisor

Richard Carlson – Air Quality Specialist

**REVIEWED BY:**

General Counsel

Barbara Baird –Chief Deputy Counsel

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
GOVERNING BOARD**

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Speaker of the Assembly Appointee

Vice Chairman: DENNIS YATES  
Mayor, City of Chino  
Cities Representative, San Bernardino County

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Governor's Appointee

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Orange County Representative

DR. CLARK E. PARKER, SR.  
Senate Rules Committee Appointee

MIGUEL PULIDO  
Mayor, City of Santa Ana  
Cities Representative, Orange County

**EXECUTIVE OFFICER:**

BARRY R. WALLERSTEIN, D.Env.



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## EXECUTIVE SUMMARY

The South Coast Air Quality Management District (SCAQMD or District) is proposing an administrative amendment to Rule 2449 – Control of Oxides of Nitrogen Emissions from Off-Road Diesel Vehicles, to revise the reference from Section 2449.3 to Section 2449.2, Title 13 of the California Code of Regulation. As the provisions referred to in the proposed amendment are already in effect, they represent no change to existing requirements on affected fleets.

## INTRODUCTION

Off-road diesel vehicles collectively represent one of the largest sources of NO<sub>x</sub> and significantly contributed to PM<sub>2.5</sub> and ozone air quality in the South Coast Air Basin. In July 2007, CARB adopted the “In-Use Off-road Diesel Vehicle” regulation to reduce these emissions statewide by requiring fleets to meet increasingly stringent PM and NO<sub>x</sub> fleet average targets or annual turnover requirements. As part of the adoption, CARB added provisions to the State Regulation to include the Surplus Off-Road Opt-In for NO<sub>x</sub> (SOON) provisions contained in Section 2449.3, Title 13 of the California Code of Regulations (CCR), which allow air district to opt-in to the SOON program to achieve additional NO<sub>x</sub> reductions from off-road diesel vehicles. Section 2449.3 was finalized by CARB as part of the State Regulation (Title 13, CCR, Section 2449 *et. seq.*) and submitted to the California Office of Administrative Law (OAL) for final approval on April 4, 2008. OAL approved the rulemaking and filed it with the Secretary of State on May 16, 2008. The regulation became effective on June 15, 2008.

The SOON provisions apply to affected fleets of off-road diesel vehicles as described in Section 2449.3(b). Once an air district has opted-in to the program, the SOON provisions require the affected fleets to submit an application for funding upon the District’s issuance of a solicitation for applications for funding. On May 2, 2008, the Board opted-in to the SOON program and adopted Rule 2449 by referencing the SOON provisions of the CARB Regulation (Title 13, CCR, Section 2449.3).

Rule 2449 was submitted to CARB on May 23, 2008 for approval. CARB approved Rule 2449 on July 2, 2008 and forwarded Rule 2449 on to U.S. EPA as a revision to the State Implementation Plan. In December 2011, prior to U.S. EPA review of Rule 2449, CARB amended the “In-Use Off-Road Diesel Vehicle” Regulation and removed Section 2449.2, Title 13 of the CCR, and renumbered the SOON Provision Section 2449.3 to Section 2449.2. CARB submitted the amended regulation on March 1, 2012 to U.S. EPA for authorization to implement the Regulation under hould Section 209(e) of the Clean Air Act. The U.S. EPA issued a “Notice of Decision” on September 30, 2013 granting CARB’s request for authorization of the Regulation. (78FR58090 *et. seq.*). As part of their review of the approvability of Rule 2449, U.S. EPA indicated that Rule 2449 should be amended to reference the appropriate section of the State Regulation.

## SUMMARY OF PROPOSED AMENDED RULE 2449

Proposed Amended Rule (PAR) 2449 would revise the reference to the SOON provisions provided in the In-Use Off-Road Diesel Vehicle Regulation (Title 13, CCR, 2449 *et. seq.*)

from Section 2449.3 to Section 2449.2. PAR 2449 is provided as Attachment A to this Report.

## **CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)**

The SCAQMD has reviewed the proposed project pursuant to the CEQA Guidelines §15002 (k)(1), the first step of a three-step process for deciding which document to prepare for a project subject to CEQA. Staff is proposing an administrative amendment to SCAQMD Rule 2449 to revise the reference from Section 2449.3 to Section 2449.2 of Title 13 of the California Code of Regulation. Because the SCAQMD exercises no discretion with regard to the proposed project, it is considered to be ministerially exempt. Therefore, the SCAQMD has determined the proposed amendments are statutorily exempt from CEQA pursuant to CEQA Guidelines §15268 – Ministerial Projects. As a result, no significant adverse impacts on the environment are expected from the proposed project. Since it can be seen with certainty that the proposed project has no potential to adversely impact air quality or any other environmental area, it is exempt from CEQA pursuant to state CEQA Guidelines §15061(b)(3) – Review for Exemption. If approved, the Notice of Exemption will be filed with the county clerks of Los Angeles, Orange, Riverside and San Bernardino counties immediately following action on the proposed project.

## **SOCIOECONOMIC ASSESSMENT**

The proposed amendments to Rule 2449 are administrative in nature and do not have any socioeconomic impacts.

## **DRAFT FINDINGS REQUIRED BY THE CALIFORNIA HEALTH AND SAFETY CODE SECTION 40727**

### **Requirements to Make Findings**

California Health and Safety Code Section 40727 requires that prior to adopting, amending or repealing a rule or regulation, the District Governing Board shall make findings of necessity, authority, clarity, consistency, non-duplication, and reference based on relevant information presented at the public hearing and in the staff report. The following provides a summary of the draft findings.

### **Necessity**

A need exists to adopt Proposed Amended Rule 2449 – Control of Oxides of Nitrogen Emissions from Off-Road Diesel Vehicles, to ensure that the proposed amendment addresses an approvability issue raised by U.S. EPA's relating to the appropriate reference of Rule 2449 to State Regulation (Title 13, CCR, Section 2449.2).

### **Authority**

The District Governing Board obtains its authority to adopt, amend, or repeal rules and regulations from Health and Safety Code §§ 40000, 40001, 40440, 40441, 40447.5, 40463, 40702, 40725 through 40728, and 40910 through 40920.5, inclusive.

**Clarity**

Proposed Amended Rule 2449 – Control of Oxides of Nitrogen Emissions from Off-Road Diesel Vehicles is written and displayed so that the meaning can be easily understood by persons directly affected by it.

**Consistency**

Proposed Amended Rule 2449 – Control of Oxides of Nitrogen Emissions from Off-Road Diesel Vehicles is in harmony with and not in conflict with or contradictory to, existing statutes, court decisions, or state or federal regulations.

**Reference**

By adopting Proposed Amended Rule 2449 – Control of Oxides of Nitrogen Emissions from Off-Road Diesel Vehicles, the District Governing Board will be implementing, interpreting or making specific the provisions of the California Health and Safety Code Sections 40000 and 40001 (rules to achieve and maintain ambient air quality standards) and 40440(a) (rules to implement the AQMP).

**APPENDIX A**

**PROPOSED AMENDED RULE 2449**

(Adopted May 2, 2008)  
(PAR 2449 April 2014)

**Proposed Amended Rule 2449.      **Control of Oxides of Nitrogen Emissions from Off-Road Diesel Vehicles****

The provisions of Article 4.8, Chapter 9, Title 13 of the California Code of Regulations (CCR), Section 2449.3, in effect June 15, 2008, were adopted in full by the South Coast Air Quality Management District on May 2, 2008 through the “opt-in” provision provided in the regulation and were made part of the Rules and Regulations of the South Coast Air Quality Management District.

Article 4.8, Chapter 9, Title 13 of the CCR, Section 2449.3 was amended in December 14, 2011 by the California Air Resources Board and renumbered to section 2449.2. Effective December 14, 2011 Section 2449.2 shall apply to the owner of any off-road diesel vehicle as described.

The provisions of this Regulation apply to the owner of any off-road diesel vehicle as described in Section 2449.32(b) operating in the South Coast Air Quality Management District. Upon the District’s issuance of a solicitation for applications for funding, fleet owners subject to Section 2449.32 shall submit applications for funding, in accordance with the Rule 2449 Administrative Guidelines developed to implement Section 2449.32.

**Title 13,                      **Motor Vehicles – Off-Road Vehicles and Engines Pollution Control Devices****  
**Chapter 9**

**Section 2449.3              **Surplus Off-Road Opt-In for NOx (SOON) Program****  
(13 CCR 2449.3, June 15, 2008)                      (SCAQMD Adopted May 2, 2008)

**Section 2449.2              **Surplus Off-Road Opt-In for NOx (SOON) Program****  
(13 CCR 2449.2, December 14, 2011)              (SCAQMD Amended xxx)

BOARD MEETING DATE: July 11, 2014

AGENDA NO. 39

REPORT: 2013 Annual Report on AB 2588 Air Toxics Hot Spots Program

SYNOPSIS: The Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) requires local air pollution districts to prepare an annual report. Key accomplishments for 2013 include: (1) reviewed and approved five facility health risk assessments (HRAs), which included two public notices and a total of 11 public meetings; (2) notified two facilities to prepare HRAs; (3) notified two facilities to prepare air toxic inventory reports; (4) required one facility to prepare a risk reduction plan; (5) completed development of a mapping tool to display health risks from retail gas stations and perchloroethylene dry cleaners; (6) prioritized approximately 50 facilities; and (7) updated AB 2588 website information.

COMMITTEE: Stationary Source, May 16, 2014, Reviewed

RECOMMENDED ACTION:  
Receive and file.

Barry R. Wallerstein, D.Env.  
Executive Officer

EC:SN:VM

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### **Introduction**

The South Coast Air Quality Management District (SCAQMD) has a comprehensive air toxics program. At the heart of this program are Rule 1401 – New Source Review of Toxic Air Contaminants to ensure toxic emissions from new and modified sources do not exceed specified thresholds and Rule 1402 – Control of Toxic Air Contaminants from Existing Sources which implements various aspects of AB 2588. The SCAQMD's air toxic program also includes a series of source-specific rules that address toxic air contaminants for specific industry or equipment categories. The 2010 Clean Communities Plan also includes measures to reduce toxic air contaminants.

The SCAQMD staff has prepared an annual report that summarizes the agency's air toxics program activities throughout 2013, including Air Toxics "Hot Spots" Information and Assessment Act (or AB 2588) activities, rule development activities, and other air toxic related programs, such as Multiple Air Toxics Exposure Study (MATES), source testing and air monitoring efforts. This report also satisfies Section 44363 of the California Health and Safety Code which requires the SCAQMD to annually prepare and publish a status and forecast report of the AB 2588 activities.

### **Background**

To date, staff has reviewed and approved 311 facility Health Risk Assessments (HRAs), 50 facilities were required to perform a public notice, and 22 facilities were subject to risk reduction. After implementation of the AB 2588 Program, about 95% of the facilities now have cancer risks below ten in a million and about 98% of the facilities have acute and chronic non-cancer hazard indices less than 1.

### **Accomplishments**

The attached report summarizes the program activities throughout 2013, including AB 2588 program, rule development activities, and other air toxic related programs such as Multiple Air Toxics Exposure Study (MATES), source testing and air monitoring efforts, and anticipated activities during 2014.

#### **Annual Emissions Reporting – Toxic Emissions Inventories**

Under the AB 2588 program, facilities are required to report their toxic emissions to the SCAQMD quadrennially through the web-based Annual Emissions Reporting (AER) Program. In 2013, 50 facilities submitted quadrennial toxic emissions inventory updates that the SCAQMD reviewed, categorized, and prioritized.

#### **Prioritization of Facilities**

Based on emissions inventory submittals, the SCAQMD staff prioritizes facilities. High-priority facilities are those with a priority score greater than 10. In 2013, thirteen facilities with priority scores greater than 10 were reviewed. SCAQMD staff conducted a more detailed evaluation and audit of high-priority facilities and found that one facility needed to submit an Air Toxic Inventory Report (ATIR) and HRA, and eight facility priority scores were modified due to revised proximity to receptors and other corrections. Four facilities had existing HRAs, and their current risk drivers compared to previous approved HRAs resulted in similar health risks, and request for new HRAs were not necessary.

#### **Notification to Prepare Air Toxic Inventory Reports (ATIR) and Health Risk Assessments (HRA)**

There are two general paths in which a facility will be asked to prepare an ATIR and HRA, either with a priority score greater than or equal to ten or by evidence through monitoring or source testing results showing elevated levels of toxic air contaminants providing evidence that the facility may exceed the action risk thresholds of Rule 1402. In 2013, the SCAQMD staff notified the following four facilities to prepare an ATIR



and/or HRA. Kaiser Aluminum Fabricated Products, LLC (ID 16338) had a priority score greater than or equal to 10 that was asked to prepare an ATIR. Carlton Forge Works (ID 22911), Gerdau – Rancho Cucamonga Mill (ID 18931), and Quemetco (ID 8547) were asked to prepare an ATIR and an HRA based on monitoring efforts and source testing.

**Approving Health Risk Assessments, Public Notices, and Risk Reduction Plans**

In 2013, five facility HRAs were reviewed and approved which included two public notices and a total of 11 public meetings. These facilities were Exide Technologies (ID 124838), ConocoPhillips Wilmington Refinery (ID 800363), Tesoro Refining and Marketing (ID 800436), Southern California Edison (ID 160437), ExxonMobile Oil Corporation (ID 800089). Based on the results contained in the approved HRA for Exide Technologies, the facility was subject to the public notification requirements of AB 2588 and the risk reduction requirements of SCAQMD Rule 1402.

A summary of the results of the health risk, public notifications and risk reduction for each facility is presented in the following Table.

<b>Facility</b>	<b>Health Risk</b>	<b>Public Notice</b>	<b>Risk Reduction Plan (RRP)</b>
Exide Technologies (ID 124838)	MICR: 156 in a million (worker) Cancer Burden: 10 Acute HI: 3.8; Chronic HI: 63	Yes. Nine public notification meetings: <ul style="list-style-type: none"> <li>• May 30, 2013 (three meetings),</li> <li>• June 1, 2013 (three meetings),</li> <li>• June 4, 2013,</li> <li>• June 5, 2013, and</li> <li>• June 27, 2013.</li> </ul>	Yes. RRP approved (3/19/2014)
Conoco Phillips Wilmington Refinery (ID 800363)	MICR: 23.2 in a million (residential) Cancer Burden: 0.29 Acute HI: 0.13; Chronic HI: 0.73	Yes. Public notification meeting was held on March 21, 2013.	Not required
Southern California Edison (ID 160437)	MICR: 2.3 in a million (residential) Cancer burden: < 0.01 Acute HI <0.01; Chronic HI <0.01	Not required	Not required
Tesoro Refining and Marketing (ID 800436)	MICR: 10.8 in a million (sensitive) Cancer Burden: 0.37 Acute HI: 0.30; Chronic HI: 0.43	Yes. Public notification meeting was held on February 4, 2014.	Not required
ExxonMobile Oil Corporation (ID 800089)	MICR: 7.7 in a million (residential) Cancer Burden: 0.15 Acute HI: 0.21; Chronic HI: 0.47	Not required	Not required

In addition, the SCAQMD staff initiated posting new health risk assessments received for Exide Technologies (ID 124838) and Tesoro Refining and Marketing (ID 800436) on the SCAQMD website for public review, and will continue to post all other new HRAs received for facilities from this point forward.

### **Air Monitoring and Source Testing Activities to Support the AB 2588 Program**

Over the past year, the SCAQMD staff has been conducting monitoring efforts on a variety of metal industries. The staff is continuing to investigate sources such as metal forging, metal melting, and plating operations to better understand potential air toxics and if additional controls are needed. These sources include Exide Technologies (ID 124838), Carlton Forge Works (ID 22911), Gerdau (ID 18931), Quemetco (ID 8547), and Hixson (ID 11818).

### **Rule 1401 Permitting and HRA Modeling Projects**

In 2013, SCAQMD staff processed approximately 4,327 Rule 1401 applications for 1,908 facilities. Under Rule 1401, the SCAQMD staff also conducts air dispersion modeling to confirm that new and modified permits do not exceed the health risk thresholds. In 2013, SCAQMD staff reviewed and approved 21 HRA modeling projects for permitting.

### **Industry-Wide Categories**

In 2013, the SCAQMD staff implemented Public Notification Procedures for the Industry-wide Category of Retail Gas Stations and Perchloroethylene Dry Cleaners. In addition, AB 2588 staff completed the development of a viewable and searchable mapping utility for displaying the industry-wide retail gas station and perchloroethylene dry cleaner risk assessment results. This was accomplished by developing a GIS application to display the estimated cancer risk for these two categories on the SCAQMD website, which can be found at:

<http://www3.aqmd.gov/webappl/OI.Web/OI.aspx?jurisdictionID=AQMD.gov&shareID=e25b31a1-f9dc-48d4-8ce2-86e13a835583>

### **Rule Development**

Rule 1420.1 was amended to establish requirements for owners or operators of large lead-acid battery recycling facilities to reduce arsenic emissions and other key toxic air contaminant emissions. Proposed amendments included requirements for ambient air concentration limits for arsenic, as well as hourly emission limits of arsenic, benzene, and 1,3-butadiene. In addition, Rule 1420.1 includes a pilot study for continuous in-stack monitors and continuous ambient monitors for multi-metals. Results from the pilot study are expected in late 2014 or early 2015.

## **Future Activities**

In 2014, staff plans to:

- Continue implementation of AB 2588 – reviewing AER inventories, categorizing and prioritizing facilities, evaluating more detailed analyses of high-priority facilities, and notifying facilities to prepare ATIRs and HRAs, when appropriate.
- Work with facilities that are required to conduct public notices under Rule 1402.
- Continue reviewing, approving HRAs and Risk Reduction Plans.
- Develop an internal work plan for addressing emission inventory, risk assessment, and public notification procedures for the Industry-wide category of auto body shops.
- Prioritize AB 2588 facilities and notify those with high-priority scores to prepare detailed ATIRs and HRAs.
- Continue to work on facility HRAs and detailed ATIRs that are either under review or will be submitted in 2014.
- Complete the MATES IV report assessing toxic risk throughout the Basin.
- Analysis and review of preliminary and final versions of the 2011 U.S. EPA National-Scale Air Toxics Assessment (NATA).
- Assessment of OEHHA Revised Air Toxics Hot Spots Program Risk Assessment Guidelines (2015) for implementation.
- Streamline the AB 2588 program through Rule 1401/1402 amendments and revisions to program guidance documents.
- Amend or adopt other proposed toxics rules (i.e. Rules 1430, 1420, 1420.1, 1420.2).

The annual report will be available on the SCAQMD's website and distributed to county boards of supervisors, city councils, and local health officers.

## **Attachment**

Annual Report on AB 2588 Air Toxics "Hot Spots" Program

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

**Annual Report on AB 2588 Air Toxics “Hot Spots” Program**

**June 2014**

**Deputy Executive Officer**  
**Planning, Rule Development and Area Sources**  
Elaine Chang, DrPH

**Assistant Deputy Executive Officer**  
**Planning, Rule Development and Area Sources**  
Philip Fine, Ph.D.

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## INTRODUCTION

The South Coast Air Quality Management District (SCAQMD) has a comprehensive air toxics program. At the heart of this program are Rule 1401 – New Source Review of Toxic Air Contaminants to ensure toxic emissions from new and modified sources do not exceed specified thresholds and Rule 1402 – Control of Toxic Air Contaminants from Existing Sources which implements various aspects of AB 2588. The SCAQMD’s air toxic program also includes a series of source specific rules that address toxic air contaminants for specific industry or equipment categories. The 2010 Clean Communities Plan (CCP) also includes measures to reduce toxic air contaminants.

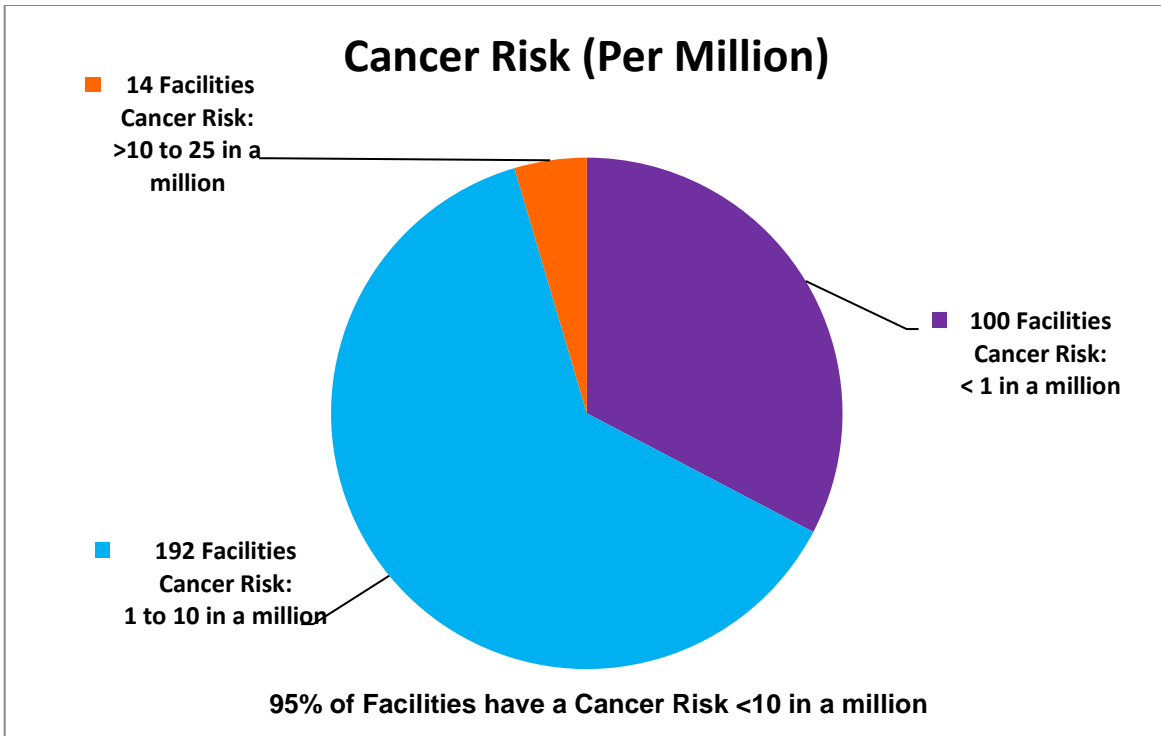
This report summarizes the SCAQMD’s air toxics program activities throughout 2013, including Air Toxics “Hot Spots” Information and Assessment Act (or AB 2588) activities, rule development activities, and other air toxic related programs such as implementation of the Clean Communities Plan, Multiple Air Toxics Exposure Study (MATES), source testing and air monitoring efforts. This report also satisfies Section 44363 of the California Health and Safety Code which requires the SCAQMD to annually\* prepare and publish a status and forecast report of the AB 2588 activities.

