AGENDA

MEETING, FEBRUARY 1, 2019

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 AQMD Governing Board begins at 9:00 a.m. The Governing Board generally will consider items in the order listed on the agenda. However, <u>any item</u> may be considered in <u>any order</u>.
- 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.

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) or contact the Clerk of the Board, (909) 396-2500. Copies of revised agendas will also be available at the Board meeting.

CALL TO ORDER

Pledge of Allegiance

Opening Comments: William A. Burke, Ed.D., Chair

Other Board Members

Wayne Nastri, Executive Officer

Presentation to Outgoing Board Member Shawn Nelson

Burke

Staff/Phone (909) 396-

CONSENT CALENDAR (Items 1 through 17)

Note: Consent Calendar items held for discussion will be moved to Item No. 18

1. Approve Minutes of January 4, 2019 Board Meeting

Garzaro/2500

 Set Public Hearing March 1, 2019 to Consider Adoption of and/or Amendments to SCAQMD Rules and Regulations

Nastri/3131

Determine that Proposed Amendments to Rules 110, 212, 301, 303, 306, 307.1, 309, 315, 518.2, 1310, 1605, 1610, 1612, 1620, 1623, 1710, 1714, and 3006 are Exempt from CEQA and Amend Rules 110, 212, 301, 303, 306, 307.1, 309, 315, 518.2, 1310, 1605, 1610, 1612, 1620, 1623, 1710, 1714, and 3006

Nakamura/3105

Proposed amendments to the above referenced rules will expand noticing options to include email and web page display for public notices for Clean Air Act permit programs and rulemaking activities. California Senate Bill 1502, drafted in response to SCAQMD's initiative to modernize communication methods, and amendments to the U.S. EPA Code of Federal Regulations enable these changes. The option to deliver invoices to permit holders by email will also be included. This action is to adopt the Resolution: 1) Determining that the proposed amendments to the above referenced rules are exempt from the requirements of the California Environmental Quality Act; and 2) Amending the above referenced rules. (Reviewed: Stationary Source Committee, January 18, 2019)

Budget/Fiscal Impact

Execute Contract to Develop Optimal Operation Model for Renewable Electrolytic Fuel Production

Miyasato/3249

The University of California, Irvine (UCI) through its Advanced Power and Energy Program is developing a roadmap for deployment of renewable electrolytic hydrogen production facilities in California. This project leverages resources to develop a hydrogen generation model to optimize dispatch and operation of facilities, including impacts on air quality. This action is to execute a contract with UCI in an amount not to exceed \$100,000 from the Clean Fuels Program Fund (31). (Reviewed: Technology Committee, January 18, 2019; Recommended for Approval)

Amend Contract for Tier 4 Passenger Locomotives and Carl Moyer Program Award

Miyasato/3249

Under the "Year 16" Carl Moyer Program, the Southern California Regional Rail Authority (SCRRA) requested \$58.85 million to cofund the replacement of 17 and the purchase of 3 new Tier 4 locomotives. In September 2015, the Board awarded \$22.85 million to SCRRA from the Carl Moyer Program AB 923 Fund (80), with a commitment to consider the remaining \$36 million over four phases. In December 2016 and 2017, the Board approved \$18 million of the remaining \$36 million. The SCAQMD cost-share of this \$129 million project is only for the replacement component of the project. This action is to amend the contract with SCRRA, adding \$9 million, comprised of \$8.5 million from the Carl Moyer Program AB 923 Fund (80) and \$500,000 from the Advanced Technology, Outreach and Education Fund (17), for a revised award total of \$49.85 million. The remaining \$9 million requested by SCRRA will be considered in a future Board request. This action is to also amend a "Year 19" Carl Moyer award approved in November 2017 to McMillan Farm Management for replacement of two instead of three off-road equipment. (Reviewed: Technology Committee, January 18, 2019; Recommended for Approval)

5. Renew SCAQMD's Membership in CaFCP for Calendar Year 2019 and Receive and File California Fuel Cell Partnership Executive Board Meeting Agenda and Quarterly Updates

Miyasato/3249

The SCAQMD has been a member of the California Fuel Cell Partnership (CaFCP) since 2000. These actions are to renew SCAQMD's membership in the CaFCP in an amount not to exceed \$70,000 for Calendar Year 2019 and cofund 50 percent of the CaFCP Regional Coordinator position located at SCAQMD in an amount not to exceed \$50,000 from the Clean Fuels Program Fund (31). This action is to also receive and file the CaFCP Executive Board Meeting Agenda for October 17, 2018, and Quarterly Updates for the third and fourth quarters of 2018. (Reviewed: Technology Committee, January 18, 2019; Recommended for Approval)

6. Amend Contract to Demonstrate Low NOx Combustion Technology on Refinery Boiler

Low/2269

In September 2017, the Board awarded a contract to ClearSign Combustion Corporation to demonstrate their DuplexTM low NOx combustion technology on a refinery boiler in an amount not to exceed \$320,000 from the Rule 1118 Mitigation Fund (54). Torrance Refining Company was identified as the host site for the demonstration, but they are no longer able to act as the host site due to operational schedule changes and higher than anticipated project costs. However, ClearSign has identified an alternate in-basin refinery to serve as the host site using a smaller-sized heater for the demonstration. This action is to amend the contract with ClearSign, changing the host site to Lunday-Thagard Company dba World Oil Refining and reducing the contract value to an amount not to exceed \$220,000 from the Rule 1118 Mitigation Fund (54). This action is to also authorize the Executive Officer to execute additional no-cost amendments to this contract, as needed. (Reviewed: Technology Committee, January 18, 2019; Recommended for Approval)

7. Appropriate Funds and Amend or Execute Contracts with Outside Counsel and Specialized Legal Counsel and Services

Gilchrist/3459

This action is to appropriate \$450,000 from the Undesignated (Unassigned) Fund Balance to Legal's FY 2018-19 Budget and amend or execute contracts for legal counsel for specialized, environmental, and other litigation. (Reviewed: Administrative Committee; January 10, 2019; Recommended for Approval)

8. Issue RFP for Consultant Services for SCAQMD's High School Air Quality Educational Program

Alatorre/3122

SCAQMD seeks to implement an air quality educational program in high schools in environmental justice communities within its jurisdiction. This action is to issue an RFP to solicit proposals from individuals and organizations to provide assistance with the high school air quality educational program in an amount not to exceed \$500,000. (Reviewed: Administrative Committee, January 10, 2019; Recommended for Approval)

Transfer and Appropriate Funds and Authorize Purchase of Kids Making Sense Kits

Alatorre/3122

SCAQMD seeks to implement an air quality educational program at 100 high schools in environmental justice communities within its jurisdiction. The Kids Making Sense kits from Sonoma Technology, Inc. are critical to implementing the program as they integrate Science, Technology, Engineering, and Math education and California Next Generation Science Standards with air quality curriculum through hands-on learning experiences. This action is to transfer and appropriate funds from the BP ARCO Settlement Project Fund (46) to Legislative, Public Affairs and Media's FY 2018-19 Budget and authorize the sole source purchase of 100 Kids Making Sense kits which can be reused multiple times, over multiple years in an amount not to exceed \$276,875. (Reviewed: Administrative Committee, January 10, 2019; Recommended for Approval)

Approve Contract Awards and Amendments as Approved by MSRC

McCallon

The MSRC approved two replacement contracts as part of their FYs 2014-16 Work Program. The Board is also requested to amend two previous awards under the MSRC's Local Government Partnership Program, as part of their FYS 2016-18 Work Program, to correct the project descriptions. At this time the MSRC seeks Board approval of the contract awards and amendments as part of the FYs 2014-16 and 2016-18 Work Programs. (Reviewed: Mobile Source Air Pollution Reduction Review Committee, September 20, 2018 and January 17, 2019; Recommended for Approval)

Items 11 through 17 - Information Only/Receive and File

11. Legislative, Public Affairs, and Media Report

Alatorre/3122

This Report highlights the December 2018 outreach activities of the Legislative, Public Affairs and Media Office, which includes: Major Events, Community Events/Public Meetings, Environmental Justice Update, Speakers Bureau/Visitor Services, Communications Center, Public Information Center, Business Assistance, Media Relations and Outreach to Business and Federal, State, and Local Government. (No Committee Review)

12. Hearing Board Report

Prussack/2500

This reports the actions taken by the Hearing Board during the period of December 1 through December 31, 2018. (No Committee Review)

13. Civil Filings and Civil Penalties Report

Gilchrist/3459

This reports the monthly penalties from December 1 through December 31, 2018, and legal actions filed by the General Counsel's Office from December 1 through December 31, 2018. An Index of District Rules is attached with the penalty report. (Reviewed: Stationary Source Committee, January 18, 2019)

Lead Agency Projects and Environmental Documents Received by SCAQMD

Nakamura/3105

This report provides, for the Board's consideration, a listing of CEQA documents received by the SCAQMD between December 1, 2018 and December 31, 2018, and those projects for which the SCAQMD is acting as lead agency pursuant to CEQA. (No Committee Review)

15. Rule and Control Measure Forecast

Fine/2239

This report highlights SCAQMD rulemaking activities and public hearings scheduled for 2019. (No Committee Review)

16. Status Report on Major Ongoing and Upcoming Projects for Information Management

Moskowitz/3329

Information Management is responsible for data systems management services in support of all SCAQMD operations. This action is to provide the monthly status report on major automation contracts and planned projects. (Reviewed: Administrative Committee, January 10, 2019)

17. Annual Report on 457 Deferred Compensation Plan

Olvera/2309

SCAQMD sponsors an IRS-approved 457 deferred compensation program for its employees. The Annual Report addresses the Board's responsibility for monitoring the activities of the Deferred Compensation Plan Committee and ensuring the Committee carries out its fiduciary duties and responsibilities under the Committee Charter. This action is to file the annual report. (Reviewed: Administrative Committee, January 10, 2019)

18. Items Deferred from Consent Calendar

BOARD CALENDAR

Note: The January meeting of the Mobile Source Committee was canceled. The next meeting of the Mobile Source Committee is scheduled for February 15, 2019.

19. Administrative Committee (Receive & File) Chair: Burke Nastri/3131

20. Legislative Committee Chair: Mitchell Alatorre/3122

21. Stationary Source Committee (Receive & File) Chair: Benoit Tisopulos/3123

22. Technology Committee (Receive & File) Chair: Buscaino Miyasato/3249

23. Mobile Source Air Pollution Reduction Board Liaison: Benoit Berry/2363

Review Committee (Receive & File)

24. California Air Resources Board Monthly Report (Receive & File)

Board Rep: Mitchell Garzaro/2500

Staff Presentation/Board Discussion

25. Proposed Approach to Address Hydrogen Fluoride Storage and Use at Petroleum Refineries

Fine/2239

At the September 22, 2018 Refinery Committee meeting, staff was directed to develop a rule by May 2019, and consider utilization of a Memorandum of Understanding (MOU) with each refinery, to reduce the risk and consequences of a release of modified hydrogen fluoride (MHF). The direction included that the proposed rule or MOU should include a possible phase-out of MHF if satisfactory mitigation and performance standards cannot be achieved. MHF is currently used at two refineries in the Basin: Torrance Refining Company Refinery (formerly ExxonMobil Refinery) and Valero Wilmington Refinery. At the recommendation of the Refinery Committee, staff will present information on hydrogen fluoride use, health impacts, dispersion characteristics, and mitigation measures. Staff has been working with stakeholders on the development of Proposed Rule 1410 - Hydrogen Fluoride Storage and Use at Petroleum Refineries, and providing updates to the Refinery Committee since April 2017. Staff will also present concepts that could be included in a rule or MOU for mitigation requirements and a possible phase-out of MHF if proposed performance standards are not met. This action is to seek Board input on the overall concept and to direct staff on how to proceed to address hydrogen fluoride storage and use at petroleum refineries. (No Committee Review)

26. Status Report on Regulation XIII – New Source Review

Tisopulos/3123

This report presents the federal preliminary determination of equivalency for January 2017 through December 2017. As such, it provides information regarding the status of Regulation XIII – New Source Review in meeting federal NSR requirements and shows that SCAQMD's NSR program is in preliminary compliance with applicable federal requirements from January 2017 through December 2017. (Reviewed: Stationary Source Committee, January 18, 2019)

PUBLIC HEARINGS

27. Determine that Proposed Amendments to Rule 1403 - Asbestos Emissions from Renovation/Demolition Activities are Exempt from CEQA and Amend Rule 1403

Rees/2856

Staff is recommending that the public hearing on this item be withdrawn from consideration.

Proposed amendments to Rule 1403 will provide revisions to further clarify existing rule requirements, enhance enforceability, and align the requirements with the applicable U.S. EPA NESHAP and with other state and local agency regulations. The proposed amendments include clarifying who is covered by the rule, standard and emergency notification procedures, specifying information to be included in survey reports, and reinforcing minimum sampling requirements for determining whether materials are asbestos-containing. This action is to adopt the Resolution: 1) Determining that the proposed amendments to Rule 1403 - Asbestos Emissions from Renovation/Demolition Activities are exempt from the requirements of the California Environmental Quality Act; and 2) Amending Rule 1403 - Asbestos Emissions from Renovation/Demolition Activities. (Reviewed: Stationary Source Committee, November 16 and December 19, 2018)

28. Determine that Proposed Amendments to BACT Guidelines and Charter for BACT Scientific Review Committee Are Exempt from CEQA, and Amend BACT Guidelines and Charter for BACT Scientific Review Committee

Low/2269

Periodically, staff proposes amendments to the BACT Guidelines to add new or update determinations and/or policy. These actions are to add new and amended listings to Part B: Lowest Achievable Emission Rate Determinations for Major Polluting Facilities, Part D: BACT Determinations for Non-Major Polluting Facilities and update Parts A and C Policy for Major and Non-Major Polluting Facilities. Additionally, these actions are to determine the proposed amendments to the BACT Guidelines and the Charter for BACT Scientific Review Committee are exempt from the California Environmental Quality Act, amend the BACT Guidelines to make them consistent with recent changes to SCAQMD rules and regulations as well as state requirements, and approve amendments to the charter for the BACT Scientific Review Committee. (Reviewed: Stationary Source Committee, January 18, 2019; Recommended for Approval)

<u>PUBLIC COMMENT PERIOD</u> – (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.

<u>CONFLICT OF INTEREST DISCLOSURES – (No Written Material)</u>

Under the approval authority of the Executive Officer, the District will enter into a contract and modifications with the following entities: Gladstein, Neandross & Associates, LLC (C19232), Southern California Gas Company (Contract Nos. C172811 & C170381), Transportation Power, Inc. (Contract No. 160231), and Sonoma Technology, Inc. (Contract No. C182551). Gladstein, Neandross & Associates, LLC, Southern California Gas Company and Transportation Power, Inc. are potential sources of income for Governing Board Member Joseph Lyou, which qualify for the remote interest exception of Section 1090 of the California Government Code. Additionally, Sonoma Technology, Inc. has entered into a contractual relationship with Dr. Lyou's non-profit employer, which also qualifies for the remote interest exception of Section 1090 of the Code. Dr. Lyou abstained from any participation in the making of the contract and modifications.

On October 5, 2018, the Governing Board authorized the Governing Board Chairman to execute a contract with the City of Los Angeles Harbor Department for the development of a battery-operated switcher locomotive in an amount not to exceed \$300,000 from the Clean Fuels Program Fund (31) (Contract No. C19192). After this October 5, 2018 authorization, the Port of Long Beach was added as cost sharing in the project as a modification to the proposed contract. At the October 5, 2018 meeting, Governing Board Member Joseph Lyou recused himself from this matter because the City of Los Angeles is a potential source of income, which qualifies for the remote interest exception of Section 1090 of the California Government Code. The Port of Long Beach is also a potential source of income to Dr. Lyou, and this also qualifies for the remote interest exception of Section 1090 of the California Government Code. Dr. Lyou abstained from any participation in the initial authorization of the contract, and abstained from any participation in the making of the contract modification.

CLOSED SESSION - (No Written Material)

Gilchrist/3459

CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION

It is necessary for the Board to recess to closed session 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 SCAQMD is a party. The actions are:

- <u>In the Matter of SCAQMD v. Aerocraft Heat Treating Co., Inc. and Anaplex Corp.</u>, SCAQMD Hearing Board Case No. 6066-1 (Order for Abatement);
- <u>SCAQMD v. Anaplex</u>, Los Angeles Superior Court Case No. BC608322 (Paramount Hexavalent Chromium);
- In the Matter of SCAQMD v. Browning-Ferris Industries of California, Inc. dba Sunshine Canyon Landfill, SCAQMD Hearing Board Case No. 3448-14;
- <u>Communities for a Better Environment v. SCAQMD</u>, Los Angeles Superior Court Case No. BS161399 (RECLAIM);
- Communities for a Better Environment v. South Coast Air Quality Management District, Los Angeles Superior Court Case No. BS169841; <u>Safe Fuel and Energy Resources California</u>, et al. v. South Coast <u>Air Quality Management District</u>, Los Angeles Superior Court Case No. BS169923 (Tesoro);
- <u>People of the State of California, ex rel. SCAQMD v. Exide Technologies, Inc.</u>, Los Angeles Superior Court Case No. BC533528;
- <u>In re: Exide Technologies, Inc.</u>, U.S. Bankruptcy Court, District of Delaware, Case No. 13-11482 (KJC) (Bankruptcy Case);

- Fast Lane Transportation, Inc., et al. v. City of Los Angeles, et al., Court of Appeal, First Appellate District, Case No. A148993 (formerly Contra Costa County Superior Court Case No. MSN14-0300) (SCIG);
- In the Matter of SCAQMD v. Southern California Gas Company, Aliso Canyon Storage Facility, SCAQMD Hearing Board Case No. 137-76 (Order for Abatement); People of the State of California, ex rel SCAQMD v. Southern California Gas Company, Los Angeles Superior Court Case No. BC608322; Judicial Council Coordinated Proceeding No. 4861;
- South Coast Air Quality Management District v. Top Shelf Consulting LLC, Los Angeles Superior Court, Case No. BC676606; In re: Top Shelf Consulting, LLC, U.S. Bankruptcy Court, Central District of California (Los Angeles), Case No. 2:18-bk-11975-ER (Bankruptcy case);
- <u>In the Matter of SCAQMD v. Torrance Refining Company, LLC</u>, SCAQMD Hearing Board Case No. 6060-5 (Order for Abatement);
- <u>State of California, et al. v. U.S. EPA, et al.</u>, U.S. Court of Appeals, D.C. Circuit, Case No. 18-1114 (mid-term evaluation for light-duty vehicles); and
- People of the State of California, ex rel South Coast Air Quality Management District v. The Sherwin-Williams Company, an Ohio Corporation, and Does 1 through 50, Inclusive, Los Angeles Superior Court Case No. PSCV 00136.

CONFERENCE WITH LEGAL COUNSEL – INITIATING LITIGATION

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

CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION

Also, it is necessary for the Board to recess to closed session pursuant to Government Code section 54956.9(d)(2) to confer with its counsel because there is a significant exposure to litigation against the SCAQMD (one case)—Letter from Steven J. Olson, O'Melveny & Myers LLP, on behalf of ExxonMobil Corporation, dated August 22, 2018.

ADJOURNMENT

PUBLIC COMMENTS

Members of the public are afforded an opportunity to speak on any agenda item before 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 will be limited to a total of three (3) minutes for the Consent Calendar and Board Calendar and three (3) minutes or less for other agenda items.

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 the Public Comment Period 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 of 10 pages or less including attachment, in MS WORD, PDF, 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

AQ-SPEC = Air Quality Sensor Performance Evaluation Center

AQIP = Air Quality Investment Program

AQMP = Air Quality Management Plan

AVR = Average Vehicle Ridership

BACT = Best Available Control Technology

BARCT = Best Available Retrofit Control Technology

Cal/EPA = California Environmental Protection Agency

CARB = California Air Resources Board

CEMS = Continuous Emissions Monitoring Systems

CEC = California Energy Commission

CEQA = California Environmental Quality Act

CE-CERT =College of Engineering-Center for Environmental

Research and Technology

CNG = Compressed Natural Gas

CO = Carbon Monoxide

DOE = Department of Energy

EV = Electric Vehicle

FY = Fiscal Year

GHG = Greenhouse Gas

HRA = Health Risk Assessment

LEV = Low Emission Vehicle

LNG = Liquefied Natural Gas

MATES = Multiple Air Toxics Exposure Study

MOU = Memorandum of Understanding

MSERCs = Mobile Source Emission Reduction Credits

MSRC = Mobile Source (Air Pollution Reduction) Review

Committee

NATTS = National Air Toxics Trends Station

 $\mbox{NESHAPS} = \mbox{National Emission Standards for}$

Hazardous Air Pollutants

NGV = Natural Gas Vehicle

NOx = Oxides of Nitrogen

NSPS = New Source Performance Standards

NSR = New Source Review

OEHHA = Office of Environmental Health Hazard

Assessment

PAMS = Photochemical Assessment Monitoring

Stations

PEV = Plug-In Electric Vehicle

PHEV = Plug-In Hybrid Electric Vehicle

PM10 = Particulate Matter ≤ 10 microns

 $PM2.5 = Particulate\ Matter \leq 2.5\ microns$

RECLAIM=Regional Clean Air Incentives Market

RFP = Request for Proposals

RFQ = Request for Quotations

SCAG = Southern California Association of Governments

SIP = State Implementation Plan

SOx = Oxides of Sulfur

SOON = Surplus Off-Road Opt-In for NOx

SULEV = Super Ultra Low Emission Vehicle

TCM = Transportation Control Measure

ULEV = Ultra Low Emission Vehicle

U.S. EPA = United States Environmental Protection

Agency

VOC = Volatile Organic Compound

ZEV = Zero Emission Vehicle



BOARD MEETING DATE: February 1, 2019

MINUTES: Governing Board Monthly Meeting

Attached are the Minutes of the January 4, 2019 meeting. SYNOPSIS:

RECOMMENDED ACTION:

Approve Minutes of the January 4, 2019 Board Meeting.

Denise Garzaro Clerk of the Boards

FRIDAY, JANUARY 4, 2019

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

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

Mayor Ben Benoit Cities of Riverside County

Dr. Joseph K. Lyou Governor's Appointee

Mayor Larry McCallon
Cities of San Bernardino County

Mayor Judith Mitchell
Cities of Los Angeles County – Western Region

Supervisor V. Manuel Perez County of Riverside

Council Member Dwight Robinson Cities of Orange County

Supervisor Janice Rutherford County of San Bernardino

Members absent:

Council Member Joe Buscaino City of Los Angeles

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

Supervisor Janice Hahn County of Los Angeles

Supervisor Shawn Nelson County of Orange

CALL TO ORDER: Chairman Burke called the meeting to order at 9:00 a.m.

- Pledge of Allegiance: Led by Chairman Burke.
- Opening Comments

Mayor Mitchell announced that on December 20, 2018 that she, along with SCAQMD staff, attended a press conference for the delivery of the first fully electric medium heavy-duty truck from Daimler Trucks to Penske Truck Leasing. She highlighted the collaboration of these two companies to bring forth innovative technology that will result in cleaner commercial vehicles.

Chairman Burke acknowledged the passing of David Czamanske, Board Consultant to Council Member Cacciotti, and expressed condolences to his family on behalf of the Board.

Swearing in of Reappointed Board Member Ben Benoit

Chairman Burke administered the oath of office to Mayor Benoit who was reappointed to the Board by the Riverside City Selection Committee for a term ending January 15, 2023. Mayor Benoit expressed appreciation for the opportunity to continue to serve on the Board.

CONSENT CALENDAR

- 1. Approve Minutes of December 7, 2018 Board Meeting
- Execute Contracts for Emission Reduction Projects Using Incentive Funding from SCAQMD Special Revenue Funds, and Reimburse General Fund for Administrative Costs for Contract Administration
- 3. Transfer and Appropriate Funds, Issue Solicitations and Purchase Orders, Approve Positions for Rule 1180 Implementation and Amend Contract
- 4. Approve Transfer of Monies from General Fund to Health Effects Research Fund
- 5. Execute Contract for Biennial Audit of Motor Vehicle Registration Revenues for FYs 2015-16 and 2016-17
- 6. Authorize Purchase of Telecommunication Services

- 7. Approve List of Prequalified Vendors for Document Conversion Services
- 8. Execute Contract for Janitorial Services at Diamond Bar Headquarters
- 9. Amend Career Development Intern Classification, Adopt New Job Classification, and Approve Staffing Changes to Upgrade Two Positions
- 10. Issue Purchase Order to Promote "The Right to Breathe" Video

<u>Items 11 through 16 – Information Only/Receive and File</u>

- 11. Legislative, Public Affairs and Media Report
- 12. Hearing Board Report
- 13. Civil Filings and Civil Penalties Report
- 14. Lead Agency Projects and Environmental Documents Received by SCAQMD
- 15. Rule and Control Measure Forecast
- 16. Status Report on Major Ongoing and Upcoming Projects for Information Management

Mayor Mitchell announced her abstention on Item No. 6 because of a financial interest in AT&T.

Dr. Lyou announced his abstention on Item No. 2 because Bloom Energy, Clean Energy Fuels, Port of Long Beach, Southern California Gas Company, Transpower, USC and BYD Motors are potential sources of income to him; and on Item No. 6 because of a financial interest in AT&T, and on Item No. 10 because of a financial interest in Google.

Supervisor Perez noted that he is a member of the Coachella Valley Association of Governments which is involved with Item No. 2.

Due to a number of requests to speak received on Consent Calendar items 2, 3, 4, 7, 9, and 11, the vote on the Consent Calendar was deferred until after those comments were made.

17. Items Deferred from Consent Calendar

Dr. Lyou left the room during discussion of Item Nos. 2, 3, 4, 7, 9 and 11.

 Execute Contracts for Emission Reduction Projects Using Incentive Funding from SCAQMD Special Revenue Funds, and Reimburse General Fund for Administrative Costs for Contract Administration

Supervisor Perez noted the importance of awarding contracts to companies that support local jobs and benefit Environmental Justice communities.

Bruce Berwager, Beta Offshore, LLC, expressed concern that the selection process for awarding contracts does not align with the intent of AB 617 which requires air districts that are in non-attainment to adopt an expedited schedule for the implementation of BARCT by each industrial source. He expressed concern that the incentive funds are not being used where the greatest industrial source emission reductions can be achieved on an accelerated schedule as intended by AB 617. He noted that the proposal submitted by Beta Offshore would achieve more than ten percent of the District's 2024 NOx reduction goal for stationary sources and urged reconsideration of their project.

Greg Sutliff, Alcal Specialty Contracting, Inc., expressed appreciation for the proposed partial funding of two projects submitted by Alcal Speciality Contracting and noted the difficulty to secure co-funding partners in a short time frame. He requested that the Board consider awarding the full requested funds for both projects or to eliminate the requirement for co-funding partners.

Carlo De La Cruz, Sierra Club, expressed opposition to investing in fossil fuel and natural gas technology and recommended funding battery electric and zero-emission technology projects.

Harvey Eder, Public Solar Power Coalition, noted that he had submitted a proposal that was deemed illegible and therefore was not considered. He noted that he has spoken with BYD Auto Company about solar powered vehicles and expressed support for immediate total solar conversion.

Alex Solis, Comite Civico Del Valle, requested further consideration of the Residential Energy Efficiency Retrofit Project in Coachella Valley as it will directly benefit disadvantaged communities by creating jobs and reducing emissions of PM2.5 and GHGs.

- 3. Transfer and Appropriate Funds, Issue Solicitations and Purchase Orders, Approve Positions for Rule 1180 Implementation and Amend Contract
- 4. Approve Transfer of Monies from General Fund to Health Effects Research Fund
- 7. Approve List of Prequalified Vendors for Document Conversion Services
- 9. Amend Career Development Intern Classification, Adopt New Job Classification, and Approve Staffing Changes to Upgrade Two Positions
- 11. Legislative, Public Affairs and Media Report

Mr. Eder urged for further studies related to the health effects of natural gas, benzene and formaldehyde. He expressed concerns about the legal implications of shredding public documents and also urged support for public solar power and research into the implications of climate change.

MOVED BY BENOIT, SECONDED BY LYOU, AGENDA ITEMS 1 THROUGH 16 APPROVED AS RECOMMENDED, BY THE FOLLOWING VOTE:

AYES: Benoit, Burke, Lyou (except Items

#2, #6 & #10), McCallon, Mitchell (except Item #6), Parker, Perez, Robinson and Rutherford

NOES: None

ABSTAIN: Lyou (Items #2, #6 & #10 only)

and Mitchell (Item #6 only)

ABSENT: Buscaino, Cacciotti, Hahn and

Nelson

BOARD CALENDAR

- 18. Administrative Committee
- 19. Special Administrative Committee

- 20. Legislative Committee
- 21. Stationary Source Committee
- 22. California Air Resources Board Monthly Report

Dr. Lyou introduced an amendment to the minutes of the December 19, 2018 Stationary Source Committee to address the omission of a discussion regarding an extension of the public comment period for refinery fence-line monitoring plans.

MOVED BY BENOIT, SECONDED MITCHELL, AGENDA ITEMS 18 THROUGH APPROVED RECOMMENDED. 22. AS RECEIVING AND FILING THE COMMITTEE AND CARB REPORTS WITH MODIFICATION TO THE DECEMBER 19, 2018 STATIONARY SOURCE COMMITTEE MEETING SUMMARY AS SET FORTH AND APPROVING THE 2019 BELOW. LEGISLATIVE GOALS AND OBJECTIVES, BY THE FOLLOWING VOTE:

AYES: Benoit, Burke, Lyou, McCallon,

Mitchell, Parker, Perez, Robinson,

and Rutherford

NOES: None

ABSENT: Buscaino, Cacciotti, Hahn and

Nelson

Amend Page 5 of the December 19, 2018 Stationary Source Committee Meeting Summary as follows:

5. Other Business

There was no other business.

Dr. Lyou asked staff about requests from the public to extend the comment deadline for draft refinery monitoring plans. Staff replied that the comment deadline had been extended until January 11.

PUBLIC HEARINGS

 Certify Final Environmental Assessment and Adopt Rule 1118.1 - Control of Emissions from Non-Refinery Flares (Continued from December 7, 2018 Board Meeting)

Michael Krause, Planning and Rules Manager, gave the staff presentation on Item No. 23.

Chairman Burke commented that the general public perception of flaring is negative and asked why there is no specific educational outreach to address flaring.

Mayor Mitchell explained that a landfill in her community was the subject of attention when they had to flare excess methane, and when the methane supply diminished, the facility could no longer produce electricity with methane, as they had been previously.

- Dr. Parker noted that flaring reduces pollutants that are released and is used as a preventive safety measure. He noted that flaring by refineries is often perceived by the public as negative and an indication that something is wrong at the refinery. He added that additional educational outreach regarding flaring would be beneficial.
- Mr. Nastri responded that staff often addresses concerns regarding flaring at community meetings and added that staff plans to present a proposed educational outreach program that addresses air quality to the Board. Information regarding the impact of flaring could be included in this program.
- Dr. Philip Fine, DEO/Planning, Rule Development and Area Sources, explained that refinery flaring is not covered under this rule but is regulated under Rule 1118. He added that when the Board amended Rule 1118 in 2017, staff committed to proposing further amendments to minimize flaring and to enhance the existing flare notification system, including increased educational outreach.
- Dr. Lyou noted that flaring is a complicated issue and there must be a balance between reducing and/or eliminating certain flaring and flaring for safety issues. He emphasized the benefits of educating the public on the complexities of flaring and asked staff to explain the reduction of refinery flaring since the adoption of Rule 1118.
- Dr. Laki Tisopulos, DEO/Engineering and Permitting, responded that Rule 1118 eliminated routine flaring at refineries. He added that flaring cannot be completely eliminated because it is necessary for safety, however, flaring has been reduced significantly.

The public hearing was opened and the following individuals addressed the Board on Item 23.

John McNamara, CR&R, commented on the success of their green waste digester in Riverside which produces biogas renewable fuel. He noted that they do not agree that ammonia will result in increased NOx emissions and stated that he will reach out to staff to discuss that issue.

David Rothbart, Southern California Alliance of Publically Owned Treatment Works, expressed support for the rule and thanked staff for their efforts during rule development. He commented on the challenges of treating gas for beneficial use and added that most flaring for non-refineries and treatment plants is clean and takes place in an enclosed area. He requested SCAQMD support for legislative changes to increase the ability for beneficial use of gas instead of flaring.

Chris Hall, Drilling and Production Company, commented on the challenges of finding beneficial uses for stranded oil field waste and asked the Board for assistance with the legislature and other agencies to change PUC regulations to allow access to the electric grid and to recognize waste gas as comparable to a renewable fuel source.

Michael Salman, University of California, Los Angeles, expressed support for the rule due to the included proposed technology assessment that will provide an opportunity to investigate new beneficial use technologies at oil and gas sites and that staff will consider amendments for more beneficial use when the technology assessment is presented to the Stationary Source Committee in 24 months.

Ivan Tether, California Independent Petroleum Association, noted that oil field flares are essential for safety as well as oil production. He suggested that any operational curtailment be addressed through permit limits or Hearing Board action. He expressed concern that restricting flare operations could negatively impact well-paying jobs in the oil and gas production industry, increase emissions, and result in the need for more foreign oil. He noted the challenges involved with gaining access to the electric grid and also requested support for legislative changes. (Submitted Written Comments)

Bill La Marr, California Small Business Alliance, expressed support for the technology assessment included in the rule and asked for the District's support to advocate with the PCC for the development of programs and policies that support the beneficial use of excess gas.

Mr. Eder urged the phase out of all fossil fuels and replace with total solar power conversion. He added that solar power is cost effective and a better alternative to natural gas.

Kris Flaig, City of Los Angeles, Bureau of Sanitation, thanked staff for their efforts throughout the rule development process and expressed the commitment by the City of Los Angeles to utilize beneficial use technology wherever practicable.

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

Mayor Benoit expressed appreciation to staff and stated that this rule proposal has been to the Stationary Source Committee multiple times. He added that the technology assessment will support new beneficial use technologies.

Dr. Lyou asked Mayor Benoit if he would amend his motion to broaden the technology assessment to include all non-refinery flares covered by the proposed rule and not just focus on oil and gas sites. He asked staff to report back on the technology assessment and provide more information on the issues brought up in public comments regarding the limitations on the sale of electricity and advocacy to the PUC.

Mayor Benoit amended his motion to include the suggestion made by Dr. Lyou.

Mr. Nastri responded that staff could provide a report on the items Dr. Lyou raised at the Stationary Source Committee or Legislative Committee.

MOVED BY BENOIT, SECONDED BY MITCHELL. AGENDA NO. 23 ITEM APPROVED AS RECOMMENDED. ADOPTING RESOLUTION NO. CERTIFYING THE FINAL ENVIRONMENTAL ASSESSMENT FOR PROPOSED RULE 1118.1 - CONTROL OF EMISSIONS NON-REFINERY FROM FLARES AND ADOPTING RULE 1118.1 WITH THE MODIFICATION TO THE RESOLUTION TO **EXPAND** THE **TECHNOLOGY** ASSESSEMENT TO INCLUDE ALL NON-REFINERY FACILITIES, BY THE FOLLOWING VOTE:

AYES: Benoit, Burke, Lyou, McCallon,

Mitchell, Parker, Perez, Robinson,

and Rutherford

NOES: None

ABSENT: Buscaino, Cacciotti, Hahn and

Nelson

24. Determine that Proposed Amendments to Rule 1325 – Federal PM2.5 New Source Review Program Are Exempt from CEQA and Amend Rule 1325

The presentation on Item No. 24 was waived.

The public hearing was opened and the following individual addressed the Board on Item 24.

Mr. Eder commented that the rule amendment should not be exempt from CEQA and expressed support for solar power conversion. He added that the health costs related to PM2.5 should be considered in the decision making process.

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

Dr. Lyou asked staff to clarify that the proposed amendments are expanding the definition of precursors for PM2.5 to include ammonia and VOC's. Dr. Fine responded that the definition was correct in one section, but omitted in another section of the rule and the amendment will correct that omission.

MOVED BY LYOU. SECONDED BY MITCHELL, AGENDA ITEM NO. 24 APPROVED AS RECOMMENDED. ADOPTING RESOLUTION NO. 19-2 DETERMINING THAT PROPOSED AMENDED RULE 1325 – FEDERAL PM2.5 NEW SOURCE REVIEW PROGRAM IS EXEMPT FROM THE REQUIREMENTS OF CEQA AND AMENDING RULE 1325, BY THE FOLLOWING VOTE:

AYES: Benoit, Burke, Lyou, McCallon,

Mitchell, Parker, Perez, Robinson,

and Rutherford

NOES: None

ABSENT: Buscaino, Cacciotti, Hahn and

Nelson

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

Steven Goldsmith, Torrance Refinery Action Alliance, expressed support for the phase out of modified hydrofluoric acid at refineries and noted the health consequences to the public in the event of an accidental release.

Al Sattler expressed appreciation to Chairman Burke for acknowledging the passing of David Czamanske and noted that he supported many environmental causes in his lifetime. He also commended the business owner who commented on the need for projects to reduce the company's NOx emissions. He urged moving away from fossil fuels as soon as possible.

Marilyn Kamimura, Clean Air Coalition of North Whittier and Avocado Heights (Submitted Written Comments)

Rebecca Overmyer-Velazquez, Clean Air Coalition of North Whittier and Avocado Heights (also spoke on behalf of William Chen)

Cynthia Simonton

Maria Avila, resident of Hacienda Heights

Expressed concerns about the proposed expansion of the Quemetco battery recycling facility due to the negative health effects of lead contamination and noted that a number of elected officials have expressed concern for environmental violations from the facility over the years and urged the Board to oppose the proposed expansion and continued operation of the facility.

Mary Valdamar, Chicano Indigenous Community for Cultured Conscience Advocacy and Action (ChICCCAA)

Jason Martinez, ChICCCAA

Jonas Fernandez, Sierra Club

Yassi Kavezade, Sierra Club

Hanna Velez, Young Medical Scholars, New View Bridge High School

Ricardo Hernandez, resident of Perris

Ricardo Caballero, resident of Perris

Jessie Parks

Diana Contreras, resident of Rancho Cucamonga

Expressed concern about increased air pollution in the Inland Empire due to the increase of truck traffic and construction of warehouses. They urged the Board to continue to support zero-emission technology as well as adopt stricter policies and enforcement measures to support clean air. They noted the health effects associated with poor air quality in the areas most impacted by the construction of new warehouses and advocated for a strong indirect source rule for warehouses.

Mr. Eder expressed concerns about health effects from air pollution and encouraged solar electric trucks, solar technology and research into the effects of climate change.

CLOSED SESSION

The Board recessed to closed session at 11:30 a.m., pursuant to Government Code sections:

CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION

• 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 SCAQMD is a party. The actions are:

In the Matter of SCAQMD v. Aerocraft Heat Treating Co., Inc. and Anaplex Corp., SCAQMD Hearing Board Case No. 6066-1 (Order for Abatement);

<u>SCAQMD v. Anaplex</u>, Los Angeles Superior Court Case No. BC608322 (Paramount Hexavalent Chromium);

Communities for a Better Environment v. South Coast Air Quality Management District, Los Angeles Superior Court Case No. BS169841; Safe Fuel and Energy Resources California, et al. v. South Coast Air Quality Management District, Los Angeles Superior Court Case No. BS169923 (Tesoro);

<u>People of the State of California, ex rel. SCAQMD v. Exide Technologies, Inc.,</u> Los Angeles Superior Court Case No. BC533528; and

In re: Exide Technologies, Inc., U.S. Bankruptcy Court, District of Delaware, Case No. 13-11482 (KJC) (Bankruptcy Case).

CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION

 54956.9(d)(2) to confer with its counsel because there is a significant exposure to litigation against the SCAQMD (one case)—Letter from Steven J. Olson, O'Melveny & Myers LLP, on behalf of ExxonMobil Corporation, dated August 22, 2018.

Following closed session, Mr. Gilchrist announced that a report of any reportable actions taken in closed session will be filed with the Clerk of the Board's office and made available to the public upon request.

ADJOURNMENT

There being no further business, the meeting was adjourned by Mr. Gilchrist at 11:55 a.m.

The foregoing is a true statement of the proceedings held by the South Coast Air Quality Management District Board on January 4, 2019.