## BACKGROUND

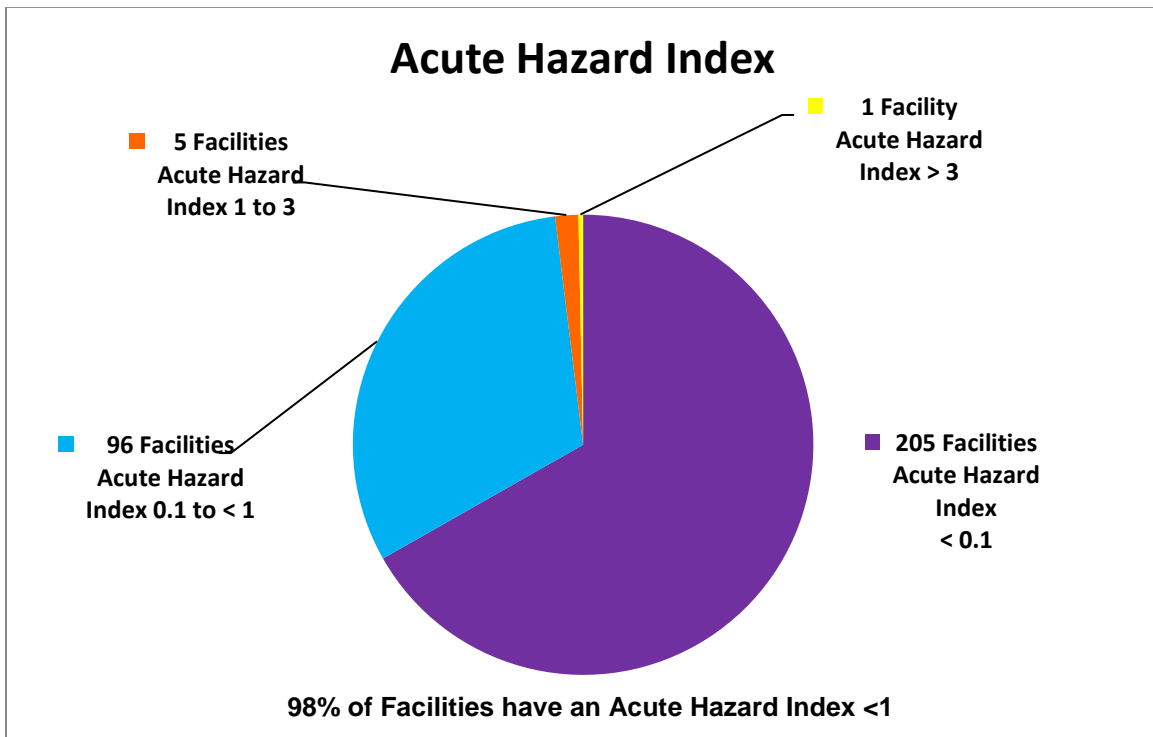
To date, staff has reviewed and approved 311 facility Health Risk Assessments (HRAs). Of these facilities, 50 facilities were required to perform a public notice and 22 facilities were subject to risk reduction. After implementation of the AB 2588 Program, about 95% of the facilities now have cancer risks below ten in a million and about 98% of the facilities have acute and chronic non-cancer hazard indices less than 1. The effectiveness of the AB 2588 Program is illustrated in Figures 1, 2 and 3 which shows the results of the approved facility HRAs after implementation of the AB 2588 Program. Appendix A lists the facilities and the current risks as reviewed and approved by the AB 2588 staff. Table A-1 lists the facilities in order of their cancer risks and Table A-2 is ordered by facility ID. Table A-3 lists facilities which have prepared health risk assessments for the AB 2588 program and their corresponding risks [Section 44363(a) (2) and (3)]. Appendix B shows trends in ambient air toxics in the South Coast Air Basin and vicinity.

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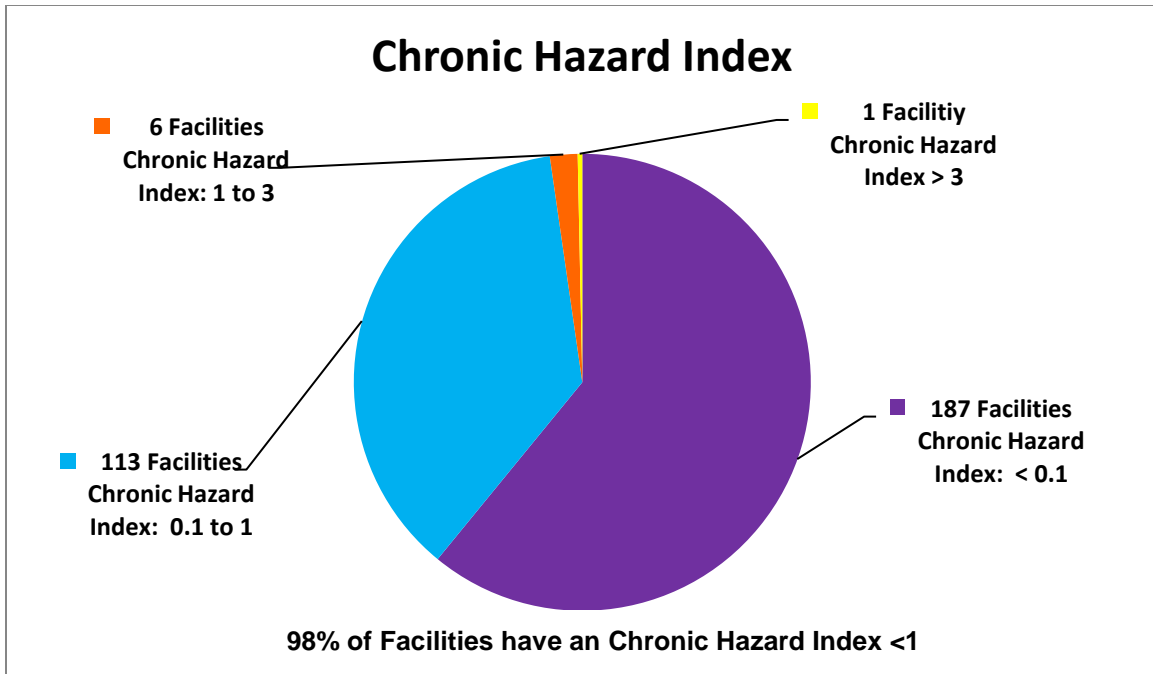
\* It was suggested, at the May 2011 Governing Board meeting, that reports be prepared every other year or every three years. Unfortunately, the Health and Safety Code Section 44363 requires that “each District shall prepare and publish an **annual** report . . .” and the “. . . board shall **hold one or more public hearings** to present the report and discuss its content and significance.” (emphasis added)



**Figure 1. Summary of facility cancer risks**



**Figure 2. Distribution of Acute Hazard Indices for AB2588 Facilities**



**Figure 3. Distribution of Chronic Hazard Indices for AB2588 Facilities**

## 2013 ACCOMPLISHMENTS

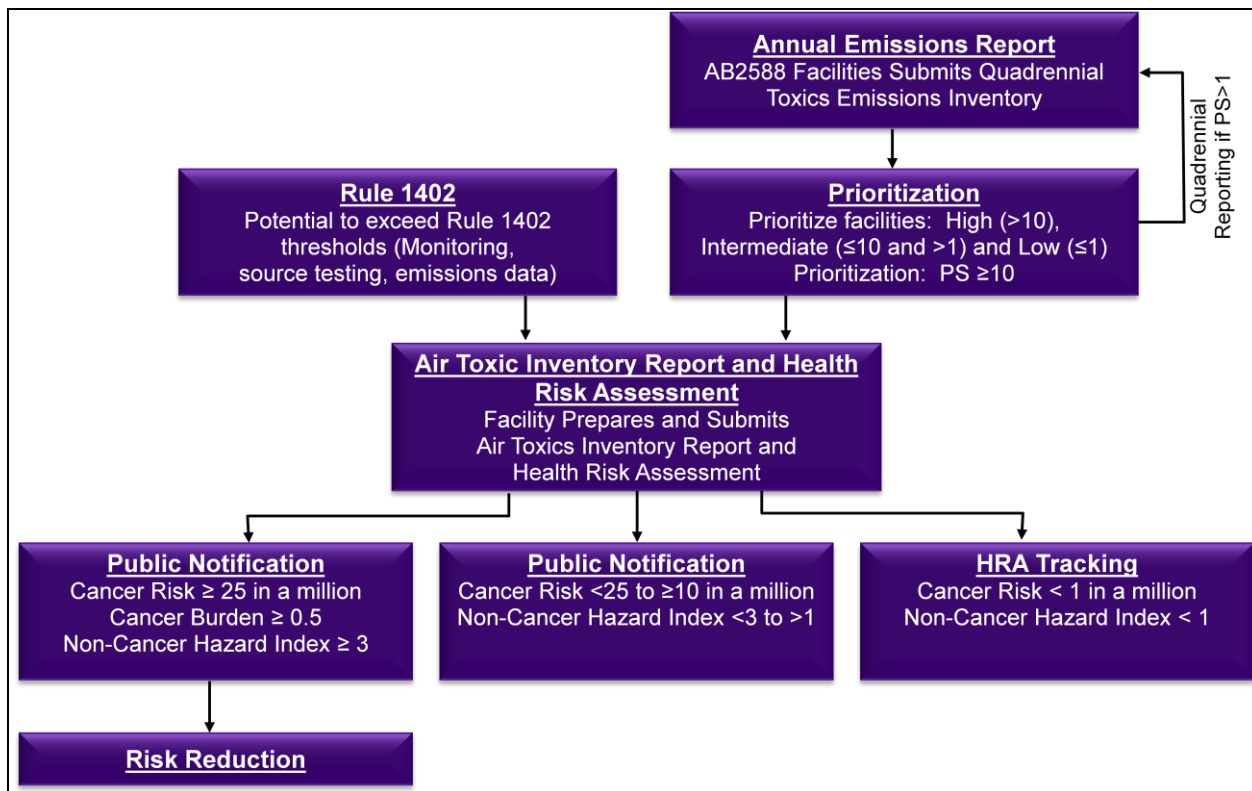
This section highlights SCAQMD’s accomplishments in 2013 for the AB 2588 Program, implementation of Rules 1402 and 1401, as well as source-specific air toxic rule development efforts. Accomplishments for AB 2588 also include industry-wide source categories, air monitoring and source testing projects done in concurrence with AB2588 and Rule 1402.

### AB 2588 Program

In 1987, the California legislature adopted the Air Toxics “Hot Spots” Information and Assessment Act (or AB 2588). To date, staff has reviewed and approved over 300 facility HRAs under the AB 2588 program. The majority of facilities that have prepared HRA’s have demonstrated that their health risk are below Rule 1402 health risk thresholds that would require implementation of a Risk Reduction Plan. Throughout the implementation of the AB 2588 and Rule 1402, the SCAQMD staff has approved 22 Risk Reduction Plans.

The SCAQMD’s AB 2588 program is comprehensive and currently, there are approximately 400 facilities that are included in the program. The AB 2588 program combined with implementation of Rule 1402 includes reviewing toxic emissions inventories, categorizing and prioritizing facilities, reviewing and approving detailed air toxic inventory reports (ATIRs), health risk assessments, public notifications, and risk

reduction plans. A summary of the SCAQMD's AB 2588 program is illustrated in Figure 4.



**Figure 4. Overview of the AB 2588 Hot Spots Program**

Under the AB 2588 program, facilities are required to report their toxic emissions to the SCAQMD quadrennially (i.e., once every four years) through the web-based Annual Emissions Reporting (AER) Program in a combined streamlined reporting process to obtain a preliminary toxic inventory. Under this streamlined process, facilities only report emissions of 177 toxic compounds which will be used to calculate priority scores for each facility. Every year, SCAQMD staff posts criteria and toxic emissions for the previous calendar year to the AB 2588 website and makes it available to the public. In 2013, 50 facilities submitted quadrennial toxic emissions inventory updates. Based on emissions inventory submittals, the SCAQMD staff calculates priority scores for each facility which takes into account potency, toxicity, and the amount of toxics released into the air, as well as the distance to workers, residents and sensitive receptors (such as hospitals, schools, and day care centers).

SCAQMD staff conducts a more detailed evaluation and audit of those facilities with a priority score greater than 10 to confirm use of the correct emission factors, control efficiencies, source test method, weight percent of toxic compounds as well as proximity to the nearest receptors. In 2013, thirteen facilities with priority score greater than 10 were reviewed. The disposition of these facilities is shown in Table 1.



**Table 1 - Disposition of Facilities with a Priority Score (PS) Greater than 10**

Facility Identification Number and Facility Name		Disposition
13920	St. Joseph Hospital	<ul style="list-style-type: none"> <li>• Priority Score verified to be <math>\geq 10</math></li> <li>• Current risk drivers compared to previous approved HRA resulted in similar health risk</li> <li>• Request for new HRA not necessary</li> </ul>
18989	Bowman Plating Co. Inc.	<ul style="list-style-type: none"> <li>• Priority Score verified to be <math>\geq 10</math></li> <li>• Current risk drivers compared to previous approved HRA resulted in similar health risk</li> <li>• Request for new HRA not necessary</li> </ul>
126060	Sterigenics US, LLC	<ul style="list-style-type: none"> <li>• Priority Score verified to be <math>\geq 10</math></li> <li>• Current risk drivers compared to previous approved HRA resulted in similar health risk</li> <li>• Request for new HRA not necessary</li> </ul>
800267	Triumph Processing, Inc.	<ul style="list-style-type: none"> <li>• Priority Score verified to be <math>\geq 10</math></li> <li>• Current risk drivers compared to previous approved HRA resulted in similar health risk</li> <li>• Request for new HRA not necessary</li> </ul>
11245	Hoag Memorial Hospital Presbyterian	<ul style="list-style-type: none"> <li>• Priority Score revised to be <math>&lt; 10</math></li> <li>• Priority Score revised due to proximity to receptors and other corrections.</li> </ul>
83876	United Parcel Service	<ul style="list-style-type: none"> <li>• Priority Score revised to be <math>&lt; 10</math></li> <li>• Priority Score revised due to proximity to receptors and other corrections.</li> </ul>
102268	Reproduction Plastics Inc.	<ul style="list-style-type: none"> <li>• Priority Score revised to be <math>&lt; 10</math></li> <li>• Priority Score revised due to proximity to receptors and other corrections.</li> </ul>
800318	Griswold Industries	<ul style="list-style-type: none"> <li>• Priority Score revised to be <math>&lt; 10</math></li> <li>• Priority Score revised due to proximity to receptors and other corrections.</li> </ul>
107652	Ralphs Grocery Co.	<ul style="list-style-type: none"> <li>• Priority Score revised to be <math>&lt; 10</math></li> <li>• Priority Score revised due to proximity to receptors and exclusion of portable diesel internal combustion engine emissions.</li> </ul>
100154	Colmac Energy Inc.	<ul style="list-style-type: none"> <li>• Priority Score revised to be <math>&lt; 10</math></li> <li>• Priority Score revised due to corrections to receptor proximity.</li> </ul>
134943	Alcoa Global Fasteners, Inc. South Bay	<ul style="list-style-type: none"> <li>• Priority Score revised to be <math>&lt; 10</math></li> <li>• Priority Score revised due to corrections to receptor proximity.</li> </ul>
800201	Arco Terminal Services Corporation	<ul style="list-style-type: none"> <li>• Priority Score revised to be <math>&lt; 10</math></li> <li>• Priority Score revised due to corrections to receptor proximity.</li> </ul>
16338	Kaiser Aluminum & Chem. Corp.	<ul style="list-style-type: none"> <li>• Priority Score verified to be <math>\geq 10</math></li> <li>• ATIR request letter was sent</li> </ul>

## **Air Toxic Inventory Reports (ATIR) and Health Risk Assessments (HRAs)**

There are two general paths in which a facility will be asked to prepare an ATIR and HRA: 1) AER preliminary toxic inventory reporting shows that the facility has a priority score greater than or equal to 10; and 2) The Executive Officer, based upon investigation, determines that emission levels from the facility could potentially cause exceedance of the action risk thresholds of Rule 1402 - Control of Toxic Air Contaminants From Existing Sources; monitoring or source testing shows elevated levels of toxic air contaminants and provides evidence that the facility may exceed the action risk thresholds of Rule 1402.

Facilities that are asked to prepare an ATIR and HRA, must submit a detailed inventory of approximately 450 toxic compounds as well as stack parameters and locations using CARB's Hotspots Analysis and Reporting Program (HARP).<sup>[3]</sup>

There was one facility Kaiser Aluminum Fabricated Products, LLC (ID 16338) that had a priority score greater than or equal to 10 that was asked to prepare an ATIR. The following three facilities based on monitoring efforts and source testing were asked to prepare an ATIR and an HRA:

- Carlton Forge Works (ID 22911);
- Gerdau – Rancho Cucamonga Mill (ID 18931), and
- Quemetco (ID 8547).

The section titled, “Air Monitoring and Source Testing Activities to Support the AB 2588 Program” provides more information regarding the monitoring and source testing efforts for these three facilities.

## **Reviewing and Approving Health Risk Assessments and Risk Reduction Plans**

In 2013, five HRAs were reviewed and approved including three refineries as discussed below. Under Rule 1402 – Control of Toxic Air Contaminants from Existing Sources, one-time public notification and a public meeting are required for facilities with cancer risks greater than or equal to ten in a million or non-cancer acute or chronic hazard index greater than one. In addition, Rule 1402 requires annual public notice until the facility gets below the action risk levels. Detailed discussions of the results of the HRAs are presented below with a summary of the health risk, public notifications and risk reduction presented in Table 2. In 2013, the SCAQMD staff posted new health risk assessments received for Exide Technologies (ID 124838) and Tesoro Refining and Marketing (ID 800436) on the SCAQMD website for public review, and will continue to post all other new HRAs received for facilities from this point forward.

***Exide Technologies (ID 124838)***

Exide Technologies is a secondary lead smelting facility which recovers lead from recycled automotive batteries, and has been in operation since 1922. Equipment used in the battery recycling process includes machines to break batteries apart and separate different materials, furnaces and kettles to melt metals, and miscellaneous equipment including storage tanks, conveying equipment, and engines. The facility poses a maximum individual cancer risk of 156 in a million primarily from arsenic at a worker receptor. The cancer burden is 10. The maximum chronic hazard index is 63 at a worker receptor, mainly from arsenic. The maximum acute hazard index is 3.8 at a residential receptor, mainly from arsenic. Based on the results contained in the approved HRA, the facility was subject to the public notification requirements of AB 2588 and the risk reduction requirements of SCAQMD Rule 1402. Exide hosted nine public meetings. Three public meetings were held on Thursday, May 30, 2013, and another three on Saturday, June 1, 2013 to allow for maximum community participation. Based on community demand, SCAQMD held three more public meetings on June 4, 5, and 27, 2013. Exide submitted a Risk Reduction Plan on August 28, 2013 to comply with SCAQMD Rule 1402 and an amended revised Risk Reduction Plan on January 17, 2014 which was approved on March 19, 2014. Furthermore, pursuant to SCAQMD Rule 1402, Exide is required to provide annual public notice in addition to annual progress reports until the Rule 1402 Action Risk Levels are met.

***ConocoPhillips Wilmington Refinery (ID 800363)***

ConocoPhillips Company owns and operates a two-part refinery in the cities of Carson & Wilmington. The Carson Plant receives various crude stocks, via rail car and pipeline, which are processed into intermediate feed stocks. The Wilmington refinery receives the intermediate feed stocks and further processes them into a variety of petroleum-based products and by-products including gasoline, diesel fuel, jet fuel, & liquefied petroleum gas. The Wilmington facility poses a maximum individual cancer risk of 23.2 in a million at residential receptor. This is mainly from diesel particulate matter (DPM), 1,3-butadiene, polycyclic aromatic hydrocarbons (PAH), and arsenic emissions. The cancer burden is 0.29. The maximum non-cancer acute hazard index is 0.13 at a boundary receptor, mainly from sulfuric acid, ammonia, and nickel emissions. The maximum non-cancer chronic hazard index is 0.73 at a worker receptor, primarily from sulfuric acid, arsenic, and nickel emissions. Based on the results of the approved HRA, the facility was subject to the public notification requirements of AB 2588, and a public notification meeting was conducted on March 21, 2013.

***Tesoro Refining and Marketing (ID 800436)***

Tesoro Refining and Marketing Company operate the refinery in the city of Wilmington which extends over 300 acres. The Plant processes various crude stocks into a variety of petroleum-based products and by-products including gasoline, jet fuel, and diesel. The facility poses a maximum individual cancer risk of 10.8 in a million at a sensitive receptor located east of the facility. The risk is mainly from diesel particulate matter

(DPM), 1,3-butadiene, benzene, hexavalent chromium, and arsenic emissions from refining processes. The cancer burden is 0.37. The maximum non-cancer acute hazard index is 0.30, mainly from hydrogen sulfide emissions. The maximum non-cancer chronic hazard index is 0.43, primarily from arsenic, nickel, and hydrogen chloride emissions. Based on the results of the approved HRA, the facility was subject to the public notification requirements of AB 2588, and a public notification meeting was held on February 4, 2014.