Respectfully Submitted,

Denise Garzaro Clerk of the Boards

Date I	Minutes /	٩р	proved:	

Dr. William A. Burke, Chairman

ACRONYMS

CARB = California Air Resources Board

CEQA = California Environmental Quality Act

CIPA = California Independent Petroleum Association

FY = Fiscal Year

GHG = Greenhouse Gas

MSRC = Mobile Source (Air Pollution Reduction) Review Committee

PM2.5 = Particulate Matter ≤ 2.5 microns

NOx = Oxides of Nitrogen

PUC = Public Utilities Commission

RFP = Request for Proposals

VOC = Volatile Organic Compound



BOARD MEETING DATE: February 1, 2019 AGENDA NO. 2

PROPOSAL: Set Public Hearing March 1, 2019 to Consider Adoption of and/or

Amendments to SCAQMD Rules and Regulations

Determine that Proposed Amendments to Rules 110, 212, 301, 303, 306, 307.1, 309, 315, 518.2, 1310, 1605, 1610, 1612, 1620, 1623, 1710, 1714, and 3006 are Exempt from CEQA and Amend Rules 110, 212, 301, 303, 306, 307.1, 309, 315, 518.2, 1310, 1605, 1610, 1612, 1620, 1623, 1710, 1714, and 3006

Proposed amendments to the above referenced rules will expand noticing options to include email and web page display for public notices for Clean Air Act permit programs and rulemaking activities. California Senate Bill 1502, drafted in response to SCAQMD's initiative to modernize communication methods, and amendments to the U.S. EPA Code of Federal Regulations enable these changes. The option to deliver invoices to permit holders by email will also be included. This action is to adopt the Resolution:

1) Determining that the proposed amendments to the above referenced rules are exempt from the requirements of the California Environmental Quality Act; and 2) Amending the above referenced rules. (Reviewed: Stationary Source Committee, January 18, 2019)

The complete text of the proposed amendments, staff report and other supporting documents will be available from the SCAQMD's Public Information Center, (909) 396-2001 and on the Internet (www.aqmd.gov) as of January 30, 2019.

RECOMMENDED ACTION:

Set Public Hearing March 1, 2019 to Amend Rules 110, 212, 301, 303, 306, 307.1, 309, 315, 518.2, 1310, 1605, 1610, 1612, 1620, 1623, 1710, 1714, and 3006.

Wayne Nastri Executive Officer



BOARD MEETING DATE: February 1, 2019

AGENDA NO. 3

PROPOSAL: Execute Contract to Develop Optimal Operation Model for

Renewable Electrolytic Fuel Production

SYNOPSIS: The University of California Irvine (UCI) through its Advanced

Power and Energy Program is developing a roadmap for deployment of renewable electrolytic hydrogen production

facilities in California. This project leverages resources to develop a hydrogen generation model to optimize dispatch and operation of facilities, including impacts on air quality. This action is to execute a contract with UCI in an amount not to exceed \$100,000 from the

Clean Fuels Program Fund (31).

COMMITTEE: Technology, January 18, 2019; Recommended for Approval

RECOMMENDED ACTION:

Authorize the Chairman to execute a contract with the University of California Irvine in an amount not to exceed \$100,000 from the Clean Fuels Program Fund (31) for development of an optimal operation model for renewable electrolytic fuel production.

Wayne Nastri Executive Officer

MMM: NB:SH

Background

The University of California Irvine (UCI) through its Advanced Power and Energy Program (APEP) is conducting a CEC-funded study to develop a roadmap for deployment of renewable hydrogen production facilities in California, with the goal to assess cost-effective electrolysis pathways for the production of renewable hydrogen. The National Renewable Energy Laboratory (NREL) initiated a DOE-funded project for optimizing an integrated renewable electrolysis system. While this ongoing effort will provide perspective on the current and future cost as well as performance of renewable electrolytic hydrogen production, it does not address optimal dispatch and operation of the facilities in detail. The proposed project leverages expertise and resources through NREL and adds a comprehensive analysis of a rapidly developing electrolysis

technology, which portends to serve as one of the most promising pathways for the production of renewable hydrogen. The developed model will provide air quality impacts by optimized electrolysis facilities.

Proposal

The proposed project will analyze three hypothetical scenarios of model electrolysis projects, including project location, production capacity, efficiency, source of electricity, footprint, dynamic operation characteristics, capital cost, operating cost and other parameters.

- A project, located in the Moreno Valley, receiving power from local solar and wind resources and producing renewable hydrogen will be assessed. Economic, air emissions and air quality impacts will be compared between a case in which hydrogen from the electrolysis system is injected into the natural gas grid and an alternative case in which hydrogen is liquefied and delivered by truck for use as a vehicle fuel.
- A project, located near downtown Los Angeles, will be assessed in which carbon dioxide (CO2) from a food waste anaerobic digester is combined with electrolytic hydrogen to create renewable methane using grid electricity.
- The 50 MW Five Points solar project near Bakersfield, owned by UCI, will be assessed for dispatching some or all of the solar electricity production to produce renewable hydrogen or methane (using CO2 from dairy biogas) via electrolysis for pipeline injection with product gas piped to Southern California.

Based on the modeling and analyses defined above, the project will extract findings on optimal economic dispatch of the model projects and air quality impact based on the quantities of renewable hydrogen injected onto the gas system, as well as directed to fuel cell electric vehicle (FCEV) fueling.

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. This request for sole source award is made under provision B.2.d.(8): Research and development efforts with educational institutions or nonprofit organizations. UCI is an educational institution and APEP is an umbrella organization that addresses the broad utilization of energy resources and the emerging nexus of electric power generation, infrastructure, transportation, water resources and the environment. Built on a foundation established in 1970 with the creation of the UCI Combustion Laboratory and the 1998 dedication of the National Fuel Cell Research Center, APEP focuses on education and research on clean and efficient distributed power generation and integration.

Benefits to SCAQMD

The proposed project provides the implementation roadmap of renewable electrolytic hydrogen production facilities that could be used to further reduce NOx and other criteria pollutant emissions from existing sources within the South Coast Air Basin. Specifically, the injection of renewable hydrogen into the existing natural gas system represents a key pathway towards reducing GHG emissions by displacing the corresponding volume of fossil-derived natural gas. For mobile sources, electrolysis facilities could allow a more economic hydrogen supply for FCEVs.

Resource Impacts

The total cost for the proposed project is \$500,000, of which SCAQMD's proposed contribution will not exceed \$100,000 from the Clean Fuels Program Fund (31), as summarized below.

Proposed Partners	Funding Amount	% of Project
UCI/CEC (match funding)	\$350,000	70
NREL/DOE	\$50,000	10
SCAQMD (requested)	\$100,000	20
Total	\$500,000	100

Sufficient funds are available from the Clean Fuels Program Fund, 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: February 1, 2019

AGENDA NO. 4

PROPOSAL: Amend Contract for Tier 4 Passenger Locomotives and Carl Moyer

Program Award

SYNOPSIS: Under the "Year 16" Carl Moyer Program, the Southern California

Regional Rail Authority (SCRRA) requested \$58.85 million to cofund the replacement of 17 and the purchase of 3 new Tier 4 locomotives. In September 2015, the Board awarded \$22.85 million to SCRRA from the Carl Moyer Program AB 923 Fund (80), with a commitment to consider the remaining \$36 million over four phases. In December 2016 and 2017, the Board approved \$18 million of the remaining \$36 million. The SCAQMD costshare of this \$129 million project is only for the replacement component of the project. This action is to amend the contract with SCRRA, adding \$9 million, comprised of \$8.5 million from the Carl Moyer Program AB 923 Fund (80) and \$500,000 from the Advanced Technology, Outreach and Education Fund (17), for a revised award total of \$49.85 million. The remaining \$9 million requested by SCRRA will be considered in a future Board request. This action is to also amend a "Year 19" Carl Moyer award approved in November 2017 to McMillan Farm Management for

replacement of two instead of three off-road equipment.

COMMITTEE: Technology, January 18, 2019; Recommended for Approval

RECOMMENDED ACTIONS:

- 1. Authorize the Chairman to amend a contract with SCRRA, adding an additional \$9 million, comprised of \$8.5 million from the Carl Moyer Program AB 923 Fund (80) and \$500,000 from Advanced Technology, Outreach and Education Fund (17), for a revised award total of \$49.85 million.
- 2. Amend a Carl Moyer award with McMillan Farm Management to include the replacement of two instead of three off-road equipment, as originally proposed, at no additional cost.

Wayne Nastri Executive Officer

Background

Under the "Year 16" Carl Moyer Program solicitation, SCRRA submitted a proposal requesting \$58.85 million for the replacement of 17 and the purchase of 3 new Tier 4 passenger locomotives. In September 2015, the Board approved \$22.85 million to SCRRA from the Carl Moyer Program AB 923 Fund (80), with a commitment to consider the remaining \$36 million over four phases. Subsequently, in December 2016 and 2017, the Board approved \$9 million in each year for a total of \$18 million out of the remaining \$36 million.

In June 2016, U.S. EPA awarded SCAQMD \$523,809 under the FY 2015-16 Diesel Emissions Reduction Act (DERA) Program to cofund the replacement of an older diesel locomotive with a new Tier 4 locomotive, with \$500,000 allocated for project funds and \$23,809 for administrative funds. In July and October 2016, the Board approved an award to Metropolitan Stevedore Company for \$1.7 million, comprised of \$1.2 million from Proposition 1B-Goods Movement Program Fund (81) and \$500,000 from DERA funds, to replace an old diesel locomotive with a new Tier 4 locomotive. In February 2017, CARB determined that the Metropolitan Stevedore Company's locomotive was ineligible for funding. CARB's determination was made after SCAQMD staff conducted the pre-inspection of the Metropolitan Stevedore Company locomotive and revealed that the locomotive had not been operated for some time. On November 13, 2018, U.S. EPA amended the grant agreement and allowed SCAQMD to reallocate the FY 2015-16 DERA award from Metropolitan Stevedore Company to SCRRA for the passenger locomotives replacement project.

In addition, under the "Year 19" Carl Moyer Program and the SOON Provision Program Announcements released in April 2017, McMillan Farm Management submitted a proposal for replacement of two off-road equipment. In November 2017, the Board approved McMillan Farm for an award which staff erroneously identified as the replacement of three off-road equipment, instead of two, in the amount of \$128,297.

Proposal

This action is to amend a contract with SCRRA, adding an additional \$9 million, comprised of \$8.5 million from the Carl Moyer Program AB 923 Fund (80) and \$500,000 from the Advanced Technology, Outreach and Education Fund (17), for a revised award total of \$49.85 million. The remaining \$9 million of the requested funds will be considered in a future Board request.

The total project cost of \$129 million is cost-shared by Caltrans and Metrolink member agencies, with 31.9 and 22.5 percent, respectively. In compliance with the Carl Moyer Program requirements, the SCAQMD funds will be used only for the 11 replacement locomotives, since these funds cannot be comingled with Caltrans funds. However, SCAQMD's participation is contingent upon implementation of all 20 locomotives.

The SCRRA application was evaluated according to CARB's Carl Moyer Program Guidelines, and the requested funding amount is within the cost-effectiveness limit of the Program. In addition, based on the location of the rail tracks, 53 percent of the locomotive operations will be in disproportionately impacted areas, as defined under SCAQMD's Carl Moyer Program criteria.

This action is to also amend a Carl Moyer award approved by the Board in November 2017 with McMillan Farm Management to include the replacement of two instead of three off-road equipment, as originally proposed, at no additional cost.

Benefits to SCAQMD

The replacement of older diesel locomotives with new Tier 4 locomotives will help the South Coast Air Basin meet federal air quality standards. The procurement of Tier 4 locomotives has been identified in the recent U.S. EPA-approved 2007 8-hour Ozone SIP for the South Coast Air Basin (Basin). In addition, since SCRRA locomotives travel throughout the Basin, the cleaner Tier 4 locomotives will result in reduced exposure to diesel particulate emissions. Specifically, emissions reductions from NOx, PM and ROG from each locomotive will be around 12.3 tons per year, 0.3 tons per year and 1.0 ton per year, respectively.

Also, the successful implementation of the Carl Moyer Program and SOON Provision Program will provide direct emissions reductions for both NOx and PM as required by the programs. Since the vehicles and equipment funded under these programs will operate for the life of the contract and beyond, the emissions reductions will provide long-term benefits.

Resource Impacts

The additional funding award for SCRRA's locomotive project will not exceed \$9 million, for a total of \$49.85 million from the Carl Moyer Program AB 923 Fund (80) and Advanced Technology, Outreach and Education Fund (17). There are sufficient funds available in each of the special revenue funds. The remaining \$9 million of the SCRRA requested funding will be considered in a future Board request.

The amendment to the "Year 19" Carl Moyer award is at no additional cost.



BOARD MEETING DATE: February 1, 2019

AGENDA NO. 5

PROPOSAL: Renew SCAQMD's Membership in CaFCP for Calendar Year

2019 and Receive and File California Fuel Cell Partnership Executive Board Meeting Agenda and Quarterly Updates

SYNOPSIS: The SCAQMD has been a member of the California Fuel Cell

Partnership (CaFCP) since 2000. These actions are to renew

SCAQMD's membership in the CaFCP in an amount not to exceed \$70,000 for Calendar Year 2019 and cofund 50 percent of the CaFCP Regional Coordinator position located at SCAQMD in an amount not to exceed \$50,000 from the Clean Fuels Program Fund (31). This action is to also receive and file the CaFCP Executive Board Meeting Agenda for October 17, 2018, and Quarterly

Updates for the third and fourth quarters of 2018.

COMMITTEE: Technology, January 18, 2019; Recommended for Approval

RECOMMENDED ACTIONS:

- 1. Authorize the Chairman to execute one or more contracts in an amount not to exceed \$120,000 from the Clean Fuels Program Fund (31) with Frontier Energy, Inc., acting on behalf of the CaFCP, to:
 - a. Continue SCAQMD's membership for Calendar Year 2019 for a total amount not to exceed \$70,000 for common expenses of the CaFCP; and
 - b. Continue support for a Regional Coordinator located at SCAQMD for a total amount not to exceed \$50,000.
- 2. Receive and file the attached Executive Board Agenda for October 17, 2018, and quarterly updates for the third and fourth quarters of 2018.

Wayne Nastri Executive Officer

MMM:NB:LHM

Background

The California Fuel Cell Partnership (CaFCP) was initiated in 1999 as a means to accelerate response to CARB's Zero Emission Vehicle (ZEV) regulations. In January 2012, CARB approved Advanced Clean Car regulations, which harmonize California requirements with federal requirements from 2017–2025 and incorporate greenhouse gas (GHG) emissions reductions. The AQMP and the Technology Advancement Office's Clean Fuels Program 2018 Plan Update have identified fuel cells for on- and off-road applications as a core technology for attaining and maintaining cleaner air quality. Because of the alignment of the SCAQMD and CaFCP goals for accelerated fuel cell vehicle commercialization, the SCAQMD Board accepted the CaFCP's formal invitation to join as a full member in March 2000.

Initially, the CaFCP Program focused on development of vehicle, infrastructure and outreach plans for future projects. The CaFCP was involved in the demonstration of cars and buses using gaseous and liquid hydrogen as well as methanol through 2003. A limited number of fleet customer placements began in 2002. The CaFCP and members demonstrated several generations of fuel cell cars and buses using gaseous hydrogen fuel at 350 bar and 700 bar pressures. Several automakers started retail placement of fuel cell vehicles near hydrogen stations in early market communities. The CaFCP with member support developed a "Roadmap" for the introduction of fuel cell passenger vehicles with sufficient hydrogen fueling stations in California, a "Bus Roadmap" and a Medium & Heavy-Duty Fuel Cell Electric Vehicle Action Plan.

With the commitment of funding under AB 8 in 2013 to develop and operate approximately 100 hydrogen retail fueling stations in California through 2023, and the collaboration of California with other states to support ZEVs, automakers are continuing to announce market launches. Some automakers are combining efforts to share intellectual property, build component supply chains and leverage resources. Germany, Japan and South Korea have also committed funding to build more hydrogen stations, and international momentum is building with establishment of the Hydrogen Council in 2017 and in 2018 Governor Brown's Executive Order (EO B-48-18) to work with the private sector to support 200 hydrogen retail fueling stations by 2025.

At the request of SCAQMD, the CaFCP has expanded its presence in Southern California due to the increased deployment of vehicles, the largest number of fueling stations and the greatest air quality need in this region. A CaFCP Regional Coordinator based in our region supports member activities and outreach and an Infrastructure Specialist facilitates hydrogen station development.

Major accomplishments during Calendar Year (CY) 2018 include:

• Continued retail production and deployment of fuel cell cars and buses in California. As of January 1, 2019, there have been 5,899 cumulative total fuel cell electric vehicle (FCEV) sales and leases by Hyundai, Toyota and Honda in

California¹, 39 retail hydrogen stations are open (21 in South Coast) with 25 more new/upgraded retail stations funded, and there are 25 fuel cell buses in operation.

- Completed and released a Vision for 2030, the California Fuel Cell Revolution².
- Increased the presence of the CaFCP in Southern California through coordination of ombudsman activities in early market communities with Regional Coordinator and Infrastructure Specialist.

The CaFCP has introduced varying levels of fees to increase interest and reduce the overall cost of membership. Each CaFCP Executive Member has a representative on the Executive Board. Current Executive Members include:

- Seven auto manufacturers (General Motors, Toyota, Daimler, Honda, Hyundai, Nissan, Volkswagen and Nikola Motor Co.);
- Four industry stakeholders (Anglo American, Air Liquide, EIN and Shell); and
- Three government agencies (SCAQMD, CARB and CEC); and
- The Governor's Office of Economic Development (GO-Biz).

Note that industry stakeholders now include a platinum supplier and a heavy-duty truck developer. There are currently an additional 33 Full and Associate Members, with commensurate benefits and voting rights.

The CaFCP retains Frontier Energy, Inc., to provide the needed support for the common tasks agreed to by the CaFCP, and each member contracts directly with Frontier Energy acting on behalf of the CaFCP.

Proposal

The CaFCP completed the fourth phase of its "Preparing for Market Launch" effort through 2016 and is continuing the transition to an ongoing commercial vision, while celebrating its 20th anniversary in 2019. The fee of \$70,000 per Executive Member supports the activities planned for 2019, with additional membership levels designed to encourage participation with commensurate benefits. The non-paying, advisory role is proposed to continue engagement with staff in federal agencies. The proposed budget for 2019 is reduced to \$1,075,500, with plans to continue encouraging new membership and growth. The 2018 Vice-Chair, O. Hoefelmann (Air Liquide), serves as 2019 Chair, with Mary Nichols (CARB), serving as Vice-Chair. Dr. Clark E. Parker will serve as SCAQMD's representative, along with 13 other Executive Members. The majority of fuel cell vehicle deployment growth is anticipated to be within the South Coast Air Basin over the next couple of years, enhanced by the development of hydrogen stations in more early markets in California and beginning in several northeast states.

_

¹Number of cumulative total FCEV sales data from HybridCars.com and Carsalesdatabase.com

² https://cafcp.org/sites/default/files/CAFCR.pdf

The proposed CaFCP activities for 2019 are to:

- Develop the necessary infrastructure and processes to support early commercial launch and expanded vehicle rollout focused in California, developing the tools necessary to accomplish the 2030 vision.
- Share and synchronize experience by providing forums and opportunities for members to advance group collaboration and progress within CaFCP and among stakeholders, including national coordination.
- Reach target markets and communities to educate, inform and promote hydrogen and FCEVs and accelerate commercial adoption.
- Continue efforts to be more inclusive and capable of meeting the expanding commercial market needs and opportunities, broaden the member base, and collaborate with stakeholder participants to add value and avoid duplication of effort.

These actions are to execute a contract with Frontier Energy to renew SCAQMD's membership in the CaFCP for CY 2019 and continue to cofund the CaFCP Regional Coordinator position based at SCAQMD and reporting to the CaFCP Executive Director. There is no need in 2019 for further funding from SCAQMD for support of medium- and heavy-duty fuel cell truck and bus fueling codes and standards coordination. This action is also to receive and file the CaFCP Executive Board Meeting Agenda for October 2018 and Quarterly Updates for the third (April-June) and fourth (July-September) quarters of 2018.

Sole Source Justification

Section VIII.B.2. of the Procurement Policy and Procedure identifies provisions under which a sole source award may be justified. This request for a sole source award is made under provision B.2.d.: Other circumstances exist which in the determination of the Executive Officer require such waiver in the best interest of SCAQMD. Specifically, these circumstances are B.2.d.(1): Projects involving cost-sharing by multiple sponsors. The major sponsors contributing financially to the CaFCP include seven automakers, four industry stakeholders and three government agencies (including SCAQMD).

Benefits to SCAQMD

Membership in the CaFCP is consistent with the *Technology Advancement Office Clean Fuels Program 2018 Plan Update* under "Hydrogen and Mobile Fuel Cell Technologies & Infrastructure" and "Assessment and Technical Support of Advanced Technologies and Information Dissemination." SCAQMD supports the development, demonstration and commercialization of zero and near-zero emissions vehicles and strives to educate public and private organizations regarding the benefits and characteristics of these vehicles.

Resource Impacts

SCAQMD's support of the CaFCP for CY 2019, provided through a contract(s) with Frontier Energy, Inc., will not exceed \$120,000 from the Clean Fuels Program Fund (31), comprised of up to \$70,000 for membership which supports common project costs and covers administrative, technical and program management costs, and up to \$50,000 for half the cost of the Regional Coordinator position based at SCAOMD.

Sufficient funds are available from the Clean Fuels Program Fund, 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.

Attachments

- 1. California Fuel Cell Partnership October 17, 2018, Executive Board Meeting Agenda
- 2. California Fuel Cell Partnership Quarterly Updates (April-June and July-September 2018)



October 17 CaFCP Public Forum Agenda California Fuel Cell Revolution — Activating the California Market

California Lottery Headquarters 700 North 10th Street, Sacramento, CA 95811

10 minutes 9:00am–9:10am Dr. Mohrdieck, CaFCP Chair	Welcome and opening remarks Welcome comments and recognition of new board members
50 minutes 9:10am–10:00am Daimler, M Forrest CaFCP, B Elrick	2. CaFCP's 2030 Vision and Strategies In July, CaFCP released <u>The California Fuel Cell Revolution</u> , the vision and strategies to transition California's early-market launch success into a self-sustaining market. Executive Board members will identify consensus priorities and initiate CaFCP member-led teams to create a three-year plan for CaFCP to achieve the first milestones in the 2030 vision of 1,000 stations and 1 million vehicles.
30 minutes 10:00am–10:30am	Break
90 minutes 10:30am-12:00pm	3. Activating the Market The right mix of a supportive policy environment and private investment can lead to scale, cost reductions, and a self-sustaining market. Speakers will highlight actions to build market confidence and expand private investments for large-scale deployment, and the Board will determine priorities and milestones for the CaFCP planning team going forward.
60 minutes 12:00pm–1:00pm	Lunch
60 minutes 1:00pm-2:00pm	4. Large-scale Hydrogen Production The Revolution outlines the need to have hydrogen infrastructure lead vehicle deployment, including dedicated hydrogen production for transportation use. Market-based mechanisms that reward renewable hydrogen production and enable grid and utility asset integration can hasten scale and increase value to transportation and energy markets. As speakers identify opportunities and challenges the Board will provide guidance on CaFCP priorities and action.



60 minutes

2:00pm-3:00pm

5. Hydrogen Network Buildout

The timing, placement and capabilities of hydrogen stations for light-, medium-, and heavy-duty vehicles is essential to build and maintain consumer demand. Developers and funders need to create a compelling value proposition to buyers while building out the network as efficiently and effectively as possible. Speakers will talk about lessons learned from the current network and what more is needed to create a compelling value proposition while achieving the milestones and goals found in the Revolution document.

30 minutes

3:00pm-3:30pm

Break

45 minutes

3:30pm-4:15pm CaFCP Executive Board members

6. Three-Year CaFCP Program Plan

Since its inception in 2009, CaFCP has worked on an annual program plan and budget. The Steering Team proposes moving to a three-year plan to better accomplish the 2030 vision. The Board will discuss and decide the merits of a three-year program plan and budget to achieve the first milestones of the 2030 vision.

30 minutes

4:15pm-4:45pm B Elrick, Executive Director

7. CaFCP Executive Board Business Meeting

- July 19 meeting decisions and assignments
- New member proposals
- 2019 CaFCP meeting dates (April is CaFCP's 20th anniversary)
- 2019 CaFCP vice chair
- 2019 Program Plan and Budget
- Public comment period

15 minutes

4:45pm-5:00pm Dr. Mohrdieck, CaFCP Chair

8. Closing remarks

ANTITRUST GUIDELINES

It is the express intent of the CaFCP and its Members that none of the CaFCP's activities 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 the antitrust laws. To the extent possible, the Members of the CaFCP 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 in April 2000 ("Antitrust Guidelines"). The Antitrust Guidelines are available for reference on the CaFCP's Member resources website. The Antitrust Guidelines will be referenced in advance of the CaFCP meetings.

CAFCP MONTHLY REPORT APR 2018



	EVENTS/ACTIVITIES Staff Lead: J Contreras		
UPCOMING			
May 9	CEC ARFVTP Business Meeting ride and drive		
May 9	Alt Car Expo		
May 14	CEC workshop re charging and hydrogen fueling infrastructure		
May 17	CARB 50th Anniversary Technology Symposium and Showcase		
June 20	CaFCP Working Group, Sacramento		
TBD	Mountain View hydrogen station ribbon cutting		
RECENT			
Apr 10–11	CaFCP Executive Board/Steering Team meeting, SoCal – SCAQMD		
Apr 19-21	Shell's Make the Future California, Sonoma Raceway		
Apr 14	FCEV driver educational event at Caltech, Pasadena, CA		
April 23	U.S. Energy Policy A Regional Project for Europe Delegation Visitors		
April	Shenzhen Chinese Delegation Visitors and MOU		
Apr 28	Woodside/Portola Valley Earth Day Event		
April 28	Thousand Oaks Earth Day		
Apr 30-May 4	ACT Expo, Long Beach, CA		

SECTOR GROUPS

AUTOMOTIVE GROUP | Member Lead: M McClory | Staff Lead: B Xiong

- Ben Xiong is the new CaFCP staff group lead.
- The group met to discuss CaFCP's proposal to integrate capacity into the SOSS status logic. The group was in favor of the general approach but wanted more discussion on the criteria.

GOVERNMENT GROUP | Member Lead: G Vacin | Staff Lead: B Xiong

• GO-Biz led ongoing Station Confirmation Group calls to coordinate efforts to bring the next group of funded hydrogen stations to Open-Retail. OEMs completed confirmation testing and Ontario CNG Station's Ontario station came online as the 34th Open-Retail station in the network. Group

- members continued discussions on a potential pathway to bring the Newport Beach and Cal State LA stations onto SOSS under a proposed "Open Limited Performance Retail Station" category.
- GO-Biz led monthly Hydrogen Coordination meeting with CARB and CEC to discuss current challenges and ensure ongoing communication and alignment between the agencies.
- GO-Biz and CARB attended a meeting with the City of Rancho Palos Verdes Planning Department and Air Products to discuss the proposed hydrogen station permit application questions and identity an outreach plan to help build community awareness and support.

STATION DEVELOPER/OPERATOR GROUP | Member Lead: A Harris | Staff Lead: B Xiong

• Ben Xiong is the new CaFCP staff lead for this group.

MHD GROUP (FCET & FCEB) | Member Lead: N Berry | Staff Lead: K Malone

- CARB hosted an April 4 Advanced Clean Trucks Sub Group meeting. The following includes a few of many observations.
 - Established truck OEMs offered input that a) timelines are unclear; b) codes and standards are a concern, including considerations of bringing vehicle technology from elsewhere in the world to the U.S. market; c) California does not make a market, and d) a sustainable business case is most important, with support for vehicle operators/customers
 - All established truck OEMs are cautiously optimistic about fuel cell technology, but refer to high cost and significant need for R&D to develop technology for trucks

PROJECT TEAMS

SAFETY CODES & STANDARDS | Member Lead: A Harris | Staff Lead: J Hamilton

- CSA HGV 4.3: meetings to commence for the completion of a document to harmonize with the 2016 SAE J2601.
- NFPA 2 and 55: Public comments for both NFPA 2 and NFPA 55 closed May 9. Two separate second draft meetings are to be held, one for NFPA 55 and the other for NFPA 2. The NFPA 55 meeting is tentatively scheduled for July 24 and 25, and the NFPA 2 meeting is scheduled for August 13-17. (https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=2&tab=nextedition)
- **IFC**: 2018 version is currently in effect and in the process of being adopted by the CA Office of the State Fire Marshal; hearings for 2021 version were held in April.



• ISO/TC 197: See attached Liaison Report from CGA. n_Report_2018-04-2

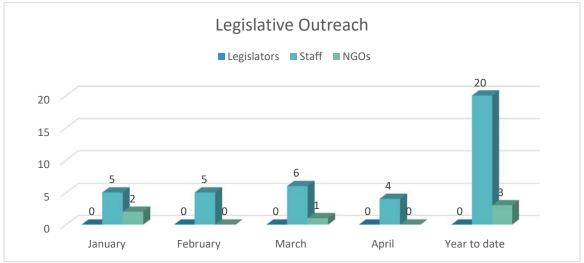
- WG 24: ISO DIS 19880-1 Gaseous hydrogen Fueling stations Part 1: General requirements — March 28 meeting to determine the U.S. position and comments resulted in "Approve with Comment"
- In person meeting: July 10th-12th, 2018 at Shell Deutschland Oil GmbH Hamburg,
 Germany to address comments from the recent ballot.
- **ASTM D03.14 Subcommittee on Hydrogen and Fuel Cells**: Inter Laboratory Studies for two ASTM methods: FTIR method, (ILS #851 for ASTM D7653-2010) and Continuous Wave Cavity Ring- Down method (ILS #1121 for ASTM D7941) needs Air Gas to prepare the samples and send out to labs.
 - o Preparing for the in person meeting June 26th in Pheonix, AZ.
- SAE J2600 Compressed Hydrogen Surface Vehicle Fueling Connection Devices: Document open for revision, N Bouwkamp sponsor. Accepting technical proposals for revision of document
- SAE J2601 Fueling Protocols for Light Duty and Medium Duty Gaseous Hydrogen Surface Vehicles: under revision; June 5-6 in-person meeting in Torrance.
- SAE J2601-4 Ambient Temperature Fixed Orifice Fueling: document under development; all comments due October 2018.
- SAE J2579 Standard for Fuel Systems in Fuel Cell and Other Hydrogen Vehicles: goal is to publish the 2018 version prior to the next GTR 13 meeting in June.

ROADMAP 2.0 | Member Lead: M Forrest | Staff Lead: C White/B Elrick

Roadmap is undergoing final edits with steering team before final board presentation for approval.

GOVERNMENT AFFAIRS | Member Lead: S Baker | Staff Lead: K Malone

- Meetings with district offices of Assembly Member Chris Holden (D-Pasadena) State Senator Connie Leyva (D-Chino). Met with policy aide to Long Beach Council Member Dee Andrews to talk about FCEVs, the Long Beach port, etc.
- CaFCP frequently receives emails via our info@ address inquiring about station locations throughout California. All are encouraged to reach out to their state legislators.



OUTREACH/EDUCATION | Member Lead: L Renz | Staff Lead: K Malone/ Juan Contreras

- Mountain View ribbon cutting postponed.
- Discussions will be necessary with station developers regarding possible celebration of Ontario and the best way to celebrate upgrades of Burbank, Newport Beach and, eventually, Emeryville.

HYPPO REPORT | Member Lead: A Harris | Staff Lead: B Elrick / B Xiong

• Bill Elrick and Ben Xiong are new co-leads of this group.

SOSS | Member Lead: J Birdsall | Staff Lead: B Xiong

- SOSS home page updated to show open hours for stations with limited hours of operation.
- SOSS home page updated to show a hollow, gray box when stations with limited hours are closed for operation.
- Ontario added to SOSS

H2 MARKET ACTIVATION | Member Lead: W Leighty | Staff Lead: Bill Elrick

- ARB board accepted the hydrogen proposal at April 27th LCFS meeting. Presentations were well received. ARB staff are now tasked with preparing details and prepping for final confirmation/addition during the fall ARB board meeting.
- Priority activities and areas of discussion to possibly pursue include:
 - Identifying cost per kw for electricity (electrolysis and compressors)
 - o Consumer mechanisms, e.g. fuel rebate
 - Station performance (to confirm station capabilities)

CAFCP MONTHLY REPORT MAY 2018



	EVENTS/ACTIVITIES Staff Lead: J Contreras		
UPCOMING			
June 13	CARB Innovative Clean Transit		
June 15	CARB AQIP/GGRF 2018/2019 funding		
June 20	2018 Roadmap 11: Test Drive the Future Conference,		
June 20	CaFCP Working Group		
July 10-12	Semicon West		
September 12-14	Global Climate Action Summit		
September 24-27	Hydrogen + Fuel Cells NORTH AMERICA		
RECENT			
May 9	CEC ARFVTP Business Meeting ride and drive		
May 9	Alt Car Expo		
May 14	CEC workshop re charging and hydrogen fueling infrastructure		
May 17	CARB 50th Anniversary Technology Symposium and Showcase		
May 9	CEC ARFVTP Business Meeting ride and drive		
May 9	Alt Car Expo		
May 14	CEC workshop re charging and hydrogen fueling infrastructure		
May 17	CARB 50th Anniversary Technology Symposium and Showcase		

SECTOR GROUPS

AUTOMOTIVE GROUP | Member Lead: M McClory | Staff Lead: B Xiong

- The OEM group met to discuss developing an updated hydrogen priority list. OEMs have began sending in their lists to be aggregated and then prioritized.
- The OEM group agreed to list Newport Beach on SOSS under the Open-retail category with a note to alert customers of its limited performance versus creating a new category.

GOVERNMENT GROUP | Member Lead: G Vacin | Staff Lead: B Xiong

- GO-Biz led ongoing Station Confirmation Group calls to coordinate efforts to bring the next group of funded hydrogen stations to Open-Retail.
- The Newport Beach station completed upgrade to become the 35th Open-Retail station. The group agreed to list Newport Beach on SOSS under the Open-retail category with a note to alert customers of its limited performance versus creating a new category.
- GO-Biz led monthly Hydrogen Coordination meeting with CARB and CEC to discuss current challenges and ensure ongoing communication and alignment between the agencies.

STATION DEVELOPER/OPERATOR GROUP | Member Lead: A Harris | Staff Lead: B Xiong

- The group met to discuss SOSS as it aligns to future station development activities. The group agreed on the following items:
 - Remove disclaimer notes about station operating hours
 - Not time to show price yet
 - o Do not use capacity in LIMITED logic
 - Update Station Map default display to only show Open stations
 - Do not update how capacity is displayed on SOSS; leave as-is
- Additional SDOs (Stratos Fuel) were granted access to add notes to their stations.
- SOSS stickers have been sent out to SDOs requesting to add the stickers to their stations
- The group discussed polling customers on how they want to be notified when a station is closed. Do they want a SOSS alert (email/SMS) if it closes and when it reopens?

MHD GROUP (FCET & FCEB) | Member Lead: N Berry | Staff Lead: K Malone

- CARB hosted a June 1 Advanced Clean Trucks Sub Group meeting. The following includes a few of many observations.
 - Established truck OEMs offered input that current offering of meeting customer needs makes it challenging to identify truck vocations and platform that may be best to start with in meeting California customer demands for electrified power trains and be able to reduce cost.
 - Established truck OEMs continue to be cautiously optimistic about fuel cell technology.
 Infrastructure for both electric and H2 fueling are identified as challenging, particularly for larger fleets.
 - CARB is working on developing a truck TCO model for internal zero-emission truck regulatory decision making.
 - Hydrogen and fuel cells for truck input from industry needs more involvement, due to current focus of CARB staff.

PROJECT TEAMS

SAFETY CODES & STANDARDS | Member Lead: A Harris | Staff Lead: J Hamilton

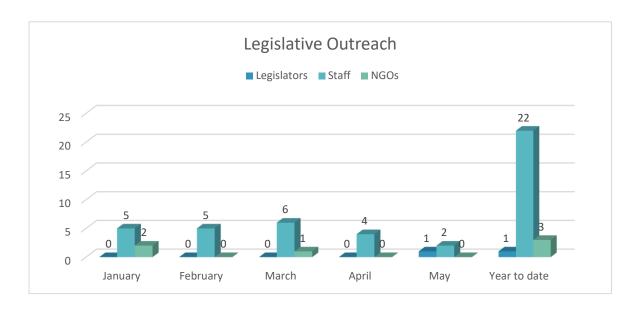
- **CSA HGV 4.3:** No updates.
- NFPA 2 and 55: No updates.
- IFC: No Updates.
- ISO/TC 197: No updates.
 - o WG 24: No updates.
- ASTM D03.14 Subcommittee on Hydrogen and Fuel Cells: No updates.
- SAE J2600 Compressed Hydrogen Surface Vehicle Fueling Connection Devices:
- Document open for revision, N Bouwkamp sponsor. Received significant number of revision proposals, with most proposals focusing on aligning document with ISO 17268. Increased engagement from H2 nozzle manufacturers.
- SAE J2601 Fueling Protocols for Light Duty and Medium Duty Gaseous Hydrogen Surface Vehicles:
 No updates.
- SAE J2601-4 Ambient Temperature Fixed Orifice Fueling: No updates.
- SAE J2579 Standard for Fuel Systems in Fuel Cell and Other Hydrogen Vehicles: No updates.

ROADMAP 2.0 | Member Lead: M Forrest | Staff Lead: C White/B Elrick

Draft presented to Board and Steering Team, with acceptance of general direction and content.
 Additional feedback taken and to be incorporated before final draft 'locked down' to enable document design finalization. Anticipated release July.

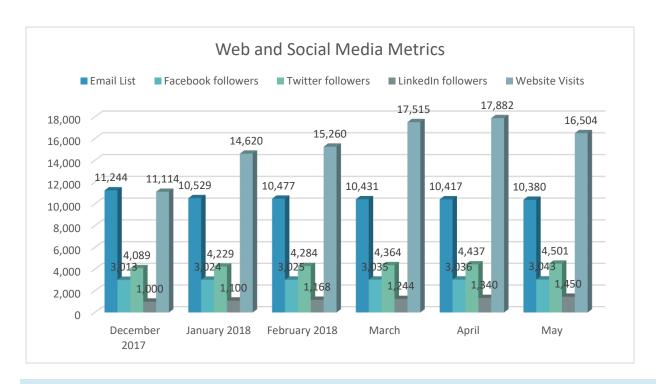
GOVERNMENT AFFAIRS | Member Lead: S Baker | Staff Lead: K Malone

- Assembly Speaker Rendon requested a briefing on FCEVs and H2 from Keith. A call was scheduled but did not take place. A sit-down briefing will eventually take place in the district office.
- Briefed staff to Long Beach city council member.
- Developing new "2 pager" overview of 2030 Vision and near-term needs, used as talking points in legislative outreach supporting Gov Brown's EO and 2018 budget request.



OUTREACH/EDUCATION | Member Lead: L Renz | Staff Lead: K Malone/ Juan Contreras

- Mountain View ribbon cutting postponed.
- Discussions will be necessary with station developers regarding possible celebration of Ontario and the best way to possibly celebrate upgrades of Burbank, Newport Beach and, eventually, Emeryville.
- Submitted 3 proposals to Governor's Global Climate Action Summit, all accepted. Working with Hydrogen Council, GO Biz and stakeholders on implementation details.



HYPPO REPORT | Member Lead: A Harris | Staff Lead: B Elrick / B Xiong

• Bill Elrick and Ben Xiong are new co-leads of this group.

SOSS | Member Lead: vacant | Staff Lead: B Xiong

- Newport Beach added to Open-retail
- Additional SDOs (Stratos Fuel) granted access to add messages to SOSS
- Proposal for using capacity to determine a LIMITED state was reviewed by SDO group. The group
 prefers not to use capacity as part of the LIMITED logic.
- Additional backend development work was done to speed up the load time of the SOSS homepage
- The XML feature is in beta mode. Internal testing is in process. SDOs will soon be able to test the XML feature.

H2 MARKET ACTIVATION | Member Lead: W Leighty | Staff Lead: Bill Elrick

- ARB board approved concept of new hydrogen LCFS proposal (based upon station capacity); group activities focused on developing consensus feedback and support for ARB staff in moving forward.
 Next step is ARB's mid-June 15-day notice.
- Participated in May 14th CEC GFO workshop. Reviewing previous CEC solicitation feedback, preparing for pending CEC GFO workshops.
- Provided feedback to Vision 2030 document and SOSS activities.

CaFCP MONTHLY REPORT



EVENTS/ACTIVIT	TIES Staff Lead: J Contreras
UPCOMING	
June 7-8	CPUC Forum on Electric Rates, San Francisco (B. Elrick)
June 12-15	DOE Annual Merit Review, Washington, D.C. (Tech Team)
June 13	CARB Innovative Celan Transit Workshop (Tech Team)
June 15	CARB AQIP/GGRF2018/2019 Funding Mtg. (Tech Team)
June 20	CaFCP In-Person WG
RECENT	
April 30	Briefing for Senator Leyva's, Chino (K. Malone)
April 30 – May 4	ACT Expo, Long Beach (K. Malone)
May 3	CaFCP MD/HD Facilitated Workshop, Long Beach (N. Bouwkamp and K. Malone)
May 4	Roundtable discussion: Bringing Zero-Emission Infrastructure Technology Manufacturing to California, Long Beach (K. Malone)
May 9	FCEV ARFVTP Business Mtg. Ride and Drive (J. Contreras)
May 10	CaFCP ST Phone Mtg (B. Elrick)
May 17	CARB 50 th Anniversary Technology Symposium and Showcase, Riverside (K. Malone)
May 24	Norwegian Delegation Financial Sector Group, CaFCP HQ (J. Contreras and B. Elrick)

SECTOR GROUPS

AUTOMOTIVE GROUP | Member Lead: M McClory | Staff Lead: B Xiong

• The group met to discuss putting together a new hydrogen station location list. OEMs have begun sending their list to CaFCP to aggregate.