***Southern California Edison (ID 160437)***

The Southern California Edison, Mountainview Generating Station is a nominal 1,056-megawatt (MW), natural gas-fired combined cycle power plant. The main power facilities for the project occupy about 16.3 acres and contain the power-block, administrative buildings, chemical storage areas, cooling towers and other support facilities. The facility poses the maximum individual cancer risk of 2.3 in a million at residential receptor primarily from diesel exhaust particulates, hexavalent chromium, and formaldehyde emissions. The cancer burden is less than 0.01. Both non-cancer maximum chronic and acute hazard indices are less than 0.01.

**Table 2 - Summary of Health Risk Assessments Approved in 2013**

<b>Facility</b>	<b>Health Risk</b>	<b>Public Notice</b>	<b>Risk Reduction Plan</b>
Exide Technologies (ID 124838)	MICR: 156 in a million (worker) Cancer Burden: 10 Acute HI: 3.8; Chronic HI: 63	Yes. Nine public notification meetings: <ul style="list-style-type: none"> <li>• May 30, 2013 (three meetings),</li> <li>• June 1, 2013 (three meetings),</li> <li>• June 4, 2013</li> <li>• June 5, 2013, and</li> <li>• June 27, 2013.</li> </ul>	Yes. RRP approved (3/19/2014)
Conoco Phillips Wilmington Refinery (ID 800363)	MICR: 23.2 in a million (residential) Cancer Burden: 0.29 Acute HI: 0.13; Chronic HI: 0.73	Yes. Public notification meeting was held on March 21, 2013.	Not required
Southern California Edison (ID 160437)	MICR: 2.3 in a million (residential) Cancer burden: < 0.01 Acute HI <0.01; Chronic HI <0.01	Not required	Not required
Tesoro Refining and Marketing (ID 800436)	MICR: 10.8 in a million (sensitive) Cancer Burden: 0.37 Acute HI: 0.30; Chronic HI: 0.43	Yes. Public notification meeting was held on February 4, 2014.	Not required
ExxonMobile Oil Corporation (ID 800089)	MICR: 7.7 in a million (residential) Cancer Burden: 0.15 Acute HI: 0.21; Chronic HI: 0.47	Not required	Not required

### ***ExxonMobile Oil Corporation (ID 800089)***

ExxonMobile Oil Corporation owns and operates a refinery in the city of Torrance. The facility refines crude oil to produce gasoline, diesel fuel, jet fuel, and other related petroleum products. The facility poses a maximum individual cancer risk of 7.7 in a million at a residential receptor. The risk is mainly from diesel particulate, arsenic, benzene and cadmium emissions. The cancer burden is estimated to be 0.15. The maximum non-cancer acute hazard index is 0.21, primarily from mercury, hydrogen sulfide and arsenic emissions. The maximum non-cancer chronic hazard index is 0.47, mainly from arsenic, mercury and manganese emissions.

### **Public Notification Procedures for Industry-wide Categories: Retail Gas Stations and Perchloroethylene Dry Cleaners**

In 2013, the SCAQMD staff implemented Public Notification Procedures for the Industry-wide Category of Retail Gas Stations and Perchloroethylene Dry Cleaners. There are approximately 2,300 gas stations in the Basin, and based on staff's estimates, only a couple of gasoline dispensing stations are above the notification level. Perchloroethylene Dry Cleaners are regulated by Rule 1421 – Control of Perchloroethylene Emissions from Dry Cleaning Systems. Unless a dry cleaner has gone through New Source Review after September 1998, their risk will be over 10 in a million and can be many times higher. This industry is under-going a transition to non-perc, less or non-toxic alternatives, which is required by Rule 1421 by December 31, 2020. Currently there are about 650 perc dry cleaning facilities remaining in the Basin which are subject to public notification requirements.

The staff implemented the streamlined public notification process of posting public notice including a newspaper notice specifying information available on the SCAQMD web site, an on-site notice, information to SCAQMD and local libraries, corresponding planning agencies, as well as school districts. In addition, each facility exceeding the public notice threshold was required to post an AB 2588 notice at their facility. The on-site notice include information regarding pollutants at the facility, their toxicity as well as explanation of health risks associated with exposure to the pollutant. Facilities with the public notice are required to post it where it is most likely to be read by employees and customers.

### **Development of Mapping Tool for Industry-wide Sources (IWS) Facilities**

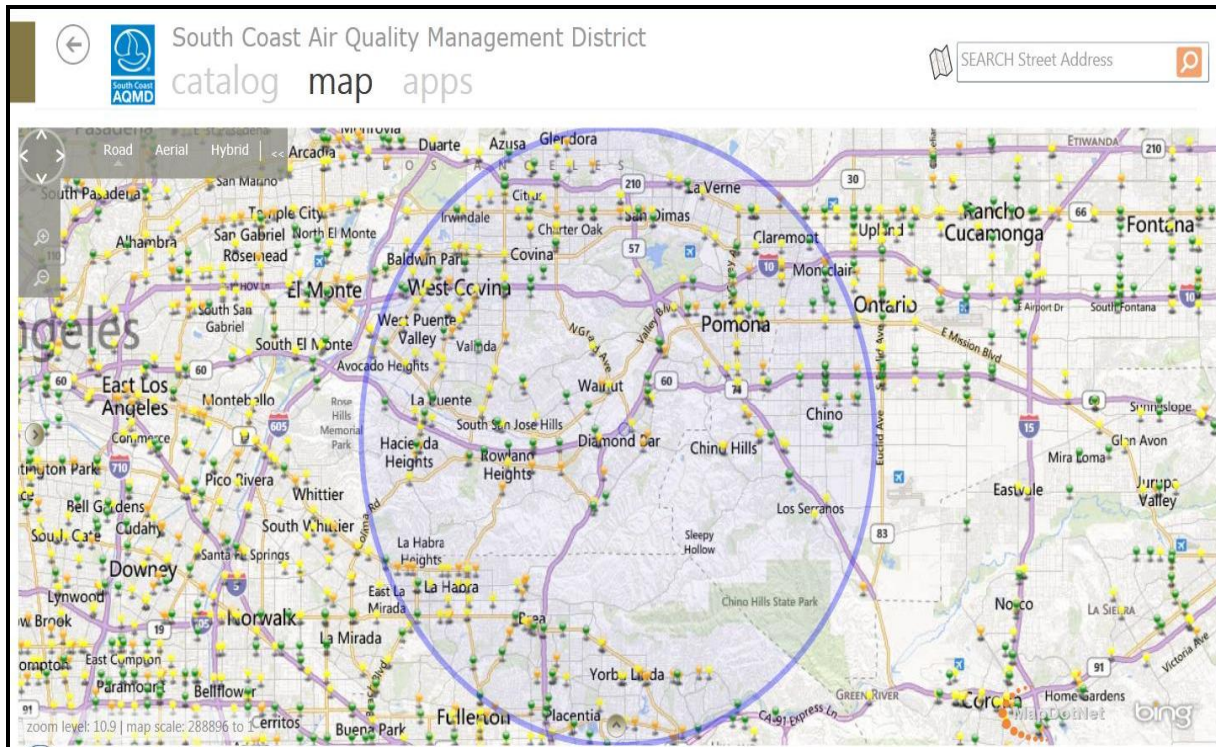
Air districts are also permitted to identify Industry-wide categories. The facilities that qualify for these categories share the same Standard Industrial Classification (SIC) code, for the most part are small businesses that would suffer severe economic hardships by individual compliance, and can be easily and generically characterized. To date, the SCAQMD has identified seven Industry-wide categories:

- Retail Gasoline Dispensing,
- Perchloroethylene Dry Cleaning,
- Auto Body Shops,
- Fiberglass Molding,
- Printing,
- Metal Plating, and
- Wood Stripping / Refinishing.

In addition to the Public Notification Procedures for retail gas stations and perchloroethylene dry cleaners, the SCAQMD staff developed a mapping tool to display health risks from these two industry-wide source categories. This was accomplished by developing a GIS application to display the estimated cancer risk for these two categories on a viewable and searchable map (mapping tool) on the SCAQMD website. Detailed maps of retail gas stations and perchloroethylene dry cleaners and their associated estimated cancer risks can be found at:

<http://www3.aqmd.gov/webappl/OI.Web/OI.aspx?jurisdictionID=AQMD.gov&shareID=e25b31a1-f9dc-48d4-8ce2-86e13a835583>.

A map of retail gas stations and perchloroethylene dry cleaners is shown with tags of orange, yellow, or green. Orange represents risks between 10 and 25 in a million; yellow represents risks between 1 and 10 in a million; and green represents risks less than 1 in a million. A specific address can be searched by using the querying function or by using the zoom icons in the upper left corner of the map. In addition, if a tag is clicked, then the facility name, ID, address, and risk value will pop-up; or if a cluster of facilities are clicked, then a list of facilities will pop-up. These are only a few examples of the functionalities of the web site. The following map is an example and it illustrates the retail gas stations and perchloroethylene dry cleaners within a 10 mile radius of the SCAQMD.



## **Air Monitoring and Source Testing Activities to Support the AB 2588 Program**

The SCAQMD regularly engages in air toxics monitoring and air toxics source testing at AB 2588 facilities, or at facilities that are brought into the AB 2588 program based on monitoring and testing results. In addition to conducting or observing source tests, SCAQMD source testing engineers are responsible for reviewing and approving source test reports submitted by facilities to estimate air toxic emissions for the AB 2588 program. Over the past year, the SCAQMD staff has been conducting monitoring efforts on a variety of metal industries. The SCAQMD staff is continuing to investigate sources such as metal forging, metal melting, and plating operations to identify potential air toxics and if additional controls are needed. Many metal operations generate metal particulate and some cases gaseous vapors that can be very toxic.

### ***Exide Technologies (ID 124838) - Vernon***

At Exide Technologies, source testing staff reviewed numerous source testing protocols and reports related to the facilities HRA and subsequent efforts to reduce emissions. Staff conducted several series of source tests at the facility, and observed other tests conducted by the facility and third party contractors. Furthermore, air monitoring for lead which began in 2007, was expanded in 2013 to include analysis for arsenic as well. Three sites are currently operating, two of which conduct daily sampling. As mentioned

above, Exide is in the process of implementing a Risk Reduction Plan under the AB 2588 program.

### ***Carlton Forge Works (ID 22911) - Paramount***

Carlton Forge Works manufactures forged high-temperature alloy rings for aerospace, gas turbine, and other industries, using principal alloy metals such as nickel, titanium, aluminum, cobalt, zirconium, niobium, and iron, as well as other high temperature metals with special properties. CFW operates a large grinding room with 25 grinding booths, each equipped with a handheld air grinder or a swing grinder and vented to one of three air pollution control equipment (baghouses). The facility is located in a mixed residential/industrial area of Paramount CA and is surrounded by public areas and private residences.

Complaints of burning metallic odors reported by local community members led SCAQMD to supplement ongoing complaint investigations, inspections and surveillance activities with preliminary air sampling in February, April and May of 2013 to investigate potential health impacts from exposure to gaseous and particulate pollutants emitted by CFW operations. Because the major activities at CFW are forging, abrasive blasting, coating, and grinding, particular attention was given to the monitoring of the metallic components of particle emissions to better characterize the emissions and determine ambient levels of potential exposure off-site and in the community.

A series of source tests were conducted in the summer of 2013 by a SCAQMD contractor to better assess the locations and levels of emissions. Starting in August 2013, based on the preliminary air and soil sampling results, SCAQMD began ambient field measurements for the monitoring of the metallic components of particle emissions at two nearby sites downwind. Nickel and hexavalent chromium were of initial concern. One of the sites was relocated to a location slightly farther away in November 2013 to collect gradient information. Sampling is ongoing and shows some reductions in ambient levels since sampling began due to improvements at the facility. Based on these field measurements, CFW was asked to prepare an ATIR, and HRA and begin work on a risk reduction plan. In addition, in 2014 the SCAQMD staff has initiated rule development to address potential toxic emissions from forging and grinding operations. More information regarding toxic rule development activities in 2014 are discussed in the section titled, "Rule Making".

### ***Gerdau (ID 18931) - Rancho Cucamonga***

Gerdau North America acquired the TAMCO Rancho Cucamonga steel mini mill in October, 2010. In 2012, a contractor was retained to perform an environmental audit and found discrepancies in reported emissions. It was found that substantial SO<sub>x</sub> emissions were not reported prior to 2012, NO<sub>x</sub> emissions were not accurately being measured and Pb emissions may have contributed to an exceedence of Rule 1420 limits. SCAQMD conducted inspections of the facility to address issues, as well as conducting source tests



of the bag house exhaust. SCAQMD ambient monitoring for Pb and select particulate metals (Mn, Ni, and hexavalent chromium) began at and around the facility in 2012 at two locations and continued through 2013. Gerdau has recently submitted an HRA and SCAQMD staff has asked for revisions prior to approval.

#### ***Quemetco (ID 8547) - Industry***

In October and November 2013, the SCAQMD staff conducted additional source tests at Quemetco. The results of the 2013 source tests showed elevated arsenic, benzene, and 1,3-butadiene emissions compared to previous 2009, 2010, and 2012 source tests. As a result, the SCAQMD staff has requested that Quemetco prepare a Health Risk Assessment in 2013 pursuant to Rule 1402.

#### ***Hixson (ID 11818) – Newport Beach***

Hixson Metal Finishing is metal finishing company conducting anodizing, plating, painting and other coatings, and non-destructive testing operations located in Newport Beach, California. The SCAQMD began ambient air monitoring for hexavalent chromium in a City near the facility in 2003, and in 2013, SCAQMD continued ambient air monitoring for hexavalent chromium at two sites. Levels of hexavalent chromium near the facility have increased in 2013, and SCAQMD staff is conducting investigations into the specific source and cause, including materials analysis on site and several shorter term intensive monitoring campaigns with higher frequency and more numerous air samples being collected. Results of short-term intensive monitoring on site in 2014 confirmed Hixson as the source of hexavalent chromium. In 2014 the SCAQMD staff notified Hixson to prepare an HRA to account for the recent increase in ambient concentrations.

#### **Pilot Study for Multi-Metals In-Stack and Ambient Continuous Monitors**

Throughout the 2013, initial studies have revealed the need for additional tools for more continuous monitoring of in-stack and ambient emissions metal operations. As a result, the SCAQMD initiated the process in 2013 to conduct a pilot study for continuous in-stack monitors and continuous ambient monitors for multi-metals. Contracts with Cooper Environmental Services, the only manufacturer of these types of continuous monitors, will be initiated in 2014 to implement this pilot study. Results from the pilot study are expected in late 2014 or early 2015.

#### **Rule 1401 Permitting and HRA Modeling Projects**

Under Rule 1401, any new, relocated, and modified permit units which emit toxic air contaminants as specified in the rule are subject to specific allowable limits for maximum individual cancer risk (MICR), cancer burden, and non-cancer acute and chronic hazard index (HI). In 2013, SCAQMD staff processed approximately 4,327 Rule 1401

applications for 1,908 facilities. Under Rule 1401, the SCAQMD staff also conducts air dispersion modeling to confirm that new and modified permits do not exceed the health risk thresholds. In 2013, SCAQMD staff reviewed and approved 21 HRA modeling projects for permitting.

### **Rule Development**

#### **Amended Rule 1420.1 – Emission Standards for Lead and Other Toxic Air Contaminants from Large Lead-acid Battery Recycling Facilities**

In January 2014, Rule 1420.1 was amended to establish requirements for owners or operators of large lead-acid battery recycling facilities to reduce arsenic emissions and other key toxic air contaminant emissions. Proposed amendments included requirements for ambient air concentration limits for arsenic, as well as hourly emission limits of arsenic, benzene, and 1,3-butadiene. Other amendments also contain additional administrative, monitoring and source testing requirements for stack emissions. The majority of work for this rule was done in 2013 and the rule was originally scheduled for the December 6, 2013 Board Hearing, and therefore listed in this annual report.

### **FUTURE ACTIVITIES**

#### **AB2588 Activities**

Staff will prioritize about 100 facilities and notify those with high priority scores to prepare detailed Air Toxics Inventory Reports (ATIRs) and HRAs. Staff anticipates the review of about 10 facility HRAs and 10 detailed ATIRs. In addition, the Tesoro Refining and Marketing (ID 800436) public notice was scheduled for February 04, 2014 at the Boys and Girls Clubs of Long Beach. Public notices are also expected for Carlton Forge Works (ID 22911) and Gerdau (ID 18931).

#### **Develop Internal Procedures for the Other Industry-wide Categories**

The California Air Pollution Control Officers Association's (CAPCOA) Toxics Committee has been tasked with developing statewide emission inventory and risk assessment guidelines for several of these Industry-wide categories. Specifically, such guidelines have been completed for auto body shops<sup>[4]</sup> and gasoline service stations.<sup>[5]</sup> The guidelines for perchloroethylene dry cleaners<sup>[6]</sup> are being finalized by CAPCOA. The guidelines provide a cost-effective and uniform method for calculating facility emissions and estimating toxic risks for the approximately 1,770 auto body shops, 2,300 gasoline service stations, and 640 perchloroethylene dry cleaners under the SCAQMD's jurisdiction. In this manner, the SCAQMD may prepare Industry-wide inventories, risk assessments, and public notices and risk reduction plans if necessary. Facilities with only emergency diesel internal combustion engines (DICES) are treated similarly to an Industry-wide category. In 2014, staff will develop an internal work plan for addressing

emission inventory, risk assessment, and public notification procedures for the Industry-wide category of auto body shops (approximately 1,770 facilities).

### **Multiple Air Toxics Exposure Study (MATES)**

MATES IV<sup>[7]</sup> is the fourth in a series of urban toxics monitoring and evaluation studies conducted in the Basin. The previous studies took place in 1985-86, 1998-99,<sup>[8]</sup> and 2004-06.<sup>[9]</sup> MATES IV consists of several elements as follows: a comprehensive monitoring program, an updated emissions inventory of toxic air contaminants, and a modeling effort to fully characterize Basin risk. The measurement of ultrafine particle concentrations is a new focus for MATES IV. In addition, shorter-term measurements were conducted at various locations, such as airports, freeways, rail yards, and busy intersections near warehouse operations to assess exposures to ultrafine particles and black carbon. Sampling began in June 2012 and concluded June 2013, providing a full year of ambient data.

AB 2588 staff is expected to participate in MATES IV in 2014 because it affords an opportunity to identify facilities that may be contributing to elevated ambient risks, but have not been determined as such through our routine procedures of inventory assessment, prioritization, and risk assessment. Staff will also assist in the development and review of an air toxics emission inventory which is a key input to the regional modeling and risk assessment tasks of MATES IV.

### **National-Scale Air Toxics Assessment (NATA) Support**

Every three years, beginning in 1996, the U.S. EPA prepares a National-Scale Air Toxics Assessment (NATA).<sup>[10]</sup> NATA is analogous to the modeling component of SCAQMD's Multiple Air Toxic Exposure Study (MATES). Whereas MATES looks at population risks in the four county jurisdiction of the SCAQMD, the 50 states are addressed in NATA. The purpose of NATA is to: (1) identify and prioritize the toxic air contaminants of greatest concern, (2) determine the risk contribution from each of the major source categories (i.e., on-road, off-road, point, and area), and (3) identify local areas (i.e., census tracts) with elevated risks.

Significant AB 2588 staff resources are expected to be dedicated in 2014 to the analysis and review of preliminary and final versions of the 2011 NATA. Staff is currently reviewing some very preliminary results for high risk facilities.

### **Assessment of OEHHA Revised Air Toxics Hot Spots Program Risk Assessment Guidelines (2015)**

The Hot Spots Act requires that the Office of Environmental Health Hazard Assessment (OEHHA) develop risk assessment guidelines for the Hot Spots program. In 2003, OEHHA adopted the Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments.<sup>[1]</sup> The Guidance Manual contains a description of the algorithms, recommended exposure variates, cancer and noncancer health values, and modeling protocols needed to perform a risk assessment under the Hot Spots Act. The information for the Guidance Manual is taken from three other technical support documents (TSDs)

that provide the input parameters for the risk assessments. OEHHA is updating these guidelines to include the most recent scientific data on exposures and toxic potencies.

To facilitate the development of risk assessments, a software program, the Hot Spots Analysis and Reporting Program (HARP), has been developed by the Air Resources Board in consultation with OEHHA and Air Pollution Control/Air Quality Management District representatives.<sup>[3]</sup> This is a tool that incorporates the components of the Guidance Manual and assists with the programmatic requirements of the Hot Spots program. HARP is an integrated software package that can be used by the air pollution control and air quality management districts, facility operators, and others. The SCAQMD uses HARP for the Hot Spots program, and also for health risk assessments in other areas such as facility permitting. The HARP software includes exposure variates and health values and is the recommended model for calculating and presenting HRA results for the Hot Spots Program. Information on obtaining the HARP software can be found on the ARB's web site at [www.arb.ca.gov](http://www.arb.ca.gov) under the Hot Spots Program.

In the last few years, OEHHA has been updating the components of the risk assessment procedure and has adopted updated technical support documents that reflect new scientific information. The Technical Support Document for the Derivation of Noncancer Reference Exposure Levels (June, 2008) addresses the methodology for deriving acute, chronic and eight hour Reference Exposure Levels.<sup>[11]</sup> The Technical Support Document for Cancer Potency Factors (May 2009) addresses the methodology for deriving cancer potency factors and adjusts cancer potency to account for the increased sensitivity of early-in-life exposure to carcinogens.<sup>[12]</sup> The Technical Support Document for Exposure Assessment and Stochastic Analysis (June 2012) presents the exposure model for the Hot Spots program and reviews the available literature on exposure and relevant fate and transport variates.<sup>[13]</sup> All three TSDs are available on OEHHA's web site at: [http://www.oehha.ca.gov/air/hot\\_spots/index.html](http://www.oehha.ca.gov/air/hot_spots/index.html).

Additionally, consideration of possible differential effects on the health of infants and children has been included in the updates.

The three TSDs have been updated and are now being incorporated in revisions to the Guidance Manual for Risk Assessments. The intent of the Guidance Manual and the HARP software is to incorporate children's health concerns, update risk assessment practices, and to provide consistent risk assessment procedures.

Estimates prepared by CARB/OEHHA staff indicate that, for a given level of emissions, the cancer risk assessments will likely yield significantly higher risk values. The estimated risk increases based on the new OEHHA guidance will range from a factor of about 2.7 for inhalation-only risks up to a factor of about 6.1 for substances that exhibit multi-pathway exposures (inhalation, soil, dermal, and breast milk). Staff will perform more detailed assessment on the resource impacts and impacts on the regulated community and prepare an action plan for Board's consideration.

The revisions to the Guidance Manual will be released for public review and OEHHA will respond to public comments. Both the Guidance Manual and OEHHA's response to the comments will then be reviewed by the State's Scientific Review Panel on Toxic Air Contaminants (SRP), which has already reviewed the three TSDs upon which this guidance is based. Following review by the SRP, OEHHA will finalize this Guidance Manual and the HARP software, which will supersede the risk assessment methods presented in the Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments (OEHHA, 2003). Staff estimates that the Guidance Manual & release of the updated HARP software will be complete by early 2015.

## **Rulemaking**

### ***Streamlining Rules 1401/1402 and AB 2588 Program***

Based on recent experience with several AB 2588 facilities associated community concerns, staff believes the current timelines and procedures of the program should be modified and streamlined to provide better information to the public and achieve faster toxic emissions reductions when necessary. To this end, staff has initiated the rule amendment process with regards to SCAQMD Rule 1402 – Control of Toxic Air Contaminants from Existing Sources, to streamline implementation of inventories, risk assessment, and risk reduction under the AB 2588 Program, while also improving the reporting process, the availability of the data, and communication to the affected community. Staff will also be revising AB 2588 internal and external AB 2588 guidelines documents to reflect new rule amendments and further provide for program enhancements. The proposed changes will be subject to the standard rulemaking process with enhanced stakeholder outreach to both community members and the affected businesses. The AB 2588 program staff will be part of the program evaluation effort.

### ***Other Proposed Rules***

**Rule 1420 – Emissions Standard for Lead** applies to all non-vehicular sources of lead emissions and contains requirements for emission levels, controls, housekeeping, and monitoring. On October 15, 2008, U.S.EPA lowered the lead National Ambient Air Quality Standard (NAAQS) from 1.5 to 0.15 ug/m<sup>3</sup>. Proposed amendments will reassess the current requirements and realigns them to ensure compliance with the revised lead standard. Proposed amendments to the rule may also include general housekeeping provisions and enclosure requirements to control fugitive lead emissions. The public process could begin in early fall of 2014.

**Rule 1420.1 – Emissions Standards for Lead and Other Toxic Air Contaminants from Large Lead-Acid Battery Recycling Facilities** applies to lead-acid battery recycling facilities that have processed more than 50,000 tons of lead per year in any one of the five calendar years prior to November 5, 2010, or annually thereafter. The purpose of Rule 1420.1 is to protect public health by reducing exposure and emissions of lead, arsenic, benzene, and 1,3-butadiene from large lead-acid battery recycling facilities, and to help ensure attainment and maintenance of the National Ambient Air Quality Standards

(NAAQS) for Lead. Potential proposed amendments will consider lowering the total facility mass lead emission rate of 0.045 lb/hr from all lead point sources and/or the ambient lead concentration. The public process will begin in fall of 2014.

**Rule 1420.2 – Emission Standards for Lead from Metal Melting Processes (tentative)** is a new rule that reduces exposure to lead emissions from facilities that conduct metal melting processes such as lead-acid battery manufacturing facilities and foundries. In addition to meeting an ambient air quality concentration standard of 0.15  $\mu\text{g}/\text{m}^3$  averaged over 30 days, the rule may establish requirements to meet a total facility lead emission rate and total enclosures of areas used in the metal melting process. Other requirements such as ambient air monitoring and housekeeping practices to control fugitive lead-dust emissions may be proposed. The public process could begin in early fall of 2014.

**Proposed Rule 1430 – Control of Toxic Air Contaminants from Metal Forging and Grinding** is a new rule which will establish requirements to control toxic air contaminants from metal forging and grinding operations. SCAQMD staff has identified 21 facilities in the South Coast Air Basin that conduct metal forging and grinding operations. SCAQMD staff is currently investigating regulatory requirements that would ensure affected facilities employ the best means available to minimize toxic air contaminants not adequately addressed by existing regulations. Specifically, the rule requirements currently under review by SCAQMD staff range from housekeeping provisions to source specific limitations such as grinding enclosures, curtains, ventilation requirements and air pollution control equipment. The SCAQMD staff will continue to review and analyze all emission reduction strategies available for this source category. The public process could begin in early fall of 2014.

## NOTES AND REFERENCES

- [1] OEHHA. 2003. The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. The document is available at [http://www.oehha.org/air/hot\\_spots/HRAguidefinal.html](http://www.oehha.org/air/hot_spots/HRAguidefinal.html).
- [2] SCAQMD. 2011. Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act (AB2588). The document is available at <http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab2588-risk-assessment-guidelines.pdf?sfvrsn=4>.
- [3] CARB. 2005. Hotspots Analysis and Reporting Program (HARP). Link to HARP is <http://www.arb.ca.gov/toxics/harp/harp.htm>.
- [4] CAPCOA. 1996. Auto Bodyshop Industry-wide Risk Assessment Guidelines. Prepared by CAPCOA, September 1996. The document is located at the following link: <http://www.arb.ca.gov/ab2588/riskassess.htm>.
- [5] CAPCOA. 1997. Gasoline Service Station Industry-wide Risk Assessment Guidelines. Prepared by CAPCOA, December 1997. The document is located at the following link: <http://www.arb.ca.gov/ab2588/riskassess.htm>.
- [6] CAPCOA. 2003. Perchloroethylene Dry Cleaner Industry-wide Risk Assessment Guidelines. Prepared by CAPCOA, January 13, 2003 (Draft). The document is located at the following link: <http://www.arb.ca.gov/ab2588/riskassess.htm>.
- [7] MATES IV preliminary material is available at: <http://www.aqmd.gov/home/library/air-quality-data-studies/health-studies/mates-iv>.
- [8] The MATES II report and related material is available at: <http://www.aqmd.gov/home/library/air-quality-data-studies/health-studies/mates-ii>.
- [9] The MATES III report and related material is available at: <http://www.aqmd.gov/home/library/air-quality-data-studies/health-studies/mates-iii>.
- [10] The U.S. EPA's web portal to NATA is at: <http://www.epa.gov/ttn/atw/natamain/>.
- [11] Air Toxics Hot Spots Risk Assessment Guidelines Technical Support Document For the Derivation of Noncancer Reference Exposure Levels, Office of Environmental Health Hazard Assessment, 2008  
[http://www.oehha.ca.gov/air/hot\\_spots/2008/NoncancerTSD\\_final.pdf](http://www.oehha.ca.gov/air/hot_spots/2008/NoncancerTSD_final.pdf)
- [12] Technical Support Document for Cancer Potency Factors: Methodologies for derivation, listing of available values, and adjustments to allow for early life stage exposures, Office of Environmental Health Hazard Assessment, May 2009  
[http://www.oehha.ca.gov/air/hot\\_spots/2009/TSDCancerPotency.pdf](http://www.oehha.ca.gov/air/hot_spots/2009/TSDCancerPotency.pdf)

- [13] Air Toxics Hot Spots Program Risk Assessment Guidelines Technical Support Document for Exposure Assessment and Stochastic Analysis, Office of Environmental Health Hazard Assessment, August, 2012  
[http://www.oehha.ca.gov/air/hot\\_spots/pdf/2012tsd/TSDportfolio2012.pdf](http://www.oehha.ca.gov/air/hot_spots/pdf/2012tsd/TSDportfolio2012.pdf)



## Appendix A

### Health Risk from Facilities with an Approved Health Risk Assessment (HRA)

The tables in Appendix A lists the facilities and the current risks as reviewed and approved by the AB 2588 staff. Table A-1 lists the facilities in order of their cancer risks and Table A-2 is ordered by facility ID. In most instances, the listed risks are from an approved HRA. However, in some instances, the risks are from after the implementation of a risk reduction plan. Table A-3 lists the status of the facility's risk reduction plan. Attention should also be given to the other footnotes in the table denoting facilities with updated HRAs pending approval and facilities with risk including emergency DICES. It also provides current status of each facility as follows:

- A – Active
- I – Inactive
- OB – Out of business (with the year in which the facility went out of business)

“Inactive” and “out of business” facilities have been retained for historical purposes since staff occasionally receives public inquiries regarding “inactive” or “out of business” facilities. Staff realizes that facilities that have gone through change of ownership could have different name and facility ID numbers. The following risk levels are identified in SCAQMD Rule 1402 – Control of Toxic Air Contaminants from Existing Sources:

- **Action Risk Levels:** Cancer risk  $\geq 25$  in a million; Acute HI  $\geq 3.0$ ; Chronic HI  $\geq 3.0$ , Cancer Burden  $\geq 0.5$
- **Public Notification Levels:** Cancer risk  $\geq 10$  in a million; Acute HI  $> 1.0$ ; Chronic HI  $> 1.0$
- **Exemption Levels:** Cancer risk  $< 1$  in a million; Acute HI  $< 0.1$ ; Chronic HI  $< 0.1$

**Appendix A-1**  
**Health Risks from Facilities with an Approved HRA**  
(listed in descending order by cancer risks)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
124838	A	EXIDE TECHNOLOGIES	Vernon	156	10	3.8	63	2013
800363	A	CONOCO-PHILLIPriority Score CO.	Wilmington	23.2	0.29	0.13	0.73	2013
122822	OB	CONSOLIDATED FILM INDUSTRIES	Hollywood	21.00	n/a	0.11	0.40	2000
45448	A	GAS RECOVERY SYSTEMS, INC.	Newport Coast	20.1	0.18	0.56	0.32	2009
14495	A	VISTA METALS CORP.	Fontana	19.80	0.057	0.01	0.29	2008
126501	A	VOUGHT AIRCRAFT INDUSTRIES (b)	Hawthorne	19.70	n/a	0.64	0.24	2001
114927	A	ANVIL CASES / A CALZONE COMPANY	Industry	19.00	n/a	0.13	0.08	2002
11142	OB (2003)	KEYSOR-CENTURY CORP	Saugus	17.00	n/a	0.54	0.06	2000
18989	A	BOWMAN PLATING CO. INC.	Compton	14.20	0.021	<0.01	<0.01	2007
41229	A	LUBECO, INC.	Long Beach	14.02	n/a	0.00	0.12	2003
35302	A	OWENS CORNING FIBERGLASS CORP. (c)	Compton	14.00	0.015	0.07	0.10	2000
48323	A	SIGMA PLATING COMPANY	La Puente	13.84	0.017	0.01	0.74	2004
18648	OB (2006)	CROWN CITY PLATING COMPANY	El Monte	11.99	0.130	0.39	0.13	2000
800436	A	TESORO REFINING AND MARKETING CO	Wilmington	10.80	0.38	0.3	0.43	2013
29110	A	OR. CO., SANITATION DIST	Huntington Beach	10.70 (d)	0.210	1.78	0.48	2007
106797	OB (2005)	SAINT-GOBAIN CONTAINERS LLC	Los Angeles	9.85	n/a	0.00	0.07	2000
101380	OB (2005)	GENERAL DYNAMICS OTS (DOWNEY) INC	Downey	9.80	n/a	0.01	0.05	2000
148925	A	CHERRY TEXTRON	Santa Ana	9.70	n/a	0.07	0.15	1999
800183	A	PARAMOUNT PETROLEUM CORPORATION	Paramount	9.61	n/a	0.02	0.01	2002
800318	A	GRISWOLD INDUSTRIES	Costa Mesa	9.51	0.009	0.10	0.01	2001

## Appendix A-1. Continued.

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
15504	A	SCHLOSSER FORGE CO.	Rancho Cucamonga	9.50	0.067	1.59	1.11	2003
800149	A	US BORAX & CHEM CORP	Wilmington	9.46	n/a	0.00	0.03	2000
10510	OB (2009)	GREGG INDUSTRIES INC.	El Monte	9.40	0.010	0.60	0.56	2008
155828	A	GARRETT AVIATION SERVICES INC.	Los Angeles	9.33	n/a	0.91	0.10	2005
42922	OB (2006)	CMC PRINTED BAG INC	Whittier	9.00	n/a	<0.01	<0.01	1995
800396	A	BP WEST COAST PRODUCTS, ARCO VINVALE	South Gate	9.00	0.023	<0.01	0.03	1994
169990	A	SPriority Score TECHNOLOGIES, LLC	Gardena	8.91	0.010	0.09	0.06	1999
1744	A	KIRKHILL RUBBER CO	Brea	8.70	0.001	0.20	0.06	2007
800431	A	PRATT & WHITNEY ROCKETDYNE, INC.	Canoga Park	8.70	0.130	<0.01	<0.01	1995
44454	A	STRUCTURAL COMPOSITES INDUSTRIES, INC.	Pomona	8.60	0.001	0.01	0.23	2002
2680	A	LA CO., SANITATION DISTRICT	Whittier	8.57	n/a	0.00	0.03	1999
15736	I	HENRY CO	Huntington Park	8.50	0.026	0.00	0.00	2000
800057	A	GATX TANK STORAGE TERMINAL CORP	Carson	8.50	n/a	0.01	0.06	1999
800079	A	PETRO DIAMOND TERMINAL CO	Long Beach	8.30	n/a	0.00	0.16	1998
125281	OB (2004)	MODERN PLATING ALCO CAD-NICKEL PLATING	Los Angeles	8.20	n/a	0.10	0.01	1997
21615	OB (2004)	OPTICAL RADIATION CORP	Azusa	8.08	n/a	0.17	0.10	1998
110924	OB (2008)	WESTWAY TERMINAL COMPANY	San Pedro	8.00	0.370	0.33	0.51	1997
3609	I	AL'S PLATING CO INC	Los Angeles	7.81	n/a	0.26	0.17	1999
37603	A	POLYCARBON INC	Valencia	7.80	0.012	0.01	0.36	1998
800182	A	RIVERSIDE CEMENT CO. (c)	Riverside	7.80	n/a	0.05	0.13	2001
13920	A	ST. JOSEPH HOSPITAL	Orange	7.73	0.014	0.79	0.26	2008

## Appendix A-1. Continued.

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
800089	A	EXXON-MOBIL OIL CORPORATION	Torrance	7.7	0.15	0.21	0.47	2013
18294	A	NORTHROP CORP., AIRCRAFT DIV. - WEST	El Segundo	7.60	n/a	0.13	0.05	2000
113170	A	SANTA MONICA HOSPITAL MEDICAL CTR UNIT 2 (b)	Santa Monica	7.60	0.000	0.17	0.01	1997
800214	A	LA CITY, HYPERION TREATMENT PLANT (c)	Playa del Rey	7.59	0.027	0.06	0.01	1999
20197	A	LAC/USC MEDICAL CENTER	Los Angeles	7.50	0.031	0.70	0.38	2007
800032	A	CHEVRON U.S.A. INC	Montebello	7.46	0.143	0.01	0.18	1999
800150	A	US GOVT., AF DEPT, MARCH AFB	Riverside	7.35	0.020	0.31	0.01	2008
108701	OB (2007)	BALL FOSTER GLASS CONTAINER CO.	El Monte	7.30	0.056	0.09	0.07	2000
117560	A	EQUILON ENTER, LLC-SHELL OIL PROD. US	Wilmington	7.30	n/a	0.03	0.07	1998
131003	A	BP WEST COAST PRODUCTS LLC	Carson	7.28	n/a	0.30	0.08	2000
800026	A	ULTRAMAR INC.	Wilmington	7.2	0.18	0.70	0.23	2012
800113	A	ROHR IND INC	Riverside	7.20	0.011	0.86	0.02	2007
800236	A	LA CO., SANITATION DIST UNIT NO.01	Carson	7.20	0.058	0.17	0.12	2007
49387	A	UNIV CAL RIVERSIDE	Riverside	7.13	0.220	0.00	0.04	1999
57094	A	G S ROOFING PRODUCTS CO INC (c)	Wilmington	7.00	n/a	0.01	0.01	2000
140499	A	AMERESCO HUNTINGTON BEACH, LLC	Huntington Beach	7.00	n/a	<0.01	<0.01	1995
55449	A	BKK CORPORATION, LANDFILL DIVISION GNRL	W. Covina	6.90	n/a	0.01	0.10	2000
800372	A	EQUILON ENTERPRISES,LLC	Carson	6.90	0.030	0.44	0.07	2001
20280	A	METAL SURFACES INC.	Bell Gardens	6.8	0.000	0.88	0.34	2011
42514	A	LA CO., SANITATION DIST., CALABASAS LANDFILL	Agoura	6.78	0.00	0.02	<0.01	2010
5723	A	AEROCHEM INC	Orange	6.70	0.004	0.02	0.10	1999

## Appendix A-1. Continued.

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
34764	A	CADDOCK ELECTRONICS, INC.	Riverside	6.70	0.034	0.01	0.09	2002
8570	A	EMBEE INC	Santa Ana	6.62	n/a	0.21	0.58	2001
800362	A	CONOCO-PHILLIPriority Score CO.	Carson	6.6	0.11	0.03	0.26	2011
17301	A	OR CO., SANITATION DIST	Fountain Valley	6.60	0.032	0.39	0.34	2007
6643	A	TECHNICOLOR, INC	N. Hollywood	6.53	0.003	0.03	0.08	2007
141585	A	RESOLUTION SPECIALTY MATERIALS, LLC	Lynwood	6.50	0.150	0.13	1.60	1995
11726	I	GE ENGINE SERVICES	Ontario	6.46	n/a	0.12	0.59	1999
2852	A	WALT DISNEY CO	Burbank	6.40	0.031	0.02	0.02	1997
800066	A	HITCO	Gardena	6.40	0.310	0.34	0.05	1998
4477	A	SOUTHERN CALIFORNIA EDISON COMPANY	Avalon	6.3	0.02	0.01	0.02	2012
1226	A	HYATT DIE CAST & ENGINEERING CORP	Cypress	6.24	0.008	<0.01	0.12	1996
800067	A	BOEING SATELLITE SYSTEMS INC	El Segundo	6.22	n/a	0.03	0.08	2000
146570	OB (2009)	ROHM AND HAAS CHEMICALS LLC	La Mirada	6.20	n/a	0.54	0.76	1999
45262	A	LA CO, SANITATION DISTRICT UNIT NO.02	Glendale	6.17	n/a	0.01	0.05	1998
140961	A	GKN AEROSPACE TRANSPARENCY SYS INC	Garden Grove	6.00	n/a	<0.01	0.49	1996
800022	A	CALNEV PIPE LINE CO	Bloomington	5.90	n/a	0.00	0.07	1999
800198	A	ULTRAMAR INC	Wilmington	5.90	n/a	0.01	0.09	1999
800279	A	SFPP, L.P.	Orange	5.85	n/a	0.00	0.24	1999
8578	OB (2002)	ASSOCIATED CONCRETE PROD. INC	Santa Ana	5.80	n/a	0.13	0.57	1999
136148	A	E/M CORP, GREAT LAKES CHEMICAL CORP SUB	N Hollywood	5.80	0.000	0.28	0.57	1998
800129	A	SO PACIFIC PIPELINES INC	Rialto	5.75	n/a	<0.01	0.02	1996
154540	A	ARROWHEAD BRASS PROD. INC	Los Angeles	5.70	n/a	0.26	0.04	1995

## Appendix A-1. Continued.

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
800288	A	UNIV CAL IRVINE UNIT NO 01	Irvine	5.64	n/a	0.00	0.07	1996
22410	OB (2012)	PALACE PLATING	Los Angeles	5.60	n/a	0.73	0.38	2004
38971	A	RICOH ELECTRONICS INC	Irvine	5.60	0.007	0.02	0.39	1995
43201	A	SNOW SUMMIT SKI CORP	Big Bear Lake	5.53	0.003	0.01	0.01	2007
14146	A	MAC GREGOR YACHT CORP	Costa Mesa	5.50	n/a	0.00	0.10	1998
54424	A	L & L CUSTOM SHUTTERS	Placentia	5.50	0.000	0.15	0.21	2001
800409	A	TRW INC.	Redondo Beach	5.48	n/a	0.45	0.24	1998
800196	A	AMERICAN AIRLINES, INC.	Los Angeles	5.40	0.190	0.86	0.08	2005
800171	A	MOBIL OIL CO	Vernon	5.33	0.016	0.07	0.02	1997
134018	A	INDUSTRIAL CONTAINER SERVICES	Montebello	5.24	n/a	0.57	0.23	2000
109198	I	TORCH OPERATING CO. (STEARNS GAS CO)	Brea	4.97	n/a	0.05	0.01	2001
800037	A	DEMENNO/KERDOON	Compton	4.9	0.01	<0.01	0.02	2009
103888	OB (2010)	A J INDUSTRIES INC, SARGENT-FLETCHER CO	El Monte	4.90	0.280	0.16	0.02	1999
11192	A	HI-SHEAR CORP	Torrance	4.80	0.002	0.04	0.02	2008
800038	A	DOUGLAS AIRCRAFT CO	Long Beach	4.80	n/a	0.15	0.11	1999
800264	A	EDGINGTON OIL, CO.	Long Beach	4.78	0.001	0.01	0.01	2002
101977	A	AMERIGAS PROPANE L.P.	Long Beach	4.70	0.002	0.59	0.97	1998
3950	OB (2005)	CROWN CORK & SEAL COMPANY, INC.	La Mirada	4.60	0.000	0.00	0.11	1997
83102	A	LIGHT METALS	Industry	4.50	0.008	0.04	2.70	2002
8547	A	QUEMETCO INC.	Industry	4.4	0.023	0.086	0.74	2010
136395	A	THOMASON MECHNICAL CORP, BENDER MACHINE	Vernon	4.40	0.001	0.99	0.02	2002
800041	OB (2009)	DOW U.S.A.	Torrance	4.40	n/a	0.09	0.01	2000