GOVERNMENT GROUP | Member Lead: G Vacin | Staff Lead: B Xiong

- GO-Biz led ongoing Station Confirmation Group calls to coordinate efforts to bring the next group of funded hydrogen stations to Open-Retail. OEMs completed confirmation testing and Newport Beach Station came online as the 35th Open-Retail station in the network.
- GO-Biz led monthly Hydrogen Coordination meeting with CARB and CEC to discuss current challenges and ensure ongoing communication and alignment between the agencies.

STATION DEVELOPER/OPERATOR GROUP | Member Lead: A Harris | Staff Lead: B Xiong

 Staff are developing a survey of drivers regarding preferences in station payment options and performance at the request of a member. Results will be shared among all members.

MHD GROUP (FCET & FCEB) | Member Lead: N Berry | Staff Lead: K Malone

- Staff attended CARB Innovative Clean Transit Workshop on June 13.
- Supporting CTE to spread the word about the American Zero Emission Bus Conference at LA Metro's headquarters, September 10-11.

PROJECT TEAMS

SAFETY CODES & STANDARDS | Member Lead: A Harris | Staff Lead: J Hamilton

- CSA Group:
 - CSA HGV 4.3: Web ex meeting held June 27th; draft nearly completed; reviewed draft which includes testing for the MC Formula method; moving in the direction of doing tests at the factory/pre-installation; draft for ballot in the coming weeks.
 - CSA HGV 4.1 and 4.9: J. Hamilton leading a task force to address conflicts and harmonization of the dispenser document (HGV 4.1) and the station document (HGV 4.9).
 - Working with CSA Group and Natural Resources Canada for California to host the second Hydrogen Forum on a North American C&S Roadmap
 - A. Harris and J. Hamilton chair and vice-chair of the Hydrogen Transportation Technical Committee
- NFPA 2 and 55: NFPA 55 and NFPA 2 draft meetings coming in July and August, respectively.
 - NFPA 2 First Responder Task Force (J. Hamilton, lead) is working to develop (a) proposal(s) to
 PHMSA for changes to the DOT Emergency Response Guide for hydrogen
- IFC: No Updates.
- ISO/TC 197:
 - WG 24: ISO/DIS 19880-1, Gaseous hydrogen Fueling stations Part 1: General requirements- Draft International Standard (DIS) out for comment; meeting to be held in July in Hamburg, Germany to address co
 - o WG 27: Hydrogen Fuel Quality- ISO 14687 DIS has been registered
 - When this document is published, SAE J2719 (Fuel Quality) will be opened for revision to harmonize with 14687

- o WG 28: Hydrogen Quality Control- ISO 19880-8 to be published late 2018
- JWG 7: Analytical methods for hydrogen fuel Proton exchange membrane (PEM) fuel cell applications for road vehicles-ISO 21087 the DIS is in ballot comments due by July 9th. The ASTM D03 committee has opportunity to submit comments through the D03.14 vice chair, Christina Daniels.
- **ASTM D03.14 Subcommittee on Hydrogen and Fuel Cells**: Held in person meeting June 26 (D03 Main meeting June 27)
 - Creating two collaboration committees for D7650 Sampling of Particulate Matter in High
 Pressure Hydrogen and D7652 Sulfur Compounds in Hydrogen Fuel by GC-SCD documents
 - Withdraw of Work Item 48876 Weight of Hydrogen Fuel Dispensed from Hydrogen Fueling Station due to it being out of scope for the committee
 - o Samples for ILS 861 (FTIR) and 1121 (Cavity Ring Down) are being generated
 - Proposed two workshops for future meetings: Hydrogen Fuel Sampling and Analysis and Workshop on In-Line Analyzers
 - o Introduced the idea of a cleaning standard for fueling stations (CGA not taking that on, as previously thought)

SAE International:

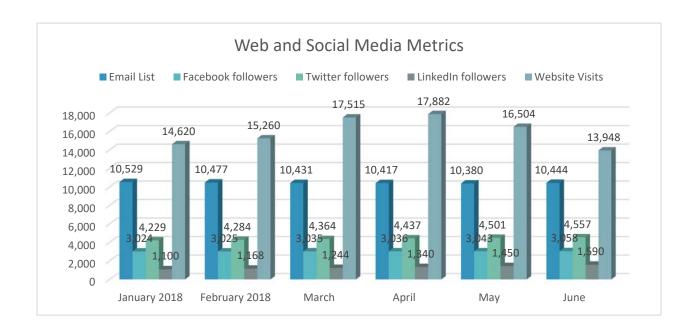
- SAE J2600 Compressed Hydrogen Surface Vehicle Fueling Connection Devices: Document open for revision, N Bouwkamp sponsor. Received significant number of revision proposals, as presented at June SAE meetings, with most proposals focusing on aligning document with ISO 17268. Increased engagement from H2 nozzle manufacturers.
- SAE J2601 Fueling Protocols for Light Duty and Medium Duty Gaseous Hydrogen Surface Vehicles: Document discussed during FC Interface Task Force in person meetings held in Torrance June 5-6;
- SAE J2601-4 Ambient Temperature Fixed Orifice Fueling: Document discussed during FC Interface Task Force in person meeting held in Torrance June 5-6
- SAE J2579 Standard for Fuel Systems in Fuel Cell and Other Hydrogen Vehicles: 2018 version published in June
- FCHEA Regulatory Matrix (as of April): http://www.hydrogenandfuelcellsafety.info/s/FCHEA-Regulatory-Matrix-markup-March-31- 2018.pdf

ROADMAP 2.0 | Member Lead: M Forrest | Staff Lead: B Elrick

Draft presented to Board and Steering Team, with acceptance of direction and content. Additional
feedback taken and to be incorporated before final draft 'locked down' to enable document design
finalization. Design group engaged to develop final product that matches content. Anticipated
release mid-July.

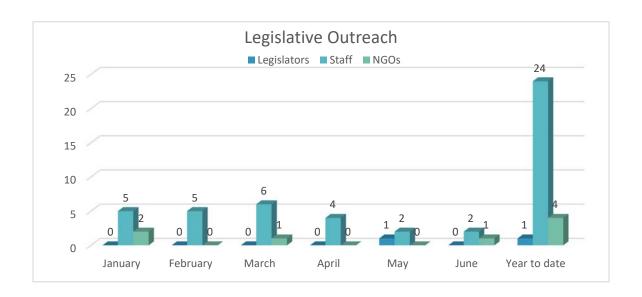
OUTREACH/EDUCATION | Member Lead: L Renz | Staff Lead: K Malone/ Juan Contreras

- CaFCP moderated a fuel cell panel at Sustain OC's 5th Annual Advanced Transportation Symposium.
- Initiated outreach plan for pending 2030 Vision document.



GOVERNMENT AFFAIRS | Member Lead: S Baker | Staff Lead: K Malone

- Briefed district staff of Assembly Member Blanca Rubio (D-Covina). Briefed staff of State Senator Anthony Portantino (D-Glendale) and toured La Canada and Cal State LA stations.
- Lunch meeting with Cody Rosenfield of Coalition for Clean Air. Discussed possible CaFCP membership.
- Coordinated with CHBC on Capital education regarding Governor Brown's proposed ZEV budget.
- Note: this section does not include activity conducted by CaFCP legislative consultant Teresa Cooke.



HYPPO REPORT | Member Lead: A Harris | Staff Lead: B Elrick / B Xiong

• Revaluating need after many of the identified items have been addressed via AB8 et al.

SOSS | MEMBER LEAD: J BIRDSALL | STAFF LEAD: B XIONG

Newport Beach added to SOSS

H2 MARKET ACTIVATION | Member Lead: W Leighty | Staff Lead: Bill Elrick

- CaFCP staff and members gave input to CARB at the Low Carbon Fuel Standard workshop, where the new hydrogen pathway was discussed.
- CaFCP staff and members presented and participated in the PUC's Zero-Emission Vehicle Rate Design Forum, and discussed follow up opportunities with PUC and several.
- CaFCP staff and members attended CEC staff workshop on a Hydrogen Station Capacity Model (HyC). Continue providing feedback to both Vision 2030 document and SOSS activities.



EVENTS/ACTIVITIES Staff Lead: J Contreras		
UPCOMING		
July 9-12	Semicon West, San Francisco	
July 31 – August 2	NCLS – National Conference of State Legislatures, Los Angeles (K. Malone)	
August 1	CaFCP Legislative Outreach Event, Sacramento, CA (K. Malone, B. Xiong, L. So)	
August 9	Visit California Hwy 1 Re-Opening Rally Event, CA (J. Contreras, B. Elrick and K. Malone)	
August 10	DOE deadline for stakeholder input re regulatory barriers	
August 12-17	NFPA 2, Quincy, MA (J. Hamilton)	
August 30	CARB AB 8 Webinar, CaFCP HQ (A. Martinez)	
RECENT		
June 7-8	CPUC Forum on Electric Rates, San Francisco (B. Elrick)	
June 12 – 15	DOE Annual Merit Review	
June 13	CARB Innovative Clean Transit Workshop	
June 15	CARB AQIP/GGRF 2018/2019 funding	
June 20	CaFCP in-person Working Group meeting	

SECTOR GROUPS

AUTOMOTIVE GROUP | Member Lead: M McClory | Staff Lead: B Xiong

• Most activity of this group has taken place within the Market Activation Group for the time being.

GOVERNMENT GROUP | Member Lead: G Vacin | Staff Lead: B Xiong

- GO-Biz led ongoing Station Confirmation Group calls to coordinate efforts to bring the next group of funded hydrogen stations to Open-Retail. OEMs completed confirmation testing and Newport Beach Station came online as the 35th Open-Retail station in the network.
- GO-Biz led monthly Hydrogen Coordination meeting with CARB and CEC to discuss current challenges and ensure ongoing communication and alignment between the agencies.

STATION DEVELOPER/OPERATOR GROUP | Member Lead: A Harris | Staff Lead: B Xiong

 Staff are developing a survey of drivers regarding preferences in station payment options and performance at the request of a member. Results will be shared among all members.

MHD GROUP (FCET & FCEB) | Member Lead: N Berry | Staff Lead: K Malone

- Staff participated in CARB's Work Group Meeting for Updates to the Heavy-Duty Three-Year
 Investment Strategy on July 19. Provided comments about need for dedicated funding of HD H2
 fueling infrastructure and HD ZEV codes & standards development (SAE, ISO, etc).
- Staff participated in US DOE FCTO's "End Use Applications Fuel Cell Truck Powertrain R&D Activities and Target Review" industry workshop on July 30-31. Presentations from workshop are posted at: https://www.energy.gov/eere/fuelcells/fuel-cell-truck-powertrain-rd-activities-and-target-review-workshop-h2-scale-end-use

PROJECT TEAMS

SAFETY CODES & STANDARDS | Member Lead: A Harris | Staff Lead: J Hamilton

CSA Group:

- CSA HGV 4.3 (hydrogen fueling parameters) is an active project to develop the next edition. Industry review closed EOM, August for the draft document, and the TSC will meet to discuss comments.
- CHMC 2 (chemical compatibility for non-metals) is an active project to develop the first edition. The Technical Sub-Committee plans to send the draft standard for Industry/Public Review in early October, with the goal of publishing in late 2018/early 2019.
- HGV 4.1 (dispensers) is a new project to develop the next edition. The TSC will be meeting via WebEx, and then in person in October in San Antonio.
- o **HGV 4.9** (stations) is a new project to develop the next edition. The TSC will be meeting on September 19 via WebEx, and then in person in October in San Antonio.
- CSA Group U.S. Committee Week is planned for San Antonio, Texas, with the Hydrogen Transportation Technical Committee meeting on the afternoon of October 16, HGV 4.9 (stations) TSC meeting on October 18 and HGV 4.1 (dispensers) TSC meeting on October 17.
- NFPA 2: Second draft meeting took place at NFPA headquarters in Qunicy, MA August 13-17. The TC resolved all comments and discussed how to move forward with the next version. The TC will hold a pre-first draft meeting in August of 2019 in an effort to avoid holding continuation meetings for the first draft, as was the case with this edition. The document revision cycle was discussed. Until further notice, NFPA 2 is on a three- year cycle (2023). Due to issues with document timing, the 2023 version of NFPA 2 will not extract from the 2023 NFPA 55.
 - o The "Permit Checklist" Task Force was discussed, as was the document proposed for annex material into NFPA 2. Outcome: the TF is updated with other members of the

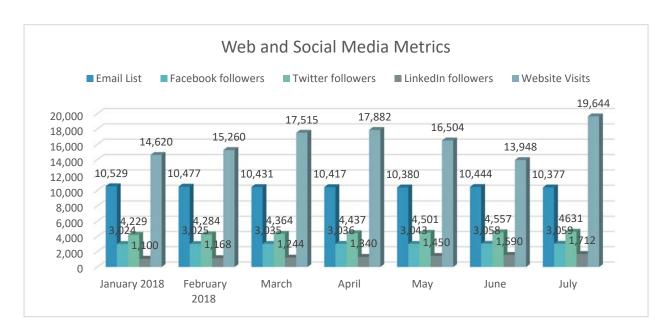
- NFPA 2 TC and will move forward developing material that will be posted onto NFPA web site, with a link in the NFPA 2 annex.
- NFPA 2 First Responder Task Force (J. Hamilton, lead) is working to develop (a)
 proposal(s) to PHMSA for changes to the DOT Emergency Response Guide for hydrogen
- NFPA 55: Second draft hearing July 24-25. NFPA 2 could not extract from the new version as it is not yet published.
- IFC: Hearing on second draft taking place in Richmond, VA in October (for the 2021 version)
- ISO/TC 197:
 - WG 24: ISO/DIS 19880-1, Gaseous hydrogen Fueling stations Part 1: General requirements- Draft International Standard (DIS) out for comment; meeting to be held in July in Hamburg, Germany to address comments
 - o WG 27: Hydrogen Fuel Quality- ISO 14687 DIS has been registered
 - When this document is published, SAE J2719 (Fuel Quality) will be opened for revision to harmonize with 14687
 - o WG 28: Hydrogen Quality Control- ISO 19880-8 to be published late 2018
 - o **JWG 7:** Analytical methods for hydrogen fuel Proton exchange membrane (PEM) fuel cell applications for road vehicles-ISO 21087 the DIS is in ballot comments due by July 9th.
- ASTM D03.14 Subcommittee on Hydrogen and Fuel Cells:
 - Samples for ILS 861 (FTIR) and 1121 (Cavity Ring Down) are being generated
- SAE International:
 - SAE J2600 Compressed Hydrogen Surface Vehicle Fueling Connection Devices: Document open for revision, N Bouwkamp sponsor. Received significant number of revision proposals, as presented at June SAE meetings, with most proposals focusing on aligning document with ISO 17268. Increased engagement from H2 nozzle manufacturers.
 - SAE J2601 Fueling Protocols for Light Duty and Medium Duty Gaseous Hydrogen Surface Vehicles: Document being revised; to be discussed at upcoming in person meeting in September (Troy, MI)
 - SAE J2601-4 Ambient Temperature Fixed Orifice Fueling: in process; regular meetings held with the Task Force; to be discussed at the upcoming in person meeting in September (Troy, MI)
 - SAE J2579 Standard for Fuel Systems in Fuel Cell and Other Hydrogen Vehicles: 2018 version published (in June)
 - FCHEA Regulatory Matrix (as of June 30):
 https://static1.squarespace.com/static/53ab1feee4b0bef0179a1563/t/5b47bf02758d467d3e3e
 https://static1.squarespace.com/static/53ab1feee4b0bef0179a1563/t/5b47bf02758d467d3e3e
 https://static1.squarespace.com/static/53ab1feee4b0bef0179a1563/t/5b47bf02758d467d3e3e
 <a href="https://static1.squarespace.com/static/53ab1feee4b0bef0179a1563/t/5b47bf02758d467d3e3e]
 <a href="https://static1.squarespace.com/static/53ab1feee4b0bef0179a1563/t/5b47bf02758d467d3e3e]
 <a href="https://static1.squarespace.com/static/53ab1feee4b0bef0179a1563/t/5b47bf02758d467d3e3e]
 <a href="https://static1.squarespace.com/static/53ab1feee4b0bef0179a1563/t/5b47bf02758d467d3e3e]
 <a href="https://static1.squarespace.com/static1.squares

ROADMAP 2.0 | Member Lead: M Forrest | Staff Lead: B Elrick

 Draft presented to Board and Steering Team, with acceptance of direction and content. Additional feedback taken and to be incorporated before final draft 'locked down' to enable document design finalization. Design group engaged to develop final product that matches content. Anticipated release mid-July.

OUTREACH/EDUCATION | Member Lead: L Renz | Staff Lead: K Malone/ Juan Contreras

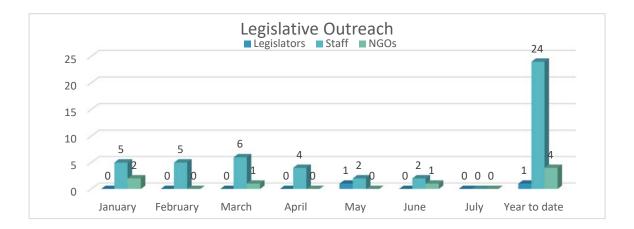
- Quarter webinar regarding station status in California.
- Participated in Semicon West with Honda Clarity. Presented at Transportation Pavillion on the status of FCEVs.



GOVERNMENT AFFAIRS | Member Lead: S Baker | Staff Lead: K Malone

- Coordinated with CHBC on Capital education regarding Governor Brown's proposed ZEV budget.
- August 1 is set for Capitol briefing. Invitations were developed and are being distributed to legislative
 offices.
- Handouts are being developed for Capitol Briefing, including one document that identifies the three
 major pots of money (CPUC, Electrify America and ARVFTP) and which are available to battery electric
 and fuel cell electric vehicles.
- Staff participated in FCHEA's test drive opportunity at National Conference of State Legislatures in Los Angeles.

• Note: this section does not include activity conducted by CaFCP legislative consultant Teresa Cooke.



HYPPO REPORT | Member Lead: A Harris | Staff Lead: B Elrick / B Xiong

• Revaluating need after many of the identified items have been addressed via AB8 et al.

SOSS | MEMBER LEAD: J BIRDSALL | STAFF LEAD: B XIONG

• No group activity. CaFCP continues to maintain stations currently open.

H2 MARKET ACTIVATION | Member Lead: W Leighty | Staff Lead: Bill Elrick

• No report for this month.



EVENTS/ACTIVIT	TES Staff Lead: J Contreras
UPCOMING	
September 4-6	Pacific Oil Conference
September 10-11	U.S. Zero Emission Bus Conference, Los Angeles
September 11	California-Germany Bilateral Energy Conference
September 11-12	Removing Carbon, Increasing Equity and Maintaining Economic Prosperity
September 12-14	Global Climate Action Summit, San Francisco
September 24-27	Hydrogen + Fuel Cells NORTH AMERICA, Anaheim
RECENT	
July 9-12	Semicon West, San Francisco (J. Contreras, K. Malone and B. Xiong)
July 31 – August 2	NCLS – National Conference of State Legislatures, Los Angeles (K. Malone)
August 1	CaFCP Legislative Outreach Event, Sacramento (K. Malone, B. Xiong and L. So)
August 9	Visit California Hwy 1 Re-Opening Rally Event, Coast (B. Elrick, J. Contreras and K. Malone)
August 10	DOE Deadline for stakeholder input regarding regulatory barriers
August 12 – 17	NFPA 2, Quincy, MA (J. Hamilton)
August 30	CARB AB 8 Webinar, CaFCP HQ (A. Martinez)

SECTOR GROUPS

AUTOMOTIVE GROUP | Member Lead: M McClory | Staff Lead: B Xiong

• Most activity of this group has taken place within the Market Activation Group for the time being.

GOVERNMENT GROUP | Member Lead: G Vacin | Staff Lead: B Xiong

 GO-Biz led ongoing Station Confirmation Group calls to coordinate efforts to bring the next group of funded hydrogen stations to Open-Retail. OEMs completed confirmation testing and Newport Beach Station came online as the 35th Open-Retail station in the network. GO-Biz led monthly Hydrogen Coordination meeting with CARB and CEC to discuss current challenges and ensure ongoing communication and alignment between the agencies.

STATION DEVELOPER/OPERATOR GROUP | Member Lead: A Harris | Staff Lead: B Xiong

- Staff distributed a survey of drivers regarding preferences in station payment options and performance at the request of a member. Results Can be found on Member Resources.
 - Fuel Cell Driver Survey 2 pager summary (formatted for use in reports, etc.)
 http://cafcpmembers.org/system/files/documents/Fuel-Cell-Driver-Survey-2pg.pdf
 - Fuel Cell Driver Survey Summary
 http://cafcpmembers.org/system/files/documents/Summary-Fuel-Cell-Driver-Survey-Data All 20180817.pdf
 - FCEV Driver Survey Summary with responses
 http://cafcpmembers.org/system/files/documents/Summary-with-responses-FCEV-Driver-Survey-Data_All_20180817.pdf
 - FCEV Driver Survey Responses By Age
 http://cafcpmembers.org/system/files/documents/By-Age-FCEV-Driver-Survey-Data All 20180817.pdf

MHD GROUP (FCET & FCEB) | Member Lead: N Berry | Staff Lead: K Malone

- Staff participated in CARB's Work Group Meeting for Updates to the Heavy-Duty Three-Year
 Investment Strategy on July 19. Provided comments about need for dedicated funding of HD H2
 fueling infrastructure and HD ZEV codes & standards development (SAE, ISO, etc).
- Staff participated in US DOE FCTO's "End Use Applications Fuel Cell Truck Powertrain R&D Activities and Target Review" industry workshop on July 30-31. Presentations from workshop are posted at: https://www.energy.gov/eere/fuelcells/fuel-cell-truck-powertrain-rd-activities-and-target-review-workshop-h2-scale-end-use

PROJECT TEAMS

SAFETY CODES & STANDARDS | Member Lead: A Harris | Staff Lead: J Hamilton

- CSA Group:
 - CSA HGV 4.3 (hydrogen fueling parameters) is an active project to develop the next edition. Industry review closed EOM, August for the draft document, and the TSC will meet to discuss comments.
 - CHMC 2 (chemical compatibility for non-metals) is an active project to develop the first edition. The Technical Sub-Committee plans to send the draft standard for Industry/Public Review in early October, with the goal of publishing in late 2018/early 2019.

- o **HGV 4.1** (dispensers) is a new project to develop the next edition. The TSC will be meeting via WebEx, and then in person in October in San Antonio.
- o **HGV 4.9** (stations) is a new project to develop the next edition. The TSC will be meeting on September 19 via WebEx, and then in person in October in San Antonio.
- CSA Group U.S. Committee Week is planned for San Antonio, Texas, with the Hydrogen Transportation Technical Committee meeting on the afternoon of October 16, HGV 4.9 (stations) TSC meeting on October 18 and HGV 4.1 (dispensers) TSC meeting on October 17.
- NFPA 2: Second draft meeting took place at NFPA headquarters in Quincy, MA August 13-17. The TC resolved all comments and discussed how to move forward with the next version. The TC will hold a pre-first draft meeting in August of 2019 in an effort to avoid holding continuation meetings for the first draft, as was the case with this edition. The document revision cycle was discussed. Until further notice, NFPA 2 is on a three- year cycle (2023). Due to issues with document timing, the 2023 version of NFPA 2 will not extract from the 2023 NFPA 55.
 - The "Permit Checklist" Task Force was discussed, as was the document proposed for annex material into NFPA 2. Outcome: the TF is updated with other members of the NFPA 2 TC and will move forward developing material that will be posted onto NFPA web site, with a link in the NFPA 2 annex.
 - NFPA 2 First Responder Task Force (J. Hamilton, lead) is working to develop (a)
 proposal(s) to PHMSA for changes to the DOT Emergency Response Guide for hydrogen
- NFPA 55: Second draft hearing July 24-25. NFPA 2 could not extract from the new version as it is not yet published.
- IFC: Hearing on second draft taking place in Richmond, VA in October (for the 2021 version)
- ISO/TC 197:
 - WG 24: ISO/DIS 19880-1, Gaseous hydrogen Fueling stations Part 1: General requirements- Draft International Standard (DIS) out for comment; meeting to be held in July in Hamburg, Germany to address comments
 - o WG 27: Hydrogen Fuel Quality- ISO 14687 DIS has been registered
 - When this document is published, SAE J2719 (Fuel Quality) will be opened for revision to harmonize with 14687
 - o WG 28: Hydrogen Quality Control- ISO 19880-8 to be published late 2018
 - JWG 7: Analytical methods for hydrogen fuel Proton exchange membrane (PEM) fuel cell applications for road vehicles-ISO 21087 - the DIS is in ballot - comments due by July 9th.
- ASTM D03.14 Subcommittee on Hydrogen and Fuel Cells:
 - o Samples for ILS 861 (FTIR) and 1121 (Cavity Ring Down) are being generated
- SAE International:
 - SAE J2600 Compressed Hydrogen Surface Vehicle Fueling Connection Devices: Document open for revision, N Bouwkamp sponsor. Received significant number of revision proposals, as presented at June SAE meetings, with most proposals focusing on aligning document with ISO 17268. Increased engagement from H2 nozzle manufacturers.

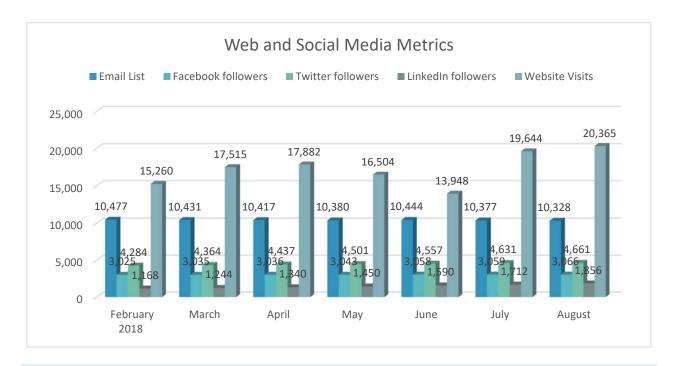
- SAE J2601 Fueling Protocols for Light Duty and Medium Duty Gaseous Hydrogen Surface Vehicles: Document being revised; to be discussed at upcoming in person meeting in September (Troy, MI)
- SAE J2601-4 Ambient Temperature Fixed Orifice Fueling: in process; regular meetings held with the Task Force; to be discussed at the upcoming in person meeting in September (Troy, MI)
- SAE J2579 Standard for Fuel Systems in Fuel Cell and Other Hydrogen Vehicles: 2018 version published (in June)
- FCHEA Regulatory Matrix (as of June 30):
 https://static1.squarespace.com/static/53ab1feee4b0bef0179a1563/t/5b47bf02758d467d3e3e
 bb9f/1531428610811/FCHEA+Regulatory+Matrix+markup+June+30+2018.pdf

ROADMAP 2.0 | Member Lead: M Forrest | Staff Lead: B Elrick

- Staff participated in US DOE H2@Scale meeting on August 1st and presented high-level overview of CaFCP's California Fuel Cell Revolution 2030 vision document.
- CARB publishes AB 8, referencing California Fuel Cell Revolution.
- CAFCP conducts member and public presentations of California Fuel Cell Revolution on August 23 and 28.

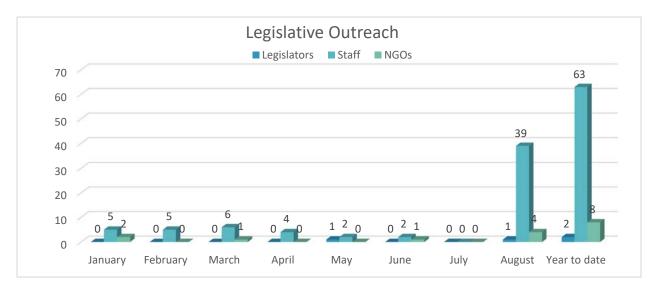
OUTREACH/EDUCATION | Member Lead: L Renz | Staff Lead: K Malone/ Juan Contreras

- Quarter webinar regarding station status in California. CaFCP participates in Visit California's Hwy 1
 Re-Opening Rally with a Honda Clarity and Toyota Mirai on August 9 with 80 journalists and 100
 cars of various decades. Keith Malone won the social media award.
- Initiated outreach plan for pending 2030 Vision document.
- Participated in Semicon West with Honda Clarity. Presented at Transportation on the status of FCEVs.



GOVERNMENT AFFAIRS | Member Lead: S Baker | Staff Lead: K Malone

- Attended Assembly Member Chris Holden's community block party with Toyota Mirai.
- Hosted Capitol briefing on August 1 on FCEVs. More 40 attended, with 37 staff from legislative offices, and other attendees from American Lung Association, CA Assn of Sanitation Agencies, New Vehicle Motor Board and Sempra.
- Handouts are being developed for Capitol Briefing, including one document that identifies the three
 major pots of money (CPUC, Electrify America and ARVFTP) and which are available to battery electric
 and fuel cell electric vehicles.
- Bill later met with Susan Reyes of State Senator Ed Hernandez's office as a follow up to the briefing.
- Bill and Keith met with Assembly Speaker Anthony Rendon and transportation aide Marie Liu.
- Note: this section does not include activity conducted by CaFCP legislative consultant Teresa Cooke.



HYPPO REPORT | Member Lead: A Harris | Staff Lead: B Elrick / B Xiong

• Revaluating need after many of the identified items have been addressed via AB8 et al.

SOSS | MEMBER LEAD: J BIRDSALL | STAFF LEAD: B XIONG

• No group activity. CaFCP continues to maintain stations currently open.

H2 MARKET ACTIVATION | Member Lead: W Leighty | Staff Lead: Bill Elrick

• No report for this month.



UPCOMING October 8 October 15-16	National Hydrogen Day Sacramento Clean Cities Workshop – Hydrogen 101 Tour
October 8	Sacramento Clean Cities Workshop – Hydrogen 101 Tour
	Sacramento Clean Cities Workshop – Hydrogen 101 Tour
October 15-16	Tour
	·
October 17	CaFCP Executive Board meeting, Sacramento
October 15-18	CSA Committee Week
October 24	Hyundai NEXO Test Drive Event for CEC, CARB and GO-Biz
November 29-December 9	LA Auto Show, Los Angeles
December 12	CaFCP Working Group, Sacramento
RECENT	
September 4-6	Pacific Fuels and Convenience Summit (formerly Pacific Oil Conference), Los Angeles
September 10-11	U.S. Zero Emission Bus Conference, Los Angeles
September 11	California-Germany Bilateral Energy Conference
September 11-12	Removing Carbon, Increasing Equity and Maintaining Economic Prosperity
September 12-14	Global Climate Action Summit, San Francisco
September 17	Japan H2 Mobility
September 19	Assn of Energy Engineers SoCal, Downey
September 24-27	Hydrogen + Fuel Cells NORTH AMERICA, Anaheim (including FCEV test drive & Air Liquide station tour
September 27-28	CARB Board Meeting, Sacramento
September 28	NESCAUM Event, Sacramento

SECTOR GROUPS

AUTOMOTIVE GROUP | Member Lead: M McClory | Staff Lead: B Xiong

Refer to Market Activation Group

GOVERNMENT GROUP | Member Lead: G Vacin | Staff Lead: B Xiong

 Outcome from the Station Confirmation Group included discussions to move Cal State LA, Woodside, Burbank, Emeryville and Palo Alto to open-retail status. Please refer to the Go-Biz SmartSheet for details.

STATION DEVELOPER/OPERATOR GROUP | Member Lead: A Harris | Staff Lead: B Xiong

 Keith and Juan hosted a booth Pacific Fuels and Convenience Summit (formerly Pacific Oil Conference) in Los Angeles to continue building bridges with the California Fuels and Convenience Association (formerly CIOMA) and its members.

MHD GROUP (FCET & FCEB) | Member Lead: N Berry | Staff Lead: K Malone

- Nico and Keith attended American Zero Emission Bus Conference at LA Metro's headquarters,
 September 10-11.
- Keith presented at CHBC FCEB Workshop on 11th. Staff is in discussion with Bus Team members about 2019 Bus Road Map in anticipation of passage of the CARB Advanced Clean Transit regulation that will likely pass in January 2019.
- Staff attended the CARB Board meeting on September 28, and during comment period for Innovative Clean Transit regulation topic provided contextual comments to warrant continued consideration of fuel cell electric bus technology as part of the solution.

PROJECT TEAMS

SAFETY CODES & STANDARDS | Member Lead: A Harris | Staff Lead: J Hamilton

CSA Group:

- CSA HGV 4.3 (hydrogen fueling parameters) is an active project to develop the next edition. Industry review has closed for the draft document, and the TSC will meet to discuss comments.
- CHMC 2 (chemical compatibility for non-metals) is an active project to develop the first edition. The Technical Sub-Committee plans to send the draft standard for Industry/Public Review in early October, with the goal of publishing in late 2018/early 2019.
- HGV 4.1 (dispensers) is a new project to develop the next edition. The TSC will be meeting on September 26 and October 3 via WebEx, and then in person in October in San Antonio.

- HGV 4.9 (stations) is a new project to develop the next edition. The TSC will be meeting on September 19 via WebEx, and then in person in October in San Antonio.
- CSA Group U.S. Committee Week is planned for San Antonio, Texas, with the Hydrogen Transportation Technical Committee meeting on the afternoon of October 16, HGV 4.9 (stations) TSC meeting on October 18 and HGV 4.1 (dispensers) TSC meeting on October 17.

NFPA 2

- NFPA 2 First Responder Task Force (J. Hamilton, lead) submitted proposal to PHMSA for informational material to be added to the 2020 DOT ERG on hydrogen vehicles. CGA led the effort for a submission to update guide 115 to remove hydrogen and deuterium and add a new guide for hydrogen and deuterium only
- IFC/CFC: Confirmed with the CA Office of the State Fire Marshal that the 2020 NFPA 2 (if published on schedule) will be adopted in the Intervening Code Cycle for the 2019 CA Fire Code

ISO/TC 197:

- WG 24: ISO/DIS 19880-1, Gaseous hydrogen Fueling stations Part 1: General requirements-. Working back comments from DIS. Hope to have them ready for the Plenary in December. Hope to get this to International Standard by 2019. WG 27: Hydrogen Fuel Quality-ISO 14687 DIS has been registered
 - When this document is published, SAE J2719 (Fuel Quality) will be opened for revision to harmonize with 14687 – proposed to open SAE J2719 in November, 2018
- o WG 28: Hydrogen Quality Control- ISO 19880-8 to be published late 2018
- O WG 27 and 28 are meeting on October 8th in Paris
- JWG 7: Analytical methods for hydrogen fuel Proton exchange membrane (PEM) fuel cell applications for road vehicles-ISO 21087 Meeting to address comments from the DIS to be held in Paris on October 8 -.
- ASTM D03.14 Subcommittee on Hydrogen and Fuel Cells: Held in person meeting June 26 (D03 Main meeting June 27)
 - Creating two collaboration committees for D7650 Sampling of Particulate Matter in High Pressure Hydrogen and D7652 Sulfur Compounds in Hydrogen Fuel by GC-SCD documents
 - Withdraw of Work Item 48876 Weight of Hydrogen Fuel Dispensed from Hydrogen Fueling Station due to it being out of scope for the committee
 - Samples for ILS 861 (FTIR) and 1121 (Cavity Ring Down) are being generated; ILS 1121 will have results to present at the December in person meeting
 - Proposed two workshops for future meetings: Hydrogen Fuel Sampling and Analysis and Workshop on In-Line Analyzers
 - Introduced the idea of a cleaning standard for fueling stations (CGA not taking that on, as previously thought)
 - o In person meeting December 12-13 in Atlanta.

SAE International:

In person meeting at SAE International HQ September 12-13

- SAE J2600 Compressed Hydrogen Surface Vehicle Fueling Connection Devices: Document open for revision, N Bouwkamp sponsor. Presented update on activities, focus continues to emphasize alignment with ISO 17268.
- SAE J2601 Fueling Protocols for Light Duty and Medium Duty Gaseous Hydrogen Surface Vehicles: Document discussed during FC Interface Task Force in person meetings held in Troy, MI Sept. 12-13; document publication date moved to June/July 2019 (approximately 3 months later than originally thought)
- SAE J2601-4 Ambient Temperature Fixed Orifice Fueling: Document discussed during FC Interface Task Force in person meeting held in Troy, MI Sept 12-13; looking for funding to support modeling efforts
- FCHEA Regulatory Matrix (as of June): http://www.fchea.org/s/FCHEA-Regulatory-Matrix-markup-June-30-2018.pdf

2030 VISION | Member Lead: M Forrest | Staff Lead: B Elrick

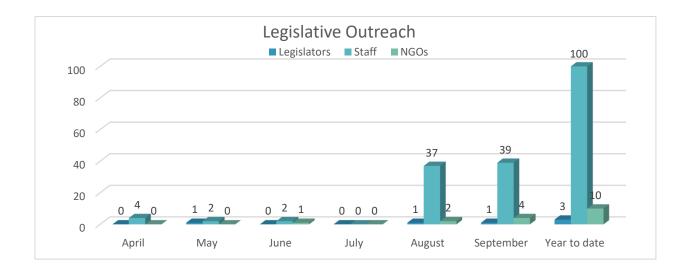
- California Fuel Cell Revolution continues to be referenced and insinuated in all CaFCP public
 activities. Members can access *The California Fuel Cell Revolution* slide deck on Member resources
 (http://cafcpmembers.org/system/files/documents/CAFCR_Vision2030-Presentation-Final.zip)
- Steering team discussed developing small teams to lead development of strawman implementation
 plans for achieving the 2030 vision, focusing on the greatest priorities of market commercialization.
 This will be integrated into the agenda and discussed during the Oct 17 executive board meeting.
 This info is being considered as the input into developing a more robust and bolder 3-year CaFCP
 program plan to activate the market and achieve the 2030 vision.

OUTREACH/EDUCATION | Member Lead: L Renz | Staff Lead: K Malone/ Juan Contreras

- Bill attended Governor's Global Climate Action Summit. During the activities, he signed MOU with Shenzen Province, China.]
- Keith attended the Association of Energy Engineers SoCal annual conference, in support of Steve
 Jones' presentation regarding hydrogen and fuel cell electric vehicles. On static display was a Toyota
 Mirai and Honda Clarity.
- Nico presented CaFCP perspective on FCEBs in California to transit industry representatives from the Netherlands.
- Staff helped organized panel discussions with CHBC at the Hydrogen + Fuel Cells NORTH AMERICA conference in Anaheim, in tandem with Solar Power International.

GOVERNMENT AFFAIRS | Member Lead: S Baker | Staff Lead: K Malone

- Alerted staff of State Senator Connie Leyva and Assembly Member Freddie Rodriguez of the strong likelihood of a heavy-duty hydrogen station in their districts (Ontario) after Port of LA/Toyota/Kenworth/Shell truck announcement. He has briefed both offices in the last year; these announcements provide opportunities to engage staff and answer questions.
- Note: this section does not include activity conducted by CaFCP legislative consultant Teresa Cooke.



SOSS | MEMBER LEAD: J BIRDSALL | STAFF LEAD: B XIONG

- Newport Beach added to SOSS
- Discussions are underway internally for user interface updates. Topics include ways to better notify customers of station status changes and report out capacity available.

H2 MARKET ACTIVATION | Member Lead: W Leighty | Staff Lead: Bill Elrick

- CaFCP members spoke on behalf of proposed infrastructure amendments to Low Carbon Fuel
 Standard at CARB board meeting in Sacramento. CARB board approved amendments. CARB staff will prepare final program adjustments for Jan 2019 implementation.
- Discussions have begun about next steps regarding activities (road maps, reports, etc.) related to the *California Fuel Cell Revolution;* identifying greatest priorities for activating the market.



BOARD MEETING DATE: February 1, 2019 AGENDA NO. 6

PROPOSAL: Amend Contract to Demonstrate Low NOx Combustion

Technology on Refinery Boiler

SYNOPSIS: In September 2017, the Board awarded a contract to ClearSign

Combustion Corporation to demonstrate their DuplexTM low NOx combustion technology on a refinery boiler in an amount not to exceed \$320,000 from the Rule 1118 Mitigation Fund (54).

Torrance Refining Company was identified as the host site for the demonstration, but they are no longer able to act as the host site due to operational schedule changes and higher than anticipated project costs. However, ClearSign has identified an alternate in-basin refinery to serve as the host site using a smaller-sized heater for the demonstration. This action is to amend the contract

with ClearSign, changing the host site to Lunday-Thagard

Company dba World Oil Refining and reducing the contract value

to an amount not to exceed \$220,000 from the Rule 1118 Mitigation Fund (54). This action is to also authorize the

Executive Officer to execute additional no-cost amendments to this

contract, as needed.

COMMITTEE: Technology, January 18, 2019; Recommended for Approval

RECOMMENDED ACTIONS:

- 1. Authorize the Chairman to amend the contract with ClearSign Combustion Corporation changing the host site to Lunday-Thagard Company dba World Oil Refining for conducting the demonstration of their DuplexTM low NOx combustion technology on a refinery heater and reducing the contract value to an amount not to exceed \$220,000 from the Rule 1118 Mitigation Fund (54).
- 2. Authorize the Executive Officer to execute additional no-cost amendments to this contract, as needed.