## Appendix A-1. Continued.

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
93346	I	COOPER DRUM CO	S. El Monte	4.30	n/a	0.09	0.16	1997
115240	A	MARCHEM TECHNOLOGIES, LONZA INC	Long Beach	4.30	0.005	0.28	0.01	2001
131249	A	BP WEST COAST PRODUCTS LLC (c)	Wilmington	4.30	0.180	0.08	0.18	1995
124506	A	BOEING ELECTRON DYNAMIC DEVICES	Torrance	4.17	n/a	0.46	0.07	1995
6459	OB (2002)	HONEYWELL INTERNATIONAL INC.	Vernon	4.13	n/a	0.01	0.01	1999
18439	OB (2006)	ACE PLATING CO INC	Los Angeles	4.08	n/a	0.58	0.19	1998
118406	A	CARSON COGENERATION COMPANY	Carson	3.86	n/a	0.16	0.01	2007
45489	A	GUIDANT CORP	Temecula	3.80	0.006	1.31	0.01	2002
126060	A	STERIGENICS US, LLC	Ontario	3.80	0.000	0.00	0.01	2007
8820	A	REULAND ELECTRIC CO. H.BRITTON LEES	Industry	3.70	0.002	<0.01	<0.01	1996
9114	I	SOMITEX PRINTS OF CALIFORNIA	Industry	3.70	n/a	0.06	<0.01	1996
17325	A	ACE CLEARWATER ENTERPRISES	Paramount	3.70	0.001	0.01	0.00	2002
106838	A	VALLEY-TODECO, INC	Sylmar	3.70	0.000	0.20	0.20	2000
105598	A	SENIOR FLEXONICS INC	Burbank	3.64	0.007	0.98	0.49	2001
7427	A	OWENS-BROCKWAY GLASS CONTAINER	Vernon	3.60	0.000	0.01	0.06	2001
800007	OB (2005)	ALLIED SIGNAL INC, El Segundo	El Segundo	3.58	n/a	0.02	0.53	2000
126197	A	ION BEAM APPLICATIONS INC.	Los Angeles	3.56	0.000	<0.01	0.01	1996
127568	A	ENGINEERED POLYMER SOLUTION	Montebello	3.53	0.000	0.05	0.48	2000
151899	A	MEDALLION CALIFORNIA PROPERTIES CO	Newhall	3.51	n/a	0.02	0.20	2000
140811	A	DUCOMMUN AEROSTRUCTURES INC	Monrovia	3.50	0.007	0.01	0.01	2002
8015	A	ANADITE INC	South Gate	3.48	n/a	0.63	0.78	2003
9163	A	INLAND EMPIRE UTILITIES AGENCY	Ontario	3.44	0.001	0.25	0.01	2007

## Appendix A-1. Continued.

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
151415	A	AERA ENERGY LLC	Brea	3.40	0.020	0.05	0.00	1999
153546	A	HUCK INTERNATIONAL INC	Carson	3.30	0.017	0.00	0.02	1999
126191	A	ION BEAM APPLICATIONS INC.	Los Angeles	3.29	0.000	<0.01	0.00	1996
800063	A	GROVER PROD. CO	Los Angeles	3.29	0.039	0.88	0.07	2002
800189	A	DISNEYLAND RESORT	Anaheim	3.25	0.030	0.11	0.06	2009
18396	A	SPRAYLAT CORPORATION	Los Angeles	3.2	0.000	0.74	<0.01	2012
6384	A	LA CO., RANCHO LOS AMIGOS MEDICAL CENTER	Downey	3.14	0.082	0.01	0.06	1999
11435	A	THE PQ CORP	South Gate	3.00	n/a	0.00	0.01	1998
800395	A	BP WEST COAST PRODUCTS, ARCO CARSON	Carson	3.00	0.001	<0.01	0.02	1994
10005	A	ELECTRONIC CHROME GRINDING CO, INC.	Santa Fe Springs	2.96	0.010	0.24	0.06	2001
52517	A	REXAM PLC, REXAM BEVERAGE CAN COMPANY	Chatsworth	2.93	0.0076	0.73	0.1	2009
18452	A	UCLA (REGENTS OF UC) (c)	Los Angeles	2.91	n/a	0.01	0.11	1999
2613	A	US GOVT, NAVY DEPT, NAVAL WEAPONS STN	Seal Beach	2.90	0.004	0.11	0.00	2002
16660	A	MC DONNELL DOUGLAS SPACE SYS CO.	Huntington Beach	2.89	0.001	0.23	0.05	2007
116868	I	EQUILON ENTERPRISES,LLC	Rialto	2.88	n/a	0.00	0.04	1999
800035	OB (2011)	CONTINENTAL AIRLINES INC	Los Angeles	2.83	n/a	0.01	0.13	1997
48274	OB	FENDER MUSICAL INST	Corona	2.81	0.004	0.03	0.37	1997
151798	A	TESORO REFINING AND MARKETING CO.	Carson	2.77	n/a	0.14	0.00	1999
151984	A	TESORO REFINING AND MARKETING CO.	Wilmington	2.75	0.002	0.00	0.01	2000
46268	A	CALIFORNIA STEEL INDUSTRIES, INC.	Fontana	2.74	0.016	0.16	0.31	1995
800030	A	CHEVRON U.S.A. INC	El Segundo	2.73	n/a	0.29	0.13	2001
5887	A	ANABOLIC INC	Irvine	2.70	0.154	0.03	0.00	1997



## Appendix A-1. Continued.

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
16642	A	ANHEUSER-BUSCH INC.(LA BREWERY)	Van Nuys	2.70	n/a	0.02	0.13	1999
25440	OB (2010)	ROBERTSHAW CONTROLS CO, GRAYSON CONTROLS	Long Beach	2.70	0.003	0.00	0.96	1998
27701	OB (2008)	CADDOCK ELECTRONICS, INC.	Riverside	2.70	n/a	0.02	0.06	2002
137517	I	RELIANT ENERGY ETIWANDA,LLC	Etiwanda	2.67	0.160	0.01	0.17	2000
133987	A	PLAINS EXPLORATION & PRODUCTION CO. LP	Inglewood	2.65	n/a	0.01	0.07	1997
134943	A	ALCOA GLOBAL FASTERNERS, INC.	Torrance	2.61	n/a	0.55	0.04	2008
35483	A	WARNER BROTHERS STUDIO FACILITIES	Burbank	2.60	0.008	0.10	0.26	1997
37507	A	TROJAN BATTERY COMPANY	Santa Fe Springs	2.55	0.000	1.08	1.27	2012
7949	A	CUSTOM FIBERGLASS MFG CO/CUSTOM HARDTOP	Long Beach	2.50	0.078	<0.01	<0.01	1995
79682	A	RAMCAR BATTERIES INC	Commerce	2.43	n/a	0.04	0.17	1998
800278	A	SFPP, L.P.	Carson	2.43	n/a	0.00	0.10	1999
18188	A	PLASMA TECHNOLOGY INC.	Torrance	2.40	0.000	0.11	0.00	2007
18508	A	AIR PROD & CHEM INC, PACIFIC ANCHOR CHEM	Los Angeles	2.40	0.000	0.10	0.81	1999
800202	A	UNIVERSAL STUDIOS INC	Universal City	2.40	n/a	<0.01	0.03	1996
800387	A	CALIFORNIA INSTITUTE OF TECHNOLOGY	Pasadena	2.40	n/a	0.05	0.00	2007
152033	A	TESORO REFINING AND MARKETING CO.	Long Beach	2.39	n/a	0.00	0.01	1999
133405	OB (2008)	BODYCOTE INC./BODYCOTE THERMAL PROCESSING	Los Angeles	2.36	n/a	0.03	0.20	1999
1208	OB (2008)	MICROSEMI CORPORATION	Santa Ana	2.30	0.004	0.01	0.01	2001
160437	A	SOUTHER CALIFORNIA EDISON	Redlands	2.30	<0.01	<0.01	<0.01	2013
800056	A	GATX STORAGE TERMINALS CORP	San Pedro	2.30	n/a	0.00	0.03	1997
103659	OB (2007)	FOUR MEDIA CO.	Burbank	2.22	n/a	0.61	0.04	2004

## Appendix A-1. Continued.

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
99773	A	CYTEC FIBERITE INC.	Anaheim	2.20	0.000	0.04	0.19	2000
9668	A	DELUXE LABORATORIES INC, DELUXE LABORATOR	Hollywood	2.10	0.000	0.01	0.02	2000
40829	A	HAWKER PACIFIC INC	Sun Valley	2.07	0.000	0.04	0.09	2009
18931	A	GERDAU (Formerly TAMCO)	Rancho Cucamonga	2.04	0.017	0.01	0.24	2001
142267	A	FS PRECISION TECH LLC	Rancho Dominguez	2.03	n/a	0.08	0.15	2001
800181	A	CALIFORNIA PORTLAND CEMENT CO (c)	Colton	2.00	0.001	<0.01	0.39	1996
2605	A	3M CO	Northridge	1.98	0.002	0.40	0.38	1996
14502	A	VERNON UTILITY DEPARTMENT	Vernon	1.98	0.000	0.01	0.01	2007
54627	A	HICKORY SPRINGS OF CAL INC	Commerce	1.95	n/a	0.01	0.48	1998
800325	A	TIDELANDS OIL PRODUCTION CO (L.B. Oil Co)	Long Beach	1.90	n/a	0.07	0.62	1999
10245	A	LA CITY SANITATION BUREAU, TERMINAL ISLAN	San Pedro	1.83	0.005	0.02	0.03	2000
23559	OB (2005)	JOHNSON CONTROLS BATTERY GROUP INC	Fullerton	1.80	n/a	0.01	0.08	2001
800003	A	HONEYWELL INTERNATIONAL INC	Torrance	1.77	n/a	0.00	0.01	1999
1947	A	THUMS LONG BEACH CO, UNIT NO.01	Long Beach	1.70	0.170	<0.01	0.14	1996
8309	A	CAMBRO MANUFACTURING CO	Huntington Beach	1.70	0.002	0.00	0.15	2000
22467	A	LEFIELL MFG CO	Santa Fe Springs	1.70	0.000	0.75	0.17	2000
82512	A	BREA CANYON OIL CO	Wilmington	1.70	n/a	0.01	<0.01	1996
119907	A	BERRY PETROLEUM	Santa Clarita	1.60	n/a	0.20	0.73	1999
119920	OB (2006)	ALUMINUM COMPANY OF AMERICA	Vernon	1.60	n/a	0.30	0.30	1996
133660	A	HAYDEN INDUSTRIAL PRODUCTS	Corona	1.60	n/a	0.82	0.44	1998
107350	OB (2007)	N O-RING CORPORATION	Downey	1.53	n/a	0.00	0.01	2001
2638	A	OCCIDENTAL COLLEGE	Los Angeles	1.50	0.002	0.07	0.01	2007

## Appendix A-1. Continued.

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
126536	A	CONSOLIDATED FOUNDRIES, POMONA	Pomona	1.50	n/a	0.00	0.02	1999
25070	A	LA CO., SANITATION DISTRICT (c)	Whittier	1.46	0.003	0.33	0.08	2009
82513	A	BREA CANYON OIL COMPANY INC	Harbor City	1.40	n/a	0.02	<0.01	1996
800408	A	TRW INC.	Manhattan Beach	1.37	n/a	0.92	0.10	1998
3968	A	TABC INC.	Long Beach	1.35	0.002	0.05	0.22	1999
62679	OB (2009)	KOP-COAT INC	Vernon	1.33	n/a	0.00	0.49	1997
123087	A	INDALEX WEST INC.	Industry	1.27	n/a	0.00	0.03	1999
126544	A	PAC FOUNDRIES INDUSTRY	Industry	1.27	n/a	0.59	0.09	1996
2526	A	CHEVRON USA INC	Van Nuys	1.25	0.007	<0.01	0.01	1996
22551	A	THUMS LONG BEACH CO, UNIT NO.04	Long Beach	1.20	0.000	0.00	0.01	2000
42633	A	LA CO., SANITATION DIST, Spadra Landfill	Walnut	1.20	0.002	<0.01	<0.01	1996
106009	A	VENOCO INC.	Beverly Hills	1.16	n/a	0.05	0.00	2005
152054	A	BREA CANYON OIL COMPANY, INC.	Brea	1.14	n/a	<0.01	0.12	1996
124806	OB (2004)	EXIDE TECHNOLOGIES	Industry	1.00	n/a	0.00	0.04	1999
800127	A	THE GAS CO.	Montebello	0.99	0.000	0.01	0.01	2009
7730	A	E R CARPENTER CO INC	Riverside	0.96	0.000	0.03	1.34	2003
20375	A	PRUDENTIAL OVERALL SUPPLY	Riverside	0.96	0.000	0.03	0.08	1997
6670	OB (2006)	TRU-CUT, INC.	Los Angeles	< 1	0.000	0.00	0.04	2002
47056	OB (2005)	MYERS CONTAINER CORP	Huntington Park	0.90	0.000	0.23	2.00	2002
800301	A	ITT GILFILLAN UNIT NO.01	Van Nuys	0.86	0.000	0.12	0.19	1998
3134	A	THUMS LONG BEACH CO, UNIT NO.05	Long Beach	0.84	0.000	<0.01	<0.01	1996
18378	A	GRUBER SYSTEMS, INC.	Valencia	0.83	0.000	0.14	0.10	2004

## Appendix A-1. Continued.

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
22556	A	THUMS LONG BEACH CO, UNIT NO.02	Long Beach	0.80	0.000	<0.01	<0.01	1996
111415	A	VAN CAN CO, SUBSIDIARY OF VAN CAMP SEAFO	Fontana	0.80	0.000	<0.01	0.08	1996
120088	A	BREITBURN ENERGY CO.	Santa Fe Springs	0.79	0.000	0.01	0.04	1998
126964	A	EDWARDS LIFESCIENCES LLC	Irvine	0.75	0.000	<0.01	0.00	1995
22373	OB (2011)	CONTAINER CORPORATION OF AMERICA	Los Angeles	0.74	0.000	<0.01	<0.01	1996
24060	OB (2011)	TOMKINS INDUSTRIES INC-LASCO PRODS GROUP	Anaheim	0.72	0.000	<0.01	0.02	1996
800091	A	MOBIL OIL CORP	Anaheim	0.72	0.000	0.01	0.00	1999
772	A	DEFT INC	Irvine	0.70	0.000	<0.01	<0.01	1995
24756	A	CRANE CO, HYDRO-AIRE DIV	Burbank	0.63	0.000	0.04	0.05	1997
115394	A	AES ALAMITOS, LLC	Long Beach	0.63	0.000	0.00	0.02	1999
134931	A	ALCOA GLOBAL FASTENERS, INC.	Fullerton	0.61	0.000	1.90	0.02	2003
24957	A	GLENDALE CITY	Glendale	0.59	0.000	0.00	0.02	1999
15647	A	CUSTOM ENAMELERS INC	Fountain Valley	0.55	0.000	0.11	0.02	2000
3093	A	LA CO., OLIVE VIEW/UCLA MEDICAL CENTER	Sylmar	0.53	0.000	0.00	0.02	1999
21895	A	AC PRODUCTS, INC.	Placentia	0.53	0.000	0.00	0.00	2003
6281	I	US GOVT,MARINE CORPriority Score AIR STATION,EL TORO	El Toro	0.51	0.000	<0.01	<0.01	1996
1634	OB (2005)	STEELCASE INC, WESTERN DIV	Tustin	0.50	0.000	<0.01	<0.01	1995
39388	A	THUMS LONG BEACH CO, UNIT NO.03	Long Beach	0.50	0.000	<0.01	<0.01	1996
61160	OB (2010)	GE ENGINE SERVICES	Ontario	0.50	0.000	0.70	0.01	2003
800267	A	TRIUMPH PROCESSING, INC.	Lynwood	0.48	0.000	0.12	0.36	2012
152501	A	PRECISION SPECIALTY METALS, INC.	Los Angeles	0.45	0.000	0.38	0.15	2001
43436	A	TIMCO	Fontana	0.43	0.000	0.00	0.43	1997

## Appendix A-1. Continued.

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
18990	A	LIFE PAINT COMPANY	Santa Fe Springs	0.41	0.000	0.02	0.00	2001
44577	A	LONG BEACH CITY, SERRF PROJECT (c)	Long Beach	0.4	0.000	0.02	0.08	2011
12660	OB (2009)	GOLDSHIELD FIBERGLASS, INC, PLANT #58	Fontana	0.40	0.000	0.01	0.05	1994
115536	A	AES REDONDO BEACH, LLC	Redondo Beach	0.40	0.000	0.01	0.04	1998
122295	OB (2007)	FALCON FOAM, A DIV OF ALTAS ROOFING	Los Angeles	0.40	0.000	0.00	0.00	1999
115663	A	EL SEGUNDO POWER, LLC	El Segundo	0.34	0.000	0.00	0.01	2000
25638	A	BURBANK CITY, PUB SERV DEPT	Burbank	0.33	0.000	0.33	0.01	1996
124805	A	EXIDE TECHNOLOGIES	Commerce	0.33	0.000	0.00	0.04	2000
550	A	LA CO., INTERNAL SERVICE DEPT	Los Angeles	0.32	0.000	0.02	0.00	2008
112192	OB (2005)	CONSOLIDATED DRUM RECONDITIONING CO. INC.	South Gate	0.31	0.000	0.00	0.00	1997
800343	A	BOEING SATELLITE SYSTEMS, INC.	El Segundo	0.30	0.000	<0.01	0.21	1996
24520	A	LA CO, SANITATION DISTRICTS	Rolling Hills Estates	0.29	0.000	<0.01	<0.01	1998
99119	A	INTERPLASTIC CORP	Hawthorne	0.28	0.000	0.05	0.32	1999
122300	OB (2010)	BASF CORPORATION	Colton	0.28	0.000	0.56	0.02	2002
19989	OB (2000)	PARKER HANNIFIN AEROSPACE CORP	Irvine	0.27	0.000	0.01	0.00	1999
107149	A	MARKLAND MANUFACTURING INC.	Santa Ana	0.26	0.000	0.06	0.12	2007
161142	A	FOAMEX L.P.	Compton	0.25	0.000	0.00	0.01	2010
160916	A	FOAMEX INNOVATIONS, INC.	Orange	0.18	0.000	0.39	0.43	1994
16264	A	INTL COATINGS CO INC	Cerritos	0.17	0.000	0.00	0.00	1999
800074	A	LA CITY, DWP HAYNES GENERATING STATION	Long Beach	0.17	0.000	0.00	0.01	2000
48300	A	PRECISION TUBE BENDING	Santa Fe Springs	0.15	0.000	0.00	0.00	2002
800168	A	PASADENA CITY, DWP	Pasadena	0.15	0.000	0.70	0.00	1996

## Appendix A-1. Continued.

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
800193	A	LA CITY, DWP; VALLEY STM PLANT	Sun Valley	0.15	0.000	0.25	0.00	1999
37336	A	COMMERCE REFUSE TO ENERGY FACILITY	Commerce	0.12	0.00	0.01	0.00	2010
42676	A	AES PLACERITA, INC.	Newhall	0.11	0.000	0.08	0.01	2003
114801	A	RHODIA INC.	Carson	0.11	0.000	0.02	0.05	2006
115389	A	SO CAL EDISON CO	Huntington Beach	0.11	0.000	0.00	0.00	1999
7416	A	PRAXAIR INC	Wilmington	0.11	0.000	0.04	0.03	2001
1992	OB (2009)	PRUDENTIAL OVERALL SUPPLY	Van Nuys	0.10	0.000	0.00	0.00	1997
16044	I	SPECIALTY ORGANICS INC	Irwindale	0.10	0.000	0.00	0.23	1997
25012	A	AMADA MFG AMERICA, INC.	La Mirada	<0.1	0.000	0.00	0.00	2002
24812	A	FARMER BROS CO	Torrance	0.09	0.000	0.00	0.02	1999
94872	A	METAL CONTAINER CORP.	Mira Loma	0.08	0.000	0.39	0.36	2002
111110	A	BRISTOL FIBERLITE IND	Santa Ana	0.08	0.000	0.00	0.02	1995
156741	A	HARBOR COGENERATION CO.	Wilmington	0.05	0.000	0.02	0.00	2002
20144	OB (2000)	CANON BUSINESS MACHINES INC	Costa Mesa	0.05	0.000	0.00	0.07	1999
800320	A	AMVAC CHEMICAL CORP.	Los Angeles	0.04	0.000	0.07	0.34	2004
45938	A	E.M.E. INC/ELECTRO MACHINE & ENGINEERING	Compton	0.04	0.000	0.00	<0.01	2001
117785	OB (2011)	BALL METAL BEVERAGE CONTAINER CORP.	Torrance	0.04	0.000	0.21	0.91	2001
22229	A	PROCESSES BY MARTIN, INC.	Lynwood	0.04	0.000	0.00	0.00	2002
800075	A	LA CITY, DWP SCATTERGOOD GENERATING STN.	Playa del Rey	0.03	0.000	0.00	0.00	2000
145368	A	SEMMATERIALS LP	Fontana	0.02	0.000	0.33	0.01	1999
115586	OB (2011)	SUNDANCE SPAS	Chino	0.02	0.000	0.05	0.43	1996
51620	A	WHEELABRATOR NORWALK ENERGY COMPANY	Norwalk	0.02	0.000	0.01	0.02	1996