Wayne Nastri Executive Officer

Background

In September 2017, the Board approved a contract with ClearSign Combustion Corporation, which partnered with Torrance Refining Company (TRC) to act as host site, to conduct a demonstration project using their DuplexTM Technology on a low NOx burner. The DuplexTM Technology burner incorporates a high-temperature porous ceramic tile matrix on which combustion is sustained after the tile has been heated using a conventional burner. Once the proper tile temperature and system parameters have been achieved, transition from conventional burner to DuplexTM mode is done where combustion is fully sustained on the tile matrix. In addition to very low NOx levels without the use of reagents, such as ammonia or urea, the DuplexTM Technology is expected to provide other benefits such as enhanced CO oxidation, enhanced radiation heat transfer and noise reduction.

TRC was initially identified as the host site for the demonstration, but they are no longer able to act as the host site due to operational schedule changes and higher than anticipated project costs. ClearSign has identified Lunday-Thagard Company dba World Oil Refining (World Oil) as an alternate in-basin refinery willing to demonstrate the DuplexTM Technology.

Proposal

ClearSign proposes to partner with World Oil to conduct a one-year demonstration by retrofitting a 39 million Btu per hour natural gas-fired heater with their DuplexTM Technology burner. Previous studies of ClearSign's DuplexTM Technology installed on a small refinery heater demonstrated NOx emissions between 2.5 ppm and 4.5 ppm. For the proposed project, the goal will be to optimize the burner for this application and validate 3 ppm NOx emissions using a third-party source testing firm. Source testing will also include PM, CO and toxics. This action is to amend the contract with ClearSign, changing the host site to World Oil and reducing the contract value from \$320,000 to an amount not to exceed \$220,000 from the Rule 1118 Mitigation Fund (54). While no further changes to this project are anticipated, to prevent further delays, this action is to also authorize the Executive Officer to execute additional no-cost amendments to this contract, as needed.

Benefits to SCAQMD

The proposed project supports SCAQMD's priorities to reduce both NOx and PM emissions from stationary sources to achieve national ambient air quality standards and protect public health. In addition, the proposed demonstration of ClearSign's DuplexTM Technology burner will help support the 2016 AQMP policy objective, which calls for investing in strategies and technologies that meet multiple objectives regarding air quality and reducing emissions impacts on local neighborhoods and disadvantaged communities. This includes supporting control measure CMB-05 to identify approaches in implementing Best Available Retrofit Control Technologies (BARCT) and generating further NOx emissions reductions at RECLAIM facilities.

Resource Impacts

The total cost for this demonstration project is \$660,000, with cost-share of \$220,000 from the host refinery, \$220,000 in-kind from ClearSign, and up to \$220,000 from SCAQMD's Rule 1118 Mitigation Fund (54).



BOARD MEETING DATE: February 1, 2019

AGENDA NO. 7

PROPOSAL: Appropriate Funds and Amend or Execute Contracts with Outside

Counsel and Specialized Legal Counsel and Services

SYNOPSIS: This action is to appropriate \$450,000 from the Undesignated

(Unassigned) Fund Balance to Legal's FY 2018-19 Budget and amend or execute contracts for legal counsel for specialized,

environmental, and other litigation.

COMMITTEE: Administrative, January 10, 2019; Recommended for Approval

RECOMMENDED ACTIONS:

- 1. Appropriate \$450,000 from the Undesignated (Unassigned) Fund Balance to Legal's FY 2018-19 Budget, Services and Supplies Major Object, Professional and Special Services Account.
- 2. Authorize the Chairman or the Executive Officer, depending on whether the amount exceeds \$75,000, to amend or execute contracts with legal counsel handling existing matters, as well as prequalified counsel approved by the Board, and specialized legal counsel and services, as the need arises.

Wayne Nastri Executive Officer

BTG:lal

Background

The FY 2018-19 Budget as adjusted December 7, 2018, included \$279,500 for litigation expenses in environmental law and other cases and specialized legal counsel and services. The total amount currently allocated will not cover current and anticipated costs of legal counsel and specialized counsel and services.

SCAQMD will require an additional amount of up to \$450,000 for these services. Monies will be expended on lawsuits and legal proceedings, including a bankruptcy case in the Exide matter; drafting legislation and advising staff regarding the proposed ballot initiative to authorize a sales tax; the Anaplex case resulting from toxics monitoring in the Paramount area; confidentiality issues related to modified hydrogen fluoride; and defending on Appeal the challenge to SCAQMD's environmental analysis of the Tesoro Los Angeles Refinery Integration and Compliance project. In the Tesoro

case, Tesoro will reimburse the SCAQMD for attorney's fees and other costs once the case is completed. Accordingly, staff is requesting an appropriation of funds in the amount of \$450,000, for a total expected expenditure of \$729,500 this fiscal year.

Proposal

In order to defend ongoing litigation, and continue other legal work, it is necessary to appropriate additional funds for expenditures by outside counsel. It is expected that ongoing lawsuits and other legal work will require an additional \$450,000 for attorney's fees and costs for prequalified counsel approved by the Board with specialized legal counsel and services, as the need arises.

Resource Impacts

Sufficient funds are available in Legal's FY 2018-19 Budget upon approval of this Board letter. This action will bring the total amount of outside counsel costs approved by the Board in FY 2018-19 to \$729,500.



BOARD MEETING DATE: February 1, 2019

PROPOSAL: Issue RFP for Consultant Services for SCAQMD's High School

Air Quality Educational Program

SYNOPSIS: SCAQMD seeks to implement an air quality educational program

in high schools in environmental justice communities within its jurisdiction. This action is to issue an RFP to solicit proposals from individuals and organizations to provide assistance with the high school air quality educational program in an amount not to

exceed \$500,000.

COMMITTEE: Administrative, January 10, 2019; Recommended for Approval

RECOMMENDED ACTION:

Authorize the release of RFP #P2019-11 to solicit proposals from qualified individuals and organizations with expertise conducting outreach, and implementation of educational materials related to the SCAQMD high school air quality educational program for a one-year period in an amount not to exceed \$500,000.

Wayne Nastri Executive Officer

DJA:LTO:RAR:AY

Background

SCAQMD has a long history of educational outreach to teachers and students in the South Coast Air Basin through programs and events, especially within environmental justice communities. These activities have been effective in raising awareness about SCAQMD and air quality issues among teachers and students, reaching several thousand program and event participants. Additionally, SCAQMD's outreach efforts to high school students has yielded exponential benefits as participants in programs have shared information with their families, communities and peers.

In 2019, SCAQMD seeks to implement an air quality educational program at 100 high schools in environmental justice communities within its jurisdiction. The initial program would target 40 schools in Los Angeles County, and 20 schools each in Orange, Riverside, and San Bernardino Counties.

RFP #2019-11 is seeking qualified consultants to help with the implementation of the high school air quality educational program by assisting the SCAQMD with program development, outreach and implementation efforts.

The general tasks under the contract pursuant to this RFP include, but are not limited to, the following:

- 1. Prepare an outreach plan taking into consideration the potential variations in the academic and administrative calendars for the targeted high schools;
- 2. Develop and implement the outreach program;
- 3. Create program presentation for the targeted high schools;
- 4. Present the program and obtain all required authorizations from the high schools, school districts, and other organizations as required;
- 5. Prepare and develop a checklist to ensure consistent implementation of the program;
- 6. Develop a consistent methodology to identify high schools for participation using specific parameters including, but not limited to, geographic location, community's environmental justice factors, the high school's ability to implement the curriculum, and other factors that will ensure the successful completion of the program;
- 7. Prepare and maintain a tracking database of all high schools contacted that contains at a minimum, justification for selection, all contact information, all required approvals or reason for non-participation, and other pertinent information;
- 8. Create messaging and materials necessary to educate schools on SCAQMD and air quality issues; and,
- 9. Prepare, distribute and collect an evaluation form for the participating high schools to provide feedback on the program and efficacy of the curriculum.

Proposal

Staff is seeking Board approval to release an RFP to solicit proposals from qualified firms and organizations with expertise in air quality issues, educational institutions and environmental justice communities. The Administrative Committee, at its January 10, 2019 meeting, discussed the proposal and determined that the overall scope of work requires additional resources and funds. The Committee recommended increasing the budget for the program to \$500,000.

Outreach

Due to the desire to award a contract with Administrative Committee approval on March 8, 2019, and Board approval at the April 5, 2019 Board meeting, it is necessary to waive the Procurement Policy and Procedure's requirement for the bidding period to be at least 30 days on this RFP. Therefore, the public notice advertising of the RFP will be 29 days instead of 30 days.

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's Press Enterprise newspapers to leverage the most cost-effective method of outreach to the entire 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 emailed 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."

Bid Evaluation

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

Resource Impacts

Funding will be requested from the BP Arco Settlement Project Fund (46) when staff seeks Board approval to award the contract.

Attachment

RFP #P2019-11- Consulting Services for High School Air Quality Educational Program



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT REQUEST FOR PROPOSALS

Consulting Services for High School Air Quality Educational Program

P2019-11

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," "Consultant," "Bidder" and "Firm" are used interchangeably.

PURPOSE

The purpose of this Request for Proposals (RFP) is to solicit qualified firms, organizations or sole practitioners to assist the SCAQMD with outreach and implementation efforts related to an air quality educational program for high school students. Work will be on an as needed basis and the Deputy Executive Officer of Legislative, Public Affairs and Media or designee, shall approve all work and/or expenditures in writing.

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 Sample Contract

Attachment A - Participation in the Procurement Process

Attachment B - Certifications and Representations

SECTION I: BACKGROUND/INFORMATION

SCAQMD has a long history of educational outreach to teachers and students in the South Coast Air Basin through programs and events, especially within environmental justice communities. These activities have been effective in raising awareness about SCAQMD and air quality issues among teachers and students reaching several thousand program and event participants. Additionally, SCAQMD's outreach efforts to high school students has yielded exponential benefits as participants in programs have shared information with their families, communities and peers.

In 2019, SCAQMD seeks to implement an air quality educational program at 100 high schools in environmental justice communities within its jurisdiction. The initial program would target 40 schools in Los Angeles County, and 20 schools each in Orange, Riverside, and San Bernardino Counties.

This RFP is seeking qualified organizations and/or sole practitioners to assist SCAQMD's Office of Legislative, Public Affairs and Media (LPAM) with outreach and implementation of a high school air quality educational program. Pursuant to this RFP, the work from the contractor will be comprehensive in nature to assist the SCAQMD in messaging about the agency and air quality related issues, the creation of related materials, and the development and implementation of the outreach program in high schools. The contractor will be responsible for the identification of the high schools based on approved environmental justice parameters, and other factors to ensure the successful implementation of the program. The contractor also will be responsible for the presentation of the program and obtaining all required authorizations from the high school, school district, and other organizations as required. Additionally, the Contractor will establish relationships and communication channels with the identified schools and appropriate administrative entities. The successful implementation of the Contractors' efforts will result in SCAQMD staff training the participating high school teacher in the curriculum to be taught to students. The organization and/or consultants responding to this RFP shall submit their proposal to demonstrate their qualifications, experience, and ability to successfully develop and implement the program. The general tasks under the contract pursuant to this RFP include, but are not limited to, the following general tasks:

- 1. Prepare an outreach plan taking into consideration the potential variations in the academic and administrative calendars for the targeted high schools;
- 2. Develop and implement the outreach program;
- 3. Prepare and develop a checklist to ensure consistent implementation of the program;
- 4. Develop a consistent methodology to identify high schools for participation using specific parameters including, but not limited to, geographic location, community's environmental justice factors, the high school's ability to implement the curriculum, and other factors that will ensure the successful completion of the program;
- 5. Prepare and maintain a tracking database of all high schools contacted that contains at a minimum, justification for selection, all contact information, all required approvals or reason for non-participation, and other pertinent information;
- 6. Create program presentation for the targeted high schools;
- 7. Create messaging and materials necessary to educate schools on SCAQMD and air quality issues; and,
- 8. Prepare, distribute and collect an evaluation form for the participating high schools to provide feedback on the program and efficacy of the curriculum.

SECTION II: CONTACT PERSON:

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

Anna Yoo Legislative, Public Affairs and Media SCAQMD 21865 Copley Drive Diamond Bar, CA 91765-4178 (909) 396-2747

SECTION III: SCHEDULE OF EVENTS

Date	Event
February 1, 2019	RFP Released
March 1, 2019	Proposals Due to SCAQMD - No Later Than 1:00 pm
March 1-6, 2019	Proposal Evaluations
March 8, 2019	Interviews, if required
April 5, 2019	Governing Board Approval
April 10, 2019	Anticipated Contract Execution

SECTION IV: PARTICIPATION IN THE PROCUREMENT PROCESS

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. Attachment A to this RFP contains definitions and further information.

SECTION V: STATEMENT OF WORK/SCHEDULE OF DELIVERABLES

Statement of Work

Under the direction of the Deputy Executive Officer of Legislative, Public Affairs and Media, or designee, the CONTRACTOR shall:

- 1. Prepare an Outreach Plan (plan) for the program. The plan shall identify the parameter use in the selection of the high schools; contain a program implementation schedule, a checklist for the proper and consistent implementation of the program, and a program evaluation form for participating schools.
- 2. Upon approval of the plan by SCAQMD, CONTRACTOR shall implement the plan, and provide status updates to SCAQMD on a monthly basis or as requested;
- 3. Identify participating schools using specific parameters including, but not limited to, geographic location, community's environmental justice factors, the high school's ability to impart the curriculum, and other factors that will ensure the successful completion of the program;
- 4. Prepare and maintain a tracking database of all high schools contacted that contains at a minimum, justification for selection, all contact information, all required approvals or reason for non-participation, and other pertinent information;
- 5. Create program presentation for the targeted high schools;
- 6. Create messaging and materials necessary to educate schools on SCAQMD and air quality issues; and,
- 7. Prepare a final report including, but not limited to, an evaluation of each high school in the program, school contact information and all required documentation, and evaluation forms completed by the participating schools.

SECTION VI: REQUIRED QUALIFICATIONS

- A. Persons or firms proposing to bid on this proposal must be qualified and experienced in representing and advising governmental agencies and must submit qualifications demonstrating this ability in cases involving as many as possible of the following areas:
 - Understanding of SCAQMD environmental justice programs and initiatives;
 - Understanding of air quality issues and associated health effects; and,
 - Outreach and ability to work and obtain approvals from educational institutions including, high schools, school districts, and other pertinent organizations.
- B. Proposer must submit the following:
- 1. Resumes or similar statement of qualifications of person or persons who may be designated as lead in the High School Outreach and Implementation Program.
- 2. List of representative clients.
- 3. Summary of proposer's general qualifications to meet required qualifications and fulfill statement of work, including additional personnel and resources beyond those of the designated lead person.

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. SCAQMD may modify the RFP or issue supplementary information or guidelines during the proposal preparation period prior to the due date. Please check our website for updates (http://www.aqmd.gov/grants-bids). The cost for developing the proposal is the responsibility of the Contractor, and shall not be chargeable to SCAQMD.

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 B to this RFP, must be completed and 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

<u>Summary (Section A)</u> - 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.

<u>Program Schedule (Section B)</u> - Provide projected milestones or benchmarks for completing the project (to include reports) within the total time allowed.

<u>Project Organization (Section C)</u> - Describe the proposed management structure, program monitoring procedures, and organization of the proposed team. Provide a statement detailing your approach to the project, specifically address the Firm's ability and willingness to commit and maintain staffing to successfully complete the project on the proposed schedule.

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

<u>Assigned Personnel (Section E)</u> - Provide the following information about the staff to be assigned to this project:

- List all key personnel assigned to the project by level, name and location. Provide a
 resume or similar statement describing the background, qualifications and experience 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 90% of the work will be performed within the geographical boundaries of SCAQMD.
- 4. Provide a statement of education and training programs provided to, 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.

<u>Subcontractors (Section F)</u> - This project may require expertise in multiple technical areas. List any subcontractors that will be used, identifying functions to be performed by them, their related qualifications and experience and the total number of hours or percentage of time they will spend on the project.

Conflict of Interest (Section G) - Address possible conflicts of interest with other clients affected by actions performed by the Firm on behalf of SCAQMD. SCAQMD recognizes that prospective Contractors may be performing similar projects for other clients. Include a complete list of such clients for the past three (3) years with the type of work performed and the total number of years performing such tasks for each client. Although the Proposer will not be automatically disqualified by reason of work performed for such clients, 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

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

<u>Cost Proposal</u> – SCAQMD anticipates awarding a fixed price contract. Cost information must be provided as listed below:

- 1. Detail must be provided by the following categories:
 - A. <u>Labor</u> The Cost Proposal must list the fully-burdened hourly rates and the total number of hours estimated for each level of professional and administrative staff to be used to perform the tasks required by this RFP. Costs should be estimated for each of the components of the work plan.
 - B. <u>Subcontractor Costs</u> List subcontractor costs and identify subcontractors by name. Itemize subcontractor charges per hour or per day.
 - C. <u>Travel Costs</u> 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.
- 2. It is the policy of the SCAQMD to receive at least as favorable pricing, warranties, conditions, benefits and terms as other customers or clients making similar purchases or receiving similar services. SCAQMD will give preference, where appropriate, to vendors who certify that they will provide "most favored customer" status to the SCAQMD. To receive preference points, Proposer shall certify that SCAQMD is receiving "most favored customer" pricing in the Business Status Certifications page of Volume III, Attachment B Certifications and Representations.

VOLUME III - CERTIFICATIONS AND REPRESENTATIONS (see Attachment B to this RFP)

SECTION VIII: PROPOSAL SUBMISSION

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

<u>Signature</u> - All proposals must be signed by an authorized representative of the Proposer.

<u>Due Date</u> - All proposals are due no later than 1:00 P.M., Friday, March 1, 2019, and should be directed to:

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

<u>Submittal</u> - 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 P2019-11."

Late bids/proposals will not be accepted under any circumstances.

<u>Grounds for Rejection</u> - 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.

<u>Modification or Withdrawal</u> - 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 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/or the Governing Board of SCAQMD for final selection of a contractor and negotiation of a contract.
- 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.

(a)	R&D Projects Requiring Technical or Scientific
. ,	Expertise, or Special Projects Requiring Unique
	Knowledge or Abilities

Understanding the Problem	20
Technical/Management Approach	20
Contractor Qualifications	20
Previous Experience on Similar Projects	10
Cost	<u>30</u>
TOTAL	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
Most Favored Customer	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. Most Favored Customer status incentive points shall be added, as applicable for a total of 17 points.

Self-Certification for Additional Points

The award of these additional points shall be contingent upon Proposer completing the Self-Certification section of Attachment B – 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-federally funded projects), the proposer must submit a selfcertification 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 IV. 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 a Local Business, the proposer must affirm that it has an ongoing business within the South Coast AQMD at the time of bid/proposal submittal and that 90% of the work related to the contract will be performed within the South Coast AQMD. Proposals for legislative representation, such as in Sacramento, California or Washington D.C. are not eligible for local business incentive points. Federally funded projects are not eligible for local business incentive points. 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. To receive points for Most Favored Customer status, the proposer must submit, at proposal submission, certification of its commitment to provide most favored customer status to the SCAQMD. 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.
- 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. 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 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 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. <u>Disposition of Proposals</u> Pursuant to 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.

SECTION X: FUNDING

The total funding for the work contemplated by this RFP will be a maximum \$500,000 for the base year with the option of two renewals upon Board approval of funding.

SECTION XI: SAMPLE CONTRACT

A sample contract to carry out the work described in this RFP is available on SCAQMD's website at http://www.aqmd.gov/grants-bids or upon request from the RFP Contact Person (Section II).

ATTACHMENT A

PARTICIPATION IN THE PROCUREMENT PROCESS

A. It is the policy of South Coast Air Quality Management District (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.
- "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. Proposals for legislative representation, such as in Sacramento, California or Washington D.C. are not eligible for local business incentive points.
- 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.

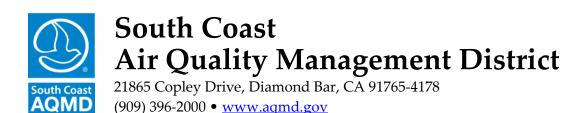
- 8. "Off-Peak Hours Delivery Business" as used in this policy means a company or contractor that commits to conducting deliveries to SCAQMD during off-peak traffic hours defined as between 10:00 a.m. and 3:00 p.m.
- 9. "Benefits Incentive Business" as used in this policy means a company or contractor 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 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. "Most Favored Customer" as used in this policy means that the SCAQMD will receive at least as favorable pricing, warranties, conditions, benefits and terms as other customers or clients making similar purchases or receiving similar services.
- 12."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. Businesses offering Most Favored Customer status shall be granted a preference in an amount equal to 2 percent 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. Businesses offering Most Favored Customer status 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.
 - 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.
 - 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. Proposals for legislative representation, such as in Sacramento, California or Washington D.C. are not eligible for local business incentive points.
- 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.

ATTACHMENT B



Business Information Request

Dear SCAQMD Contractor/Supplier:

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, remember to sign all 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 <u>not</u> be able to establish you as a vendor. This will delay any payments and would <u>still</u> 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,

Sujata Jain Asst. Deputy Executive Officer Finance

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 **Business Name**

BUSINESS INFORMATION REQUEST

Division of										
Subsidiary of										
Website Address										
Type of Business Check One:			Corporation	ne on, ID No , ID No		ed in				
	_	RI	EMITT	TING ADDR	ESS INFO	RMAT	ΓΙΟΝ			
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

BUSINESS STATUS CERTIFICATIONS

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.

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

TELEPHONE NUMBER	DATE
NAME	TITLE
I, the undersigned, hereby declare that to the best of my knowl information submitted is factual.	ledge the above information is accurate. Upon penalty of perjury, I certify
State of California Public Works Contractor Re INCLUDED IF BID PROPOSAL IS FOR PUBLIC V	9
Name of Qualifying Owner(s):	
Percent of ownership:%	
☐ Small Business Enterprise/Small Business Joint Venture ☐ Local business ☐ Minority-owned Business Enterprise	 ☐ Women-owned Business Enterprise ☐ Disabled Veteran-owned Business Enterprise/DVBE Joint Venture ☐ Most Favored Customer Pricing Certification
Check all that apply:	

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:
 - Primarily engaged in the chemical or mechanical transformation of raw materials or processed substances into new products.
 - 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.

Most Favored Customer as used in this policy means that the SCAQMD will receive at least as favorable pricing, warranties, conditions, benefits and terms as other customers or clients making similar purchases or receiving similar services.

(Rev. November 2017) Department of the Treasury

Request for Taxpayer **Identification Number and Certification**

▶ Go to www.irs.gov/FormW9 for instructions and the latest information.

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

	Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.	
	2 Business name/disregarded entity name, if different from above	
e. ns on page 3.	Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check of following seven boxes. Individual/sole proprietor or	A Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): Exempt payee code (if any)
Print or type. See Specific Instructions	Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) Note: Check the appropriate box in the line above for the tax classification of the single-member owner. LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner another LLC that is not disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-me is disregarded from the owner should check the appropriate box for the tax classification of its owner.	Do not check of the LLC is
ec.	Other (see instructions) ► 5 Address (number, street, and apt. or suite no.) See instructions. Req	(Applies to accounts maintained outside the U.S.) uester's name and address (optional)
See	6 City, state, and ZIP code	,
	7 List account number(s) here (optional)	
Par	Taxpayer Identification Number (TIN)	
backu reside	your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid up withholding. For individuals, this is generally your social security number (SSN). However, for a ent alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other	Social security number
entitie TIN, la	es, it is your employer identification number (EIN). If you do not have a number, see <i>How to get a</i> ater.	or
Numb	If the account is in more than one name, see the instructions for line 1. Also see What Name and per To Give the Requester for guidelines on whose number to enter.	Employer identification number
Par		
Under	r panelties of parium. I sortify that:	

Inder 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); and
- 4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

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 yo	ou must provide your correct TIN. See the instructions for Part II, later.
Sign Here	Signature of U.S. person ▶	Date ►

General Instructions

Section references are to the Internal Revenue Code unless otherwise

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

• Form 1099-INT (interest earned or paid)

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- . Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.

Form W-9 (Rev. 11-2017) Cat. No. 10231X

By signing the filled-out form, you:

- 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, and
- Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See What is FATCA reporting, later, for further information.

Note: If you are a U.S. person and 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 under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 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 section 1446 withholding on your share of partnership income.

In the cases below, the following person must give 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.

- In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the entity;
- In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust; and
- In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

Foreign person. If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Pub. 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.

- 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.
- 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, give the requester the appropriate completed Form W-8 or Form 8233.

Backup Withholding

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS 28% 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, payments made in settlement of payment card and third party network transactions, 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,
- You do not certify your TIN when required (see the instructions for Part II for details),
 - 3. The IRS tells the requester that you furnished an incorrect TIN,
- 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
- 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 *Exempt payee code*, later, and the separate Instructions for the Requester of Form W-9 for more information.

Also see Special rules for partnerships, earlier.

What is FATCA Reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See Exemption from FATCA reporting code, later, and the Instructions for the Requester of Form W-9 for more information.

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

Line 1

You must enter one of the following on this line; do not leave this line blank. The name should match the name on your tax return.

- If this Form W-9 is for a joint account (other than an account maintained by a foreign financial institution (FFI)), list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9. If you are providing Form W-9 to an FFI to document a joint account, each holder of the account that is a U.S. person must provide a Form W-9.
- a. Individual. Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

Note: ITIN applicant: Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040/1040A/1040EZ you filed with your application.

- b. Sole proprietor or single-member LLC. Enter your individual name as shown on your 1040/1040A/1040EZ on line 1. You may enter your business, trade, or "doing business as" (DBA) name on line 2.
- c. Partnership, LLC that is not a single-member LLC, C corporation, or S corporation. Enter the entity's name as shown on the entity's tax return on line 1 and any business, trade, or DBA name on line 2
- d. Other entities. Enter your name as shown on required U.S. federal tax documents on line 1. 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 line 2.
- e. **Disregarded entity.** For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a "disregarded entity." See Regulations section 301.7701-2(c)(2)(iii). Enter the owner's name on line 1. The name of the entity entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner's name is required to be provided on line 1. 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 line 2, "Business name/disregarded entity name." If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

Line 2

If you have a business name, trade name, DBA name, or disregarded entity name, you may enter it on line 2.

Line 3

Check the appropriate box on line 3 for the U.S. federal tax classification of the person whose name is entered on line 1. Check only one box on line 3.

IF the entity/person on line 1 is a(n)	THEN check the box for
Corporation	Corporation
 Individual Sole proprietorship, or Single-member limited liability company (LLC) owned by an individual and disregarded for U.S. federal tax purposes. 	Individual/sole proprietor or single- member LLC
LLC treated as a partnership for U.S. federal tax purposes, LLC that has filed Form 8832 or 2553 to be taxed as a corporation, or LLC that is disregarded as an entity separate from its owner but	Limited liability company and enter the appropriate tax classification. (P= Partnership; C= C corporation; or S= S corporation)
the owner is another LLC that is not disregarded for U.S. federal tax purposes.	
Partnership	Partnership
Trust/estate	Trust/estate

Line 4, Exemptions

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space on line 4 any code(s) that may apply to you.

Exempt payee code.

- Generally, individuals (including sole proprietors) are not exempt from backup withholding.
- Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.
- Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions.
- Corporations are not exempt from backup withholding with respect to attorneys' fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space in line 4.

- 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 U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities
- 4-A foreign government or any of its political subdivisions, agencies, or instrumentalities
- 5-A corporation
- 6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or possession
- 7—A futures commission merchant registered with the Commodity Futures Trading Commission
- 8-A real estate investment trust
- 9-An entity registered at all times during the tax year under the Investment Company Act of 1940
- 10-A common trust fund operated by a bank under section 584(a)
- 11-A financial institution
- 12-A middleman known in the investment community as a nominee or custodian
- 13—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 13.

, , , , , , , , , , , , , , , , , , , ,	
IF the payment is for	THEN the payment is exempt for
Interest and dividend payments	All exempt payees except for 7
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4
Payments over \$600 required to be reported and direct sales over \$5,000 ¹	Generally, exempt payees 1 through 5 ²
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4

¹ See Form 1099-MISC, Miscellaneous Income, and its instructions.

Exemption from FATCA reporting code. The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) written or printed on the line for a FATCA exemption code.

- A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)
- B—The United States or any of its agencies or instrumentalities
- C—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities
- D—A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(ii)
- E-A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i)
- F—A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state
 - G-A real estate investment trust
- H—A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940
- I-A common trust fund as defined in section 584(a)
- J-A bank as defined in section 581
- K-A broker
- L—A trust exempt from tax under section 664 or described in section 4947(a)(1)

M—A tax exempt trust under a section 403(b) plan or section 457(g) plan

Note: You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

Line 5

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns. If this address differs from the one the requester already has on file, write NEW at the top. If a new address is provided, there is still a chance the old address will be used until the payor changes your address in their records.

Line 6

Enter your city, state, and ZIP code.

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.

If you are a single-member LLC that is disregarded as an entity separate from its owner, 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 What Name and Number To Give the Requester, later, 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 SSA office or get this form online at 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 and clicking on Employer Identification Number (EIN) under Starting a Business. Go to www.irs.gov/Forms to view, download, or print Form W-7 and/or Form SS-4. Or, you can go to www.irs.gov/OrderForms to place an order and have Form W-7 and/or SS-4 mailed to you within 10 business days.

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and 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 U.S. 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, 4, or 5 below indicates 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 line 1 must sign. Exempt payees, see Exempt payee code. earlier.

Signature requirements. Complete the certification as indicated in items 1 through 5 below.

² 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 reportable under section 6045(f), and payments for services paid by a federal executive agency.

- 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 made in settlement of payment card and third party network transactions, 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), ABLE accounts (under section 529A), 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

Give name and SSN of:
The individual
The actual owner of the account or, if combined funds, the first individual on the account ¹
Each holder of the account
The minor ²
The grantor-trustee ¹
The actual owner ¹
The owner ³
The grantor*
Give name and EIN of:
The owner
Legal entity ⁴
The corporation
The organization
The organization The partnership

For this type of account:	Give name and EIN of:		
14. 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		
 Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulations section 1.671-4(b)(2)(i)(B)) 	The trust		

¹ 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.

⁴ 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*, earlier.

*Note: The 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, 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 Pub. 5027, Identity Theft Information for Taxpayers.

Victims of identity theft who are experiencing economic harm or a systemic 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 1-800-829-4050

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.

² Circle the minor's name and furnish the minor's SSN.

³ 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.

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. You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at spam@uce.gov or report them at www.ftc.gov/complaint. You can contact the FTC at www.ftc.gov/idtheft or 877-IDTHEFT (877-438-4338). If you have been the victim of identity theft, see www.IdentityTheft.gov and Pub. 5027.

Visit www.irs.gov/ldentityTheft 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. commonwealths and 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.

TAXABLE YEAR

2018 Withholding Exemption Certificate

590

The	e payee completes this form and submits it to the withholding agent. The withholding age	nt keeps	this fo	orm with thei	r records.	
	thholding Agent Information					
Nan	no .					
	yee Information	1=				
Nan	no .	SSN or ITIN FEIN CA Corp no. CA SOS file no.				
_						
Add	frees (apt/sta., room, PO box, or PMB no.)					
Chu	(If you have a foreign address, see instructions.)		State	ZIP code		
City	(ir you have a xirregin address, see instructions.)		State	ZIP COOR		
F						
	emption Reason seck only one box.					
	checking the appropriate box below, the payee certifies the reason for the exemption from	the Calife	mia ir	ncomo tav wi	thholding	
	quirements on payment(s) made to the entity or individual.	irie Callic	IIIIa II	ICOTTIE LEAK WI	unioung	
	Individuals — Certification of Residency: I am a resident of California and I reside at the address shown above. If I become a notify the withholding agent. See instructions for General Information D, Definitions.	nonreside	nt at	any time, I wi	II promptly	
	Corporations: The 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. 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 D. Definitions.					
	Partnerships or Limited Liability Companies (LLCs): The 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. 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 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). 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 Per The entity is an insurance company, IRA, or a federally qualified pension or profit-sh			naring Plans		
	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. If the trustee or noncontingent beneficiary 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 or trust. The decedent was a The estate will file a California fiduciary tax return.	California	resid	ent at the tim	e of death.	
	Nonmilitary Spouse of a Military Servicemember: I am a nonmilitary spouse of a military servicemember and I meet the Military Spouse requirements. See instructions for General Information E, MSRRA.	e Reside	ncy R	elief Act (MS	RRA)	
CE	RTIFICATE OF PAYEE: Payee must complete and sign below.					
To	learn about your privacy rights, how we may use your information, and the consequences to ftb.ca.gov/forms and search for 1131. To request this notice by mail, call 800.852.5711	for not pro	vidin	g the request	ed information	
Un sta	der penalties of perjury, I declare that I have examined the information on this form, includi tements, and to the best of my knowledge and belief, it is true, correct, and complete. I furl he facts upon which this form are based change, I will promptly notify the withholding agen	ng accom her decla				
Тур	pe or print payee's name and title		Telep	hone ()	
Pay	yee's signature ▶		Date			
	7061183			Form 590	2017	

2017 Instructions for Form 590

Withholding Exemption Certificate

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

General Information

Registered Domestic Partners (RDP) – 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.

A Purpose

Use Form 590, Withholding Exemption Certificate, to certify an exemption from nonresident withholding.

Form 590 does not apply to payments of backup withholding. For more information, go to ftb.ca.gov and search for backup withholding.

Form 590 does not apply to payments for wages to employees. Wage withholding is administered by the California Employment Development Department (EDD). For more information, go to edd.ca.gov or call 888.745.3886.

Do not use Form 590 to certify an exemption from withholding if you are a Seller of California real estate. Sellers of California real estate use Form 593-C, Real Estate Withholding Certificate, to claim an exemption from the real estate withholding requirement.

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.

B Income Subject to Withholding

California Revenue and Taxation Code (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 partners, members, and S corporation shareholders 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 from activities sourced to California.

- Distributions of California source income to nonresident beneficiaries from an estate or trust.
- Endorsement payments received for services performed in California.
- 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 Additional Information.

C Who Certifies this Form

Form 590 is certified by the payee. California residents or entities exempt from the withholding requirement should complete Form 590 and submit it to the withholding agent before payment is made. 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 notified by the Franchise Tax Board (FTB) that the form should not be relied upon.

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 exemption certificate, the withholding agent may accept a letter from the payee as a substitute explaining why they are 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 (TIN). The withholding agent must retain a copy of the certificate or substitute for at least five years after the last payment to which the certificate applies, and provide it upon request to the FTB.

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 Definitions

For California nonwage withholding purposes, nonresident includes all of the following:

- Individuals who are not residents of California.
- Corporations not qualified through the California Secretary of State (CA SOS) to do business in California or having no permanent place of business in California.
- Partnerships or limited liability companies (LLCs) with no permanent place of business in California.
- Any trust without a resident grantor, beneficiary, or trustee, or estates where the decedent was not a California resident.

Foreign refers to non-U.S.

For more information about determining resident status, get FTB Pub. 1031, Guidelines for Determining Resident Status. Military servicemembers have special rules for residency. For more information, get FTB Pub. 1032, Tax Information for Military Personnel

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 it has qualified through the CA SOS to transact intrastate business. 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.

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.

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.

Specific Instructions

Payee Instructions

Enter the withholding agent's name.

Enter the payee's information, including the TIN and check the appropriate TIN box.

You must provide a valid TIN as requested on this form. 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 CA SOS file number.

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 – Follow the country's practice for entering the city, county, province, state, country, and postal code, as applicable, in the appropriate boxes. **Do not** abbreviate the country name.

Exemption Reason – Check the box that reflects the reason why the payee is exempt from the California income tax withholding requirement.

Withholding Agent Instructions

Do not send this form to the FTB. The withholding agent retains this form for a minimum of five years or until the payee's status changes, and must provide this form to the FTB upon request.

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.

If any of these situations occur, then withholding may be required. For more information, get Form 592, Resident and Nonresident Withholding Statement, Form 592-B, Resident and Nonresident Withholding Tax Statement, and Form 592-V, Payment Voucher for Resident and Nonresident Withholding.

Additional Information

Website: For more information go to ftb.ca.gov and search for

nonwage.

MyFTB offers secure online tax account information and services. For more information and to register, go to ftb.ca.gov and

search for myftb.

Telephone: **888**.792.4900 or 916.845.4900, Withholding Services and

Withholding Services and Compliance phone service

Fax: 916.845.9512

Mail: WITHHOLDING SERVICES AND

COMPLIANCE MS F182 FRANCHISE TAX BOARD PO BOX 942867 SACRAMENTO CA 94267-0651

For questions unrelated to withholding, or to download, view, and print California tax forms and publications, or to access the TTY/TDD numbers, see the information below.

Internet and Telephone Assistance

Website: 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

Teléfono: 800.852.5711 dentro de los

Estados Unidos

916.845.6500 fuera de los

Estados Unidos

TTY/TDD: 800.822.6268 para personas con

discapacidades auditivas

o de habla

Page 2 Form 590 Instructions 2016

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 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 SCAQMD website (www.aqmd.gov). The list of current MSRC members/alternates can be found at the MSRC website (http://www.cleantransportationfunding.org).

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 _____ Date of Contribution Governing Board Member or MSRC Member/Alternate Amount of Contribution Name of Contributor Governing Board Member or MSRC Member/Alternate Date of Contribution Amount of Contribution Name of Contributor Governing Board Member or MSRC Member/Alternate Date of Contribution Amount 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. 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.

(iv) There is otherwise a regular and close working relationship between the entities; or

(i) The same person or substantially the same person owns and manages the two entities;

and control, consideration should be given to the following factors:

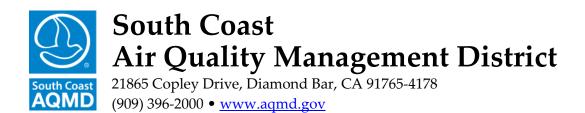
(ii) There are common or commingled funds or assets;

personnel on a regular basis;

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.

There is shared management and control between the entities. In determining whether there is shared management

(iii) The business entities share the use of the same offices or employees, or otherwise share activities, resources or



Direct Deposit Authorization

☐ Indiv☐ Vend☐ Char	Please check all the ap vidual (Employee, Governing Edor/Contractor nged Information			☐ New Re ☐ Cancel	quest Direct Deposit			
STEP 2:	Payee Information	First N	lame		Middle Initia	ı T	Title	
Last Hame	•	1 1101 14	idillo		Wildale Hilla		Tido	
Vendor/Co	ontractor Business Name (if applicable)							
Address					Apartment o	r P.O. Box N	umber	
Oite				1 01-1-	7:-		Lowerten	
City				State	Zip		Country	
Taxpayer I	ID Number		Telephone Number		I	Email A	ddress	
in: If str pa 2. Th 3. It fu m STEP 3: You must your payn below.	 I hereby release and hold harmless SCAQMD for any claims or liability to pay for any losses or costs related to insufficie 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 your payment. You must attach a voided check or have your bank complete the bank information and the account holder must 							CAQMD at any time. e direct deposit is not This will delay my on from you. elated to insufficient timely deposit
e e								
heck Here	Account Holder Name(s) Account Holder Name(s)							
Staple Voided Che	☐ Saving ☐ Checking	Account Number Routing Number						
taple V	Bank Representative Printed Name			Bank Represent	ative Signature			Date
<i>σ</i>	ACCOUNT HOLDER S	SIGNA	TURE:					Date
For SCAQMD Use Only Input By Date					te			

Input By



BOARD MEETING DATE: February 1, 2019

AGENDA NO. 9

PROPOSAL: Transfer and Appropriate Funds and Authorize Purchase of Kids

Making Sense Kits

SYNOPSIS: SCAQMD seeks to implement an air quality educational program

at 100 high schools in environmental justice communities within its

jurisdiction. The *Kids Making Sense* kits from Sonoma

Technology, Inc. are critical to implementing the program as they integrate Science, Technology, Engineering, and Math education and California Next Generation Science Standards with air quality curriculum through hands-on learning experiences. This action is to transfer and appropriate funds from the BP ARCO Settlement Project Fund (46) to Legislative, Public Affairs and Media's FY 2018-19 Budget and authorize the sole source purchase of 100 Kids

Making Sense kits which can be reused multiple times, over

multiple years in an amount not to exceed \$276,875.

COMMITTEE: Administrative, January 10, 2019; Recommended for Approval

RECOMMENDED ACTIONS:

- 1. Transfer \$276,875 from the BP ARCO Settlement Project Fund (46) to General Fund (01) Unassigned Fund Balance;
- 2. Appropriate \$276,875 from General Fund Unassigned Fund Balance to Legislative, Public Affairs and Media's FY 2018-19 Budget, Services and Supplies Major Object, Professional & Specialized Services account; and,
- 3. Authorize the Procurement Manager to issue a sole source purchase order of one hundred Kids Making Sense Kits from Sonoma Technology, Inc. at the cost of \$276,875.

Wayne Nastri **Executive Officer**

DJA:LTO:RAR:AY

Background

SCAQMD has a long history of educational outreach to teachers and students in the South Coast Air Basin through programs and events, especially within environmental justice communities. These activities have been effective in raising awareness about SCAQMD and air quality issues among teachers and students, reaching several thousand program and event participants. Additionally, SCAQMD's outreach efforts to high school students has yielded exponential benefits as participants in programs have shared information with their families, communities and peers.

In 2019, SCAQMD seeks to implement an air quality educational program at 100 high schools in environmental justice communities within its jurisdiction. The initial program would target 40 schools in Los Angeles County, and 20 schools each in Orange, Riverside, and San Bernardino Counties.

Recent advancements in low cost sensor technology, smartphones and the development of professional air quality curriculum that meets California standards will enable SCAQMD to implement an all new hands-on learning program for high school teachers and students. Sonoma Technology, Inc. has developed unique educational kits called *Kids Making Sense* which integrate Science, Technology, Engineering, and Math (STEM) education and California Next Generation Science Standards (NGSS) with air quality curriculum. This specific curriculum correlates well with key SCAQMD environmental justice related initiatives including, but not limited to, AQ-SPEC, Rule 1180 Refinery Fenceline Air Monitoring, Special Air Toxics Investigations and AB 617. The kits also can be reused multiple times, over multiple years and include updates to curriculum.

Additionally, the kits include access to interactive tools including, air monitoring sensors, smartphones, access to a designated website for air quality data, and materials specifically designed for high school teachers and students. Sonoma Technology Inc. also allows for the modification of the curricula to align with SCAQMD branding and messaging. The specific hands-on learning experience provided by the kits would uniquely serve SCAQMD's objectives to raise awareness and to educate and engage high school students and teachers in disadvantaged communities on SCAQMD and air quality issues.

Sole Source Justification

Section VIII.B.2. of the Procurement Policy and Procedure identifies provisions under which a sole source award may be justified. This request for sole source award is made under provision B.2.c: The desired services are available from only the sole-source based upon one or more of the following reasons: (1) The unique experience and capabilities of the proposed contractor or contractor team.

The *Kids Making Sense* kits from Sonoma Technology, Inc. were selected to be a sole source purchase because they integrate STEM education and California NGSS standards with air quality curriculum. This specific curriculum correlates well with key SCAQMD environmental justice related initiatives including, but not limited to, AQ-SPEC, Rule 1180 Refinery Fenceline Air Monitoring, Special Air Toxics Investigations and AB 617.

Proposal

This action is to transfer and appropriate funds from the BP ARCO Settlement Project Fund (46) to Legislative, Public Affairs and Media's FY 2018-19 Budget and authorize the purchase of one hundred *Kids Making Sense* kits which can be reused multiple times, over multiple years, in an amount not to exceed \$276,875.

Resource Impacts

Sufficient funding will exist for this sole source purchase upon transfer of \$276,875 from BP ARCO Settlement Projects Fund (46), and the appropriation of \$276,875 from the General Funds Unassigned Fund Balance to the Legislative, Public Affairs, and Media FY 2018-19 Budget.





BOARD MEETING DATE: February 1, 2019 AGENDA NO. 10

PROPOSAL: Approve Contract Awards and Amendments as Approved by MSRC

SYNOPSIS: The MSRC approved two replacement contracts as part of their FYs

2014-16 Work Program. The Board is also requested to amend two previous awards under the MSRC's Local Government Partnership Program, as part of their FYS 2016-18 Work Program, to correct the project descriptions. At this time the MSRC seeks Board approval of the contract awards and amendments as part of the FYs 2014-16

and 2016-18 Work Programs.

COMMITTEE: Mobile Source Air Pollution Reduction Review, September 20, 2018

and January 17, 2019; Recommended for Approval

RECOMMENDED ACTIONS:

- 1. Approve a replacement contract with the City of Palm Springs, in an amount not to exceed \$40,000, to install bicycle racks and implement bicycle outreach under the Local Government Match Program, as part of approval of the FYs 2014-16 Work Program, as described in this letter;
- 2. Approve a replacement contract with San Bernardino County Transportation Authority, in an amount not to exceed \$1,000,000, to update the San Bernardino Valley Coordinated Traffic Signal System under the CTC Partnership Program, as part of approval of the FYs 2014-16 Work Program, as described in this letter;
- 3. Amend awards under the Local Government Partnership Program to correct the descriptions with no change to the award amounts, as part of approval of the FYs 2016-18 Work Program, as described below and as follows:
 - a. A contract with the City of La Puente in an amount not to exceed \$52,800 to procure one heavy-duty near-zero emission vehicle (rather than one heavy-duty zero emission vehicle), one light-duty zero emission vehicle, and install at least one electric vehicle charging station; and
 - b. A contract with the City of San Clemente in an amount not to exceed \$85,000 to procure up to four light-duty zero emission vehicles (rather than three light-duty zero emission vehicles) and install at least two electric vehicle charging stations;

- 4. Authorize MSRC the authority to adjust contract awards up to five percent, as necessary and previously granted in prior work programs; and
- 5. Authorize the Chairman of the Board to execute the new contracts under the FYs 2014-16 and 2016-18 Work Programs, as described above and in this letter.

Larry McCallon Chair, MSRC

MMM:NB:CR

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 subvened 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.

Proposals

At its January 17, 2019 meeting, the MSRC considered recommendations from its MSRC-TAC and approved the following:

FYs 2014-16 Local Government Match Program

As part of its FYs 2014-16 Local Government Match Program, the MSRC awarded the City of Palm Springs \$40,000 to install bicycle racks and conduct bicycle outreach. The City completed a Bicycle Friendly Business District Plan and was working with downtown merchants on implementation. Due to changes requested by the merchants and the death of the City's consultant, the work was not able to be completed within the original time frame. The contract to effectuate the project lapsed on October 3, 2017. In October 2018, the City submitted a request to complete the project. The MSRC considered and approved a 12-month replacement contract in the amount of \$40,000 as part of the FYs 2014-16 Work Program.

FYs 2014-16 Transportation Control Measure CTC Partnership Program

As part of its FYs 2014-16 Transportation Control Measure CTC Partnership Program, the MSRC awarded San Bernardino County Transportation Authority (SBCTA, formerly San Bernardino Associated Governments) \$1,000,000 to update the San Bernardino Valley Coordinated Traffic Signal System. The MSRC approved an extension in October 2018, but the contract lapsed on November 6, 2018 prior to modification documents being mailed out for signature. The MSRC considered and approved a 14-month replacement contract in the amount of \$1,000,000 as part of the FYs 2014-16 Work Program.

FYs 2016-18 Local Government Partnership Program

As part of its FYs 2016-18 Work Program, the MSRC allocated \$21,180,650 for the Local Government Partnership Program and released an Invitation to Negotiate. As part of this program, in September 2018 the MSRC approved awards of \$52,800 and \$85,000 to the Cities of La Puente and San Clemente, respectively. The SCAQMD Board approved these awards at their October 5, 2018 meeting. However, the descriptions for these two awards did not accurately reflect the projects as presented to, and approved by, the MSRC. The MSRC seeks Board approval of the following amended project descriptions, with no change to the award amounts:

- a. A contract with the City of La Puente in an amount not to exceed \$52,800 to procure one heavy-duty near-zero emission vehicle (rather than one heavy-duty zero emission vehicle), one light-duty zero emission vehicle, and install at least one electric vehicle charging station; and
- b. A contract with the City of San Clemente in an amount not to exceed \$85,000 to procure up to four light-duty zero emission vehicles (rather than three light-duty zero emission vehicles) and install at least two electric vehicle charging stations.

At this time, the MSRC requests the SCAQMD Board to approve the contract awards and modifications as part of approval of the FYs 2014-16 and 2016-18 AB 2766 Discretionary Fund Work Programs 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.

Resource Impacts

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 will be drawn from this fund.



BOARD MEETING DATE: February 1, 2019 AGENDA NO. 11

REPORT: Legislative, Public Affairs and Media Report

SYNOPSIS: This report highlights the December 2018 outreach activities of the

Legislative, Public Affairs and Media Office, which includes Major

Events, Community Events/Public Meetings, Environmental

Justice Update, Speakers Bureau/Visitor Services, Communications Center, Public Information Center, Business Assistance, Media Relations, and Outreach to Community Groups and Federal, State,

and Local Governments.

COMMITTEE: No Committee Review

RECOMMENDED ACTION:

Receive and file.

Wayne Nastri Executive Officer

DJA:LTO:DM:

BACKGROUND

This report summarizes the activities of the Legislative, Public Affairs and Media Office for December 2018. The report includes: Major Events; Community Events/Public Meetings; Environmental Justice Update; Speakers Bureau/Visitor Services; Communications Center; Public Information Center; Business Assistance; Media Relations; and Outreach to Community Groups and Governments.

MAJOR EVENTS (HOSTED AND SPONSORED)

Each year SCAQMD staff engage in holding and sponsoring a number of major events throughout the SCAQMD's four county area to promote, educate and provide important information to the public regarding reducing air pollution, protecting public health, and improving air quality and the economy.

December 10-12

SCAQMD sponsored the California Hydrogen & Fuel Cell Summit and California Hydrogen Business Council Member Day in Sacramento . The purpose of the summit was to advance the interests of hydrogen energy in California, and beyond, by exchanging information and addressing opportunities and challenges in key environmental, business, and market areas. Representatives from over 100 organizations attended this summit.

COMMUNITY EVENTS/PUBLIC MEETINGS

Each year SCAQMD staff engage with thousands of residents, providing valuable information about the agency, incentive programs and ways individuals can help reduce air pollution through events and meetings sponsored solely by SCAQMD 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;
- SCAQMD incentive programs;
- Ways to participate in SCAQMD's rules and policy development; and
- Assistance in resolving air pollution-related problems.

SCAQMD staff attended and/or provided information and updates at the following events:

December 1

• AB 2588 Air Toxic Hotspots Program Public Meeting for Aerocraft Corporation and Anaplex Heat Treating Company, Inc., Progress Park, Paramount.

December 6

• Robert F. Kennedy Institute, Annual Health Conference, Banning's Landing, Wilmington.

ENVIRONMENTAL JUSTICE UPDATE

The following are key environmental justice-related activities in which staff participated throughout the month of December 2018. These events involve communities affected disproportionately from adverse air quality impacts.

December 4

Staff participated in the "Your Life Now" conference hosted by California Safe Schools in Los Angeles. The conference was attended by students from Los Angeles Unified School District, as well as environmental health professionals, local community organizations, and government employees from agencies such as the Cal/EPA, U.S. EPA, and the City of Los Angeles. Board Member JosephLyou opened the conference and panelists discussed topics such as environmental health and local air quality.

December 6

Staff presented at the Fifth Annual Health and Environmental Conference hosted by the Robert F. Kennedy Institute of Community and Family Medicine in Wilmington. Community members and local community organizations attended. Some of the topics presented were: health planning for healthy homes and body; climate change; and environmental endocrine disrupting chemicals and reproductive health.

December 12

Staff attended a meeting in Los Angeles with SCAG regarding their Environmental Justice Working Group. The meeting focused on how SCAQMD and SCAG can work together on EJ initiatives and events moving forward. The Environmental Justice Working Group's purpose is to request feedback on SCAG's 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS or Plan). The Plan is a long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals.

December 13

Staff attended the Department of Toxic Substances Control (DTSC) Exide Advisory Group meeting in Bell. At the meeting, representatives from DTSC updated the public on clean-up efforts in areas affected by lead emissions from Exide and reported that over 200 properties have been cleaned up.

December 19

Staff attended the Coachella Valley Environmental Justice Enforcement Task Force meeting in Indio. There were 15 representatives in attendance from government agencies, community based organizations, and members of the public. Presentations included a general overview of the Transformative Climate Communities planning grant, plans to save the Salton Sea, and a presentation from SCAQMD's Health Effects Officer on air monitoring efforts and incentive programs in the Coachella Valley.

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.

December 13

• Staff presented information on SCAQMD, and its compliance and enforcement of air quality rules and regulations to improve public health, at the Riverside County Department of Environmental Health in Riverside.

COMMUNICATION CENTER STATISTICS

The Communication Center handles calls on SCAQMD's main line, the 1-800-CUT-SMOG® line, the Spanish line, and after-hours calls to each of those lines. Total calls received in the month of December were:

Calls to SCAQMD's Main Line and	
1-800-CUT-SMOG® Line	3,011
Calls to SCAQMD's Spanish-language Line	29
Total Calls	3,040

PUBLIC INFORMATION CENTER STATISTICS

The Public Information Center (PIC) handles phone calls and walk-in requests for general information. Information for the month of December is summarized below:

Calls Received by PIC Staff	101
Calls to Automated System	794
Total Calls	895
Visitor Transactions	142
Email Advisories Sent	6,130

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:

- Provided permit application assistance to 157 companies
- Processed 60 Air Quality Permit Checklists
- Conducted 11 free on-site consultations

Types of businesses assisted

Auto Body Shops	Dry Cleaners	Furniture Refinishing Facilities
Plating Facilities	Gas Stations	Manufacturing Facilities
Auto Repair Centers	Restaurants	Printing Facilities
Engineering, Construction,	-	

MEDIA RELATIONS

The Media Office handles all SCAQMD outreach and communications with television, radio, newspapers and all other publications and media operations.

Total Media Inquiries: 44

No-Burn Alerts: 4

Press Releases/Air Quality Advisories Issued: 3

Major Media Topics for December All inquiries closed unless noted as pending

- AB 617 Random Lengths News requested updates on information shared at an October meeting regarding AB 617 efforts. The reporter inquired as to the basic premise of AB 617 and why certain communities were selected, as well as requesting more information regarding steering committees.
- Aerocraft and Anaplex Health Risk Assessment (HRA) meetings Long Beach Post and CBS-2 attended the HRA meetings. Staff spoke with both regarding the HRAs and the purpose of the meeting.
- Portable air monitors New York Times fact-checked portions of their story on portable air monitoring with staff.
- Housing near freeways KCET requested an in-person interview with SCAQMD staff regarding the issue of freeway pollution and the related health effects facing residents who live nearby. Interview is pending.
- RECLAIM IWP news requested a status update on litigation against SCAQMD in regards to RECLAIM. Staff informed the reporter that the case is stayed until summer 2019, at which time both parties may agree to dismiss the case.
- Torrance Refinery The Daily Breeze requested information regarding the Torrance Refinery flaring events on December 16, and 22, 2018. Staff provided information on our response.
- Emissions monitoring KFI & KNX News requested an interview regarding fenceline emissions monitoring plans for South Bay refineries.
- Modified Hydrofluoric Acid Staff conducted an interview on December 24 with KPCC regarding the status of Proposed Rule 1410.
- KORE Infrastructure project, Rialto KCBS requested an update on the status of the KORE project in Rialto. Reporter also requested clarification of records of payments from SCAQMD to KORE.

No-burn alert – Spectrum News 1, KNX 1070, KPCC/NPR, KCRW and other local news stations requested interviews regarding the weather conditions that can contribute to no-burn alerts.

News Releases

- Los Angeles County Supervisor Janice Hahn Joins SCAQMD Board December 7, 2018.
- SCAQMD Extends Comment Period for Refinery Monitoring Plans December 21, 2018.
- SCAQMD Issues Windblown Dust Advisory December 28, 2018.

Media Campaigns

The Right to Breathe

• The Google AdWords campaign received 4,634 clicks, 5.31 million impressions, 2.65 million views.

Check Before You Burn

- Ten No-burn days declared since November 1, 2018.
- The Google AdWords campaign received 17,223 clicks, 10,308,042 million impressions, 3,071 million views.

OUTREACH TO COMMUNITY GROUPS AND FEDERAL, STATE, AND LOCAL GOVERNMENTS

Field visits and/or communications were conducted with elected officials or staff from the following cities:

Alhambra Glendora Pasadena Riverside Anaheim Highland Arlington Irvine Rosemead San Dimas Azusa Irwindale Big Bear La Cañada Flintridge San Gabriel Claremont South El Monte Laguna Beach Covina Laguna Niguel Temple City Colton Lake Forest Tustin Diamond Bar Los Angeles Walnut West Covina Duarte Monrovia

El Monte Monterey Park Fountain Valley Newport Beach Visits and/or communications were conducted with elected officials and/or staff from the following state and federal offices:

- U.S. Representative Pete Aguilar
- U.S. Representative Nanette Barragán
- U.S. Representative Paul Cook
- Senator Steven Bradford
- Senator Bill Emmerson
- Senator Anthony Portantino
- Assembly Member Ian Calderon

- Assembly Member Wendy Carrillo
- Assembly Member Tom Daly
- Assembly Member Chris Holden
- Assembly Member Mike Gipson
- Assembly Speaker Anthony Rendon
- Assembly Member Sharon Quirk-Silva

• Assembly Member Cottie Petrie-Norris

Staff represented SCAQMD and/or provided updates or a presentation to the following governmental agencies and business organizations:

Arlington Chamber of Commerce

Bear Valley Chamber of Commerce

Bear Valley Electric

Foothill Transit

Glendora Rotary Club

Laguna Beach Chamber of Commerce

Omnitrans, San Bernardino County

Orange County Business Council

Orange County Community Relations Collaborative

Riverside Chamber of Commerce

Riverside Public Utilities

Riverside County Department of Environmental Health

Riverside County Transportation Commission

Riverside Transit Agency - Transportation Now, Greater Riverside Coalition

San Bernardino County Transportation Authority

San Gabriel Valley Council of Governments

San Gabriel Valley Economic Partnership

San Gabriel Valley Public Affairs Network

South Pasadena Chamber of Commerce

Southern California Association of Governments

Staff represented SCAQMD and/or provided updates or a presentation to the following community and educational groups and organizations:

Healthy San Bernardino County Inland Action, Inland Empire

Pasadena Neighborhood Connections

Robert F. Kennedy Institute, Wilmington



BOARD MEETING DATE: February 1, 2019 AGENDA NO. 12

REPORT: Hearing Board Report

SYNOPSIS: This reports the actions taken by the Hearing Board during the

period of December 1 through December 31, 2018.

COMMITTEE: No Committee Review

RECOMMENDED ACTION:

Receive and file.

Julie Prussack Chairman of Hearing Board

DG

Two summaries are attached: **December 2018 Hearing Board Cases** and **Rules From Which Variances and Orders for Abatement Were Requested in 2018**. An Index of District Rules is also attached.

The total number of appeals filed during the period December 1 to December 31, 2018 is 0; and total number of appeals filed during the period of January 1 to December 31, 2018 is 0.

Report of December 2018 Hearing Board Cases

Cas	se Name and Case No.	Rules	Reason for	District Position/	Type and Length of Variance or	Excess Emissions
	AQMD Attorney)		Petition/Hearing	Hearing Board Action	Order	
1.	City of San Bernardino Municipal Water District Case No. 6124-1 (S. Hanizavareh)	203(b) 1110.2(d)(1)(B)(ii) 1110.2(f)(1)(C)(ii) 1110.2(f)(1)(D)(iii) 1110.2(f)(1)(H)	Request relief from emission limits to construct new control technology for essential wastewater processes.	Not Opposed/Granted	RV granted commencing 1/1/19 and continuing through 9/1/21 or until final compliance is achieved, whichever occurs first.	NOx: 2.2 lbs/hr CO: 88.6 lbs/hr VOC: 6.3 lbs/hr
2.	Kinsbursky Brothers, Inc. Case No. 6122-1 (N. Feldman)	1420(f)(1)(B) 1420(g)(2)(B) 1420(J)(2)	Request additional time to meet total enclosure and control requirements for lead processing facility while maintaining zero excess emissions.	Not Opposed/Granted	RV granted commencing 12/13/18 and continuing through 9/3/19 or until final compliance is achieved, whichever occurs first.	None
3.	Los Angeles County Internal Services Department Network Services Division Case No. 6127-1 (T. Barrera)	203(b)	ICE exceeded annual permitted hours of operation due to wildfire.	Not Opposed/Granted	SV granted commencing 12/11/18 and continuing through 12/31/18.	SOx: 0.04 lb/hr PM10: 0.05 lb/hr VOC: 0.7 lb/hr CO: 0.8 lb/hr NOx: 2.65 lbs/hr
4.	Los Angeles County Internal Services Department Network Services Division Case No.6127-2 (T. Barrera)	203(b)	ICE exceeded annual permitted hours of operation due to wildfire.	Not Opposed/Granted	SV granted commencing 12/11/18 and continuing through 12/31/18.	Fees waived pursuant to Rule 303(p)

H	se Name and Case No. AQMD Attorney)	Rules	Reason for Petition/Hearing	District Position/ Hearing Board Action	Type and Length of Variance or Order	Excess Emissions		
5.	Los Angeles County Sanitation Districts Case No. 3715-21 (K. Manwaring)	202(a) 203(b) 431.1(d)(3) 1150.1(d)(1)(C)(i) 1150.1(d)(20) 1150.1(e)(1)(B) 1150.1(e)(1)(C) 1150.1(e)(2)(B) 1150.1(e)(2)(C) 1150.1(e)(3)(C) 1150.1(e)(3)(C) 1150.1(e)(4)(A) 1150.1(e)(4)(A) 1150.1(e)(4)(B) 1150.1(e)(4)(B) 1150.1(e)(5) 1150.1(e)(7) 1150.1(e)(7)(C) 3002(c)	Petitioner sought relief due to extensive damage incurred to landfill gas collection system and associated piping as a result of the Woolsey fire.	Not Opposed/Granted	IV granted commencing 12/18/18 and continuing for 90 days or until the RV hearing currently scheduled for 1/31/19, whichever comes first.	Fees waived pursuant to Rule 303(p)		
6.	Tesoro Refining & Marketing Co, LLC. Case No. 4982-118 (N. Feldman)	203(b) 1105.1 2004(f)(1) 3002(c)(1)	Petitioner sought relief to bypass secondary control equipment in order to conduct source test needed to support a requested permit modification.	Not Opposed/Granted	SV granted commencing 1/7/19 and continuing through 2/28/19. The variance shall be for a period of 96 hours within the start date and ending date listed above.	PM: TBD within 30 days of source test date		
7.	Tesoro Refining & Marketing Co, LLC. Case No. 4982-119 (N. Feldman)	203(b) 2004(f)(1) 2011(c)(2)(A) 2011(C)(2)(B) 2011(e)(1) 2012(c)(2)(A) 2012(c)(2)(B) 2012(g)(1) 3002(c)(1)	Petitioner sought relief to disconnect CEMS during a turnaround in order to safely replace failing heater convection area tubes.	Not Opposed/Granted	SV & AOC granted commencing 1/7/19 and continuing through 2/21/19 or until final compliance is achieved, whichever occurs first.	None		

	se Name and Case No. CAQMD Attorney)	Rules	Reason for Petition/Hearing	District Position/ Hearing Board Action	Type and Length of Variance or Order	Excess Emissions
8.	SCAQMD vs. Providence Tarzana Medical Center Case No. 6128-1 (N. Feldman)	203(a) 1470(c)(2)(C)(iv)(I)	Operating noncompliant emergency generator.	Stipulated/Issued	O/A issued commencing 12/18/19 and continuing through 8/31/19. The Hearing Board shall retain jurisdiction over this matter until 8/31/19.	N/A
9.	SCAQMD vs. Sunshine Canyon Landfill Case No. 3448-14 (N. Sanchez)	N/A	Status Report.	No Action	The Hearing board received a status report and continued the hearing to 3/19/19.	N/A

Acronyms

AOC: Alternative Operating Conditions

CEMS: Continuous Emissions Monitoring System

CO: Carbon Monoxide ICE: Internal Combustion Engine

IV: Interim Variance N/A: Not Applicable
NOx: Oxides of Nitrogen
O/A: Order for Abatement

Mod. O/A: Modification of Order for Abatement

PM: Particulate matter

PM10: Particulate matter 10 micron

RV: Regular Variance SOx: Oxides of Sulfur SV: Short Variance TBD: To Be Determined

VOC: Volatile Organic Compounds

		Rules	from whic	n Variance	s and Orde	ers for Aba	tement we	re Reques	ted in 2018					
	2018	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Actions
# of HB Actions Involving Rules														
109(c)(1)				1									1	2
202(a)								1		1				2
203											1			1
203(a)				2			1	1	1				1	6
203(b)		2	4	2	4	2	3	2	4	3		5	6	37
218(f)										1				1
222							1							1
401(b)(1)										1				1
402								1			1			2
431.1													1	1
431.1(c)(2)					2	1	1							4
431.1(d)(3)													1	1
461										1				1
461(c)(1)(A)												1		1
461(c)(2)(B)								1						1
461(c)(3)(P)								1						1
461(e)(5)								3				1		4
463(c)(2)							2							2
463(d)(2)							2							2
463(e)(4)							2							2
463(f)(1)(C)							2							2
1110.2(d)(1)(B)(ii)													1	1
1110.2(d)(1)(E)(ll) 1110.2(d)(1)(F)							1						•	1
1110.2(d)(1)(F) 1110.2(d)(1)(H)							1							 1
1110.2(d)(1)(H) 1110.2(d)(1)(L)				1			<u>'</u>							1
										1				1
1110.2(e)(3)(b)										1				1
1110.2(f)(1)										•			1	1
1110.2(f)(1)(C)(ii)													1	1
1110.2(f)(1)(D)(iii)													1	1
1110.2(f)(1)(H)							1			1			'	2
1146(d)(6)							1			1				2
1146(d)(8)							1			'				1
1146.2							1							1
1146.2(e)							1	1						2
1147		1					1	1	1					2
1147(c)(1)		1					1		1					1
1149(c)(1)							1							1
1149(c)(2)							1							1
1149(c)(7)														
1105.1													1	1
1150.1(d)(1)(C)(i)													1	1
1150.1(d)(14)													1	1
1150.1(d)(20)													1	1
1150.1(e)(1)(B)													1	1

		Rules f	rom which	Nariance:	s and Orde	rs for Abat	ement wei	re Reques	ted in 2018					
	2018	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Actions
1150.1(e)(1)C)									,g			7.01	1	1
1150.1(e)(2)													1	1
1150.1(e)(2)(B)													1	1
1150.1(e)(2)(C)													1	1
1150.1(e)(3)													1	1
1150.1(e)(3)(B)													1	1
1150.1(e)(3)(C)													1	1
1150.1(e)(4)													1	1
1150.1(e)(4)(A)													1	1
1150.1(e)(4)(B)													1	1
1150.1(e)(5)													1	1
1150.1(e)(7)													1	1
1150.1(e)(7)(C)													1	1
1173(g)(1)										1				1
1178(d)(3)							2							2
1178(g)							2							2
1178(h)(4)							2							2
1401											1			1
1407				1										1
1415(d)(1)(A)							1							1
1420(f)(1)(B)													1	1
1420(g)(2)(B)													1	1
1420(J)(2)													1	1
1420.2				2		1			1					4
1420.2(g)(3)(B)									1					1
1430									1					1
1430(d)(8)(A)									1	1				2
1470							1							1
1470(c)(2)(C)(iv)(I)													1	1
2004(f)(1)		2	3		2		2	1	1	1			2	14
2011(c)(2)(A)		1											1	2
2011(c)(2)(B)		1											1	2
2011(e)(1)		1											1	2
2012(c)(2)(A)		1											1	2
2012(c)(2)(B)		1 1											1	2
2012(g)(1)		1											1	2
3002(c)		1					2						1	2
3002(c)(1)		1	3		3		3	1	2	1	4		1	16
H&S 41700								7			1			2
H&S 41701										1				1
H&S 42401										1				1

DISTRICT RULES AND REGULATIONS INDEX FOR 2018 HEARING BOARD CASES AS OF DECEMBER 31, 2018

REGULATION I – GENERAL PROVISIONS

Rule 109 Recordkeeping for Volatile Organic Compound Emissions

REGULATION II - PERMITS

Rule 202	Temporary Permit to Operate
Rule 203	Permit to Operate
Rule 218	Continuous Emission Monitoring
Rule 222	Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II

REGULATION IV – PROHIBITIONS

Rule 40 I	VISIDIE ETTISSIONS
Rule 402	Nuisance
Rule 431.1	Sulfur Content of Gaseous Fuels
Rule 461	Gasoline Transfer and Dispensing
Rule 463	Organic Liquid Storage

REGULATION XI - SOURCE SPECIFIC STANDARDS

Rule 1105.1	Reduction of PM10 and Ammonia Emissions from Fluid Catalytic Cracking Units
Rule 1110.2	Emissions from Gaseous- and Liquid-Fueled Internal Combustion Engines
Rule 1143	Consumer Paint Thinners and Multi-Purpose Solvents
Rule 1146	Emissions of Oxides of Nitrogen from Industrial, Institutional and Commercial Boilers, Steam Generators,
	and Process Heaters
Rule 1146.2	Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters
Rule 1147	NOx Reductions from Miscellaneous Sources
Rule 1149	Storage Tank and Pipeline Cleaning and Degassing
Rule 1150.1	Control of Gaseous Emissions from Municipal Solid Waste Landfills
Rule 1173	Control of Volatile Organic Compound Leaks and Releases from Components at Petroleum Facilities and
	Chemical Plants
Rule 1178	Further Reductions of VOC Emissions from Storage Tanks at Petroleum Facilities

REGULATION XIV – TOXICS AND OTHER NON-CRITERIA POLLUTANTS

Rule 1401	New Source Review of Toxic Air Contaminants
Rule 1407	Control of Emissions of Arsenic, Cadmium, and Nickel from Non-Ferrous Metal Melting Operations
Rule 1415	Reduction of Refrigerant Emissions from Stationary Air Conditioning Systems
Rule 1420.2	Emission Standard for Lead from Metal Melting Facilities
Rule 1430	Control of Emissions from Metal Grinding Operations at Metal Forging Facilities
Rule 1470	Requirements for Stationary Diesel-Fueled Internal Combustion and Other Ignition Engines

REGULATION XX - REGIONAL CLEAN AIR INCENTIVES MARKET (RECLAIM)

Rule 2004	Requirements
Rule 2011	Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SOx) Emissions
Rule 2012	Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NOx) Emissions

REGULATION XXX - TITLE V PERMITS

Rule 3002 Requirements

CALIFORNIA HEALTH AND SAFETY CODE

§41700	Prohibited Discharges
§41701	Restricted Discharges
§42401	Violation of Abatement Order; Civil Penalty



BOARD MEETING DATE: February 1, 2019 AGENDA NO. 13

REPORT: Civil Filings and Civil Penalties Report

SYNOPSIS: This reports the monthly penalties from December 1, 2018

through December 31, 2018, and legal actions filed by the General Counsel's Office from December 1 through December 31, 2018. An Index of District Rules is attached

with the penalty report.

COMMITTEE: Stationary Source, January 18, 2019, Reviewed

RECOMMENDED ACTION:

Receive and file.

Bayron T. Gilchrist General Counsel

BTG:ew

There are no Civil Filings for December 2018

Attachments

December 2018 Penalty Report Index of District Rules and Regulations

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT General Counsel's Office

December 2018 Settlement Penalty Report

Total Penalties

Civil Settlements: \$271,150.00 MSPAP Settlements: \$24,075.00

Total Cash Settlements: \$295,225.00
Total SEP Value: \$0.00

Fiscal Year through 12 / 2018 Cash Total: \$4,727,730.00
Fiscal Year through 12 / 2018 SEP Value Only Total: \$260,000.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
Civil Sett	lements					
22911	CARLTON FORGE WORKS	2004 2005 3002		DH	P64149	\$40,000.00
34389	CHAFFEY COLLEGE	461 1146.2 1415 1470 203 222		WBW	P62031 P62039	\$19,750.00
4588	HOST MARRIOTT	2202	12/27/2018	NSF	P64817	\$10,000.00
95461	HUNTINGTON MEMORIAL HOSPITAL UNIT NO.02	2202	12/12/2018	SH	P55315	\$2,500.00
43525	J C PENNEY CO (amount includes Suspended Penalty of \$15,000)	2202	12/5/2018	BBB	P60301 P64804	\$21,400.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
141750	NRC ENVIRONMENTAL SERVICES INC	203 (b)	12/12/2018	WBW	P63304	\$70,000.00
171109	PHILLIPS 66 COMPANY/LOS ANGELES REFINERY	402	12/12/2018	NAS	P64601	\$93,500.00
		462			P64602	
		1118			P64603	
		1173			P64604	
		1176			P64607	
		2004			P64611	
		2011			P64612	
		2012			P64613	
		2012 Appen A			P64614	
		3002			P65311	
		41700				
168088	POLYNT COMPOSITES USA INC	2004	12/21/2018	DH	P57884	\$12,500.00
157135	SEAL BEACH POLICE DEPARTMENT	203	12/4/2018	VKT	P64217	\$1,500.00

Total Civil Settlements: \$271,150.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
MSPAP S	ettlements					
178441	AGROMIN OC CHINO GREEN MATERIAL COMPOST	203(a)	12/7/2018	GC	P66405	\$200.00
151886	ALPHA MATERIALS, INC.	203 (a)	12/7/2018	GC	P66052	\$200.00
800196	AMERICAN AIRLINES, INC,	13 CCR 2460	12/7/2018	GC	P66752	\$1,000.00
156222	AMPARO MEDICAL INC	201 203	12/26/2018	GC	P65761	\$1,040.00
133566	ASBESTOS INSTANT RESPONSE INC	1403	12/7/2018	GC	P65951	\$2,000.00
136077	CLEAN AIR TESTING, INC	461	12/7/2018	TF	P64993	\$800.00
185551	CRITICAL ENVIRONMENTS, INC	203 (a)	12/26/2018	GC	P66602	\$200.00
184317	FAIRMOUNT TERRACE	201 203(a)	12/26/2018	GC	P64128	\$400.00
179460	H&S ENERGY, LLC. H&S 37	461	12/26/2018	GC	P64994	\$880.00
800367	IPS CORPORATION	3002	12/7/2018	GC	P50741	\$1,100.00
172198	JACOS & CO INC/7-ELEVEN STORE 39682A	203(a) 461	12/26/2018	GC	P65726	\$880.00
186808	MBC PROPERTY INVESTMENT INC	1403	12/26/2018	TF	P66703	\$2,050.00
139769	MELROSE 76, GLENROSE INC	461	12/26/2018	TF	P68151	\$800.00
139769	MELROSE 76, GLENROSE INC	461	12/26/2018	TF	P64934	\$500.00
186361	MGA INVESTMENT INC	203 (a)	12/26/2018	TF	P65263	\$800.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
187049	PRESIDO RESIDENTIAL CAPITOL	403	12/26/2018	TF	P63144	\$375.00
32056	R & S OIL CO/ARCO DEALER	461	12/7/2018	TF	P64933	\$500.00
181610	ST MARY & ST MICHAEL, INC., 5FM ONTARIO	461 41960.2		TF	P66359	\$800.00
139811	SUNNYSIDE 76 CAR CARE CENTER	201	12/7/2018	TF	P65000	\$800.00
180780	TESORO ARCO #42660	203 461		GC	P66352	\$3,150.00
185347	THE CRANE GUYS, LLC.	203 (a)	12/7/2018	GC	P66601	\$800.00
180854	VILLEGAS POWDER COATING	201 203		TF	P68051	\$2,400.00
186859	WILCOX & WILCOX	403	12/26/2018	TF	P67202 P67203	\$2,400.00

Total MSPAP Settlements: \$24,075.00

DISTRICT'S RULES AND REGULATIONS INDEX FOR DECEMBER 2018 PENALTY REPORT

REGULATION II - PERMITS

Rule 201	Permit to Construct
Rule 203	Permit to Operate

Rule 222 Filing Requirements for Specific Emission Sources Not Requiring a Written permit Pursuant to Regulation II

REGULATION IV - PROHIBITIONS

Rule 402	Nuisance
----------	----------

Rule 403 Fugitive Dust - Pertains to solid particulate matter emitted from man-made activities

Rule 461 Gasoline Transfer and Dispensing

Rule 462 Organic Liquid Loading

REGULATION XI - SOURCE SPECIFIC STANDARDS

Rule 1118	Emissions from Refinery Flares
-----------	--------------------------------

Rule 1146.2 Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers

Rule 1173 Fugitive Emissions of Volatile Organic Compounds

Rule 1176 Sumps and Wastewater Separators

REGULATION XIV - TOXICS

Rule 1415 Reduction of Refrigerant Emissions from Stationary Refrigeration and Air Conditioning Systems

Rule 1470 Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines

REGULATION XX - REGIONAL CLEAN AIR INCENTIVES MARKET (RECLAIM)

Rule 2004	RECLAIM Program Requirements
Rule 2005	New Source Review for RECLAIM

Rule 2011 Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SO_X) Emissions Rule 2012 Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NO_X) Emissions

Rule 2012

Appendix A Protocol for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NOx) Emissions

REGULATION XXII ON-ROAD MOTOR VEHICLE MITIGATION

Rule 2202 On-Road Motor Vehicle Mitigation Options

REGULATION XXX - TITLE V PERMITS

Rule 3002 Requirements for Title V Permits

CALIFORNIA HEALTH AND SAFETY CODE

41700 Violation of General Limitations41960.2 Gasoline Vapor Recovery

CALIFORNIA CODE OF REGULATIONS

13 CCR 2460 Portable Equipment Testing Requirements



BOARD MEETING DATE: February 1, 2019 AGENDA NO. 14

REPORT: Lead Agency Projects and Environmental Documents Received By

SCAQMD

SYNOPSIS: This report provides, for the Board's consideration, a listing of

CEQA documents received by the SCAQMD between December 1,

2018 and December 31, 2018, and those projects for which the

SCAQMD is acting as lead agency pursuant to CEQA.

COMMITTEE: No Committee Review

RECOMMENDED ACTION:

Receive and file.

Wayne Nastri Executive Officer

PF:SN:MK:LS:LW

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 December 1, 2018 through December 31, 2018 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 in Attachment B. A total of 65 CEQA documents were received during this reporting period and 23 comment letters were sent. Notable project to highlight in this report include the State Route 710 North Project and the Santa Susana Field Laboratory Project in Ventura County.

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 Board's 1997 Environmental Justice Guiding Principles and Environmental Justice Initiative #4. As required by the Environmental Justice Program Enhancements for FY 2002-03 approved by the Board in October 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 by submitting newspaper articles. The attachments also identify, for each project, the dates of the public comment period and the public hearing date, if applicable. 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; 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 at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mitigationmeasures-and-control-efficiencies. Staff will continue compiling tables of mitigation measures for other emission sources, including airport ground support equipment and other sources.

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 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 staff testified at a hearing for the proposed project, a notation is provided under the "Comment Status." If there is no notation, then staff did not provide testimony at a hearing for the proposed project.

During the period December 1, 2018 through December 31, 2018, the SCAQMD received 65 CEQA documents. Of the total of 78 documents* listed in Attachments A and B:

- 23 comment letters were sent;
- 24 documents were reviewed, but no comments were made;
- 25 documents are currently under review;
- 0 documents did not require comments (e.g., public notices);
- 0 documents were not reviewed; and
- 6 documents were screened without additional review.
 - * These statistics are from December 1, 2018 to December 31, 2018 and may not include the most recent "Comment Status" updates in Attachments A and B.

Copies of all comment letters sent to lead agencies can be found on the SCAQMD's CEQA webpage at the following internet address: http://www.aqmd.gov/home/regulations/ceqa/commenting-agency.

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, a 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. As noted in Attachment C, the SCAQMD continued working on the CEQA documents for three active projects during December.