## Appendix A-1. Continued.

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
800009	OB	AMERON PROTECTIVE COATINGS DIV	Brea	0.01	0.000	0.24	0.24	2000
55711	OB (2004)	SUNLAW COGENERATION PARTNERS I	Vernon	0.01	0.000	0.01	0.00	1996
124016	A	OAKITE PRODUCTS, INC.	La Mirada	0.00	0.000	0.14	0.08	2000
55714	OB	SUNLAW COGENERATION PARTNERS I	Vernon	0.00	0.000	0.01	0.00	1996
119127	OB (2009)	PRC DE SOTO INTERNATIONAL	Glendale	0.00	0.000	<0.01	<0.01	2002
809	OB (2011)	GARNER GLASS CO	Claremont	0.00	0.000	0.00	0.00	1996
1732	OB (1997)	INTL ELECTRONIC RESEARCH CORP	Burbank	0.00	0.000	0.00	0.00	1996
1746	A	UNITED ALLOYS INC	Los Angeles	0.00	0.000	0.00	0.00	1998
3084	A	CARDINAL INDUSTRIAL FINISHES INC	South El Monte	0.00	0.000	0.00	0.00	1996
3578	A	PRUDENTIAL OVERALL SUPPLY	Carson	0.00	0.000	0.00	0.00	2000
6163	A	OHLINE	Gardena	0.00	0.000	0.26	0.72	1996
6315	A	FLO-KEM, INC.	Rancho Dominguez	0.00	0.000	0.03	0.61	1999
7010	A	PRUDENTIAL OVERALL SUPPLY	Irvine	0.00	0.000	0.00	0.00	1995
8560	A	PRUDENTIAL OVERALL SUPPLY CO	Commerce	0.00	0.000	0.00	0.00	1995
8935	A	TRAIL RITE INC	Santa Ana	0.00	0.000	0.00	0.30	1996
10656	A	NEWPORT LAMINATES	Santa Ana	0.00	0.000	<0.01	<0.01	1996
19953	OB (2002)	RISTON KELLER INC	Irvine	0.00	0.000	<0.01	0.01	1996
21544	OB	US GOVT, MARINE CORPriority Score AIR STA @BLD	Tustin	0.00	0.000	0.00	0.00	2000
22092	A	WESTERN TUBE & CONDUIT CORP	Long Beach	0.00	0.000	0.02	0.62	1997
24647	A	J. B. I. INC	Compton	0.00	0.000	0.00	0.17	1999
40806	A	ASSOCIATED PLASTICS INC	Riverside	0.00	0.000	0.73	0.20	1997
51849	A	ELIMINATOR CUSTOM BOATS	Mira Loma	0.00	0.000	<0.01	<0.01	1995

## Appendix A-1. Concluded.

<b>Facility ID</b>	<b>Facility Status (a)</b>	<b>Facility Name</b>	<b>City</b>	<b>Cancer Risk in a million</b>	<b>Cancer Burden</b>	<b>Acute Hazard Index</b>	<b>Chronic Hazard Index</b>	<b>HRA Approved (year)</b>
70021	A	XERXES CORP ( A DELAWARE CORP)	Anaheim	0.00	0.000	<0.01	<0.01	1996
144677	A	PRATT & WHITNEY ROCKETDYNE/RUBY ACQ ENT	Canoga Park	0.00	0.000	<0.01	<0.01	1996
149241	A	REGAL CULTURED MARBLE	Pomona	0.00	0.000	<0.01	0.25	1995
800018	A	BAXTER HEALTH CARE CORP, BENTLEY DIV	Irvine	0.00	0.000	<0.01	0.37	1994

- Notes:
- (a) A = Active; I = Inactive; OB = Out of Business (with the year in which the facility went out of business)
  - (b) The specific risk driver listed in this HRA is no longer in use & the resulting risk has been eliminated or minimized.
  - (c) SCAQMD staff has requested these facilities to update their HRAs.
  - (d) This includes risk attributable to the emergency DICE. The total facility risks excluding the emergency DICE are less than 10 in a million.



**Appendix A-2**  
**Health Risks from Facilities with an Approved HRA**  
(listed by Facility ID)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
550	A	LA CO., INTERNAL SERVICE DEPT	Los Angeles	0.32	0.000	0.02	0.00	2008
772	A	DEFT INC	Irvine	0.70	0.000	<0.01	<0.01	1995
809	OB (2011)	GARNER GLASS CO	Claremont	0.00	0.000	0.00	0.00	1996
1208	OB (2008)	MICROSEMI CORPORATION	Santa Ana	2.30	0.004	0.01	0.01	2001
1226	A	HYATT DIE CAST & ENGINEERING CORP	Cypress	6.24	0.008	<0.01	0.12	1996
1634	OB (2005)	STEELCASE INC, WESTERN DIV	Tustin	0.50	0.000	<0.01	<0.01	1995
1732	OB (1997)	INTL ELECTRONIC RESEARCH CORP	Burbank	0.00	0.000	0.00	0.00	1996
1744	A	KIRKHILL RUBBER CO	Brea	8.70	0.001	0.20	0.06	2007
1746	A	UNITED ALLOYS INC	Los Angeles	0.00	0.000	0.00	0.00	1998
1947	A	THUMS LONG BEACH CO, UNIT NO.01	Long Beach	1.70	0.170	<0.01	0.14	1996
1992	OB (2009)	PRUDENTIAL OVERALL SUPPLY	Van Nuys	0.10	0.000	0.00	0.00	1997
2526	A	CHEVRON USA INC	Van Nuys	1.25	0.007	<0.01	0.01	1996
2605	A	3M CO	Northridge	1.98	0.002	0.40	0.38	1996
2613	A	US GOVT, NAVY DEPT, NAVAL WEAPONS STN	Seal Beach	2.90	0.004	0.11	0.00	2002
2638	A	OCCIDENTAL COLLEGE	Los Angeles	1.50	0.002	0.07	0.01	2007
2680	A	LA CO., SANITATION DISTRICT	Whittier	8.57	n/a	0.00	0.03	1999
2852	A	WALT DISNEY CO	Burbank	6.40	0.031	0.02	0.02	1997
3084	A	CARDINAL INDUSTRIAL FINISHES INC	South El Monte	0.00	0.000	0.00	0.00	1996
3093	A	LA CO., OLIVE VIEW/UCLA MEDICAL CENTER	Sylmar	0.53	0.000	0.00	0.02	1999

## Appendix A-2. Continued.

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
3134	A	THUMS LONG BEACH CO, UNIT NO.05	Long Beach	0.84	0.000	<0.01	<0.01	1996
3578	A	PRUDENTIAL OVERALL SUPPLY	Carson	0.00	0.000	0.00	0.00	2000
3609	I	AL'S PLATING CO INC	Los Angeles	7.81	n/a	0.26	0.17	1999
3950	OB (2005)	CROWN CORK & SEAL COMPANY, INC.	La Mirada	4.60	0.000	0.00	0.11	1997
3968	A	TABC INC.	Long Beach	1.35	0.002	0.05	0.22	1999
4477	A	SOUTHERN CALIFORNIA EDISON COMPANY	Avalon	6.3	0.02	0.01	0.02	2012
5723	A	AEROCHEM INC	Orange	6.70	0.004	0.02	0.10	1999
5887	A	ANABOLIC INC	Irvine	2.70	0.154	0.03	0.00	1997
6163	A	OHLINE	Gardena	0.00	0.000	0.26	0.72	1996
6281	I	US GOVT,MARINE CORPriority Score AIR STATION,EL TORO	El Toro	0.51	0.000	<0.01	<0.01	1996
6315	A	FLO-KEM, INC.	Rancho Dominguez	0.00	0.000	0.03	0.61	1999
6384	A	LA CO., RANCHO LOS AMIGOS MEDICAL CENTER	Downey	3.14	0.082	0.01	0.06	1999
6459	OB (2002)	HONEYWELL INTERNATIONAL INC.	Vernon	4.13	n/a	0.01	0.01	1999
6643	A	TECHNICOLOR, INC	N. Hollywood	6.53	0.003	0.03	0.08	2007
6670	OB (2006)	TRU-CUT, INC.	Los Angeles	< 1	0.000	0.00	0.04	2002
7010	A	PRUDENTIAL OVERALL SUPPLY	Irvine	0.00	0.000	0.00	0.00	1995
7416	A	PRAXAIR INC	Wilmington	0.11	0.000	0.04	0.03	2001
7427	A	OWENS-BROCKWAY GLASS CONTAINER	Vernon	3.60	0.000	0.01	0.06	2001
7730	A	E R CARPENTER CO INC	Riverside	0.96	0.000	0.03	1.34	2003
7949	A	CUSTOM FIBERGLASS MFG CO/CUSTOM HARDTOP	Long Beach	2.50	0.078	<0.01	<0.01	1995
8015	A	ANADITE INC	South Gate	3.48	n/a	0.63	0.78	2003
8309	A	CAMBRO MANUFACTURING CO	Huntington Beach	1.70	0.002	0.00	0.15	2000

## Appendix A-2. Continued.

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
8547	A	QUEMETCO INC.	Industry	4.4	0.023	0.086	0.74	2010
8560	A	PRUDENTIAL OVERALL SUPPLY CO	Commerce	0.00	0.000	0.00	0.00	1995
8570	A	EMBEE INC	Santa Ana	6.62	n/a	0.21	0.58	2001
8578	OB (2002)	ASSOCIATED CONCRETE PROD. INC	Santa Ana	5.80	n/a	0.13	0.57	1999
8820	A	REULAND ELECTRIC CO. H.BRITTON LEES	Industry	3.70	0.002	<0.01	<0.01	1996
8935	A	TRAIL RITE INC	Santa Ana	0.00	0.000	0.00	0.30	1996
9114	I	SOMITEX PRINTS OF CALIFORNIA	Industry	3.70	n/a	0.06	<0.01	1996
9163	A	INLAND EMPIRE UTILITIES AGENCY	Ontario	3.44	0.001	0.25	0.01	2007
9668	A	DELUXE LABORATORIES INC, DELUXE LABORATOR	Hollywood	2.10	0.000	0.01	0.02	2000
10005	A	ELECTRONIC CHROME GRINDING CO, INC.	Santa Fe Springs	2.96	0.010	0.24	0.06	2001
10245	A	LA CITY SANITATION BUREAU, TERMINAL ISLAN	San Pedro	1.83	0.005	0.02	0.03	2000
10510	OB (2009)	GREGG INDUSTRIES INC.	El Monte	9.40	0.010	0.60	0.56	2008
10656	A	NEWPORT LAMINATES	Santa Ana	0.00	0.000	<0.01	<0.01	1996
11142	OB (2003)	KEYSOR-CENTURY CORP	Saugus	17.00	n/a	0.54	0.06	2000
11192	A	HI-SHEAR CORP	Torrance	4.80	0.002	0.04	0.02	2008
11435	A	THE PQ CORP	South Gate	3.00	n/a	0.00	0.01	1998
11726	I	GE ENGINE SERVICES	Ontario	6.46	n/a	0.12	0.59	1999
12660	OB (2009)	GOLDSHIELD FIBERGLASS, INC, PLANT #58	Fontana	0.40	0.000	0.01	0.05	1994
13920	A	ST. JOSEPH HOSPITAL	Orange	7.73	0.014	0.79	0.26	2008
14146	A	MAC GREGOR YACHT CORP	Costa Mesa	5.50	n/a	0.00	0.10	1998
14495	A	VISTA METALS CORP.	Fontana	19.80	0.057	0.01	0.29	2008
14502	A	VERNON UTILITY DEPARTMENT	Vernon	1.98	0.000	0.01	0.01	2007

## Appendix A-2. Continued.

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
15504	A	SCHLOSSER FORGE CO.	Rancho Cucamonga	9.50	0.067	1.59	1.11	2003
15647	A	CUSTOM ENAMELERS INC	Fountain Valley	0.55	0.000	0.11	0.02	2000
15736	I	HENRY CO	Huntington Park	8.50	0.026	0.00	0.00	2000
16044	I	SPECIALTY ORGANICS INC	Irwindale	0.10	0.000	0.00	0.23	1997
16264	A	INTL COATINGS CO INC	Cerritos	0.17	0.000	0.00	0.00	1999
16642	A	ANHEUSER-BUSCH INC.(LA BREWERY)	Van Nuys	2.70	n/a	0.02	0.13	1999
16660	A	MC DONNELL DOUGLAS SPACE SYS CO.	Huntington Beach	2.89	0.001	0.23	0.05	2007
17301	A	OR CO., SANITATION DIST	Fountain Valley	6.60	0.032	0.39	0.34	2007
17325	A	ACE CLEARWATER ENTERPRISES	Paramount	3.70	0.001	0.01	0.00	2002
18188	A	PLASMA TECHNOLOGY INC.	Torrance	2.40	0.000	0.11	0.00	2007
18294	A	NORTHROP CORP., AIRCRAFT DIV. - WEST	El Segundo	7.60	n/a	0.13	0.05	2000
18378	A	GRUBER SYSTEMS, INC.	Valencia	0.83	0.000	0.14	0.10	2004
18396	A	SPRAYLAT CORPORATION	Los Angeles	3.2	0.000	0.74	<0.01	2012
18439	OB (2006)	ACE PLATING CO INC	Los Angeles	4.08	n/a	0.58	0.19	1998
18452	A	UCLA (REGENTS OF UC) (c)	Los Angeles	2.91	n/a	0.01	0.11	1999
18508	A	AIR PROD & CHEM INC, PACIFIC ANCHOR CHEM	Los Angeles	2.40	0.000	0.10	0.81	1999
18648	OB (2006)	CROWN CITY PLATING COMPANY	El Monte	11.99	0.130	0.39	0.13	2000
18931	A	GERDAU (Formerly TAMCO)	Rancho Cucamonga	2.04	0.017	0.01	0.24	2001
18989	A	BOWMAN PLATING CO. INC.	Compton	14.20	0.021	<0.01	<0.01	2007
18990	A	LIFE PAINT COMPANY	Santa Fe Springs	0.41	0.000	0.02	0.00	2001
19953	OB (2002)	RISTON KELLER INC	Irvine	0.00	0.000	<0.01	0.01	1996
19989	OB (2000)	PARKER HANNIFIN AEROSPACE CORP	Irvine	0.27	0.000	0.01	0.00	1999

## Appendix A-2. Continued.

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
20144	OB (2000)	CANON BUSINESS MACHINES INC	Costa Mesa	0.05	0.000	0.00	0.07	1999
20197	A	LAC/USC MEDICAL CENTER	Los Angeles	7.50	0.031	0.70	0.38	2007
20280	A	METAL SURFACES INC.	Bell Gardens	6.8	0.000	0.88	0.34	2011
20375	A	PRUDENTIAL OVERALL SUPPLY	Riverside	0.96	0.000	0.03	0.08	1997
21544	OB	US GOVT, MARINE CORPriority Score AIR STA @BLD	Tustin	0.00	0.000	0.00	0.00	2000
21615	OB (2004)	OPTICAL RADIATION CORP	Azusa	8.08	n/a	0.17	0.10	1998
21895	A	AC PRODUCTS, INC.	Placentia	0.53	0.000	0.00	0.00	2003
22092	A	WESTERN TUBE & CONDUIT CORP	Long Beach	0.00	0.000	0.02	0.62	1997
22229	A	PROCESSES BY MARTIN, INC.	Lynwood	0.04	0.000	0.00	0.00	2002
22373	OB (2011)	CONTAINER CORPORATION OF AMERICA	Los Angeles	0.74	0.000	<0.01	<0.01	1996
22410	OB (2012)	PALACE PLATING	Los Angeles	5.60	n/a	0.73	0.38	2004
22467	A	LEFIELL MFG CO	Santa Fe Springs	1.70	0.000	0.75	0.17	2000
22551	A	THUMS LONG BEACH CO, UNIT NO.04	Long Beach	1.20	0.000	0.00	0.01	2000
22556	A	THUMS LONG BEACH CO, UNIT NO.02	Long Beach	0.80	0.000	<0.01	<0.01	1996
23559	OB (2005)	JOHNSON CONTROLS BATTERY GROUP INC	Fullerton	1.80	n/a	0.01	0.08	2001
24060	OB (2011)	TOMKINS INDUSTRIES INC-LASCO PRODS GROUP	Anaheim	0.72	0.000	<0.01	0.02	1996
24520	A	LA CO, SANITATION DISTRICTS	Rolling Hills Estates	0.29	0.000	<0.01	<0.01	1998
24647	A	J. B. I. INC	Compton	0.00	0.000	0.00	0.17	1999
24756	A	CRANE CO, HYDRO-AIRE DIV	Burbank	0.63	0.000	0.04	0.05	1997
24812	A	FARMER BROS CO	Torrance	0.09	0.000	0.00	0.02	1999
24957	A	GLENDALE CITY	Glendale	0.59	0.000	0.00	0.02	1999
25012	A	AMADA MFG AMERICA, INC.	La Mirada	<0.1	0.000	0.00	0.00	2002

## Appendix A-2. Continued.

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
25070	A	LA CO., SANITATION DISTRICT (c)	Whittier	1.46	0.003	0.33	0.08	2009
25440	OB (2010)	ROBERTSHAW CONTROLS CO, GRAYSON CONTROLS	Long Beach	2.70	0.003	0.00	0.96	1998
25638	A	BURBANK CITY, PUB SERV DEPT	Burbank	0.33	0.000	0.33	0.01	1996
27701	OB (2008)	CADDOCK ELECTRONICS, INC.	Riverside	2.70	n/a	0.02	0.06	2002
29110	A	OR. CO., SANITATION DIST	Huntington Beach	10.70 (d)	0.210	1.78	0.48	2007
34764	A	CADDOCK ELECTRONICS, INC.	Riverside	6.70	0.034	0.01	0.09	2002
35302	A	OWENS CORNING FIBERGLASS CORP. (c)	Compton	14.00	0.015	0.07	0.10	2000
35483	A	WARNER BROTHERS STUDIO FACILITIES	Burbank	2.60	0.008	0.10	0.26	1997
37336	A	COMMERCE REFUSE TO ENERGY FACILITY	Commerce	0.12	0.00	0.01	0.00	2010
37507	A	TROJAN BATTERY COMPANY	Santa Fe Springs	2.55	0.000	1.08	1.27	2012
37603	A	POLYCARBON INC	Valencia	7.80	0.012	0.01	0.36	1998
38971	A	RICOH ELECTRONICS INC	Irvine	5.60	0.007	0.02	0.39	1995
39388	A	THUMS LONG BEACH CO, UNIT NO.03	Long Beach	0.50	0.000	<0.01	<0.01	1996
40806	A	ASSOCIATED PLASTICS INC	Riverside	0.00	0.000	0.73	0.20	1997
40829	A	HAWKER PACIFIC INC	Sun Valley	2.07	0.000	0.04	0.09	2009
41229	A	LUBECO, INC.	Long Beach	14.02	n/a	0.00	0.12	2003
42514	A	LA CO., SANITATION DIST., CALABASAS LANDFILL	Agoura	6.78	0.00	0.02	<0.01	2010
42633	A	LA CO., SANITATION DIST, Spadra Landfill	Walnut	1.20	0.002	<0.01	<0.01	1996
42676	A	AES PLACERITA, INC.	Newhall	0.11	0.000	0.08	0.01	2003
42922	OB (2006)	CMC PRINTED BAG INC	Whittier	9.00	n/a	<0.01	<0.01	1995
43201	A	SNOW SUMMIT SKI CORP	Big Bear Lake	5.53	0.003	0.01	0.01	2007
43436	A	TIMCO	Fontana	0.43	0.000	0.00	0.43	1997

## Appendix A-2. Continued.

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
44454	A	STRUCTURAL COMPOSITES INDUSTRIES, INC.	Pomona	8.60	0.001	0.01	0.23	2002
44577	A	LONG BEACH CITY, SERRF PROJECT (c)	Long Beach	0.4	0.000	0.02	0.08	2011
45262	A	LA CO, SANITATION DISTRICT UNIT NO.02	Glendale	6.17	n/a	0.01	0.05	1998
45448	A	GAS RECOVERY SYSTEMS, INC.	Newport Coast	20.1	0.18	0.56	0.32	2009
45489	A	GUIDANT CORP	Temecula	3.80	0.006	1.31	0.01	2002
45938	A	E.M.E. INC/ELECTRO MACHINE & ENGINEERING	Compton	0.04	0.000	0.00	<0.01	2001
46268	A	CALIFORNIA STEEL INDUSTRIES, INC.	Fontana	2.74	0.016	0.16	0.31	1995
47056	OB (2005)	MYERS CONTAINER CORP	Huntington Park	0.90	0.000	0.23	2.00	2002
48274	OB	FENDER MUSICAL INST	Corona	2.81	0.004	0.03	0.37	1997
48300	A	PRECISION TUBE BENDING	Santa Fe Springs	0.15	0.000	0.00	0.00	2002
48323	A	SIGMA PLATING COMPANY	La Puente	13.84	0.017	0.01	0.74	2004
49387	A	UNIV CAL RIVERSIDE	Riverside	7.13	0.220	0.00	0.04	1999
51620	A	WHEELABRATOR NORWALK ENERGY COMPANY	Norwalk	0.02	0.000	0.01	0.02	1996
51849	A	ELIMINATOR CUSTOM BOATS	Mira Loma	0.00	0.000	<0.01	<0.01	1995
52517	A	REXAM PLC, REXAM BEVERAGE CAN COMPANY	Chatsworth	2.93	0.0076	0.73	0.1	2009
54424	A	L & L CUSTOM SHUTTERS	Placentia	5.50	0.000	0.15	0.21	2001
54627	A	HICKORY SPRINGS OF CAL INC	Commerce	1.95	n/a	0.01	0.48	1998
55449	A	BKK CORPORATION, LANDFILL DIVISION GNRL	W. Covina	6.90	n/a	0.01	0.10	2000
55711	OB (2004)	SUNLAW COGENERATION PARTNERS I	Vernon	0.01	0.000	0.01	0.00	1996
55714	OB	SUNLAW COGENERATION PARTNERS I	Vernon	0.00	0.000	0.01	0.00	1996
57094	A	G S ROOFING PRODUCTS CO INC (c)	Wilmington	7.00	n/a	0.01	0.01	2000
61160	OB (2010)	GE ENGINE SERVICES	Ontario	0.50	0.000	0.70	0.01	2003