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 December 01, 2018 to December 31,2018

Warehouse & Distribution Centers The proposed project consists of demolition of a 3,800-square-foot to building and construction of a 5,5000-square-foot cooler dock on 7,7 ares. The project is located on the northeast corner of East E Street and McFarland Avenue in the community of Wilmington-Harbor City. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/january/LAC181221-03.pdf Comment Period: 12/20/2018 - 1/9/2019 Public Hearing: N/A Public Hearing: N/A Valley Valley	SCAQMD LOG-IN NUMBER	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Warehouse & Distribution Centers RVC181205-03 MA181211 (CUP18007 & TPM37614) The proposed project consists of construction of a 310,760-square-foot warehouse on 13.9 acres. The project is located on the northwest corner of Etiwanda Avenue and Cantu-Galleano Ranch Road. The project is located on the northwest corner of Etiwanda Avenue and Cantu-Galleano Ranch Road. Site Plan City of Jurupa Valley SCAL Staff Comment Period: 12/5/2018 - 12/19/2018 RVC181205-03.pdf Comment Period: 12/5/2018 - 12/19/2018 RVC181205-07 Banning Distribution Center (GPA 17- 2501, ZC 17-3501) Reference RVC180626-03 and RVC180123-01 Warehouse & Distribution Centers RVC181218-03 Major Modification 17-05075 to Integra Perris Distribution Center Project The proposed project consists of construction of 273,000 square feot warehouse on 63.9 acres. The project is located near the northeast corner of East Lincoln Street and South Hathaway Street. Reference RVC180626-03 and RVC180123-01 The proposed project consists of construction of 273,000 square feet of warehouse uses to be added to existing 864,000-square-foot warehouse on 10.2 acres. The project is located at 657 West Nance Street on the northeast corner of Webster Avenue and Markham Street. Reference RVC180328-01, RVC141209-09, RVC141202-06, RVC140808-04, RVC140604-03 and RVC140523-06	LAC181221-03	55,000-square-foot warehouse with a 38,400-square-foot freezer and a 7,000-square-foot cooler dock on 7.7 acres. The project is located on the northeast corner of East E Street and McFarland Avenue in the community of Wilmington-Harbor City. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/january/LAC181221-03.pdf	Negative	City of Los Angeles	commented
Warehouse & Distribution Centers RVC181205-07 Banning Distribution Center (GPA 17-2501, ZC 17-3501) Comment Period: N/A Warehouse & Distribution Centers RVC181218-03 Major Modification 17-05075 to Integra Perris Distribution Center Project Marehouse & Vision Street (GPA 17-2501) The proposed project consists of construction of a 1,000,000-square-foot warehouse on 63.9 acres. The project is located near the northeast corner of East Lincoln Street and South Hathaway Street. Reference RVC180626-03 and RVC180123-01 The proposed project consists of construction of 273,000 square feet of warehouse uses to be added to existing 864,000-square-foot warehouse on 10.2 acres. The project is located at 657 west Nance Street on the northeast corner of Webster Avenue and Markham Street. Reference RVC180328-01, RVC141209-09, RVC141202-06, RVC140808-04, RVC140604-03 and RVC140523-06 Response to City of Banning Documers of East Lincoln Street and South Hathaway Street. Reference RVC180626-03 and RVC180123-01 City of Perris Supplemental Environmental Impact Report written and RVC140523-06	RVC181205-03	The proposed project consists of construction of a 310,760-square-foot warehouse on 13.9 acres. The project is located on the northwest corner of Etiwanda Avenue and Cantu-Galleano Ranch Road. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/RVC181205-03.pdf	Site Plan		commented
Warehouse & Distribution Centers RVC181218-03 Major Modification 17-05075 to Integra Perris Distribution Center Project The proposed project consists of construction of 273,000 square feet of warehouse uses to be added to existing 864,000-square-foot warehouse on 10.2 acres. The project is located at 657 West Nance Street on the northeast corner of Webster Avenue and Markham Street. Reference RVC180328-01, RVC141209-09, RVC141202-06, RVC140808-04, RVC140604-03 Reference RVC180328-01, RVC140523-06 The proposed project consists of construction of 273,000 square feet of warehouse uses to be Supplemental Environmental Impact Report with	RVC181205-07 Banning Distribution Center (GPA 17-	The proposed project consists of construction of a 1,000,000-square-foot warehouse on 63.9 acres. The project is located near the northeast corner of East Lincoln Street and South Hathaway Street. Reference RVC180626-03 and RVC180123-01	•	City of Banning	comments
	RVC181218-03 Major Modification 17-05075 to Integra	The proposed project consists of construction of 273,000 square feet of warehouse uses to be added to existing 864,000-square-foot warehouse on 10.2 acres. The project is located at 657 West Nance Street on the northeast corner of Webster Avenue and Markham Street. Reference RVC180328-01, RVC141209-09, RVC141202-06, RVC140808-04, RVC140604-03	Supplemental Environmental	City of Perris	Under review, may submit written comments

Documents received by the CEQA Intergovernmental Review program but not requiring review are not included in this report.

^{*}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.

ATTACHMENT A INCOMING CEQA DOCUMENTS LOG December 01, 2018 to December 31, 2018

SCAQMD LOG-IN NUMBER	PROJECT DESCRIPTION	TYPE OF	LEAD AGENCY	COMMENT
PROJECT TITLE		DOC.		STATUS
Warehouse & Distribution Centers RVC181219-07 Agua Mansa Commerce Center - MA16170 (GPA16003, CZ16008, SP16002, SDP18044, and TPM37528)	The proposed project consists of subdivision of 281 acres for future development of 4,216,000 square feet of industrial uses, 289,000 square feet of business and retail uses, and 71 acres of open space. The project is located at 1500 Rubidoux Boulevard on the southeast corner of El Rivino Road and Rubidoux Boulevard. Reference RVC181023-01, RVC180509-01, RVC180503-05, RVC171128-09, RVC170705-15, RVC161216-03, and RVC161006-06	Site Plan	City of Jurupa Valley	Document reviewed - No comments sent
	Comment Period: N/A Public Hearing: N/A			
Warehouse & Distribution Centers	The proposed project consists of construction of a 278,047-square-foot warehouse on 13.47	Notice of Intent	City of San	SCAQMD
SBC181205-04 2600 Cajon Boulevard Project	acres. The project is located on the northwest corner of 24th Street and Western Avenue North.	to Adopt a Mitigated Negative Declaration	Bernardino	staff commented on 12/14/2018
	http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/SBC181205-04.pdf Comment Period: 11/30/2018 - 12/20/2018 Public Hearing: N/A			
Warehouse & Distribution Centers SBC181211-02 CDRE Base Line Industrial Warehouse	The proposed project consists of construction of a 99,999-square-foot industrial building on five acres. The project is located on the northeast corner of Base Line Road and Palmetto Avenue. Reference SBC181107-07	Response to Comments	City of Rialto	Document reviewed - No comments sent
	Comment Period: N/A Public Hearing: 1/9/2019			
Warehouse & Distribution Centers	The proposed project consists of construction of a 192,790-square-foot warehouse on 8.5 acres.	Notice of	City of Fontana	SCAQMD
SBC181212-04 Slover Business Park Overlay & Slover Gateway Commerce Center	The project is located on the southwest corner of Solver Avenue and Cypress Avenue.	Preparation		staff commented on 12/19/2018
	http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/SBC181212-04.pdf			
	Comment Period: 12/3/2018 - 1/4/2019 Public Hearing: 12/12/2018			

^{# -} Project has potential environmental justice concerns due to the nature and/or location of the project.

Documents received by the CEQA Intergovernmental Review program but not requiring review are not included in this report.

ATTACHMENT A INCOMING CEQA DOCUMENTS LOG December 01, 2018 to December 31, 2018

SCAQMD LOG-IN NUMBER	PROJECT DESCRIPTION	TYPE OF	LEAD AGENCY	COMMENT
PROJECT TITLE		DOC.		STATUS
Warehouse & Distribution Centers SBC181220-01 Baseline and Tamarind Warehouse Project	The proposed project consists of construction of a 156,500-square-foot warehouse on 8.01 acres. The project is located on the northwest corner of Base Line Road and Tamarind Avenue. Reference SBC181128-02	Response to Comments	City of Rialto	Document reviewed - No comments sent
	Comment Period: N/A Public Hearing: 1/9/2019			
Warehouse & Distribution Centers SBC181221-06 Alder - Baseline Road Project	The proposed project consists of construction of a 255,173-square-foot warehouse on 11.63 acres. The project is located on the northwest corner of Alder Avenue and Base Line Road.	Mitigated Negative Declaration	City of Rialto	scaQMD staff commented on 1/8/2019
	http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/january/SBC181221-06.pdf Comment Period: 12/21/2018 - 1/9/2019 Public Hearing: 1/30/2019	,		
Warehouse & Distribution Centers SBC181221-08 Alder II Warehouse	The proposed project consists of construction of a 78,680-square-foot warehouse on 4.10 acres. The project is located on the northwest corner of Base Line Road and Alder Avenue.	Mitigated Negative Declaration	City of Rialto	SCAQMD staff commented on 1/8/2019
	http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/january/SBC181221-08.pdf Comment Period: 12/22/2018 - 1/10/2019 Public Hearing: 1/30/2019			1/8/2019
Industrial and Commercial LAC181204-01 Aerocraft Heat Treating Dust Collection Project (Conditional Use Permit No. 854)	The proposed project consists of installation of four new dust collectors to be attached to two existing buildings on 1.6 acres. The project is located at 15701 Minnesota Avenue on the southwest corner of Madison Street and Minnesota Avenue. Reference LAC180927-05	Addendum to a Mitigated Negative Declaration	City of Paramount	Document reviewed - No comments sent
	Comment Period: N/A Public Hearing: N/A			

^{# -} Project has potential environmental justice concerns due to the nature and/or location of the project.

Documents received by the CEQA Intergovernmental Review program but not requiring review are not included in this report.

SCAQMD LOG-IN NUMBER	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
PROJECT TITLE		DOC.		SIATUS
Industrial and Commercial LAC181205-08 City Yards Master Plan Project	The proposed project consists of demolition, removal, and redevelopment of 16 existing buildings totaling 65,348 square feet, and construction of 51,013 square feet of new industrial buildings on 14.2 acres. The project is located at 2500 Michigan Avenue on the southeast corner of Michigan Avenue and 24th Street. Reference LAC181002-13 and LAC171117-06	Response to Comments	City of Santa Monica	Document reviewed - No comments sent
	Comment Period: N/A Public Hearing: 12/12/2018			
Industrial and Commercial	The proposed project consists of construction of a 102,848-square-foot office building on 2.1	Mitigated	City of Long Beach	Document
LAC181219-05 Laserfiche Office Project	acres. The project is located at 3443 Long Beach Boulevard on the northwest corner of Long Beach Boulevard and East Wardlow Road.	Negative Declaration		reviewed - No comments sent
	Comment Period: 12/17/2018 - 1/17/2019 Public Hearing: 1/17/2019			
Industrial and Commercial	The proposed project consists of demolition of a 96,335-square-foot building and construction of	Mitigated	City of Los Angeles	-
LAC181221-02 ENV-2018-870: 3600 S. Hope St.	a 229,741-square-foot storage building on 0.84 acres. The project is located on the southwest corner of South Hope Street and South Grand Avenue in the community of Downtown Los Angeles.	Negative Declaration		staff commented on 1/2/2018
	http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/january/LAC181221-02.pdf Comment Period: 12/21/2018 - 1/14/2019 Public Hearing: N/A			
Industrial and Commercial	The proposed project consists of demolition of a 20,059-square-foot office building and	Mitigated	City of Los Angeles	
LAC181221-04 ENV-2017-4170: 5950 W. Jefferson Blvd.	construction of a 69,483-square-foot commercial building with office, retail, and restaurant uses. The project is located on the southeast corner of Jefferson Boulevard and Holdrege Avenue in the community of West Adams-BaldwinHills-Leimert.	Negative Declaration		reviewed - No comments sent
	Comment Period: 12/20/2018 - 1/9/2019 Public Hearing: N/A			

^{# -} Project has potential environmental justice concerns due to the nature and/or location of the project.

Documents received by the CEQA Intergovernmental Review program but not requiring review are not included in this report.

SCAQMD LOG-IN NUMBER	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT
PROJECT TITLE		DOC.		STATUS
Industrial and Commercial RVC181211-03 Toscana Village at Temescal Valley	The proposed project consists of construction of 15 commercial buildings totaling 194,100 square feet and a gasoline service station with 12 fueling pumps on 27 acres. The project is located on the northwest corner of Temescal Canyon Road and Indian Truck Trail in the community of Temescal Valley. Reference RVC180524-02 and RVC170705-11	Final Environmental Impact Report	County of Riverside	Document reviewed - No comments sent
	Comment Period: N/A Public Hearing: 12/19/2018			
Industrial and Commercial	The proposed project consists of construction of a 110,479-square-foot office building with	Mitigated	City of Redlands	Document
SBC181221-11 Commission Review & Approval No. 901 and Zone Change No. 460	subterranean parking on 3.58 acres. The project is located on the southwest corner of West Park Avenue and New York Street.	Negative Declaration		reviewed - No comments sent
	Comment Period: 12/21/2018 - 1/22/2019 Public Hearing: N/A			
Waste and Water-related	The proposed project consists of construction of groundwater treatment facilities and removal of	Mitigated	Water	Document
LAC181204-02 Sativa Well #5	one tank on 0.08 acres. The project is located at 2083 East Stockwell Street on the southeast corner of Aranbe Avenue and Stockwell Street in the community of Willowbrook in Los Angeles County.	Negative Declaration	Replenishment District of Southern California	reviewed - No comments sent
	Comment Period: 11/26/2018 - 12/26/2018 Public Hearing: N/A			
Waste and Water-related	The proposed project consists of construction of 2.5 miles of portable water pipelines. The project	Mitigated	Los Angeles	SCAQMD
LAC181204-05 De Soto Trunk Line Replacement	is located on the northwest corner of De Soto Avenue and Roscoe Boulevard within the communities of Chatsworth-Porter Ranch and Canoga Park-Winnetka-Woodland Hills-West Hills.	Negative Declaration	Department of Water and Power	staff commented on 1/4/2019
	http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/january/LAC181204-05.pdf			
	Comment Period: 11/27/2018 - 1/11/2019 Public Hearing: N/A			

^{# -} Project has potential environmental justice concerns due to the nature and/or location of the project.

Documents received by the CEQA Intergovernmental Review program but not requiring review are not included in this report.

SCAQMD LOG-IN NUMBER	PROJECT DESCRIPTION	TYPE OF	LEAD AGENCY	COMMENT
PROJECT TITLE		DOC.		STATUS
Waste and Water-related LAC181204-11 Associated Plating Company	The proposed project consists of development of corrective measures to install four soil vapor extraction wells, conveyance pipeline, and monitoring system on 1.25 acres. The project is located at 9636 Ann Street on the northwest corner of Santa Fe Springs Road and Sorensen Avenue in the City of Santa Fe Springs.	Corrective Measure Plan	Department of Toxic Substances Control	Document reviewed - No comments sent
	Comment Period: 11/19/2018 - 1/14/2019 Public Hearing: N/A			
Waste and Water-related LAC181218-01 Culver Boulevard Realignment and Stormwater Treatment Project	The proposed project consists of roadway improvements to a 0.45-mile segment of Culver Boulevard and construction of a subsurface stormwater treatment capture facility on 1.6 acres. The project is located along Culver Boulevard between Sepulveda Boulevard and Elenda Street.	Mitigated Negative Declaration	City of Culver City	scaQMD staff commented on 1/9/2019
	http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/january/LAC181218-01.pdf Comment Period: 12/13/2018 - 1/14/2019 Public Hearing: 1/28/2019	D. C	II is 10 s. A	
Waste and Water-related LAC181219-02 Whittier Narrows Dam Safety Modification Study	The proposed project consists of development of risk reduction and remedial actions in response to safety issues at the project. The project is located on the southwest corner of Rosemead Boulevard and San Gabriel Boulevard in the City of Pico Rivera. Reference LAC130903-08	Draft Environmental Impact Statement	United States Army Corps of Engineers	Under review, may submit written comments
	Comment Period: 12/11/2018 - 1/28/2019 Public Hearing: 1/12/2019			
Waste and Water-related ODP181221-07 Santa Susana Field Laboratory Project	The proposed project consists of closure activities including cleanup of contaminated soil and groundwater, and removal of existing facilities, and restoration of Area IV on a 290-acre portion of 2,850 acres. The project is located on the southeast corner of Service Area Road and Woolsey Canyon Road in Ventura County. Reference ODP180904-15, ODP180814-10, ODP170926-03, ODP170915-02, ODP170908-05, ODP170420-07, ODP170405-01, ODP140116-02, ODP131121-02, ODP100930-02, LAC131018-05, LAC130918-13, and LAC110510-12	Final Environmental Impact Statement	United States Department of Energy	Document reviewed - No comments sent
	Comment Period: N/A Public Hearing: N/A			

^{# -} Project has potential environmental justice concerns due to the nature and/or location of the project.

Documents received by the CEQA Intergovernmental Review program but not requiring review are not included in this report.

SCAQMD LOG-IN NUMBER	PROJECT DESCRIPTION	TYPE OF	LEAD AGENCY	COMMENT
PROJECT TITLE		DOC.		STATUS
Waste and Water-related ORC181204-07 Construction and Management of an Artificial Reef in the Pacific Ocean near San Clemente, California: Wheeler North Reef Expansion Project	The proposed project consists of deposition of 175,000 tons of quarried rock to expand existing 175-acre Wheeler North Reef to create 210 acres of additional kelp reef. The project is located on submerged lands offshore of the City of San Clemente. Reference ORC140403-10, ORC130328-01, and ORC100330-05 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/ORC181204-07.pdf	Notice of Availability of a Draft Subsequent Environmental Impact Report	California State Land Commission	SCAQMD staff commented on 12/21/2018
	Comment Period: 11/9/2018 - 12/28/2018 Public Hearing: 12/5/2018			
Waste and Water-related ORC181214-02 RGP - 66 San Clemente Beach Nourishment Program	The proposed project consists of a permit application to conduct beach nourishment using fill from construction and development projects on 29 acres of tidal waters. The project is located in the coastal zone of the City of San Clemente in Orange County.	Public Notice	United States Army Corps of Engineers	Document reviewed - No comments sent
	Comment Period: 12/13/2018 - 1/14/2019 Public Hearing: N/A			
Waste and Water-related RVC181220-02 Edom Hill Compost Facility and Truck Climbing Lane	The proposed project consists of construction of waste composting facility that would accept up to 500 tons of food and green waste, and up to 25,000 gallons of grease trap liquid per day on 20 acres. The project is located at 69780 Edom Hill Road near the northeast corner of Varner Road and Edom Hill Road. Reference RVC180626-04	Response to Comments	City of Cathedral City	Document reviewed - No comments sent
	Comment Period: N/A Public Hearing: N/A			
Waste and Water-related	The proposed project consists of construction of water flow channel to promote leaching and	Mitigated	San Bernardino	Document
SBC181226-01 Chris Basin Annual Routine Maintenance and Bacteria Reduction Pilot Project	reduction of bacteria on eight acres. The project is located near the southwest corner of Chino Avenue and Archibald Avenue in the City of Ontario.	Negative Declaration	County Flood Control District	reviewed - No comments sent
	Comment Period: 12/21/2018 - 1/16/2019 Public Hearing: N/A			

^{# -} Project has potential environmental justice concerns due to the nature and/or location of the project.

Documents received by the CEQA Intergovernmental Review program but not requiring review are not included in this report.

SCAQMD LOG-IN NUMBER	PROJECT DESCRIPTION	TYPE OF	LEAD AGENCY	COMMENT
PROJECT TITLE		DOC.		STATUS
Wtilities RVC181212-08 Circle City Substation and Mira Loma- Jefferson 66 kV Subtransmission Line Project	The proposed project consists of construction of a 66/12 kilovolt (kV) substation, six underground 12 kV distribution getaways, four 66 kV subtransmission source lines, and a 10.9-mile 66 kV subtransmission line on 19.5 acres. The project would also relocate 1.9 miles of 33 kV distribution line and install telecommunication facilities. The project is located on the southwest corner of Magnolia Avenue and East 6th Street in the City of Corona, and would also traverse through the cities of Eastvale, Norco, Chino, and Ontario in the counties of Riverside and San Bernardino. Reference RVC180606-02 and RVC160204-01	Final Environmental Impact Report	California Public Utilities Commission	Document reviewed - No comments sent
	Comment Period: N/A Public Hearing: N/A			
Transportation LAC181207-01 State Route 710 North Project	This document identifies adverse effects on cultural resources for the proposed project. The proposed project consists of improvements to mobility to relieve congestion on State Route 710. The project is located near the southwest corner of Interstate 2 and Interstate 605 in the western portion of the San Gabriel Valley of Los Angeles County. Reference LAC180518-07, LAC170523-03, and LAC150306-02	Final Environmental Impact Report	California Department of Transportation	Document reviewed - No comments sent
	Comment Period: N/A Public Hearing: N/A			
Transportation ORC181204-09 Jeffrey Open Space Trail Extension Project (Barranca Parkway to Walnut Avenue)	The proposed project consists of construction of a bicycle-pedestrian trail and rest area on 13.46 acres. The project is located along the east side of Jeffrey Road between Barranca Parkway and Walnut Avenue. Reference ORC170622-06	Recirculated Mitigated Negative Declaration	City of Irvine	Document reviewed - No comments sent
Transportation	Comment Period: 11/29/2018 - 1/8/2019 Public Hearing: N/A	Dogmongo to	California	Dogumant
Transportation ORC181212-07 State Route 74 (SR-74) Safety Improvement Project	The proposed project consists of construction of roadway improvements to a 5.1-mile segment of State Route 74 from Post Mile (PM) 11.50 to PM 16.60, excluding the San Juan Canyon Bridge (PM 13.28 to PM 13.33). The project traverses through the community of Trabuco Canyon. Reference ORC180306-05	Response to Comments	Department of Transportation	Document reviewed - No comments sent
	Comment Period: N/A Public Hearing: N/A			

^{# -} Project has potential environmental justice concerns due to the nature and/or location of the project.

Documents received by the CEQA Intergovernmental Review program but not requiring review are not included in this report.

SCAQMD LOG-IN NUMBER	PROJECT DESCRIPTION	TYPE OF	LEAD AGENCY	COMMENT
PROJECT TITLE		DOC.		STATUS
Transportation RVC181205-09 State Route 86/Avenue 50 New Interchange Project	The proposed project consists of construction of an overcrossing bridge of 326 feet in length and 122 feet in width, a bridge structure of 605 feet in length and 120 feet in width, and an interchange at State Route 86 and Avenue 50 from Post Mile (PM) R19.2 to PM R21.6. The project will also include widening of a portion of Avenue 50 from two lanes to six lanes. The project is located at the existing interchange between State Route 86 and Dillon Road interchange in the City of Coachella. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/january/RVC181205-09.pdf	Mitigated Negative Declaration	California Department of Transportation	SCAQMD staff commented on 1/4/2019
	Comment Period: 12/6/2018 - 1/7/2019 Public Hearing: 12/21/2018			
Institutional (schools, government, etc.) LAC181211-01 2041 Facilities Master Plan Liberal Arts Campus Improvements	The proposed project consists of demolition of four buildings totaling 109,156 square feet, renovation of 10 buildings totaling 387,341 square feet, and construction of seven buildings totaling 264,018 square feet on 29.84 acres. The project is located at 4901 East Carson Street on the northwest corner of East Carson Street and Clark Avenue in the City of Long Beach. Reference LAC180918-03	Response to Comments	Long Beach Community College District	Document reviewed - No comments sent
	Comment Period: N/A Public Hearing: N/A			
Institutional (schools, government, etc.)	The proposed project consists of demolition of existing building and construction of a 47,000-	Notice of	California	Under
SBC181212-02 Mental Health Crisis Facility	square-foot mental health treatment facility with 50 beds on three acres. The project is located at 14901 Central Avenue near the southeast corner of Central Avenue and Eucalyptus Avenue in the City of Chino. Reference SBC180711-01	Availability of a Draft Environmental Impact Report	Department of Corrections and Rehabilitation	review, may submit written comments
	Comment Period: 12/6/2018 - 1/28/2019 Public Hearing: 1/10/2019			
Retail LAC181204-06 Citadel Outlets Expansion & 10-acre Development Project	The proposed project consists of construction of 234,941 square feet of retail buildings, 279,000 square feet of commercial buildings, three hotels with 770 rooms, and a 55,000-square-foot warehouse on 36 acres. The project is located on the southeast corner of Telegraph Road and Hoefner Avenue. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/LAC181204-06.pdf	Notice of Preparation	City of Commerce	SCAQMD staff commented on 12/7/2018
	Comment Period: 10/22/2018 - 12/14/2018 Public Hearing: 11/28/2018			

^{# -} Project has potential environmental justice concerns due to the nature and/or location of the project.

Documents received by the CEQA Intergovernmental Review program but not requiring review are not included in this report.

SCAQMD LOG-IN NUMBER	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT
PROJECT TITLE		DOC.		STATUS
Retail LAC181207-02 100 East Ocean Boulevard	The proposed project consists of construction of a 537,075-square-foot hotel with 429 rooms on 1.36 acres. The project is located on the southeast corner of South Pine Avenue and East Ocean Boulevard. Reference LAC181009-11 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/LAC181207-02.pdf	Notice of Preparation	City of Long Beach	SCAQMD staff commented on 12/19/2018
	Comment Period: 12/4/2018 - 1/3/2019 Public Hearing: N/A			
RVC181205-01 Conditional Use Permit No. 180006	The proposed project consists of construction of a gasoline service station with six pumps on 1.14 acres. The project is located on the northeast corner of Putter's Lane and Lake Street in the community of San Jacinto Valley.	Mitigated Negative Declaration	County of Riverside	scaQMD staff commented on 12/11/2018
	http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/RVC181205-01.pdf			
	Comment Period: 11/30/2018 - 12/19/2018 Public Hearing: 12/19/2018			
Retail RVC181221-09 Conditional Use Permit 2018-300	The proposed project consists of construction of a 3,838-squar-foot convenience store, a 4,700-square-foot canopy, a 1,050-square-foot car wash, and a gasoline service station with 16 pumps on 3.8 acres. The project is located on the northwest corner of State Route 74 and Palomar Road.	Site Plan	City of Menifee	SCAQMD staff commented on 12/21/2018
	http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/RVC181221-09.pdf Comment Period: 12/20/2018 - 1/9/2019 Public Hearing: N/A			
Retail SBC181219-06 Alder Plaza Project (CUP Nos. 810-812, PPD No. 2452, EA Review NO. 16-26)	The proposed project consists of construction of a 4,100-square-foot commercial building, a 3,200-square-foot restaurant, a 1,262-square-foot canopy, and a diesel fuel station with four dispensers on 6.05 acres. The project is located on the southeast corner of Alder Avenue and Casmalia Street.	Mitigated Negative Declaration	City of Rialto	SCAQMD staff commented on 12/21/2018
	http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/SBC181219-06.pdf			
	Comment Period: 12/15/2018 - 1/3/2019 Public Hearing: 1/30/2019			

^{# -} Project has potential environmental justice concerns due to the nature and/or location of the project.

Documents received by the CEQA Intergovernmental Review program but not requiring review are not included in this report.

SCAQMD LOG-IN NUMBER	PROJECT DESCRIPTION	TYPE OF	LEAD AGENCY	COMMENT
PROJECT TITLE		DOC.		STATUS
General Land Use (residential, etc.) LAC181204-04 California Grand Village Project	The proposed project consists of construction of 253 residential units on a 4.48-acre portion of 19.36 acres. The project is located on the northeast corner of East 10th Street and North Todd Avenue. Reference LAC180627-01	Notice of Availability of a Draft Environmental Impact Report	City of Azusa	Under review, may submit written comments
	Comment Period: 11/28/2018 - 1/28/2019 Public Hearing: 1/16/2019			
General Land Use (residential, etc.) LAC181204-08 Stonefield 63 Project	The proposed project consists of demolition of 9,940 square feet of buildings and construction of 14 buildings totaling 123,060 square feet with 63 townhomes on 3.9 acres. The project is located at 14031 South Vermont Avenue on the northwest corner of South Vermont Avenue and West 141st Street.	Mitigated Negative Declaration	City of Gardena	Document reviewed - No comments sent
	Comment Period: 11/29/2018 - 12/28/2018 Public Hearing: 2/19/2019			
General Land Use (residential, etc.) LAC181204-10 9034 Sunset Boulevard Project	The proposed project consists of demolition of five residential units and construction of a 496,137-square-foot building with 237 hotel rooms, 10 residential units, and subterranean parking on 1.29 acres. The project is located southeast corner of North Doheny Drive and West Sunset Boulevard. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/january/LAC181204-10.pdf Comment Period: 11/29/2018 - 1/11/2019 Public Hearing: 12/12/2018	Notice of Preparation	City of West Hollywood	SCAQMD staff commented on 1/8/2019
General Land Use (residential, etc.)	The proposed project consists of demolition of existing building and parking lot, and construction	Notice of	City of La Puente	Document
LAC181212-03 22-Unit Condominium Housing Project	of a 37,720-square-foot building with 22 residential units on 0.97 acres. The project is located at 135-145 North 1st Street on the southeast corner of Glendora Avenue and Workman Street. Reference LAC180717-08	Availability of a Focused Draft Environmental Impact Report		reviewed - No comments sent
	Comment Period: 12/10/2018 - 1/25/2019 Public Hearing: 1/10/2019			

^{# -} Project has potential environmental justice concerns due to the nature and/or location of the project.

Documents received by the CEQA Intergovernmental Review program but not requiring review are not included in this report.

SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
General Land Use (residential, etc.) LAC181214-02 1375 St. Andrews Apartments (ENV-2015-4630-EIR)	The proposed project consists of demolition of two buildings totaling 35,057 square feet, and construction of a 226,160-square-foot building with 185 residential units and subterranean parking on 1.7 acres. The project is located on the southwest corner of St. Andrews Place and West De Longpre Avenue in the community of Hollywood. Reference LAC180828-07 and LAC160525-02	Final Environmental Impact Report	City of Los Angeles	Document reviewed - No comments sent
General Land Use (residential, etc.) LAC181219-03 Reese Davidson Community Project	Comment Period: N/A The proposed project consists of construction of a 105,770-square-foot building with 140 residential units on 2.66 acres. The project is located at 2102 South Pacific Avenue on the southeast corner of South Pacific Avenue and West 21st Street in the community of Venice.	Notice of Preparation	City of Los Angeles	SCAQMD staff commented on
	http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/january/LAC181219-03.pdf Comment Period: 12/18/2018 - 1/21/2019 Public Hearing: 1/14/2019			1/8/2019
General Land Use (residential, etc.) LAC181219-08 ENV-2016-4394: 2910 North San Fernando Road	The proposed project consists of demolition of a 53,670-square-foot warehouse and construction of a 406,436-square-foot building with 370 residential units on 5.05 acres. The project is located on the southwest corner of North San Fernando Road and State Route 2 in the community of Northeast Los Angeles.	Mitigated Negative Declaration	City of Los Angeles	Document reviewed - No comments sent
	Comment Period: 12/13/2018 - 1/14/2019 Public Hearing: N/A			
General Land Use (residential, etc.) LAC181221-10 713 East 5th Street Project	The proposed project consists of demolition of a 14,475-square-foot building and construction of a 33,007-square-foot building with 51 residential units on 0.13 acres. The project is located near the northwest corner of Stanford Avenue and 5th Street in the community of Central City. Reference LAC180601-03	Draft Environmental Impact Report	City of Los Angeles	Under review, may submit written comments
	Comment Period: 12/20/2018 - 2/4/2019 Public Hearing: N/A			

^{# -} Project has potential environmental justice concerns due to the nature and/or location of the project.

Documents received by the CEQA Intergovernmental Review program but not requiring review are not included in this report.

SCAQMD LOG-IN NUMBER	PROJECT DESCRIPTION	TYPE OF	LEAD AGENCY	COMMENT
PROJECT TITLE		DOC.		STATUS
General Land Use (residential, etc.) ORC181205-02 Mountain View Apartment Homes	The proposed project consists of demolition of three residential units and construction of 30 residential units on 0.97 acres. The project is located at 320-330 South Monte Vista Street on the southwest corner of La Habra Boulevard and Monte vista Avenue.	Mitigated Negative Declaration	City of La Habra	Document reviewed - No comments sent
General Land Use (residential, etc.)	Comment Period: 11/30/2018 - 12/19/2018 Public Hearing: 1/28/2018 The proposed project consists of demolition of a 58,277-square-foot shopping center, and construction of 350 residential units, a 2,000-square-foot restaurant, 5,500 square feet of	Draft Environmental	City of Newport Beach	SCAQMD staff
ORC181205-10 Newport Crossings Mixed-Use Project	commercial uses, a 0.5-acre public park, and subterranean parking on 5.7 acres. The project is located on the southeast corner of Corinthian Way and Scott Drive. Reference ORC171103-02	Impact Report	Beach	commented on 1/11/2019
General Land Use (residential etc.)	http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/january/ORC181205-10.pdf Comment Period: 11/30/2018 - 1/14/2019 Public Hearing: 12/6/2018 The proposed project consists of construction of a 171,433-square-foot building with 120	Notice of	City of Brea	SCAQMD
General Land Use (residential, etc.) ORC181214-01 Mercury Residential Project	residential units. The project is located on the southeast corner of Mercury Lane and South Berry Street.	Preparation	City of Brea	staff commented on 1/8/2019
	http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/january/ORC181214-01.pdf Comment Period: 12/13/2018 - 1/22/2019 Public Hearing: 1/14/2019			
General Land Use (residential, etc.)	The proposed project consists of demolition of existing restaurant and construction of 17	Mitigated	City of Stanton	SCAQMD
ORC181218-02 11752 Beach Boulevard Condominium Project	residential units on 0.92 acres. The project is located on the southeast corner of Beach Boulevard and Crager Lane.	Negative Declaration		staff commented on 12/21/2018
	http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/ORC181218-02.pdf			
	Comment Period: 12/17/2018 - 1/15/2019 Public Hearing: N/A			

^{# -} Project has potential environmental justice concerns due to the nature and/or location of the project.

Documents received by the CEQA Intergovernmental Review program but not requiring review are not included in this report.

SCAQMD LOG-IN NUMBER	PROJECT DESCRIPTION	TYPE OF	LEAD AGENCY	COMMENT
PROJECT TITLE		DOC.		STATUS
General Land Use (residential, etc.) ORC181219-04 Magnolia Tank Farm	The proposed project consists of construction of a 211,000-square-foot building with 215 guestrooms and 250 residential units on 28.9 acres. The project is located at 21845 Magnolia Street on the southwest corner of Hamilton Avenue and Magnolia Street.	Draft Program Environmental Impact Report	City of Huntington Beach	Under review, may submit written comments
	Comment Period: 12/17/2018 - 2/14/2019 Public Hearing: N/A			
General Land Use (residential, etc.) RVC181205-06 MA16045 Rio Vista Specific Plan	The proposed project consists of construction of 1,363 residential units, 18.6 acres of recreational uses, and a 13.3-acre school. The project will also include 608.6 acres of open space on 917.3 acres. The project is located on the northeast corner of Muriel Drive and Paramount Drive. Reference RVC180605-11, RVC170705-16, and RVC160422-03 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/RVC181205-06.pdf	Notice of Preparation	City of Jurupa Valley	SCAQMD staff commented on 12/19/2018
	Comment Period: 12/4/2018 - 1/4/2019 Public Hearing: 12/13/2018			
General Land Use (residential, etc.)	The proposed project consists of construction of 314 residential units on 242 acres. The project	Draft	Riverside County	Under
RVC181219-01 Change of Zone No. 07544, EIR No. 500 and Tentative Tract Map No. 36030	will also include 76 acres of open space. The project is located on the southeast corner of Nuevo Road and Sky Drive in the community of Nuevo. Reference RVC140610-05	Environmental Impact Report	Planning Department	review, may submit written comments
	Comment Period: 12/11/2018 - 1/24/2019 Public Hearing: N/A			
General Land Use (residential, etc.) RVC181221-01 Tuscany Valley Crest Housing Project	The proposed project consists of application of permit under Section 404 of Clean Water Act for construction of 336 residential units on 97.4 acres. The project is located on the southwest corner of Little Valley Road and Greenwald Avenue in the City of Lake Elsinore.	Public Notice	United States Army Corps of Engineers	Document reviewed - No comments sent
	Comment Period: 12/20/2018 - 1/20/2019 Public Hearing: N/A			

^{# -} Project has potential environmental justice concerns due to the nature and/or location of the project.

Documents received by the CEQA Intergovernmental Review program but not requiring review are not included in this report.

SCAQMD LOG-IN NUMBER	PROJECT DESCRIPTION	TYPE OF	LEAD AGENCY	COMMENT
PROJECT TITLE		DOC.		STATUS
General Land Use (residential, etc.) SBC181212-01 Etiwanda Heights Neighborhood & Conservation Plan Project	The proposed project consists of construction of 3,000 residential units, 180,000 square feet of commercial and retail uses, an elementary school with 600 students, and 450 acres of open space on a 1,212-acre portion of 5,388 acres. The project will also include annexation of 4,088 acres from County of San Bernardino. The project is located on the northeast corner of Base Line Road and Haven Avenue. Reference SBC180102-08 and SBC170912-13 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/january/SBC181212-01.pdf Comment Period: 12/4/2018 - 1/21/2019 Public Hearing: 12/12/2018	Revised Notice of Preparation	City of Rancho Cucamonga	SCAQMD staff commented on 1/8/2019
General Land Use (residential, etc.) SBC181218-04 Sunflower Residential Project	The proposed project consists of construction of 184 residential units on 15.95 acres. The project is located on the northwest corner of Foothill Boulevard and Spruce Avenue. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/january/SBC181218-04.pdf Comment Period: 12/17/2018 - 1/15/2019 Public Hearing: 2/13/2019	Mitigated Negative Declaration	City of Rialto	SCAQMD staff commented on 1/15/2019
Plans and Regulations ORC181205-05 Orange is the New Green Zoning Code Update	The proposed project consists of development of updates to zoning code regulations for orderly development and redevelopment to incorporate sustainable and flexible practices that address technological advances. Comment Period: 12/3/2018 - 12/24/2018 Public Hearing: 1/23/2019	Notice of Intent to Adopt a Negative Declaration	County of Orange	Document reviewed - No comments sent

^{# -} Project has potential environmental justice concerns due to the nature and/or location of the project.

Documents received by the CEQA Intergovernmental Review program but not requiring review are not included in this report.

$\begin{array}{c} \textbf{ATTACHMENT B}^* \\ \textbf{ONGOING ACTIVE PROJECTS FOR WHICH SCAQMD HAS} \\ \textbf{OR IS CONTINUING TO CONDUCT A CEQA REVIEW} \end{array}$

SCAQMD LOG-IN NUMBER	PROJECT DESCRIPTION	TYPE OF	LEAD AGENCY	COMMENT
PROJECT TITLE		DOC.		STATUS
Plans and Regulations LAC181120-08 Hollywood Community Plan Update	The proposed project consists of development of amendments to land use policies, land use map, zoning ordinances, and development of a community plan implementation overlay district on 13,962 acres. The project is located southwest of the State Highway 134 and Interstate Highway 5 junction. Reference LAC160527-06, LAC160503-16, LAC111007-01 and LAC110308-06 Comment Period: 11/15/2018 - 1/31/2019 Public Hearing: N/A	Notice of Availability of a Draft Environmental Impact Report	City of Los Angeles	Under review, may submit written comments
Warehouse & Distribution Centers LAC181120-04 ENV-2018-3190: 9201 N Winnetka Avenue	The proposed project consists of construction of 210,000 square feet of warehouses on 11.55 acres. The project is located on the southeast corner of Prairie Street and Oso Avenue in the community of Chatsworth-Porter Ranch. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/LAC181120-04.pdf	Negative Declaration	City of Los Angeles	SCAQMD staff commented on 12/7/2018
	Comment Period: 11/20/2018 - 12/7/2018 Public Hearing: N/A			
RVC181127-07 K4 and Cactus Channel Improvements Project	The proposed project consists of construction of a 718,000-square-foot warehouse and installation of a box culvert within the Cactus Channel on 35.4 acres. The project is located on the southwest corner of Cactus Avenue and Frederick Street.	Notice of Preparation	March Joint Powers Authority	scaQMD staff commented on 12/7/2018
	http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/RVC181127-07.pdf			
	Comment Period: 11/19/2018 - 12/19/2018 Public Hearing: N/A			
Warehouse & Distribution Centers SBC181128-02 Baseline and Tamarind Warehouse Project	The proposed project consists of construction of a 156,500-square-foot warehouse on 8.01 acres. The project is located on the northwest corner of Base Line Road and Tamarind Avenue.	Mitigated Negative Declaration	City of Rialto	scaqMD staff commented on 12/13/2018
	http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/SBC181128-02.pdf Comment Period: 11/25/2018 - 12/14/2018 Public Hearing: 1/9/2019			
Waste and Water-related LAC181113-04 Pacoima Spreading Grounds Improvement Project	The proposed project consists of excavation of 1.6 million cubic yards of sediment to increase water storage capacity from 530 acre-feet (af) to 1,197 af and increase percolation rate from 65 cubic feet per second (cfs) to 142 cfs on 169 acres. The project is located on the southwest corner of Arleta Avenue and Devonshire Street in the City of Los Angeles.	Recirculated Mitigated Negative Declaration	Los Angeles County Flood Control District	SCAQMD staff commented on 12/12/2018
	http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/LAC181113-04.pdf Comment Period: 11/14/2018 - 12/13/2018 Public Hearing: 11/29/2018			

^{*}Sorted by Comment Status, followed by Land Use, then County, then date received.

^{# -} Project has potential environmental justice concerns due to the nature and/or location of the project.

ATTACHMENT B ONGOING ACTIVE PROJECTS FOR WHICH SCAQMD HAS OR IS CONTINUING TO CONDUCT A CEQA REVIEW

SCAQMD LOG-IN NUMBER	PROJECT DESCRIPTION	TYPE OF	LEAD AGENCY	COMMENT
PROJECT TITLE		DOC.		STATUS
Waste and Water-related RVC181107-01 Santa Ana River Conservation and Conjunctive Use Program	The proposed project consists of provision of up to 70,439 acre-feet per year of new local dry-year water supply, construction of groundwater production and extraction wells, pipelines, pump stations, and ancillary facilities, and installation of groundwater treatment systems. The project is located within the Santa Ana River Watershed along the cities of Corona, Eastvale, Norco, Jurupa Valley, and Riverside. Reference RVC161216-05, RVC161101-07 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/RVC181107-01.pdf Comment Period: 11/6/2018 - 12/21/2018 Public Hearing: N/A	Draft Environmental Impact Report	Inland Empire Utilities Agency	SCAQMD staff commented on 12/19/2018
Medical Facility	The proposed project consists of construction of 1,125,000 square feet of buildings with 460	Notice of	City of Moreno	SCAQMD
RVC181127-05 Kaiser Permanente Moreno Valley Medical Center Master Plan	hospital beds on 30 acres. The project is located at 27300 Iris Avenue on the northwest corner of Iris Avenue and Oliver Street.	Preparation	Valley	staff commented on 12/7/2018
	http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/RVC181127-05.pdf			
	Comment Period: 11/23/2018 - 12/31/2018 Public Hearing: 12/12/2018			
General Land Use (residential, etc.) LAC181109-02 2110 Bay Street Mixed-Used Project	The proposed project consists of construction of 110 dwelling units, 111,350 square feet of office uses, and 50,848 square feet of commercial uses on 1.78 acres. The project is located on the southeast corner of Santa Fe Avenue and Bay Street in the community of Central City North. Reference LAC170308-01	Draft Environmental Impact Report	City of Los Angeles	scaQMD staff commented on 12/20/2018
	http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/LAC181109-02.pdf			
	Comment Period: 11/8/2018 - 12/26/2018 Public Hearing: N/A			
General Land Use (residential, etc.) LAC181109-03 Palmetto Mixed-Use Project	The proposed project consists of construction of 310 dwelling units, 27,401 square feet of commercial uses, 32,315 square feet of open space, and subterranean parking on 1.38 acres. The project is located at 527 South Colton Street on the northeast corner of Alameda Street and Palmetto Street in the community of Central City North. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/LAC181109-03.pdf Comment Period: 11/8/2018 - 12/10/2018 Public Hearing: 11/29/2018	Notice of Preparation	City of Los Angeles	SCAQMD staff commented on 12/7/2018
General Land Use (residential, etc.)	The proposed project consists of demolition of three warehouses, one apartment building, and	Mitigated	City of Los Angeles	SCAQMD
LAC181120-05 ENV-2018-1095: 200-224 Washington Boulevard & 1910-1914 Los Angeles Street	one commercial building. The project will also include construction of a 141,796-square-foot residential building with 112 units and 7,300 square feet of commercial uses on 1.4 acres. The project is located on the southeast corner of Los Angeles Street and Washington Boulevard in the community of Southeast Los Angeles.	Negative Declaration		staff commented on 12/6/2018
	http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/LAC181120-05.pdf Comment Period: 11/20/2018 - 12/7/2018 Public Hearing: N/A			

^{# -} Project has potential environmental justice concerns due to the nature and/or location of the project.

ATTACHMENT B ONGOING ACTIVE PROJECTS FOR WHICH SCAQMD HAS OR IS CONTINUING TO CONDUCT A CEQA REVIEW

SCAQMD LOG-IN NUMBER	PROJECT DESCRIPTION	TYPE OF	LEAD AGENCY	COMMENT
PROJECT TITLE		DOC.		STATUS
General Land Use (residential, etc.) ORC181114-03 The Trails at Santiago Creek Project	The proposed project consists of construction of 128 residential units on a 40.7-acre portion of 109 acres. The project will also include 69 acres of natural greenway and open space. The project is located at 6118 East Santiago Canyon Road on the northwest corner of East Santiago Canyon Road and Orange Park Boulevard. Reference ORC180223-01 and ORC170307-07 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/ORC181114-03.pdf Comment Period: 11/14/2018 - 12/31/2018 Public Hearing: N/A	Recirculated Draft Environmental Impact Report	City of Orange	SCAQMD staff commented on 12/26/2018
General Land Use (residential, etc.)	The proposed project consists of subdivision of 18.38 acres for future development of 90	Site Plan	City of Riverside	SCAQMD
RVC181128-04 Planning Cases P18-0836 (PRD), P18-0839 (SPA), P18-0840 (TM), P18-0841 (DR), and P18-0842 (VR)	residential units. The project is located on the southwest corner of Lurin Avenue and Newsome Road.			staff commented on 12/7/2018
	http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/RVC181128-04.pdf			
	Comment Period: 11/16/2018 - 12/14/2018 Public Hearing: N/A			
Plans and Regulations RVC181120-07 Winchester Hills Specific Plan Amendment No. 6 (GPA 01162, SPA00293A6, CZ 07897, EA 42865)	The proposed project consists of addition of seven planning areas totaling 211.2 acres, and change in land use designation from Mixed-Use Area to Medium-High Density Residential, High-Density Residential, Mixed-Use Area, Commercial Retail, Open Space-Recreation, Open Space-Water, and Circulation. The project is located on the southwest corner of Briggs Road and Case Road in the community of Winchester. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2018/RVC181120-07.pdf	Notice of Preparation	Riverside County Planning Department	scaQMD staff commented on 12/7/2018
	Comment Period: 11/20/2018 - 12/7/2018 Public Hearing: 12/10/2018			

^{# -} Project has potential environmental justice concerns due to the nature and/or location of the project.

ATTACHMENT C ACTIVE SCAQMD LEAD AGENCY PROJECTS THROUGH DECEMBER 31, 2018

	THROUGH DEC	LIVIDEK 31, 2010		
PROJECT DESCRIPTION	PROPONENT	TYPE OF	STATUS	CONSULTANT
		DOCUMENT		
The Phillips 66 (formerly ConocoPhillips) Los Angeles Refinery	Phillips 66	Environmental	The Notice of Preparation/Initial Study	Environmental Audit,
Ultra Low Sulfur Diesel project was originally proposed to	(formerly	Impact Report	(NOP/IS) was circulated for a 30-day	Inc.
comply with federal, state and SCAQMD requirements to limit	ConocoPhillips),	(EIR)	public comment period on March 26,	
the sulfur content of diesel fuels. Litigation against the CEQA	Los Angeles		2012 to April 26, 2012. The	
document was filed. Ultimately, the California Supreme Court	Refinery		consultant submitted the	
concluded that the SCAQMD had used an inappropriate baseline			administrative Draft EIR to SCAQMD	
and directed the SCAQMD to prepare an EIR, even though the			in late July 2013. The Draft EIR was	
project has been built and has been in operation since 2006. The			circulated for a 45-day public review	
purpose of this CEQA document is to comply with the Supreme			and comment period from September	
Court's direction to prepare an EIR.			30, 2014 to November 13, 2014. Two	
			comment letters were received and the	
			consultant has prepared responses to	
			comments. SCAQMD staff has	
			reviewed the responses to comments	
			and provided edits.	
Quemetco is proposing to modify existing SCAQMD permits to	Quemetco	Environmental	A Notice of Preparation/Initial Study	Trinity
allow the facility to recycle more batteries and to eliminate the		Impact Report	(NOP/IS) was released for a 56-day	Consultants
existing daily idle time of the furnaces. The proposed project		(EIR)	public review and comment period	
will increase the rotary feed drying furnace feed rate limit from			from August 31, 2018 to October 25,	
600 to 750 tons per day and increase the amount of total coke			2018, and 154 comment letters were	
material allowed to be processed. In addition, the project will			received. Two CEQA scoping	
allow the use of petroleum coke in lieu of or in addition to			meetings were held on September 13,	
calcined coke, and remove one existing emergency diesel-fueled			2018 and October 11, 2018 in the	
internal combustion engine (ICE) and install two new emergency			community. SCAQMD staff is	
natural gas-fueled ICEs.			reviewing the comments received.	

ATTACHMENT C ACTIVE SCAQMD LEAD AGENCY PROJECTS THROUGH DECEMBER 31, 2018

THROUGH DECEMBER 51, 2010				
PROJECT DESCRIPTION	PROPONENT	TYPE OF	STATUS	CONSULTANT
		DOCUMENT		
Southern California Edison (SCE) is proposing to modify the air	Southern	Addendum to the	SCAQMD staff has provided revisions	Yorke Engineering,
pollution control system for the Mira Loma Peaker unit to repair	California Edison	April 2007 Final	to the Draft Addendum for the	LLC
current and prevent future water damage by: 1) decreasing the		Mitigated	consultant to incorporate.	
water-injection rate into the turbine's combustor; 2) replacing the		Negative		
oxidation catalyst and increasing the overall area of catalyst beds		Declaration for		
in the Selective Catalytic Reduction (SCR) unit; 3) replacing the		the Southern		
ammonia injection grid to improve the deliverability of ammonia		California Edison		
to the catalyst; and, 4) increasing the concentration of the		Mira Loma Peaker		
aqueous ammonia that is delivered to the facility, stored on-site,		Project in Ontario		
and injected into the SCR unit from 19% to 29%. In addition,				
SCE is proposing to revise its SCAQMD Title V Operating				
Permit to allow the turbine to generate power over its full				
operating range, from less than one megawatt (MW) to full load				
(e.g., 45 MW net), while continuing to meet the emission limits				
in the current permit.				



BOARD MEETING DATE: February 1, 2019

AGENDA NO. 15

REPORT: Rule and Control Measure Forecast

SYNOPSIS: This report highlights SCAQMD rulemaking activities and public

hearings scheduled for 2019.

COMMITTEE: No Committee Review

RECOMMENDED ACTION:

Receive and file.

Wayne Nastri Executive Officer

PMF:SN:AF:EG

2019 MASTER CALENDAR

The table below summarizes changes to the schedule since the last month's Rule and Control Measure Forecast Report. Staff will continue to work with all stakeholders as these projects move forward.

1106⁺ Marine Coating Operations

1106.1⁺ Pleasure Craft Coating Operations

Proposed Amended Rules 1106 and 1106.1 have been moved from April 2019 to May 2019 to allow time to work with stakeholders.

Asbestos Emissions from Demolition/Renovation Activities

Proposed Amended Rule 1403 has been moved from February 2019 to TBD to allow for evaluation of stakeholder input.

The 2019 Master Calendar provides a list of proposed or proposed amended rules for each month, with a brief description, and a notation in the third column indicating if the rulemaking is for the 2016 AQMP, Toxics, AB 617 BARCT, or Other. Projected emission reductions will be determined during rulemaking. The following symbols next to the rule number indicates if the rulemaking will be a potentially significant hearing, reduce criteria pollutants, or part of the RECLAIM transition.

- * Potentially significant hearing
- ⁺ Reduce criteria air contaminants and assist toward attainment of ambient air quality standards
- * Part of the transition of RECLAIM to a command-and-control regulatory structure

2019 MASTER CALENDAR

Month	Title and Description	Type of
March	Title and Description	Rulemaking
110	Rule Adoption Procedures to Assure Protection and	Other
	Enhancement of the Environment	
212	Standards for Approving Permits and Issuing Public Notice	
301	Permitting and Associated Fees	
303	Hearing Board Fees	
306	Plan Fees	
307.1	Alternative Fees for Air Toxics Emissions Inventory	
309	Fees for Regulation XVI and Regulation XXV	
315	Fees for Training Classes and License Renewal	
510	Notice of Hearing	
515	Findings and Decision	
518.2	Federal Alternative Operating Conditions	
812	Notice of Hearing	
1309	Emission Reduction Credits and Short Term Credits	
1310	Analysis and Reporting	
1605	Credits For The Voluntary Repair of On-Road Motor Vehicles	
	Identified Through Remote Sensing Devices	
1610	Old-Vehicle Scrapping	
1620	Credits for Clean Off-Road Mobile Equipment	
1623	Credits for Clean Lawn and Garden Equipment	
1710	Analysis, Notice, and Reporting	
1714	Prevention of Significant Deterioration for Greenhouse Gases	
3006	Public Participation	
	The above proposed amended rules will revise noticing requirements to	
	reflect recent amendments to state law that allow certain public notices	
	to be sent via electronic mail (email) and streamline other types of	
	noticing requirements. Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	

^{*} Potentially significant hearing

⁺ Reduce criteria air contaminants and assist toward attainment of ambient air quality standards

 $^{^{\#}}$ Part of the transition of RECLAIM to a command-and-control regulatory structure

Month	Title and Description	
April	Title and Description	Rulemaking
1134*+#	Emissions of Oxides of Nitrogen from Stationary Gas Turbines Proposed Amended Rule 1134 will update the NOx emission standard to reflect Best Available Retrofit Control Technology for RECLAIM and non-RECLAIM facilities. Proposed Rule 1134 will also establish an ammonia emission limit for pollution controls with ammonia emissions, and update monitoring, reporting, and recordkeeping requirements.	AQMP/ AB 617 BARCT
	Implementation Schedule for NOx Facilities Proposed Rule 1100 will establish the implementation schedule for NOx RECLAIM facilities that are transitioning to command and control. Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176 and Socio: Ian MacMillan 909.396.3244	
1407*	Control of Emissions of Arsenic, Cadmium and Nickel from Non-Ferrous Metal Operations Proposed Amended Rule 1407 will establish additional requirements to minimize point source and fugitive toxic air contaminant emissions from non-chromium metal melting operations. Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	Toxics
May		
	Fees Proposed amendments to Regulation III will incorporate the Consumer Price Index adjustment to reflect inflation, pursuant to Rule 320. Other proposed amendments may be needed to update fees associated with existing programs and implementation of new or revised programs. Ian MacMillan 909.396.3244; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	Other
1106 ⁺	Marine Coating Operations	AQMP/
	Pleasure Craft Coating Operations Rule 1106 would subsume the requirements of Rule 1106.1, revise VOC content limits for several categories in order to align limits with U.S. EPA Control Techniques Guidelines and other California air districts, and add new limits for several new categories. Rule 1106.1 is proposed to be rescinded. David DeBoer 909.396.2329; CEQA: Jillian Wong 909.396.3176 and Socio: Ian MacMillan 909.396.3244	AB 617 BARCT
	Hydrogen Fluoride Use at Refineries Proposed Rule 1410 will establish requirements including mitigation measures, a performance standard, and potential phase-out of hydrogen fluoride or modified hydrogen fluoride for the use and storage of hydrogen fluoride at petroleum refineries. Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	Toxics

^{*} Potentially significant hearing

⁺Reduce criteria air contaminants and assist toward attainment of ambient air quality standards

[#] Part of the transition of RECLAIM to a command-and-control regulatory structure

Month	Title and Description	
June	Title and Description	Rulemaking
Reg. IX Reg. X	Standards of Performance for New Stationary Sources (NSPS) National Emission Standards for Hazardous Air Pollutants (NESHAPS)	Other
	Proposed amendments to Regulations IX and X are periodically made to incorporate by reference new or amended federal standards that have been enacted by U.S. EPA for stationary sources. Regulations IX and X provide stationary sources with a single point of reference for determining which federal and local requirements apply to their specific operations. **Carol Gomez 909.396.3264; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	
1480*	Toxics Monitoring Proposed Rule 1480 will establish requirements for ambient monitoring of certain metal toxic air contaminants. Proposed rule will establish applicability, on-ramps and off-ramps for ambient monitoring, and provisions to address high ambient levels. Jillian Wong 909.396.3176; CEQA: Jillian Wong 909.396.3176 and Socio: Ian MacMillan 909.396.3244	Toxics
July		
1138*+	Control of Emissions from Restaurant Operations	AQMP/
	Proposed Amended Rule 1138 will reduce NOx emissions from	AB 617
	establishments utilizing commercial cooking ovens, ranges, fryers, and charbroilers. David DeBoer 909.396.2329; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	BARCT
Reg. XIII*#	New Source Review	AQMP
Reg. XX	RECLAIM Proposed Amendments to Regulation XIII will revise New Source Review provisions to address facilities that are transitioning from	
	RECLAIM to command-and-control. Staff may be proposing a new rule within Regulation XIII to address offsets for facilities that transition out of RECLAIM. Proposed Amendments to Regulation XX also are	
	needed to coordinate amendments to Regulation XIII. Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
1450	Control of Methylene Chloride Emissions Proposed Rule 1450 will reduce methylene chloride emissions from furniture stripping and establish monitoring, reporting, and recordkeeping requirements.	Toxics
	Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; and Socio: Ian MacMillan 909.396.3244	

^{*} Potentially significant hearing

⁺Reduce criteria air contaminants and assist toward attainment of ambient air quality standards

[#] Part of the transition of RECLAIM to a command-and-control regulatory structure

Month	Title and Description	Type of Rulemaking
September		
1110.2*+#^	Emissions from Stationary Internal Combustion Engines	AQMP/
	Rule 1110.2 will update the NOx emission standard to reflect Best	AB 617
	Available Retrofit Control Technology for RECLAIM and non-	BARCT
	RECLAIM facilities. Proposed Rule 1110.2 will also establish an	
	ammonia emission limit for pollution controls with ammonia emissions,	
	and update monitoring, reporting, and recordkeeping requirements.	
1100	Implementation Schedule for NOx Facilities	
	Proposed Rule 1100 will establish the implementation schedule for NOx	
	RECLAIM facilities that are transitioning to command-and-control. Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
1147*+#	NOx Reductions from Miscellaneous Sources	Other/
1147.1	NOx Reductions from Large Miscellaneous Combustion	AB 617
	Proposed Rule 1147.1 will establish NOx emission limits to reflect Best	BARCT
	Available Retrofit Control Technology for large miscellaneous	
	combustion sources and will apply to RECLAIM and non-RECLAIM	
	facilities. Proposed Amended Rule 1147 will remove equipment that	
	will be regulated under Proposed Rule 1147.1 and evaluate the existing	
	NOx emission limits.	
1100	Implementation Schedule for NOx Facilities	
	Proposed Rule 1100 will establish the implementation schedule for NOx	
	RECLAIM facilities that are transitioning to command-and-control.	
	Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
October		
113*#	Monitoring, Reporting, and Recordkeeping (MRR) Requirements	AQMP
	for NOx and SOx Sources	
	Proposed Rule 113 will establish MRR requirements for facilities exiting	
	RECLAIM and transitioning to a command-and-control regulatory	
	Structure. Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
218*#	Continuous Emission Monitoring	AQMP
218.1	Continuous Emission Monitoring Performance Specificiations	
	Proposed Amended Rule 218 will revise provisions for continuous	
	emission monitoring systems for facilities exiting RECLAIM and	
	transitioning to a command-and-control regulatory structure.	
	Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	

^{*} Potentially significant hearing

⁺Reduce criteria air contaminants and assist toward attainment of ambient air quality standards

^{*} Part of the transition of RECLAIM to a command-and-control regulatory structure

Month	T:41 J D:4:	Type of
October (continued)	Title and Description	Rulemaking
1109*+#	Emissions of Oxides of Nitrogen from Boilers and Process Heaters in	AQMP/
	Petroleum Refineries	BARCT
	Reduction of Emissions of Oxides of Nitrogen from Refinery	(AB 617)
1109.1	Equipment	
	Proposed Rule 1109.1 will establish NOx emission limits to reflect Best	
	Available Retrofit Control Technology for NOx emitting equipment at	
	petroleum refineries and related operations. Proposed Rule 1109.1 is an	
	industry-specific rule, will establish an ammonia emission limit for	
	pollution controls with ammonia emissions, and update monitoring,	
	reporting, and recordkeeping requirements. Proposed Rule 1109.1 will	
	replace Rule 1109. Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
November	Michael Krause 707.370.2700, CEGA: Junan Wong 707.370.3170, Socio. Ian macimilan 707.370.3244	
N/A	Airports MOU/Potential Regulation	AQMP
	The proposed MOUs with the marine ports and commercial airports will	
	implement the facility-based mobile source measures MOB-01 and	
	MOB-04 from the 2016 AQMP. In the event that the MOU approach	
	with the ports or airports is not agreed on, staff will pursue a regulatory	
	approach. Zorik Pirveysian 909.396.2431; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
1147*+#	NOx Reductions from Miscellaneous Sources	AQMP/
1147.2	NOx Reductions from Metal Melting and Heat Treating Furnaces	AB617
	Proposed Rule 1147.2 will establish NOx emission limits to reflect Best	BARCT
	Available Retrofit Control Technology for metal melting and heat	
	treating furnaces and will apply to RECLAIM and non-RECLAIM	
	facilities. Proposed Amended Rule 1147 will remove equipment that	
	will be regulated under Proposed Rule 1147.2.	
1.40.5*	Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	m ·
1435*	Control of Emissions from Metal Heat Treating Processes	Toxics
	Proposed Rule 1435 will establish requirements to reduce point source	
	and fugitive toxic air contaminants including hexavalent chromium	
	emissions from heat treating processes. Proposed Rule 1435 will also	
	include monitoring, reporting, and recordkeeping requirements. Jillian Wong 909.396.3176; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
	Junan wong 909.390.31/0; CEQA: Junan wong 909.390.31/0; Socio: Ian MacMulan 909.390.3244	

^{*} Potentially significant hearing

⁺ Reduce criteria air contaminants and assist toward attainment of ambient air quality standards

[#] Part of the transition of RECLAIM to a command-and-control regulatory structure

Month	Title and Degarinties	
December	Title and Description	Rulemaking
1117+#	Emissions of Oxides of Nitrogen from Glass Melting Furnaces	AQMP/
	Proposed Amended Rule 1117 will establish NOx emission limits to	AB 617
	reflect Best Available Retrofit Control Technology for glass melting	BARCT
	furnaces and will apply to RECLAIM and non-RECLAIM facilities. Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
1147*+#	NOx Reductions from Miscellaneous Sources	AQMP/
1147.3	NOx Reductions for Equipment at Aggregate Facilities	AB 617
	Proposed Rule 1147.3 will establish NOx emission limits to reflect Best	BARCT
	Available Retrofit Control Technology for NOx equipment at aggregate	
	facilities and will apply to RECLAIM and non-RECLAIM facilities.	
	Proposed Amended Rule 1147 will remove equipment that will be	
	regulated under Proposed Rule 1147.3.	
1170 2*+	Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176 and Socio: Ian MacMillan 909.396.3244	A ON AD
1150.3*+	NOx Emission Reduction from Combustion Equipment at Landfills	AQMP/
	Proposed Rule 1150.3 will establish NOx emission limits for boilers,	AB 617
	process heaters, furnaces, and engines to reflect Best Available Retrofit	BARCT
	Control Technology at landfills. The proposed rule will also include	
	implementation schedules and monitoring, recordkeeping, and reporting	
	requirements. Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
1179.1*+	NOx Emission Reduction from Combustion Equipment at Publicly	AQMP/
11,711	Owned Treatment Work Facilities	AB 617
	Proposed Rule 1179.1 will establish NOx emission limits for boilers,	BARCT
	process heaters, furnaces, and engines to reflect Best Available Retrofit	211101
	Control Technology at publicly owned treatment works. The proposed	
	rule will also include implementation schedules and monitoring,	
	recordkeeping, and reporting requirements.	
	Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
1426*	Reduction of Toxic Air Contaminants from Metal Finishing	Toxics
	Operations	
	Proposed amendments to Rule 1426 will establish requirements to	
	reduce nickel, cadmium, hexavalent chromium, and other air toxics from	
	plating operations. Proposed Amended Rule 1426 will establish	
	requirements to control point source and fugitive toxic air contaminant	
	emissions.	
	Jillian Wong 909.396.3176; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	

^{*} Potentially significant hearing

⁺Reduce criteria air contaminants and assist toward attainment of ambient air quality standards

[#] Part of the transition of RECLAIM to a command-and-control regulatory structure

Month December (Continued)	Title and Description	Type of Rulemaking
	Facility Based Mobile Sources	AQMP
	Proposed rules within Regulation XXIII would reduce emissions from	
	indirect sources (e.g., mobile sources that visit facilities). The rule or set	
	of rules that would be brought for Board consideration in this month	
	would reduce emissions from warehouses and distribution centers,	
	consistent with Control Measure MOB-03 from the 2016 AQMP.	
	Ian MacMillan 909.396.3244; CEQA; Jillian Wong 909.396.3176 Socio: Ian MacMillan 909.396.3244	

^{*} Potentially significant hearing

⁺Reduce criteria air contaminants and assist toward attainment of ambient air quality standards

[#] Part of the transition of RECLAIM to a command-and-control regulatory structure

2019 To-Be-Determined

Definition of Terms (VOC) Staff may propose amendments to Rule 102 to add or revise definitions in order to support amendments to other Regulation XI rules. Cond Gomes 909.396.3264; CEQA: Jillian Wong 909.396.3176; Socio: Inm MacMillian 909.396.3244	2019	Title and Description	Type of Rulemaking
in order to support amendments to other Regulation XI rules. Card Gome 900.396.3264; CEQA: Jillian Wong 900.396.3176; Socio: lan MacMillin 900.396.3244 209 Transfer and Voiding of Permits; Permitting and Associated Fees 301 Staff may propose amendments to clarify requirements for change of ownership and permits and the assessment of associated fees. 219 Equipment Not Requiring a Written Permit Pursuant to Regulation II Proposed Amended Rule 219 will add or revise equipment not requiring a written permit. TBD: CEQA: Jillian Wong 909.396.3176; Socio: Inn MacMillan 909.396,3244 222 Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II Proposed Amended Rule 222 will add or revise equipment subject to filing requirements. Michael Kennas 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Inn MacMillan 909.396.3244 223 Emission Reduction Permits for Large Confined Animal Facilities 1133.3 Proposed Amended Rules 223 and 1133.3 will seek additional emission reductions from large confined animal facilities by lowering the applicability threshold. TBD: CEQA: Jillian Wong 909.396.3176; Socio: Inn MacMillan 909.396.3244 416 Odors from Kitchen Grease Processing Proposed Rule 416 will reduce odors from kitchen grease processing operations. The proposed rule will establish best management practices, and examine enclosure requirements for wastewater treatment operations and filter cake storage. TBD: CEQA: Jillian Wong 909.396.3176; Socio: Inn MacMillan 909.396.3244 425 Odors from Cannabis Processing Dovid Deliev 909.396.2210; CEQA: Jillian Wong 909.396.3176; Socio: Inn MacMillan 909.396.3244 425 Odors from Cannabis Processing Proposed Amendments to Rule 429 to address start-up/shutdown provisions related to the transition of NOx RECLAIM to a commandand-and-control regulatory program and if U.S. EPA requires updates to such provisions.	102	Definition of Terms (VOC)	Other
209 Transfer and Voiding of Permits; Permitting and Associated Fees 301 Staff may propose amendments to clarify requirements for change of ownership and permits and the assessment of associated fees. 219 Equipment Not Requiring a Written Permit Pursuant to Regulation II Proposed Amended Rule 219 will add or revise equipment not requiring a written permit. TBD: CEQA: Hilliam Vong 909.396.3176; Socio: Iam MacMillam 909.396.3244 222 Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II Proposed Amended Rule 222 will add or revise equipment subject to filing requirements. Michael Krause 909.396.2706; CEQA: Jilliam Vong 909.396.3176; Socio: Iam MacMillam 909.396.3244 223 Emission Reduction Permits for Large Confined Animal Facilities Proposed Amended Rules 223 and 1133.3 will seek additional emission reductions from large confined animal facilities by lowering the applicability threshold. TBD: CEQA: Jilliam Vong 909.396.3176; Socio: Iam MacMillam 909.396.3244 416 Odors from Kitchen Grease Processing Proposed Rule 416 will reduce odors from kitchen grease processing operations. The proposed rule will establish best management practices, and examine enclosure requirements for wastewater treatment operations and filter cake storage. TBD: CEQA: Jilliam Vong 909.396.3176; Socio: Iam MacMillam 909.396.3244 425 Odors from Cannabis Processing David Deliar- 1909.396.2290; CEQA: Jilliam Wong 909.396.3176; Socio: Iam MacMillam 909.396.3244 425 Odors from Cannabis processing David Deliar- 1909.396.2290; CEQA: Jilliam Wong 909.396.3176; Socio: Iam MacMillam 909.396.3244 426 Start-Up and Shutdown Exemption Provisions for Oxides of Nitrogen Proposed Amendments to Rule 429 to address start-up/shutdown provisions related to the transition of NOx RECLAIM to a command- and-control regulatory program and if U.S. EPA requires updates to such provisions.			
Staff may propose amendments to clarify requirements for change of ownership and permits and the assessment of associated fees.		Carol Gomez 909.396.3264; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
ownership and permits and the assessment of associated fees. 219			Other
Equipment Not Requiring a Written Permit Pursuant to Regulation II Proposed Amended Rule 219 will add or revise equipment not requiring a written permit. TiDP, CEQA. Jillian Wong. 909.396.3176; Socio: Iam MacMillan 909.396.3244	301		
Regulation II Proposed Amended Rule 219 will add or revise equipment not requiring a written permit. TBD: CEQA: Jillian Wong 909.396.3176; Socio: Iam MacMillan 909.396.3244 222 Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II Proposed Amended Rule 222 will add or revise equipment subject to filing requirements. Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Iam MacMillan 909.396.3244 223 Emission Reduction Permits for Large Confined Animal Facilities Proposed Amended Rules 223 and 1133.3 will seek additional emission reductions from large confined animal facilities by lowering the applicability threshold. TBD: CEQA: Jillian Wong 909.96.3176; Socio: Iam MacMillan 909.396.3244 416 Odors from Kitchen Grease Processing Proposed Rule 416 will reduce odors from kitchen grease processing operations. The proposed rule will establish best management practices, and examine enclosure requirements for wastewater treatment operations and filter cake storage. TBD: CEQA: Jillian Wong 909.396.3176; Socio: Iam MacMillan 909.396.3244 425 Odors from Cannabis Processing Proposed Rule 425 will establish requirements to control the odors from cannabis processing. David Deboer 909.390.2329; CEQA: Jillian Wong 909.396.3176; Socio: Iam MacMillan 909.396.3244 429 Start-Up and Shutdown Exemption Provisions for Oxides of Nitrogen Proposed Amendments to Rule 429 to address start-up/shutdown provisions related to the transition of NOx RECLAIM to a command-and-control regulatory program and if U.S. EPA requires updates to such provisions.			
Proposed Amended Rule 219 will add or revise equipment not requiring a written permit. ### Written Permit Pursuant to Regulation II Proposed Amended Rule 222 will add or revise equipment subject to filing requirements. #### Mission Reduction Permits for Large Confined Animal Facilities #### Proposed Amended Rules 223 and 1133.3 will seek additional emission reductions from large confined animal facilities by lowering the applicability threshold. ##### ### Odors from Kitchen Grease Processing #### Opposed Rule 416 will reduce odors from kitchen grease processing operations. The proposed rule will establish best management practices, and examine enclosure requirements for wastewater treatment operations and filter cake storage. ###################################	219	Equipment Not Requiring a Written Permit Pursuant to	Other
a written permit. ### TBD: CEQA: Jillian Wong 909.396.3176; Socio: lan MacMillan 909.396.3244 222 Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II Proposed Amended Rule 222 will add or revise equipment subject to filing requirements. #### Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: lan MacMillan 909.396.3244 223 Emission Reduction Permits for Large Confined Animal Facilities Proposed Amended Rules 223 and 1133.3 will seek additional emission reductions from large confined animal facilities by lowering the applicability threshold. ###################################			
Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II Proposed Amended Rule 222 will add or revise equipment subject to filing requirements. Michael Krause 909.396.2706; CEQA: Jilliam Wong 909.396.3176; Socio: Ian MacMillam 909.396.3244 223 Emission Reduction Permits for Large Confined Animal Facilities Proposed Amended Rules 223 and 1133.3 will seek additional emission reductions from large confined animal facilities by lowering the applicability threshold. TBD: CEQA: Jilliam Wong 909.396.3176; Socio: Ian MacMillam 909.396.3244 416 Odors from Kitchen Grease Processing Proposed Rule 416 will reduce odors from kitchen grease processing operations. The proposed rule will establish best management practices, and examine enclosure requirements for wastewater treatment operations and filter cake storage. TBD: CEQA: Jilliam Wong 909.396.3176; Socio: Ian MacMillam 909.396.3244 425 Odors from Cannabis Processing Proposed Rule 425 will establish requirements to control the odors from cannabis processing. David DeBoer 909.396.2329; CEQA: Jilliam Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244 429 Start-Up and Shutdown Exemption Provisions for Oxides of Nitrogen Proposed Amendments to Rule 429 to address start-up/shutdown provisions related to the transition of NOx RECLAIM to a commandand-control regulatory program and if U.S. EPA requires updates to such provisions.			
Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II Proposed Amended Rule 222 will add or revise equipment subject to filing requirements. Michael Krause 909.396.2706; CEQA: Jilliam Wong 909.396.3176; Socio: Ian MacMillam 909.396.3244 223 Emission Reduction Permits for Large Confined Animal Facilities Proposed Amended Rules 223 and 1133.3 will seek additional emission reductions from large confined animal facilities by lowering the applicability threshold. TBD: CEQA: Jilliam Wong 909.396.3176; Socio: Ian MacMillam 909.396.3244 416 Odors from Kitchen Grease Processing Proposed Rule 416 will reduce odors from kitchen grease processing operations. The proposed rule will establish best management practices, and examine enclosure requirements for wastewater treatment operations and filter cake storage. TBD: CEQA: Jilliam Wong 909.396.3176; Socio: Ian MacMillam 909.396.3244 425 Odors from Cannabis Processing Proposed Rule 425 will establish requirements to control the odors from cannabis processing. David Delboer 909.396.2329; CEQA: Jilliam Wong 909.396.3176; Socio: Ian MacMillam 909.396.3244 429 Start-Up and Shutdown Exemption Provisions for Oxides of Nitrogen Proposed Amendments to Rule 429 to address start-up/shutdown provisions related to the transition of NOx RECLAIM to a commandand-control regulatory program and if U.S. EPA requires updates to such provisions.			
Written Permit Pursuant to Regulation II Proposed Amended Rule 222 will add or revise equipment subject to filing requirements. Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244 223 Emission Reduction Permits for Large Confined Animal Facilities 1133.3 Proposed Amended Rules 223 and 1133.3 will seek additional emission reductions from large confined animal facilities by lowering the applicability threshold. TBD: CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244 416 Odors from Kitchen Grease Processing Proposed Rule 416 will reduce odors from kitchen grease processing operations. The proposed rule will establish best management practices, and examine enclosure requirements for wastewater treatment operations and filter cake storage. TED: CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244 425 Odors from Cannabis Processing Proposed Rule 425 will establish requirements to control the odors from cannabis processing. David DeBoer 909.396.3239; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244 429 Start-Up and Shutdown Exemption Provisions for Oxides of Nitrogen Proposed Amendments to Rule 429 to address start-up/shutdown provisions related to the transition of NOx RECLAIM to a commandand-control regulatory program and if U.S. EPA requires updates to such provisions.	222		Other
Proposed Amended Rule 222 will add or revise equipment subject to filing requirements. Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: tan MacMillan 909.396.3244 Emission Reduction Permits for Large Confined Animal Facilities Proposed Amended Rules 223 and 1133.3 will seek additional emission reductions from large confined animal facilities by lowering the applicability threshold. TBD: CEQA: Jillian Wong 909.396.3176; Socio: tan MacMillan 909.396.3244 Odors from Kitchen Grease Processing Proposed Rule 416 will reduce odors from kitchen grease processing operations. The proposed rule will establish best management practices, and examine enclosure requirements for wastewater treatment operations and filter cake storage. TBD: CEQA: Jillian Wong 909.396.3176; Socio: tan MacMillan 909.396.3244 Odors from Cannabis Processing Proposed Rule 425 will establish requirements to control the odors from cannabis processing. David DeBoer 909.396.2329; CEQA: Jillian Wong 909.396.3176; Socio: tan MacMillan 909.396.3244 Start-Up and Shutdown Exemption Provisions for Oxides of Nitrogen Proposed Amendments to Rule 429 to address start-up/shutdown provisions related to the transition of NOx RECLAIM to a commandand-control regulatory program and if U.S. EPA requires updates to such provisions.	222		Other
filing requirements. Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244 Emission Reduction Permits for Large Confined Animal Facilities Proposed Amended Rules 223 and 1133.3 will seek additional emission reductions from large confined animal facilities by lowering the applicability threshold. TBD: CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244 Odors from Kitchen Grease Processing Proposed Rule 416 will reduce odors from kitchen grease processing operations. The proposed rule will establish best management practices, and examine enclosure requirements for wastewater treatment operations and filter cake storage. TBD: CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244 Odors from Cannabis Processing Proposed Rule 425 will establish requirements to control the odors from cannabis processing. David Deboer 909.396.3239; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244 Start-Up and Shutdown Exemption Provisions for Oxides of Nitrogen Proposed Amendments to Rule 429 to address start-up/shutdown provisions related to the transition of NOx RECLAIM to a commandand-control regulatory program and if U.S. EPA requires updates to such provisions.			
Emission Reduction Permits for Large Confined Animal Facilities Proposed Amended Rules 223 and 1133.3 will seek additional emission reductions from large confined animal facilities by lowering the applicability threshold. TBD: CEQA: Jilliam Wong 909.396.3176; Socio: Iam MacMillan 909.396.3244 Odors from Kitchen Grease Processing Proposed Rule 416 will reduce odors from kitchen grease processing operations. The proposed rule will establish best management practices, and examine enclosure requirements for wastewater treatment operations and filter cake storage. TBD: CEQA: Jilliam Wong 909.396.3176; Socio: Iam MacMillan 909.396.3244 Odors from Cannabis Processing Proposed Rule 425 will establish requirements to control the odors from cannabis processing. David DeBoer 909.396.2329; CEQA: Jilliam Wong 909.396.3176; Socio: Iam MacMillan 909.396.3244 Start-Up and Shutdown Exemption Provisions for Oxides of Nitrogen Proposed Amendments to Rule 429 to address start-up/shutdown provisions related to the transition of NOx RECLAIM to a commandand-control regulatory program and if U.S. EPA requires updates to such provisions.			
### Proposed Amended Rules 223 and 1133.3 will seek additional emission reductions from large confined animal facilities by lowering the applicability threshold. #### Transport of the applicability threshold. #### Transport of the applicability threshold. ##### Transport of the applicability threshold. ###################################			
reductions from large confined animal facilities by lowering the applicability threshold. **TBD: CEQA: Jillian Wong 909.396.3176; Socio: lan MacMillan 909.396.3244* **Odors from Kitchen Grease Processing Proposed Rule 416 will reduce odors from kitchen grease processing operations. The proposed rule will establish best management practices, and examine enclosure requirements for wastewater treatment operations and filter cake storage. **TBD: CEQA: Jillian Wong 909.396.3176; Socio: lan MacMillan 909.396.3244* **Odors from Cannabis Processing** Proposed Rule 425 will establish requirements to control the odors from cannabis processing. **David DeBoer 909.396.2329; CEQA: Jillian Wong 909.396.3176; Socio: lan MacMillan 909.396.3244* **Start-Up and Shutdown Exemption Provisions for Oxides of Nitrogen** Proposed Amendments to Rule 429 to address start-up/shutdown provisions related to the transition of NOx RECLAIM to a commandand-control regulatory program and if U.S. EPA requires updates to such provisions.	223		AQMP
applicability threshold. TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244 Odors from Kitchen Grease Processing Proposed Rule 416 will reduce odors from kitchen grease processing operations. The proposed rule will establish best management practices, and examine enclosure requirements for wastewater treatment operations and filter cake storage. TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244 Odors from Cannabis Processing Proposed Rule 425 will establish requirements to control the odors from cannabis processing. David DeBoer 909.396.2329; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244 Start-Up and Shutdown Exemption Provisions for Oxides of Nitrogen Proposed Amendments to Rule 429 to address start-up/shutdown provisions related to the transition of NOx RECLAIM to a commandand-control regulatory program and if U.S. EPA requires updates to such provisions.	1133.3	Proposed Amended Rules 223 and 1133.3 will seek additional emission	
416 Odors from Kitchen Grease Processing Proposed Rule 416 will reduce odors from kitchen grease processing operations. The proposed rule will establish best management practices, and examine enclosure requirements for wastewater treatment operations and filter cake storage. TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244 425 Odors from Cannabis Processing Proposed Rule 425 will establish requirements to control the odors from cannabis processing. David DeBoer 909.396.2329; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244 429 Start-Up and Shutdown Exemption Provisions for Oxides of Nitrogen Proposed Amendments to Rule 429 to address start-up/shutdown provisions related to the transition of NOx RECLAIM to a command-and-control regulatory program and if U.S. EPA requires updates to such provisions.		reductions from large confined animal facilities by lowering the	
Other Proposed Rule 416 will reduce odors from kitchen grease processing operations. The proposed rule will establish best management practices, and examine enclosure requirements for wastewater treatment operations and filter cake storage. TBD; CEQA: Jilliam Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244 425 Odors from Cannabis Processing Proposed Rule 425 will establish requirements to control the odors from cannabis processing. David DeBoer 909.396.2329; CEQA: Jilliam Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244 429 Start-Up and Shutdown Exemption Provisions for Oxides of Nitrogen Proposed Amendments to Rule 429 to address start-up/shutdown provisions related to the transition of NOx RECLAIM to a command-and-control regulatory program and if U.S. EPA requires updates to such provisions.		applicability threshold.	
Proposed Rule 416 will reduce odors from kitchen grease processing operations. The proposed rule will establish best management practices, and examine enclosure requirements for wastewater treatment operations and filter cake storage. **TBD; CEQA: Jillian Wong 909.396.3176; Socio: lan MacMillan 909.396.3244* 425 **Odors from Cannabis Processing** Proposed Rule 425 will establish requirements to control the odors from cannabis processing. **David DeBoer 909.396.2329; CEQA: Jillian Wong 909.396.3176; Socio: lan MacMillan 909.396.3244* 429 **Start-Up and Shutdown Exemption Provisions for Oxides of Nitrogen** Proposed Amendments to Rule 429 to address start-up/shutdown provisions related to the transition of NOx RECLAIM to a commandand-control regulatory program and if U.S. EPA requires updates to such provisions.	416		Othor
operations. The proposed rule will establish best management practices, and examine enclosure requirements for wastewater treatment operations and filter cake storage. TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244 425 Odors from Cannabis Processing Proposed Rule 425 will establish requirements to control the odors from cannabis processing. David DeBoer 909.396.2329; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244 429 Start-Up and Shutdown Exemption Provisions for Oxides of Nitrogen Proposed Amendments to Rule 429 to address start-up/shutdown provisions related to the transition of NOx RECLAIM to a command-and-control regulatory program and if U.S. EPA requires updates to such provisions.	410		Other
and examine enclosure requirements for wastewater treatment operations and filter cake storage. TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244 425 Odors from Cannabis Processing Proposed Rule 425 will establish requirements to control the odors from cannabis processing. David DeBoer 909.396.2329; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244 429 Start-Up and Shutdown Exemption Provisions for Oxides of Nitrogen Proposed Amendments to Rule 429 to address start-up/shutdown provisions related to the transition of NOx RECLAIM to a command-and-control regulatory program and if U.S. EPA requires updates to such provisions.			
and filter cake storage. TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244 425 Odors from Cannabis Processing Proposed Rule 425 will establish requirements to control the odors from cannabis processing. David DeBoer 909.396.2329; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244 429 Start-Up and Shutdown Exemption Provisions for Oxides of Nitrogen Proposed Amendments to Rule 429 to address start-up/shutdown provisions related to the transition of NOx RECLAIM to a command-and-control regulatory program and if U.S. EPA requires updates to such provisions.			
425 Odors from Cannabis Processing Proposed Rule 425 will establish requirements to control the odors from cannabis processing. David DeBoer 909.396.2329; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244 429 Start-Up and Shutdown Exemption Provisions for Oxides of Nitrogen Proposed Amendments to Rule 429 to address start-up/shutdown provisions related to the transition of NOx RECLAIM to a command-and-control regulatory program and if U.S. EPA requires updates to such provisions.			
Odors from Cannabis Processing Proposed Rule 425 will establish requirements to control the odors from cannabis processing. David DeBoer 909.396.2329; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244 Start-Up and Shutdown Exemption Provisions for Oxides of Nitrogen Proposed Amendments to Rule 429 to address start-up/shutdown provisions related to the transition of NOx RECLAIM to a command- and-control regulatory program and if U.S. EPA requires updates to such provisions.			
Proposed Rule 425 will establish requirements to control the odors from cannabis processing. David DeBoer 909.396.2329; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244 429 Start-Up and Shutdown Exemption Provisions for Oxides of Nitrogen Proposed Amendments to Rule 429 to address start-up/shutdown provisions related to the transition of NOx RECLAIM to a command-and-control regulatory program and if U.S. EPA requires updates to such provisions.	425		Other
A29 Start-Up and Shutdown Exemption Provisions for Oxides of Other Nitrogen Proposed Amendments to Rule 429 to address start-up/shutdown provisions related to the transition of NOx RECLAIM to a command-and-control regulatory program and if U.S. EPA requires updates to such provisions.			
429 Start-Up and Shutdown Exemption Provisions for Oxides of Nitrogen Proposed Amendments to Rule 429 to address start-up/shutdown provisions related to the transition of NOx RECLAIM to a command-and-control regulatory program and if U.S. EPA requires updates to such provisions.			
Nitrogen Proposed Amendments to Rule 429 to address start-up/shutdown provisions related to the transition of NOx RECLAIM to a command- and-control regulatory program and if U.S. EPA requires updates to such provisions.	120		0.1
Proposed Amendments to Rule 429 to address start-up/shutdown provisions related to the transition of NOx RECLAIM to a command-and-control regulatory program and if U.S. EPA requires updates to such provisions.	429	_	Other
provisions related to the transition of NOx RECLAIM to a command- and-control regulatory program and if U.S. EPA requires updates to such provisions.			
and-control regulatory program and if U.S. EPA requires updates to such provisions.		_	
provisions.		F.	
⊬			
MICHAEL ISTAINSE 202.320.4700, CEQAS, JUHAN WORK 202.320.3170. BUCH. IAN MIACMIHAN 202.320.3477		Provisions. <i>Michael Krause</i> 909.396.2706; <i>CEQA: Jillian Wong</i> 909.396.3176; <i>Socio: Ian MacMillan</i> 909.396.3244	