## Appendix A-2. Continued.

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
62679	OB (2009)	KOP-COAT INC	Vernon	1.33	n/a	0.00	0.49	1997
70021	A	XERXES CORP ( A DELAWARE CORP)	Anaheim	0.00	0.000	<0.01	<0.01	1996
79682	A	RAMCAR BATTERIES INC	Commerce	2.43	n/a	0.04	0.17	1998
82512	A	BREA CANYON OIL CO	Wilmington	1.70	n/a	0.01	<0.01	1996
82513	A	BREA CANYON OIL COMPANY INC	Harbor City	1.40	n/a	0.02	<0.01	1996
83102	A	LIGHT METALS	Industry	4.50	0.008	0.04	2.70	2002
93346	I	COOPER DRUM CO	S. El Monte	4.30	n/a	0.09	0.16	1997
94872	A	METAL CONTAINER CORP.	Mira Loma	0.08	0.000	0.39	0.36	2002
99119	A	INTERPLASTIC CORP	Hawthorne	0.28	0.000	0.05	0.32	1999
99773	A	CYTEC FIBERITE INC.	Anaheim	2.20	0.000	0.04	0.19	2000
101380	OB (2005)	GENERAL DYNAMICS OTS (DOWNEY) INC	Downey	9.80	n/a	0.01	0.05	2000
101977	A	AMERIGAS PROPANE L.P.	Long Beach	4.70	0.002	0.59	0.97	1998
103659	OB (2007)	FOUR MEDIA CO.	Burbank	2.22	n/a	0.61	0.04	2004
103888	OB (2010)	A J INDUSTRIES INC, SARGENT-FLETCHER CO	El Monte	4.90	0.280	0.16	0.02	1999
105598	A	SENIOR FLEXONICS INC	Burbank	3.64	0.007	0.98	0.49	2001
106009	A	VENOCO INC.	Beverly Hills	1.16	n/a	0.05	0.00	2005
106797	OB (2005)	SAINT-GOBAIN CONTAINERS LLC	Los Angeles	9.85	n/a	0.00	0.07	2000
106838	A	VALLEY-TODECO, INC	Sylmar	3.70	0.000	0.20	0.20	2000
107149	A	MARKLAND MANUFACTURING INC.	Santa Ana	0.26	0.000	0.06	0.12	2007
107350	OB (2007)	N O-RING CORPORATION	Downey	1.53	n/a	0.00	0.01	2001
108701	OB (2007)	BALL FOSTER GLASS CONTAINER CO.	El Monte	7.30	0.056	0.09	0.07	2000
109198	I	TORCH OPERATING CO. (STEARNS GAS CO)	Brea	4.97	n/a	0.05	0.01	2001



## Appendix A-2. Continued.

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
110924	OB (2008)	WESTWAY TERMINAL COMPANY	San Pedro	8.00	0.370	0.33	0.51	1997
111110	A	BRISTOL FIBERLITE IND	Santa Ana	0.08	0.000	0.00	0.02	1995
111415	A	VAN CAN CO, SUBSIDIARY OF VAN CAMP SEAFO	Fontana	0.80	0.000	<0.01	0.08	1996
112192	OB (2005)	CONSOLIDATED DRUM RECONDITIONING CO. INC.	South Gate	0.31	0.000	0.00	0.00	1997
113170	A	SANTA MONICA HOSPITAL MEDICAL CTR UNIT 2 (b)	Santa Monica	7.60	0.000	0.17	0.01	1997
114801	A	RHODIA INC.	Carson	0.11	0.000	0.02	0.05	2006
114927	A	ANVIL CASES / A CALZONE COMPANY	Industry	19.00	n/a	0.13	0.08	2002
115240	A	MARCHEM TECHNOLOGIES, LONZA INC	Long Beach	4.30	0.005	0.28	0.01	2001
115389	A	SO CAL EDISON CO	Huntington Beach	0.11	0.000	0.00	0.00	1999
115394	A	AES ALAMITOS, LLC	Long Beach	0.63	0.000	0.00	0.02	1999
115536	A	AES REDONDO BEACH, LLC	Redondo Beach	0.40	0.000	0.01	0.04	1998
115586	OB (2011)	SUNDANCE SPAS	Chino	0.02	0.000	0.05	0.43	1996
115663	A	EL SEGUNDO POWER, LLC	El Segundo	0.34	0.000	0.00	0.01	2000
116868	I	EQUILON ENTERPRISES,LLC	Rialto	2.88	n/a	0.00	0.04	1999
117560	A	EQUILON ENTER, LLC-SHELL OIL PROD. US	Wilmington	7.30	n/a	0.03	0.07	1998
117785	OB (2011)	BALL METAL BEVERAGE CONTAINER CORP.	Torrance	0.04	0.000	0.21	0.91	2001
118406	A	CARSON COGENERATION COMPANY	Carson	3.86	n/a	0.16	0.01	2007
119127	OB (2009)	PRC DE SOTO INTERNATIONAL	Glendale	0.00	0.000	<0.01	<0.01	2002
119907	A	BERRY PETROLEUM	Santa Clarita	1.60	n/a	0.20	0.73	1999
119920	OB (2006)	ALUMINUM COMPANY OF AMERICA	Vernon	1.60	n/a	0.30	0.30	1996
120088	A	BREITBURN ENERGY CO.	Santa Fe Springs	0.79	0.000	0.01	0.04	1998
122295	OB (2007)	FALCON FOAM, A DIV OF ALTAS ROOFING	Los Angeles	0.40	0.000	0.00	0.00	1999

## Appendix A-2. Continued.

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
122300	OB (2010)	BASF CORPORATION	Colton	0.28	0.000	0.56	0.02	2002
122822	OB	CONSOLIDATED FILM INDUSTRIES	Hollywood	21.00	n/a	0.11	0.40	2000
123087	A	INDALEX WEST INC.	Industry	1.27	n/a	0.00	0.03	1999
124016	A	OAKITE PRODUCTS, INC.	La Mirada	0.00	0.000	0.14	0.08	2000
124506	A	BOEING ELECTRON DYNAMIC DEVICES	Torrance	4.17	n/a	0.46	0.07	1995
124805	A	EXIDE TECHNOLOGIES	Commerce	0.33	0.000	0.00	0.04	2000
124806	OB (2004)	EXIDE TECHNOLOGIES	Industry	1.00	n/a	0.00	0.04	1999
124838	A	Exide Technologies	Vernon	156	10	3.8	63	2013
125281	OB (2004)	MODERN PLATING ALCO CAD-NICKEL PLATING	Los Angeles	8.20	n/a	0.10	0.01	1997
126060	A	STERIGENICS US, LLC	Ontario	3.80	0.000	0.00	0.01	2007
126191	A	ION BEAM APPLICATIONS INC.	Los Angeles	3.29	0.000	<0.01	0.00	1996
126197	A	ION BEAM APPLICATIONS INC.	Los Angeles	3.56	0.000	<0.01	0.01	1996
126501	A	VOUGHT AIRCRAFT INDUSTRIES (b)	Hawthorne	19.70	n/a	0.64	0.24	2001
126536	A	CONSOLIDATED FOUNDRIES, POMONA	Pomona	1.50	n/a	0.00	0.02	1999
126544	A	PAC FOUNDRIES INDUSTRY	Industry	1.27	n/a	0.59	0.09	1996
126964	A	EDWARDS LIFESCIENCES LLC	Irvine	0.75	0.000	<0.01	0.00	1995
127568	A	ENGINEERED POLYMER SOLUTION	Montebello	3.53	0.000	0.05	0.48	2000
131003	A	BP WEST COAST PRODUCTS LLC	Carson	7.28	n/a	0.30	0.08	2000
131249	A	BP WEST COAST PRODUCTS LLC (c)	Wilmington	4.30	0.180	0.08	0.18	1995
133405	OB (2008)	BODYCOTE INC./BODYCOTE THERMAL PROCESSING	Los Angeles	2.36	n/a	0.03	0.20	1999
133660	A	HAYDEN INDUSTRIAL PRODUCTS	Corona	1.60	n/a	0.82	0.44	1998

## Appendix A-2. Continued.

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
133987	A	PLAINS EXPLORATION & PRODUCTION CO. LP	Inglewood	2.65	n/a	0.01	0.07	1997
134018	A	INDUSTRIAL CONTAINER SERVICES	Montebello	5.24	n/a	0.57	0.23	2000
134931	A	ALCOA GLOBAL FASTENERS, INC.	Fullerton	0.61	0.000	1.90	0.02	2003
134943	A	ALCOA GLOBAL FASTERNERS, INC.	Torrance	2.61	n/a	0.55	0.04	2008
136148	A	E/M CORP, GREAT LAKES CHEMICAL CORP SUB	N Hollywood	5.80	0.000	0.28	0.57	1998
136395	A	THOMASON MECHNICAL CORP, BENDER MACHINE	Vernon	4.40	0.001	0.99	0.02	2002
137517	I	RELIANT ENERGY ETIWANDA,LLC	Etiwanda	2.67	0.160	0.01	0.17	2000
140499	A	AMERESCO HUNTINGTON BEACH, LLC	Huntington Beach	7.00	n/a	<0.01	<0.01	1995
140811	A	DUCOMMUN AEROSTRUCTURES INC	Monrovia	3.50	0.007	0.01	0.01	2002
140961	A	GKN AEROSPACE TRANSPARENCY SYS INC	Garden Grove	6.00	n/a	<0.01	0.49	1996
141585	A	RESOLUTION SPECIALTY MATERIALS, LLC	Lynwood	6.50	0.150	0.13	1.60	1995
142267	A	FS PRECISION TECH LLC	Rancho Dominguez	2.03	n/a	0.08	0.15	2001
144677	A	PRATT & WHITNEY ROCKETDYNE/RUBY ACQ ENT	Canoga Park	0.00	0.000	<0.01	<0.01	1996
145368	A	SEMMATERIALS LP	Fontana	0.02	0.000	0.33	0.01	1999
146570	OB (2009)	ROHM AND HAAS CHEMICALS LLC	La Mirada	6.20	n/a	0.54	0.76	1999
148925	A	CHERRY TEXTRON	Santa Ana	9.70	n/a	0.07	0.15	1999
149241	A	REGAL CULTURED MARBLE	Pomona	0.00	0.000	<0.01	0.25	1995
151415	A	AERA ENERGY LLC	Brea	3.40	0.020	0.05	0.00	1999
151798	A	TESORO REFINING AND MARKETING CO.	Carson	2.77	n/a	0.14	0.00	1999
151899	A	MEDALLION CALIFORNIA PROPERTIES CO	Newhall	3.51	n/a	0.02	0.20	2000
151984	A	TESORO REFINING AND MARKETING CO.	Wilmington	2.75	0.002	0.00	0.01	2000
152033	A	TESORO REFINING AND MARKETING CO.	Long Beach	2.39	n/a	0.00	0.01	1999

## Appendix A-2. Continued.

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
152054	A	BREA CANYON OIL COMPANY, INC.	Brea	1.14	n/a	<0.01	0.12	1996
152501	A	PRECISION SPECIALTY METALS, INC.	Los Angeles	0.45	0.000	0.38	0.15	2001
153546	A	HUCK INTERNATIONAL INC	Carson	3.30	0.017	0.00	0.02	1999
154540	A	ARROWHEAD BRASS PROD. INC	Los Angeles	5.70	n/a	0.26	0.04	1995
155828	A	GARRETT AVIATION SERVICES INC.	Los Angeles	9.33	n/a	0.91	0.10	2005
156741	A	HARBOR COGENERATION CO.	Wilmington	0.05	0.000	0.02	0.00	2002
160437	A	SOUTHERN CALIFORNIA EDISON	Redlands	2.3	<0.01	<0.01	<0.01	2013
160916	A	FOAMEX INNOVATIONS, INC.	Orange	0.18	0.000	0.39	0.43	1994
161142	A	FOAMEX L.P.	Compton	0.25	0.000	0.00	0.01	2010
169990	A	SPriority Score TECHNOLOGIES, LLC	Gardena	8.91	0.010	0.09	0.06	1999
800003	A	HONEYWELL INTERNATIONAL INC	Torrance	1.77	n/a	0.00	0.01	1999
800007	OB (2005)	ALLIED SIGNAL INC, El Segundo	El Segundo	3.58	n/a	0.02	0.53	2000
800009	OB	AMERON PROTECTIVE COATINGS DIV	Brea	0.01	0.000	0.24	0.24	2000
800018	A	BAXTER HEALTH CARE CORP, BENTLEY DIV	Irvine	0.00	0.000	<0.01	0.37	1994
800022	A	CALNEV PIPE LINE CO	Bloomington	5.90	n/a	0.00	0.07	1999
800026	A	ULTRAMAR INC.	Wilmington	7.2	0.18	0.70	0.23	2012
800030	A	CHEVRON U.S.A. INC	El Segundo	2.73	n/a	0.29	0.13	2001
800032	A	CHEVRON U.S.A. INC	Montebello	7.46	0.143	0.01	0.18	1999
800035	OB (2011)	CONTINENTAL AIRLINES INC	Los Angeles	2.83	n/a	0.01	0.13	1997
800037	A	DEMENNO/KERDOON	Compton	4.9	0.01	<0.01	0.02	2009
800038	A	DOUGLAS AIRCRAFT CO	Long Beach	4.80	n/a	0.15	0.11	1999
800041	OB (2009)	DOW U.S.A.	Torrance	4.40	n/a	0.09	0.01	2000

## Appendix A-2. Continued.

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
800056	A	GATX STORAGE TERMINALS CORP	San Pedro	2.30	n/a	0.00	0.03	1997
800057	A	GATX TANK STORAGE TERMINAL CORP	Carson	8.50	n/a	0.01	0.06	1999
800063	A	GROVER PROD. CO	Los Angeles	3.29	0.039	0.88	0.07	2002
800066	A	HITCO	Gardena	6.40	0.310	0.34	0.05	1998
800067	A	BOEING SATELLITE SYSTEMS INC	El Segundo	6.22	n/a	0.03	0.08	2000
800074	A	LA CITY, DWP HAYNES GENERATING STATION	Long Beach	0.17	0.000	0.00	0.01	2000
800075	A	LA CITY, DWP SCATTERGOOD GENERATING STN.	Playa del Rey	0.03	0.000	0.00	0.00	2000
800079	A	PETRO DIAMOND TERMINAL CO	Long Beach	8.30	n/a	0.00	0.16	1998
800089	A	EXXON-MOBIL OIL CORPORATION	Torrance	7.70	0.15	0.21	0.47	2013
800091	A	MOBIL OIL CORP	Anaheim	0.72	0.000	0.01	0.00	1999
800113	A	ROHR IND INC	Riverside	7.20	0.011	0.86	0.02	2007
800127	A	THE GAS CO.	Montebello	0.99	0.000	0.01	0.01	2009
800129	A	SO PACIFIC PIPELINES INC	Rialto	5.75	n/a	<0.01	0.02	1996
800149	A	US BORAX & CHEM CORP	Wilmington	9.46	n/a	0.00	0.03	2000
800150	A	US GOVT., AF DEPT, MARCH AFB	Riverside	7.35	0.020	0.31	0.01	2008
800168	A	PASADENA CITY, DWP	Pasadena	0.15	0.000	0.70	0.00	1996
800171	A	MOBIL OIL CO	Vernon	5.33	0.016	0.07	0.02	1997
800181	A	CALIFORNIA PORTLAND CEMENT CO (c)	Colton	2.00	0.001	<0.01	0.39	1996
800182	A	RIVERSIDE CEMENT CO. (c)	Riverside	7.80	n/a	0.05	0.13	2001
800183	A	PARAMOUNT PETROLEUM CORPORATION	Paramount	9.61	n/a	0.02	0.01	2002
800189	A	DISNEYLAND RESORT	Anaheim	3.25	0.030	0.11	0.06	2009
800193	A	LA CITY, DWP; VALLEY STM PLANT	Sun Valley	0.15	0.000	0.25	0.00	1999

## Appendix A-2. Continued.

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
800196	A	AMERICAN AIRLINES, INC.	Los Angeles	5.40	0.190	0.86	0.08	2005
800198	A	ULTRAMAR INC	Wilmington	5.90	n/a	0.01	0.09	1999
800202	A	UNIVERSAL STUDIOS INC	Universal City	2.40	n/a	<0.01	0.03	1996
800214	A	LA CITY, HYPERION TREATMENT PLANT (c)	Playa del Rey	7.59	0.027	0.06	0.01	1999
800236	A	LA CO., SANITATION DIST UNIT NO.01	Carson	7.20	0.058	0.17	0.12	2007
800264	A	EDGINGTON OIL, CO.	Long Beach	4.78	0.001	0.01	0.01	2002
800267	A	TRIUMPH PROCESSING, INC.	Lynwood	0.48	0.000	0.12	0.36	2012
800278	A	SFPP, L.P.	Carson	2.43	n/a	0.00	0.10	1999
800279	A	SFPP, L.P.	Orange	5.85	n/a	0.00	0.24	1999
800288	A	UNIV CAL IRVINE UNIT NO 01	Irvine	5.64	n/a	0.00	0.07	1996
800301	A	ITT GILFILLAN UNIT NO.01	Van Nuys	0.86	0.000	0.12	0.19	1998
800318	A	GRISWOLD INDUSTRIES	Costa Mesa	9.51	0.009	0.10	0.01	2001
800320	A	AMVAC CHEMICAL CORP.	Los Angeles	0.04	0.000	0.07	0.34	2004
800325	A	TIDELANDS OIL PRODUCTION CO (L.B. Oil Co)	Long Beach	1.90	n/a	0.07	0.62	1999
800343	A	BOEING SATELLITE SYSTEMS, INC.	El Segundo	0.30	0.000	<0.01	0.21	1996
800362	A	CONOCO-PHILLIPriority Score CO.	Carson	6.6	0.11	0.03	0.26	2011
800363	A	CONOCO-PHILLIPriority Score CO.	Wilmington	23.2	0.29	0.13	0.73	2013
800372	A	EQUILON ENTERPRISES,LLC	Carson	6.90	0.030	0.44	0.07	2001
800387	A	CALIFORNIA INSTITUTE OF TECHNOLOGY	Pasadena	2.40	n/a	0.05	0.00	2007
800395	A	BP WEST COAST PRODUCTS, ARCO CARSON	Carson	3.00	0.001	<0.01	0.02	1994
800396	A	BP WEST COAST PRODUCTS, ARCO VINVALE	South Gate	9.00	0.023	<0.01	0.03	1994
800408	A	TRW INC.	Manhattan Beach	1.37	n/a	0.92	0.10	1998

## Appendix A-2. Concluded.

<b>Facility ID</b>	<b>Facility Status (a)</b>	<b>Facility Name</b>	<b>City</b>	<b>Cancer Risk in a million</b>	<b>Cancer Burden</b>	<b>Acute Hazard Index</b>	<b>Chronic Hazard Index</b>	<b>HRA Approved (year)</b>
800409	A	TRW INC.	Redondo Beach	5.48	n/a	0.45	0.24	1998
800431	A	PRATT & WHITNEY ROCKETDYNE, INC.	Canoga Park	8.70	0.130	<0.01	<0.01	1995
800436	A	TESORO REFINING AND MARKETING CO	Wilmington	10.80	0.38	0.3	0.43	2013

Notes:

- (a) A = Active; I = Inactive; OB = Out of Business (with the year in which the facility went out of business)
- (b) The specific risk driver listed in this HRA is no longer in use & the resulting risk has been eliminated or minimized.
- (c) SCAQMD staff has requested these facilities to update their HRAs.
- (d) This includes risk attributable to the emergency DICE. The total facility risks excluding the emergency DICE are less than 10 in a million.

### Appendix A-3. Status of Risk Reduction Plans

Fac. ID	Facility Name	Submitted	Approved	Implemented	Residual Risk
7427	Owens-Brockway Glass	Yes	Yes	Yes	Cancer: 3.60
					Acute HI: 0.01
					Chronic HI: 0.06
					Can. Burden: 0.00
7730	E.R. Carpenter	Yes	Yes	Yes	Cancer: 0.96
					Acute HI: 0.03
					Chronic HI: 1.34
					Can. Burden: 0.000
8015	Anadite Inc.	Yes	Yes	Yes	Cancer: 3.5
					Acute HI: 0.63
					Chronic HI: 0.78
					Can. Burden: n/a
8547	Quemetco	Yes	Yes	Yes	Cancer: 4.4 (d)
					Acute HI: 0.086
					Chronic HI: 0.74
					Can. Burden 0.023
8570	Embee Inc.	Yes	Yes	Yes	Cancer: 6.6
					Acute HI: 0.21
					Chronic HI: 0.58
					Can. Burden: n/a
14191	Nicklor Chemical Co.	Yes	Yes	Yes	Cancer: 0.00
					Acute HI: 0 (a)
					Chronic HI: 0 (a)
					Can. Burden: 0.000
15504	Schlosser Forge Co.	Yes	Yes	Yes	Cancer: 9.5
					Acute HI: 1.59
					Chronic HI: 1.11
					Can. Burden: 0.067
18294	Northrop-Grumman	Yes	Yes	Yes	Cancer: 7.6
					Acute HI: 0.13
					Chronic HI: 0.05
					Can. Burden: n/a
22410	Palace Plating	Yes	Yes	Yes	Cancer: 5.6 (b)
					Acute HI: 0.73
					Chronic HI: 0.38
					Can. Burden: n/a
25012	Amada Manufacturing America, Inc.	Yes	Yes	Yes	Cancer: <0.1
					Acute HI: 0.00
					Chronic HI: 0.00
					Can. Burden: 0.000
41229	Lubeco, Inc.	Yes	Yes	Yes	Cancer: 14.0
					Acute HI: 0.00
					Chronic HI: 0.12
					Can. Burden: n/a
45938	E.M.E. Inc.	Yes	Yes	Yes	Cancer: <0.1
					Acute HI: 0.00
					Chronic HI: < 0.01
					Can. Burden: 0.000
48323	Sigma Plating Co.	Yes	Yes	Yes	Cancer: 13.8
					Acute HI: 0.01
					Chronic HI: 0.74
					Can. Burden: 0.017



### Appendix A-3. Concluded

Fac. ID	Facility Name	Submitted	Approved	Implemented	Residual Risk
61160	GE Engine Services	Yes	Yes	Yes	Cancer: 0.50
					Acute HI: 0.7
					Chronic HI: 0.01
					Can. Burden: 0.000
116459	GE Engine Services	Yes	Yes	Yes	Cancer: 9.3
					Acute HI: 0.19
					Chronic HI: 0.25
					Can. Burden: n/a
119127	PRC DeSoto International	Yes	Yes	Yes	Cancer: 0 (a)
					Acute HI: < 0.01
					Chronic HI: < 0.01
					Can. Burden: 0.000
124838	Exide Technologies	Yes	Yes	Pending	Cancer:
					Acute HI:
					Chronic HI:
					Can. Burden:
126501	Vought Aircraft Industries, Inc.	Yes	Yes	Yes	Cancer: 19.7 (c)
					Acute HI: 0.64
					Chronic HI: 0.24
					Can. Burden: n/a
134931	Alcoa Global Fasteners, Inc.	Yes	Yes	Yes	Cancer: 0.6
					Acute HI: 1.90
					Chronic HI: 0.02
					Can. Burden: 0.000
800037	DeMenno/Kerdoon	Yes	Yes	Yes	Cancer: 4.9
					Acute HI: < 0.01
					Chronic HI: 0.02
					Can. Burden: 0.01
800063	Grover Products Co.	Yes	Yes	Yes	Cancer: 3.3
					Acute HI: 0.88
					Chronic HI: 0.07
					Can. Burden: 0.039
800196	American Airlines, Inc.	Yes	Yes	Yes	Cancer: 5.4
					Acute HI: 0.86
					Chronic HI: 0.08
					Can. Burden: 0.190

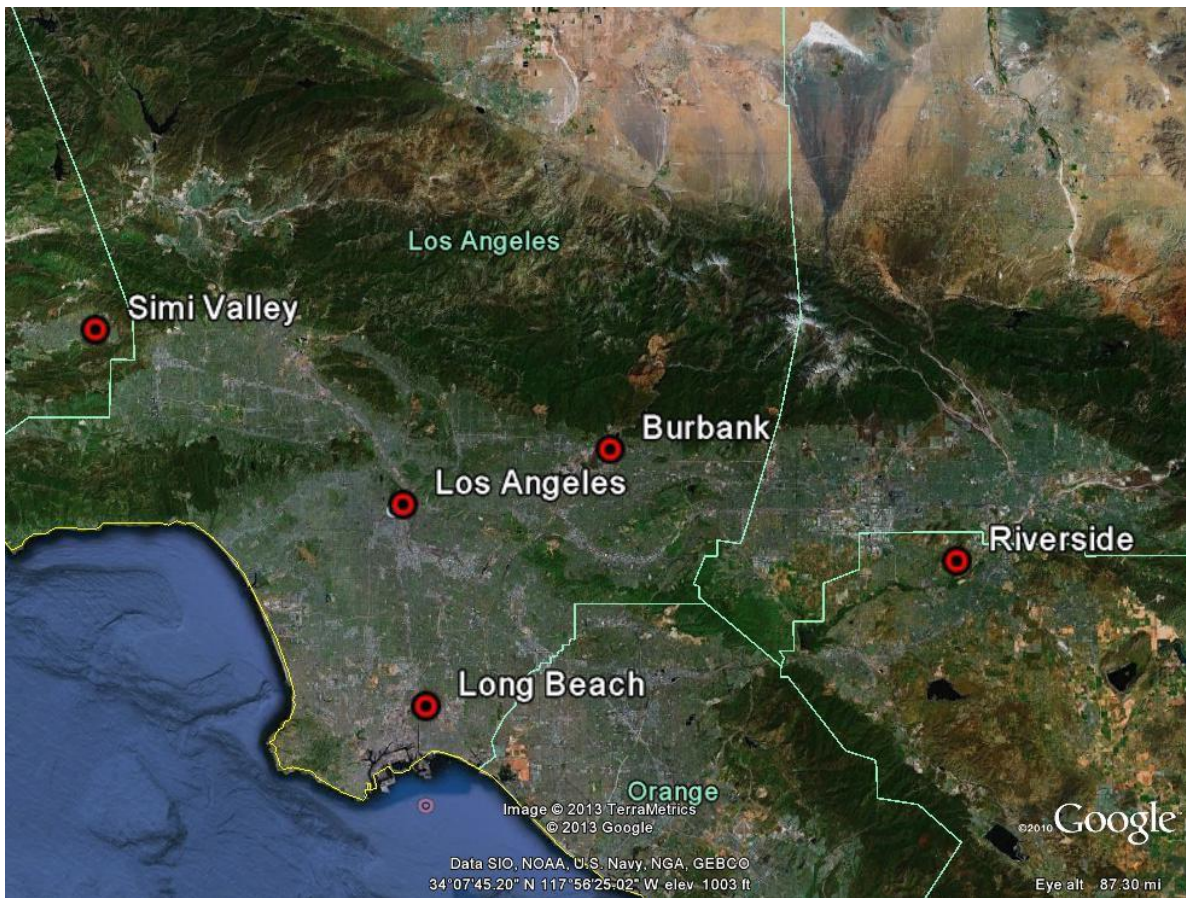
- (a) Facility left the South Coast Air Basin so their risks are zero.
- (b) Facility is shutdown so their risks are zero.
- (c) The specific risk driver listed in this HRA is no longer in use & the resulting risk has been eliminated.
- (d) An updated HRA was requested on 12/10, 2013, based on November source test.

## Appendix B

### Trends in Ambient Air Toxics in the South Coast Air Basin and Vicinity

The California Air Resources Board (CARB) has maintained toxics monitoring network since the late 1980's.<sup>[1]</sup> In this appendix, trends in cancer risks are illustrated for sites in the South Coast Air Basin (Basin) and vicinity. Health risk levels for the most recent three-year period (i.e., 2010 to 2012) are also shown. Since this is ambient air quality data, both mobile and stationary emission sources are captured in the health risk levels provided here. Looking at this historical data set illustrates the benefits of past regulatory control efforts and also shows the way for future control strategies.

Five of the approximately 17 current active sites in CARB's statewide toxics monitoring network are in the Basin and vicinity as shown in Figure B-1. Simi Valley is included in this analysis since it is just outside the western edge of the Basin and represents conditions in the western end of the San Fernando Valley. The measurements consist of 24-hour integrated samples collected once every 12 days. Table B-1 lists the toxic air contaminants analyzed here. The carcinogens in the table are identified with an asterisk.



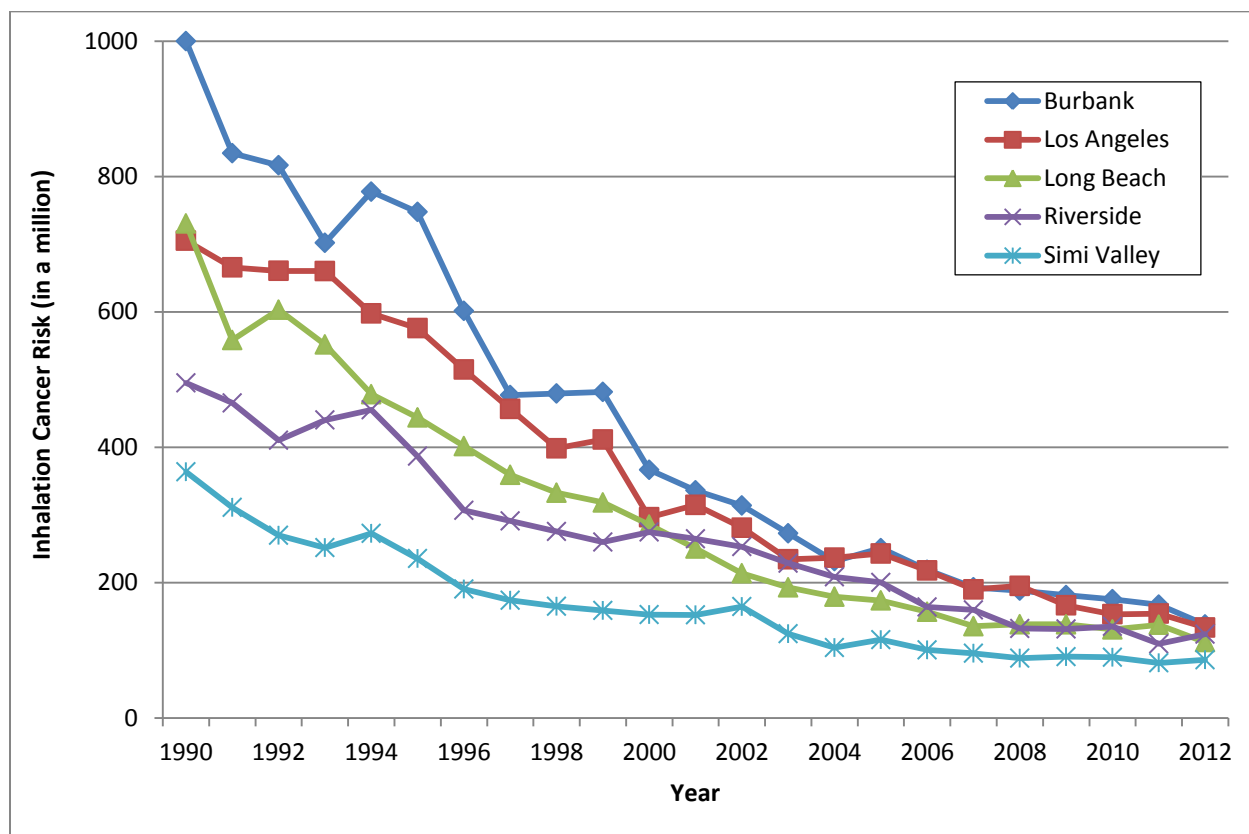
**Figure B-1.** ARB toxic monitoring sites in the South Coast Air Basin and vicinity

**Table B-1. Toxic Air Contaminants Considered**

Toxic VOC	Toxic PM
Acetaldehyde*	Hexavalent Chromium*
Acrolein	Lead*
Benzene*	Manganese
1,3-Butadiene*	Nickel*
Carbon Tetrachloride*	Selenium
Chloroform*	
Ethyl Benzene*	
Formaldehyde*	
Methyl Bromide	
Methyl Chloroform	
Methyl Ethyl Ketone	
Methylene Chloride*	
Perchloroethylene*	
Styrene	
Toluene	
Trichloroethylene*	

\* carcinogen

Inhalation cancer risks have decreased significantly at all stations since 1990 as shown in Figure B-2. Specifically, risks have decreased by 86, 81, 85, 75, and 76 percent at Burbank, Los Angeles, Long Beach, Riverside, and Simi Valley, respectively. The improvement is primarily from reductions in ambient concentrations of benzene (87 to 91 percent) and 1,3-butadiene (85 to 91 percent) and secondarily from decreases in hexavalent chromium (77 to 93 percent) and perchloroethylene (85 to 96 percent) concentrations.



**Figure B-2.** Trends in inhalation cancer risks in the South Coast Air Basin and vicinity (excluding cancer risks from diesel particulate matter)

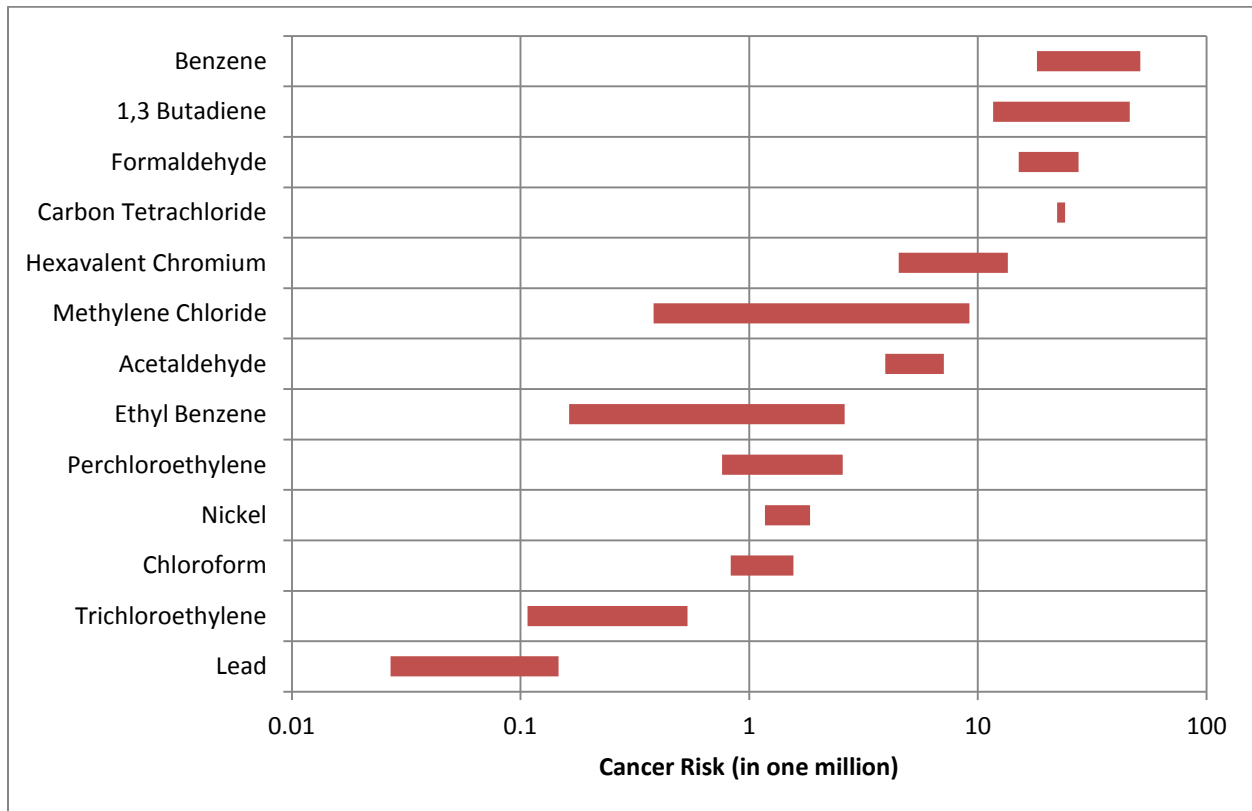
The risk reductions shown in Figure B-2 occurred in spite of significant increases in population and vehicle activity. As shown in Table B-2, population increased by 31.5 percent since 1990 and daily VMT, vehicle population, and daily fuel consumption increased by 36.3, 43.6, and 24.3 percent, respectively.

**Table B-2.** Change in Population and Vehicle Activity in the SCAQMD Since 1990

Activity Variable	1990	2012	% Increase
Population	13,083,594	17,198,994	31.5
Daily VMT (in thousands of miles per day)	282,561	385,212	36.3
Vehicle Population	7,547,354	10,836,390	43.6
Daily Fuel Consumption (in thousands of gallons per day)	18,338	22,791	24.3

Source: [http://www.arb.ca.gov/app/emsinv/trends/ems\\_trends.php](http://www.arb.ca.gov/app/emsinv/trends/ems_trends.php).

VMT = vehicle miles travelled.

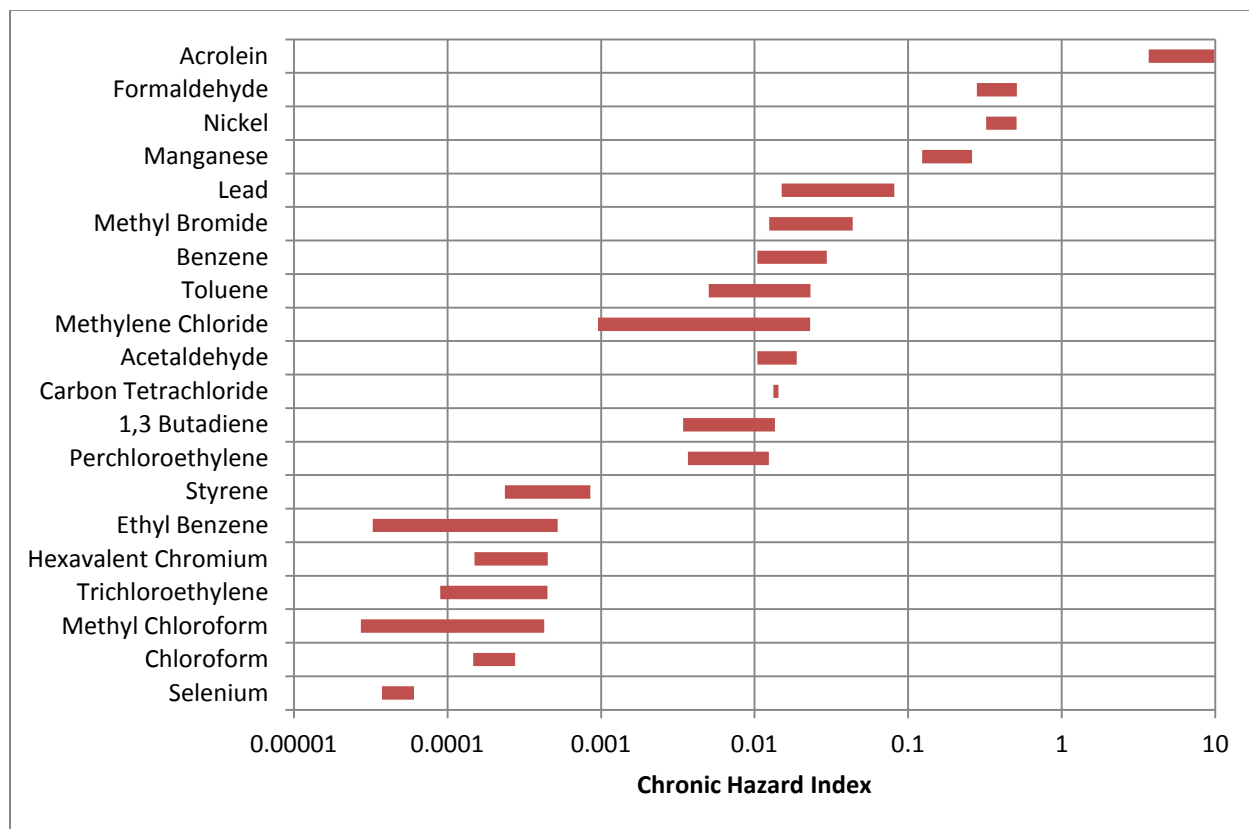


**Figure B-3.** Inhalation cancer risks in the Basin and vicinity over the period, 2010 to 2012 (excluding diesel particulate matter)

The relative importance of each of the toxics is illustrated in the Figure B-3 above. The range of cancer risks for the five sites analyzed here are shown for the most recently available three-year period (2010 to 2012). Benzene, 1,3-butadiene, formaldehyde,

carbon tetrachloride, and hexavalent chromium are the largest contributors to the inhalation cancer risks, contributing individually from 5 to over 50 in a million. The ambient carbon tetrachloride concentrations observed in the Basin are not from a local source of emissions but represent a background condition. Note that there is little variability in cancer risks attributable to carbon tetrachloride as indicated by its short bar in Figure B-3. In fact, there is little variability statewide in carbon tetrachloride concentrations, with concentrations varying by less than ten percent. Methylene chloride, acetaldehyde, ethyl benzene, perchloroethylene, chloroform, and nickel each contribute between 1 and 10 in a million and trichloroethylene and lead contribute less than 1 in a million to the inhalation cancer risks.

As demonstrated in the series of Multiple Air Toxics Exposure Studies (MATES) conducted by the SCAQMD, diesel particulate matter (DPM) is by far the largest contributor to inhalation cancer risks observed in the Basin. MATES III attributed about 84 percent of the inhalation cancer risks to DPM,<sup>[2]</sup> so cancer risks shown in Figures B-2 and B-3 represent only 16 percent of the total inhalation cancer risks.



**Figure B-4.** Non-cancer chronic risks in the Basin and vicinity over the period, 2010 to 2012

The range of chronic non-cancer risks for the five sites analyzed here are shown above in Figure B-4 for the most recently available three-year period (2010 to 2012). For each

toxic, the ratio of the observed concentration to the pollutant's chronic reference exposure level (REL)<sup>†</sup> is shown. Ratios greater than one indicate the potential for adverse health effects. Note that acrolein, a respiratory irritant, is the only toxic in which ambient concentrations are above its REL. It should be noted that the ambient concentrations of acrolein are above its REL throughout the state.

## NOTES AND REFERENCES

- [1] Information about and data from ARB's toxic monitoring data are available at: <http://www.arb.ca.gov/adam/toxics/toxics.html>.
- [2] See page ES-3 of the Executive Summary which is available at: <http://www.aqmd.gov/home/library/air-quality-data-studies/health-studies/mates-iii/mates-iii-final-report>.

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<sup>†</sup> The REL is an exposure level at or below which no non-cancer adverse health is anticipated to occur in a human population for a specific duration. This definition is taken directly from: OEHHA, 2003 - *The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*.