2019	Title and Description	Type of Rulemaking
445	Wood Burning Devices (PM 2.5 Contingency)	AQMP
	Proposed Amendments to Rule 445 will include provisions for	
	contingency in the event of failure to attain, or make reasonable further	
	progress toward, the PM2.5 federal ambient air quality standards and	
	other provisions.	
461	Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244 Gasoline Transfer and Dispensing	AQMP/
701	Proposed Amendments to Rule 461 will reflect information from the	Toxics
	California Air Resources Board, corrections, revisions and additions to	TOXICS
	improve the effectiveness, enforceability, and clarity of the rule.	
	Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
462	Organic Liquid Loading	Other
	Proposed Amendments to Rule 462 will improve the effectiveness,	
	enforceability, and clarity of the rule.	
4.62	TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	0.1
463	Organic Liquid Storage	Other
	Proposed Amendments to Rule 463 will address the current test method	
	and improve the effectiveness, enforceability, and clarity of the rule. TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
464	Wastewater Separators	Other
	Proposed Amendments to Rule 464 will improve the effectiveness,	
	enforceability, and clarity of the rule.	
1105	TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	4 63 55
1107	Coating of Metal Parts and Products	AQMP
	Proposed Amended Rule 1107 will lower VOC emission limits for	
	certain categories of coatings for metal parts and products and improve	
	rule clarity and enforceability. Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
	Reduction of NOx Emissions from Natural Gas Fired Commercial	AQMP
	Furnaces (CMB-01)	Other
1111.1	Proposed Rule 1111.1 will establish equipment-specific NOx emission	
	limits and other requirements for the operation of commercial furnaces.	
	TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
1113	Architectural Coatings	Other
	Proposed Amended Rule 1113 may be needed to remove the tBAc	
	exemption and pCBtF as a VOC exempt compound based on guidance	
	from the Stationary Source Committee.	
1118	Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	Other
1110	Refinery Flares Proposed Amended Pule 1118 will ravise provisions to improve the	Other
	Proposed Amended Rule 1118 will revise provisions to improve the	
	enforceability of the rule. Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	

2019	Title and Description	Type of Rulemaking
1123	Refinery Process Turnarounds	AQMP
	Proposed Amended Rule 1123 will establish procedures that better	
	quantify emission impacts from start-up, shutdown or turnaround	
	activities. Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
1135	Emissions of Oxides of Nitrogen from Electricity Generating	Other
	Facilities	
	Proposed Amended Rule 1135 will revise monitoring, reporting, and	
	recordkeeping provisions to reflect amendments to Proposed Rule 113	
	and possibly other amendments to address comments from U.S. EPA. Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
1136	Wood Products Coatings	AQMP
	Proposed Amended Rule 1136 will revise VOC limits for wood product	
	coatings and other clarifications. David DeBoer 909.396.2329; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
1142	Marine Tank Vessel Operations	Other
11.2	Proposed Amended Rule 1142 will address VOC emissions from marine	
	tank vessel operations and provide clarifications.	
	David DeBoer 909.396.2329; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
1146.2	Emissions of Oxides of Nitrogen from Large Water Heaters and	AQMP/
	Small Boilers and Process Heaters	AB617
	Proposed Amended Rule 1146.2 may be revised to lower the NOx	BARCT
	emission limit to reflect a Best Available Retrofit Control Technology	
	assessment. Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
1148.1	Oil and Gas Production Wells	Other
1148.2	Notification and Reporting Requirements for Oil and Gas Wells and	
	Chemical Suppliers	
	Proposed Amended Rules 1148.1 and 1148.2 may be revised to address	
	community notification procedures, the inclusion of water injection	
	wells, and potentially other measures based on an evaluation of	
	information collected since the last rule adoption. Possibly other	
	amendments to improve the enforceability. Jillian Wong 909.396.3176; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
1149	Tank Degassing	Other
	Proposed Amended Rule 1149 will improve the effectiveness,	
	enforceability, and clarity of the rule.	
1148.3	Requirements for Natural Gas Underground Storage Facilities	Other
1170.5	Proposed Rule 1148.3 will establish requirements to address public	
	nuisance and VOC emissions from underground natural gas storage	
	facilities.	
	Jillian Wong 909.396.3176; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	

2019	Title and Description	Type of Rulemaking
1150.1	Control of Gaseous Emissions from Municipal Solid Waste Landfills	Other
	Proposed Amended Rule 1150.1 will address U.S. EPA revisions to the	
	New Source Performance Standards for Municipal Solid Waste Landfills	
	and Existing Guidelines and Compliance Timelines for Municipal Solid	
	Waste Landfills, as well as CARB GHG requirements.	
1151	Ian MacMillan 909.396.3244; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244 Motor Vehicle and Mobile Equipment Non-Assembly Line Coating	Other
	Operations	
	Proposed Amended Rule 1151 is considering removing the tBAc	
	exemption and is evaluating the impact from removing pCBtF as a VOC	
	exempt compound based on guidance from the Stationary Source	
	Committee.	
1152 1	Jillian Wong 909.396.3176; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	A OMD/
1153.1	Emissions of Oxides of Nitrogen from Commercial Food Ovens Proposed Amendments to Rule 1153.1 may be needed to address	AQMP/ AB 617
	applicability and technological feasibility of low-NOx burner	BARCT
	technologies for new commercial food ovens.	DARCI
	Michael Krause 909.396.2706 CEQA: Jillian Wong 909.396.3176 and Socio: Ian MacMillan 909.396.3244	
1157	PM10 Emission Reductions from Aggregate Related Operations	Other
	Proposed Amended Rule 1157 will remove outdated language, revise	
	opacity requirements, and improve the effectiveness, enforceability, and	
	clarity of the rule.	
1159.1	TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244 Nitric Acid Units – Oxides of Nitrogen	AQMP
	Proposed Rule 1159.1 will address NOx emissions from processes using	AB 617
	nitric acid and is needed as part of the transition of RECLAIM to	BARCT
	command-and-control.	
11.66	David DeBoer 909.396.2329; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	0.1
1166	VOC Emissions from Decontamination of Soil	Other
	Proposed Amended Rule 1166 will revise notification provisions,	
	improve the effectiveness, enforceability, and clarity of the rule. Michael Morris 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
1173	Control of Volatile Organic Compound Leaks and Releases from	Other
	Components at Petroleum Facilities and Chemical Plants	
	Proposed revisions to Rule 1173 are being considered based on recent	
	U.S. EPA regulations and CARB oil and gas regulations and revisions to	
	improve the effectiveness, enforceability, and clarity of the rule. TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
1190, 1191,	Fleet Vehicle Requirements	Other
1192, 1193,	Proposed amendments to fleet rules may be necessary to improve rule	
1194,1195,	implementation. In addition, the current fleet rules may be expanded to	
1196, &	achieve criteria pollutant and air toxic emission reductions pending new	
1186.1	legislative authority. Zorik Pirveysian 909.396.2431; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
	2016 1 11 registar 207.370.2731, CDQn. 3111411 Hong 707.370.3170, 3000. Ital indexinitian 709.370.3244	

2019	Title and Description	Type of Rulemaking
1304.2	California Public Utilities Commission Regulated Electrical Local	Other
	Publicly Owned Electrical Utility Fee for Use of SOx, PM10 and	
	NOx Offsets	
1304.3	Local Publicly Owned Electrical Generating Facility Fee for Use	Other
	of SOx, PM10 and NOx Offsets	
	Proposed Rules 1304.2 and 1304.3 would allow new greenfield	
	facilities and additions to existing electricity generating facilities	
	conditional access to SCAQMD internal offset accounts for a fee, for	
	subsequent funding of qualifying improvement projects consistent	
	with the AQMP. TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
1401	New Source Review of Toxic Air Contaminants	Toxics
	Proposed Amended Rule 1401 may be revised to add, remove, or	
	revise toxic air contaminants based on changes from OEHHA.	
1.402	Jillian Wong 909.396.3176; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	m ·
1402	Control of Toxic Air Contaminant Emissions from Existing	Toxics
	Sources	
	Proposed Amended Rule 1402 may be revised based on	
	implementation of other toxic rules or programs. Jillian Wong 909.396.3176; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
1403	Asbestos Emissions from Demolition/Renovation Activities	Toxics
	Proposed Amended Rule 1403 will enhance implementation, improve	
	rule enforceability, and align provisions with the applicable U.S. EPA	
	National Emission Standard for Hazardous Air Pollutants (NESHAP)	
	and other state and local requirements as necessary.	
1407.1	David De Boer 909.396.2329; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	Tavias
1407.1	Control of Toxic Air Contaminant Emissions from Chromium Alloy Melting Operations	Toxics
	Proposed Rule 1407.1 will establish requirements to reduce point	
	source and fugitive toxic air contaminant emissions from metal	
	melting operations.	
	Michael Morris 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
1415	Reduction of Refrigerant Emissions from Stationary Air	Other
1415.1	Conditioning Systems, and Reduction of Refrigerant Emissions	
	from Stationary Refrigeration Systems	
	Amendments will align with the proposed CARB Refrigerant	
	Management Program and U.S. EPA's Significant New Alternatives	
	Policy Rule provisions relative to prohibitions on specific	
	hydrofluorocarbons. David DeBoer 909.396.2329; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
		l

2019	Title and Description	Type of Rulemaking
1426	Emissions from Metal Finishing Operations	Toxics
	Proposed Amended Rule 1426 will establish requirements to control	
	point and fugitive toxic air contaminant emissions from metal finishing	
	operations. Jillian Wong 909.396.3176; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
1430	Control of Emissions from Metal Grinding Operations at Metal	Toxics
	Forging Facilities	
	Proposed Amended Rule 1430 may be needed to establish requirements	
	to reduce toxic air contaminant emissions from metal forging operations. Jillian Wong 909.396.3176; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
1445	Control of Toxic Emissions from Laser Arc Cutting	Toxics
	Proposed Rule 1445 will establish requirements to reduce toxic metal	
	particulate emissions from laser arc cutting. David DeBoer 909.396.2329; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
1469.1	Spraying Operations Using Coatings Containing Chromium	Toxics
	Proposed Amended Rule 1469.1 will establish additional requirements to	
	address fugitive emissions from facilities that are conducting spraying	
	operations using chromium primers or coatings to further reduce	
	hexavalent chromium emissions. Jillian Wong 909.396.3176; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
1470	Requirements for Stationary Diesel-Fueled Internal Combustion	Toxics
	and Other Compression Ignition Engines	
	Proposed Amended Rule 1470 will establish additional provisions to	
	reduce the exposure to diesel particulate from new and existing small	
	(≤ 50 brake horsepower) diesel engines located near sensitive receptors. David DeBoer 909.396.2329; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
1902	Transportation Conformity	Other
	Proposed Amended Rule 1902 may be necessary to align the rule with	
	current U.S. EPA requirements.	
1905	Ian MacMillan 909.396.3244; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244 Pollution Controls for Automotive Tunnel Vents	Other
1903	Proposed Rule 1905 will address emissions from proposed roadway	Other
	tunnel projects that could have air quality impacts.	
	Ian MacMillan 909.396.3244; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
2202	On-Road Motor Vehicle Mitigation Options	Other
	Proposed Rule 2202 may be amended to address program streamlining	
	for regulated entities, as well as reduce review and administration time	
	for SCAQMD staff. Proposed Rule amendment concepts may include	
	program components to facilitate the obtainment of average vehicle	
	ridership (AVR) targets. Carol Gomez 909.396.3264; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	

2019	Title and Description	Type of Rulemaking
Reg. XVI	Mobile Source Offset Programs	AQMP
	Proposed Amendments to Regulation XVI rules will allow generation of	
	criteria pollutant Mobile Source Emission Reduction Credits (MSERCs)	
	from various on-road and off-road sources, such as on-road heavy-duty	
	trucks, off-road equipment, locomotives, and marine vessels. Credits	
	will be generated by retrofitting existing engines or replacing the engines	
	with new lower-emitting or zero-emission engines. Zorik Pirveysian 909.396.2431; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
Reg. XVII	Prevention of Significant Deterioration(PSD)	Other
_	Proposed Amendments to Regulation XVII are being considered for	
	possible revisions based on information from U.S. EPA.	
	Carol Gomez 909.396.3264; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	2.1
Reg. XXVII	Climate Change	Other
	Changes may be needed to Regulation XXVII to add or update protocols	
	for GHG reductions, and other changes. Zorik Pirveysian 909.396.2431; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244	
Reg. II, IV,	Various rule amendments may be needed to meet the requirements of	Other/
_	state and federal laws, implement OEHHA's 2015 revised risk	AQMP
	assessment guidance, address variance issues/ technology-forcing limits,	1101111
	to abate a substantial endangerment to public health or additional	
	reductions to meet the SIP short-term measure commitment. The	
	associated rule development or amendments include, but are not limited	
	to, SCAQMD existing rules, new or amended rules to implement the	
	2012 or 2016 AQMP measures. This includes measures in the 2010	
	Clean Communities Plan (CCP) or 2016 AQMP to reduce toxic air	
	contaminants or reduce exposure to air toxics from stationary, mobile,	
	and area sources. Rule adoption amendments may include updates to	
	provide consistency with CARB Statewide Air Toxic Control Measures,	
	U.S. EPA's National Emission Standards for Hazardous Air Pollutants,	
	or implementation of AB 617.	



BOARD MEETING DATE: February 1, 2019

AGENDA NO. 16

REPORT: Status Report on Major Ongoing and Upcoming Projects for

Information Management

SYNOPSIS: Information Management is responsible for data systems

> management services in support of all SCAQMD operations. This action is to provide the monthly status report on major automation

contracts and planned projects.

COMMITTEE: Administrative, January 10, 2019, Reviewed

RECOMMENDED ACTION:

Receive and file.

Wayne Nastri **Executive Officer**

RMM:MAH:agg

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 ongoing or expected to be initiated within the next six months. Information provided for each project includes a brief project description and the schedule associated with known major milestones (issue RFP/RFQ, execute contract, etc.).

Attachment

Information Management Status Report on Major Ongoing and Upcoming Projects During the Next Six Months

ATTACHMENT

February 1, 2019 Board Meeting

Information Management Status Report on Major Ongoing and Upcoming Projects During the Next Six Months

Project	Brief Description	Budget	Completed Actions	Upcoming Milestones
Implementation of Enterprise Geographic Information System (EGIS) Phase II	Continue to support accomplishment of the agency's mission through the effective and costefficient implementation of EGIS and related technologies		 Purchased ESRI extensions for OnBase Completed three prioritized EGIS projects: GIS Data Development System Documentation Portal/Mobile Development 	Complete the three prioritized EGIS projects: OnBase Expansion and GIS Integration CLASS GIS Integration One-click Site Report
Telecommunications Services	Select vendor(s) to provide local, long distance, telemetry, internet, cellular services, and phone system maintenance for a three-year period	\$750,000	 Released RFP October 5, 2018 Board Approval January 4, 2019 	• Execute contract(s) February 28, 2019
Office 365 Implementation	Acquire and implement Office 365 for SCAQMD staff	\$350,000	 Pre-assessment evaluation and planning completed Board action approved funding on October 5, 2018 Developed implementation and migration plan Acquired Office 365 licenses 	 Implement Office 365 email (Exchange) and migrate all users Implement Office 365 file storage (OneDrive for Business) and migrate users Implement Office 365 internal website (SharePoint) and migrate existing content

Project	Brief Description	Budget	Completed Actions	Upcoming Milestones
Permitting System Automation Phase 1	New Web application to automate the filing of all permit applications with immediate processing and issuance of permits for specific application types: Dry Cleaners, Gas Stations and Automotive Spray Booths	\$694,705	 Phase 1 Automated 400A form filing, application processing, and online permit generation for Dry Cleaner module deployed to production Facility ID Creation Module deployed to production Phase 1.1 Automated 400A form filing, application processing, and online permit generation for Automotive Spray Booth and Gas Station Modules deployed to production 	 Continue Phase 1.1 project outreach support Enhance processing of school locations with associated parcels Upgrade GIS Map integration and enhanced sensitive receptor identification and distance measurement work
Permitting System Automation Phase 2	Enhanced Web application to automate filing process of Permit Applications, Rule 222 equipment, and registration process for IC Engines; implement electronic permit folder and workflow for internal SCAQMD users	\$525,000	 December 2017 Board action approved initial Phase 2 funding May 2018 Phase 2 project startup and detail planning completed Business process model approved Development of Negative Air Machines, Boilers/Water Heaters/Process Heaters, Cooling Towers, Portable Heaters, and Food Ovens filing process completed 	User testing of completed Rule 222 forms including Negative Air Machines, Boilers/Water Heaters/Process Heaters, Cooling Towers, Portable Heaters, and Food Ovens User testing of new set of Rule 222 forms including Tar Pots, Asphalt Tankers, Asphalt Tankers, Asphalt Heaters, Aqueous Urea Storage, Agricultural Engines, and Diesel Fuel Boilers

Project	Brief Description	Budget	Completed Actions	Upcoming Milestones
Permitting System Automation Phase 2 (Continued)			 October 5, 2018 Board action approved remaining Phase 2 funding Code development for Boilers, Heaters, Ovens, Baghouses, and IC Engines completed Application submittals, and form filing of Char Broilers, Small Boilers, and Oil Wells processing completed Wireframes and user stories for Tar Pots/Tar Kettles, Asphalt Day Tankers, and Asphalt Pavement Heaters completed Development of new set of Rule 222 forms including Tar Pots, Asphalt Tankers, Asphalt Heaters, Aqueous Urea Storage, Agricultural Engines, and Diesel Fuel Boilers 	Wireframes, user stories, and code development for Micro Turbines, Storage of Odorants, and Storage of Aqueous Urea Solutions
Information Technology Review Implementation	Complete Board requested Information Technology review and initiate work on implementation of key recommendations	\$75,000	 Initiated Implementation Planning and Resource Requirements for key recommendations Conducted recruitment process to fill Systems & Programming Supervisor position Completed Microsoft Project Plan training for all IM Managers, Supervisors and Secretaries 	Office 365 deployment

Project	Brief Description	Budget	Completed Actions	Upcoming Milestones
Information Technology Review Implementation (continued)			 Established Information Technology Steering Committee, members and charter Configured and deployed Project Management software for IM team 	
Permit Application Status and Dashboard Statistics	New Web application to allow engineers to update intermediate status of applications; create dashboard display of status summary with link to FIND for external user review	\$100,000	 December 2017 Board action approved funding April 2018 project startup and detail planning completed June 2018 wireframe and user story approved for Release 1 User story and wireframe approved for application search module User stories approved and coding completed for Dashboard Data Entry screens 	 Code development for Release 1 Code development for application search module User acceptance testing for data capture module User acceptance testing for user reports Internal deployment of application for engineers to populate application related data
Agenda Tracking System Replacement	Replace aging custom agenda tracking system with state-of-the-art, cost-effective Enterprise Content Management (ECM) system, which is fully integrated with OnBase, SCAQMD's agencywide ECM system	\$86,600	 Released RFP December 4, 2015 Awarded contract April 1, 2016 Continued parallel testing Conducted survey of stakeholder satisfaction As a result of the survey responses, the decision was made to develop a custom user interface for the application 	Identify funding source

Project	Brief Description	Budget	Completed Actions	Upcoming Milestones
Agenda Tracking System Replacement (continued)			 Revised project scope to include custom user interface Developed plan and schedule for revised scope 	
Document Conversion Services	Document Conversion Services to convert paper documents stored at SCAQMD facilities to electronic storage in OnBase	\$83,000	 Released RFQ October 5, 2018 Board Approved of qualified vendors January 4, 2019 	• Execute purchase orders for scanning services
Replace Your Ride (RYR)	New Web application to allow residents to apply for incentives to purchase newer, less polluting vehicles	\$301,820	 Phase 2 Fund Allocation, Administration and Management Reporting modules deployed and in production Final Phase 2 user requested enhancements: VIN Number, Case Manager, Auto e-mail and document library updates deployed to production Phase 3 Data Migration development work completed 	 Phase 3 user approval for production Implementation of Electric Vehicle Service Equipment and alternative mode of transportation in the RYR application Approval of data migration Approval of Phase 3 move to production
SCAQMD Mobile Application for iOS devices Phase 2	Enhancement of Mobile application with addition of Enhanced Notifications, Complaint Filing and Facility Information Detail	\$100,000	 Project Charter released Proposal received Task order issued 	• System design

Project	Brief Description	Budget	Completed Actions	Upcoming Milestones
SCAQMD Mobile Application for Android devices Phase 1	New mobile application for Android devices which will have the same functionality as the new iOS application	\$75,000	Project Charter releasedProposal receivedTask order issued	System design
FIND System Replacement	Update and replace Facility Information Detail (FIND) application	\$148,150	 Task order issued, evaluated and awarded Detail project planning completed Wireframe approved Development completed Automated Testing completed Beta testing completed User outreach and training completed System moved to production 	• Phase 2 requirements gathering
Legal Division New System Development	Develop new web- based case management system for Legal Division to replace existing JWorks System	\$500,000	 Task order issued, evaluated and awarded Project initiated and project charter finalized Business Process Model completed Functional and system design received 	 Code development for Sprint 1 – NOV tracking and MSPAP case management Data model design

Project	Brief Description	Budget	Completed Actions	Upcoming Milestones
Flare Event Notification – Rule 1118	Develop new web- based application to comply with the Rule 1118 to improve current flare notifications to the public and the compliance team	\$100,000	 Vision & Scope issued Charter Document and proposal approved Task order issued Requirement gathering for Sprint 1 & 2 completed System Design for Sprint 1 & 2 completed 	 Requirement gathering for Sprint 3 System Design for Sprint 3
VW Environmental Mitigation Action Plan Project	California Air Resource Board has assigned SCAQMD to develop web applications for two projects: Zero- Emission Class 8 Freight and Port Drayage Truck Project & Combustion Freight and Marine Project. It will be SCAQMD's responsibility to develop a web application for both incentive programs, and maintain a database that will be queried for reporting perspectives for California Air Resource Board	\$650,000	Draft Charter Document issued	 Approve timeline and milestones Approve Charter Budget Transfer Approve qualifying vendor Requirement gathering Functional and system design
AQ-SPEC Cloud Platform	Develop a cloud- based platform to		 Task Order issued Proposals received	Task Order to be awarded
	manage and visualize data collected by low-cost sensors.		Troposais received	3333

Project	Brief Description	Budget	Completed Actions	Upcoming Milestones
PeopleSoft Electronic Requisition	In line with the agency's green and paperless office initiatives, SCAQMD is implementing electronic requisition for PeopleSoft Financials. This implementation will allow individual divisions to submit their requisition online. Electronic requisition will also provide several additional benefits including tracking of multiple levels of approval, electronic archival of requisition documents, preencumbrance of budget, and streamlined workflow for Finance.		 Project Charter approved Task Order issued Proposal received Task Order awarded Requirement gathering for Sprint 1 completed Design for Sprint 1 completed 	Code Development for Sprint 1

Projects that have been completed are shown below.

Completed Projects							
Project	Date Completed						
Website & Evaluation Improvements	January 6, 2018						
Information Technology Review	January 31, 2018						
Prequalify Vendor List for PCs, Network Hardware, etc.	February 3, 2018						
Renewal of HP Server Maintenance & Support	April 6, 2018						
Implementation of Enterprise Geographic Information System (EGIS) Phase I	May 30, 2018						
Fiber Cable Network Infrastructure Upgrade	May 30, 2018						
Air Quality Index Rewrite and Migration	June 29, 2018						
SCAQMD Mobile Application for iOS devices Phase 1	November 2, 2018						
CLASS Database Software Licensing and Support	November 30, 2018						



BOARD MEETING DATE: February 1, 2019 AGENDA NO. 17

PROPOSAL: Annual Report on 457 Deferred Compensation Plan

SYNOPSIS: SCAQMD sponsors an IRS-approved 457 deferred compensation

program for its employees. The Annual Report addresses the Board's responsibility for monitoring the activities of the Deferred Compensation Plan Committee and ensuring the Committee carries out its fiduciary duties and responsibilities under the Committee

Charter. This action is to file the annual report.

COMMITTEE: Administrative, January 10, 2019, Reviewed

RECOMMENDED ACTION:

Receive and file.

Wayne Nastri Executive Officer

AJO:mm

Background

SCAQMD sponsors and administers a 457 deferred compensation program for its employees. The Deferred Compensation Plan ("Plan") is administered by Massachusetts Mutual Life Insurance Company (MassMutual), a retirement services, asset management and insurance firm. State law governs the fiduciary requirement for the operation and investment of 457 plans sponsored by governmental entities. SCAQMD's Governing Board serves a fiduciary role subject to the duties and obligations under Article XVI, Section 17 of the California Constitution.

To meet its fiduciary responsibilities, the Board, at the time it established SCAQMD's 457 Plan, also established a Deferred Compensation Plan Committee ("Committee") to oversee the administration of the Plan. On May 2, 2008, the Board approved the Deferred Compensation Plan Committee Charter, formalizing the fiduciary duties and responsibilities of the Committee. The four members of the Deferred Compensation Plan Committee are the Assistant Deputy Executive Officer/Finance, the Assistant Deputy Executive Officer/Administrative and Human Resources, the Human Resources Manager over employee benefits, and the General Counsel.

In addition to the Plan administrator, SCAQMD utilizes the services of an independent, third-party consulting firm, Benefit Financial Services Group (BFSG), to provide services to the Plan as a fiduciary under a Registered Investment Advisor agreement.

Summary of Report

Attached is the 457 Deferred Compensation Plan Annual Report to the Board for FY 2017-18. The Committee meets on a regular basis to review the Plan's design, investment options, asset allocation/demographics, and to make changes as necessary. During this fiscal year period the Committee placed one fund on the Watch List due to relative underperformance and removed another from the list due to improved performance, replaced several date and index funds, and added both a large and small cap value index fund.

Additionally, the Committee voted to initiate the Plan's transition to MassMutual's new and enhanced user platform (completed August 8, 2018), engaged MassMutual for the processing of retiree benefit payment requests (i.e., retiree distributions), adopted a fee leveling structure, and modified the Plan's loan program to provide more options to participants.

As of June 30, 2018, the Plan has:

- 940 participants (employees and retirees)
- Over \$177.5 million in assets
- An average account balance of \$188,870
- Outperformed the 3-, 5- and 10-year benchmarks

The attached report provides detailed information regarding Plan Assets/Demographics and Plan Performance.

Proposal

Staff recommends that the Board receive and file the Plan Annual Report.

Attachment

457 Deferred Compensation Plan Annual Report for FY 2017-18



ANNUAL REPORT TO THE BOARD

REPORT PERIOD: JULY 2017 -

JUNE 2018

South Coast Air Quality Management District 457 Deferred Compensation Plan



Table of Contents

Section I Executive Summary

Section II Year in Review

Section III Plan Assets / Demographics

Section IV Plan Performance

Section V Appendix

Meeting Minutes

SECTIONI

EXECUTIVE SUMMARY

Executive Summary

South Coast Air Quality Management District ("SCAQMD") sponsors and administers an eligible deferred compensation program for its employees, as covered under section 457 of the Federal Internal Revenue Code. SCAQMD's Deferred Compensation Plan ("Plan") was adopted on January 1, 1987. Employees are immediately eligible upon hire to participate in the Plan.

SCAQMD's Deferred Compensation Plan Committee ("Committee"), officially chartered in May 2008, and whose members are appointed by SCAQMD's Governing Board, meets on a regular basis to review the Plan's design, investment options, asset allocation/demographics, and to make changes as necessary. Current membership includes the Assistant Deputy Executive Officer of Finance, General Counsel, the Assistant Deputy Executive Officer of Administration and Human Resources, and a Human Resources Manager.

The Plan is administered by Massachusetts Mutual Life Insurance Company ("Mass Mutual"), a retirement services, asset management and insurance firm. MassMutual provides recordkeeping and administration services to 1,577 Governmental 457 Plans, with over \$14.7 billion in total assets, as of December 31st, 2017. MassMutual has been administering 457 Plans since 1979, and has an \$&P credit rating of AA+.

In addition to the retirement plan administrator, SCAQMD utilizes the services of Benefit Financial Services Group ("BFSG"). BFSG is a third-party consulting firm that provides services to the Plan as a fiduciary under a Registered Investment Advisor agreement. Their consulting services include investment analysis, review and recommendation of investment options offered in the Plan, fiduciary compliance assistance to Committee members and annual Plan cost benchmarking. BFSG has been providing services to the Plan since 2007.

The Plan was established to provide a retirement savings program for the employees of SCAQMD and is maintained for the exclusive purpose of benefiting the Plan participants and their beneficiaries. The Plan is also intended to operate in accordance with all applicable state and federal laws and regulations.

While Plan participants are ultimately responsible for their own investment decisions, the Committee endeavors to provide an appropriate range of investment options, allowing participants to invest in accordance with their own time horizons, risk tolerance, and retirement goals.

SECTION II

YEAR IN REVIEW

2017/2018 Year in Review

Items addressed and adopted by the Committee during the year are as follows:

Plan Summary

Meeting Date	Item	Update
September 13, 2017	Annual Report	BFSG prepared and presented to the Committee the FY 2017 Annual Report.
	MassMutual "REFLEX" Platform	The Committee unanimously agreed to begin the process of transitioning to MassMutual's "REFLEX" platform in the second quarter of 2018 with expected completion in July.
	Amendment to Administrative Services Agreement	The Committee unanimously agreed to outsource benefit payment requests to MassMutual effective November 1, 2017.
April 11, 2018	Fee Levelization	The Committee unanimously agreed to adopt a fee leveling process by which all participants will be charged an equivalent asset-based fee.
June 6, 2018	457 Plan Loan Refinancing	The Committee unanimously agreed to permit certain types of loan refinancing as well as allow for loan repayment after separation of services through ACH payment directly to MassMutual.

2017/2018 Year in Review

Items addressed and adopted by the Committee during the year are as follows:

Investment Menu

Meeting Date	Item	Update
September 13, 2017	Watch List	The Committee unanimously agreed to remove Invesco Real Estate Fund from the watch list due to improved performance.
November 14, 2017	Fund Change	The SSgA Target Date Funds were scheduled to close on December 15, 2017. The Committee unanimously agreed to replace the SSgA Target Date Funds with T. Rowe Price, effective December 14, 2017.
December 13, 2017	Watch List	The Committee unanimously agreed to place MFS International New Discovery on the Watch List due to underperformance.
April 11, 2018	Share Class / Fund Changes	The Committee unanimously agreed to proposed share class changes and to replace the SSgA index funds with Vanguard.
June 6, 2018	Fund Changes	The Committee unanimously agreed to add DFA U.S. Large Cap Value and Vanguard Small Cap Value Index.
	457 Plan Default Investment Selection	The Committee unanimously agreed to utilize the T. Rowe Price Target Date Series as the primary default investment option for non-participant directed monies in the 457 Plan. The Invesco Equity and Income was chosen as a secondary default option for participants with no date of birth on file.

SECTION III

PLAN ASSETS / DEMOGRAPHICS

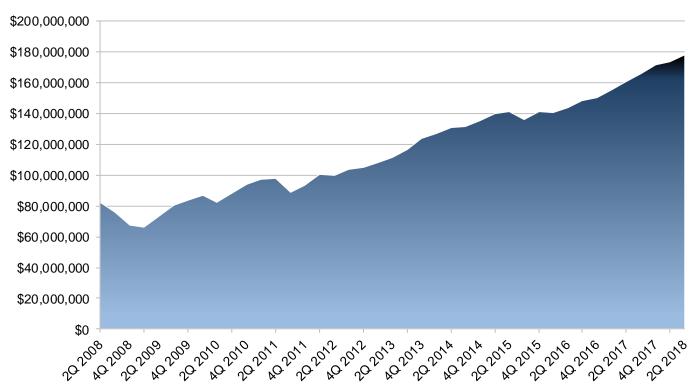
Plan Assets / Demographics as of June 30, 2018

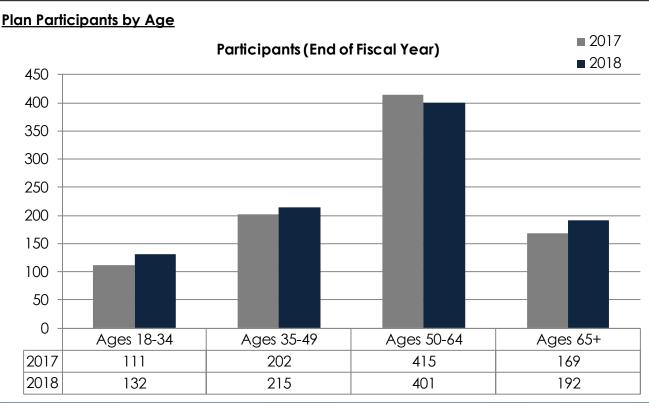
Investment Option	% of Plan Assets	Participants	Plan Assets
General Account	47.09%	656	\$83,595,322
T. Rowe Price Blue Chip Growth I	11.84%	436	\$21,024,096
American Funds Fundamental Invs R4	8.03%	233	\$14,255,881
Hartford MidCap HLS IA	4.28%	339	\$7,592,256
SSgA S&P 500 Index Sec Lend Inv Opt I	4.15%	175	\$7,366,490
Hartford Dividend and Growth HLS IA	3.66%	342	\$6,496,948
Hartford International Opp HLS IA	2.87%	370	\$5,100,798
Invesco Equity and Income A	2.45%	129	\$4,355,018
Goldman Sachs Small Cap Gr Insghts Inv	2.23%	294	\$3,964,318
Metropolitan West Total Return Bond Plan	1.72%	227	\$3,045,444
Hartford Healthcare HLS IA	1.52%	93	\$2,699,961
Vanguard Selected Value Inv	1.35%	273	\$2,393,985
T. Rowe Price Retirement 2045	1.26%	77	\$2,244,486
American Beacon Small Cp Val Inst	1.14%	274	\$2,023,313
SSgA US Interm Gov/Credit Bond Index SL Inv Opt I	1.08%	150	\$1,914,460
T. Rowe Price Retirement 2035	0.99%	31	\$1,749,420
MFS® International New Discovery A	0.94%	96	\$1,670,983
SSgA S&P MidCap Index Non-Lend Series Inv Opt I	0.85%	100	\$1,510,880
SSgA Russell Small Cap Index Sec Lend Inv Opt I	0.67%	88	\$1,197,945
MFS® Utilities A	0.65%	79	\$1,149,102
SSgA International Index Sec Lend Series Inv Opt I	0.34%	44	\$612,422
Invesco Real Estate R5	0.32%	38	\$572,579
T. Rowe Price Retirement 2025	0.21%	15	\$375,861
Neuberger Berman Sustainable Eq R6	0.19%	33	\$334,175
T. Rowe Price Retirement 2040	0.05%	3	\$91,338
T. Rowe Price Retirement 2030	0.04%	2	\$67,711
T. Rowe Price Retirement 2050	0.03%	5	\$57,919
T. Rowe Price Retirement 2010	0.03%	2	\$51,468
T. Rowe Price Retirement 2015	0.01%	3	\$13,194
T. Rowe Price Retirement 2020	0.01%	2	\$9,252
T. Rowe Price Retirement 2060	0.00%	1	\$1,212
	100.00%		\$177,538,238

Note: Total does not include Self-Directed Brokerage Account

Plan Assets / Demographics

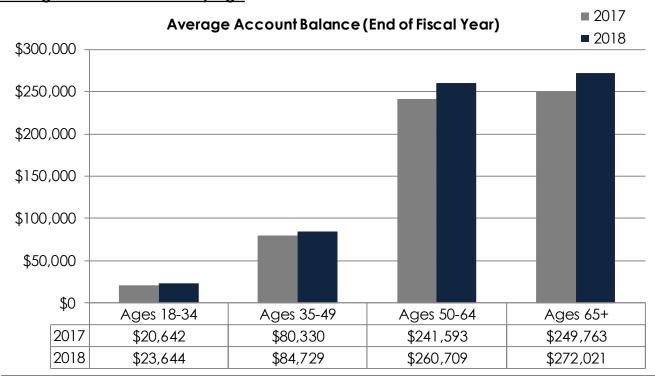
Growth of Plan Assets



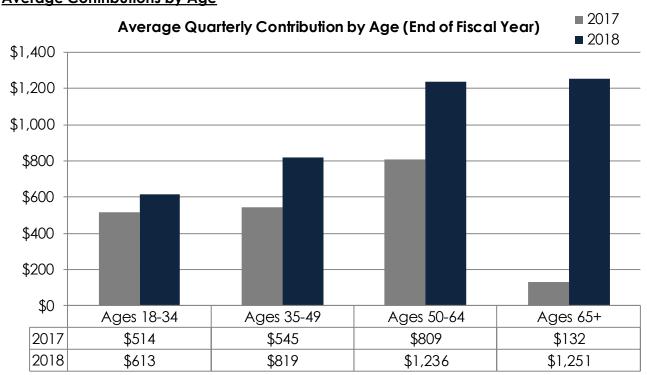


Plan Assets / Demographics

Average Account Balance by Age







Plan Assets / Demographics

Annual Net Cash Flow - YTD 2018

	2018 YTD						
QUARTER ENDING	March 31st	June 30th	September 30th	December 31st	Jan 1st - Dec 31st		
Cash Flow							
Beginning Market Value	\$171,599,211	\$173,610,939			\$171,599,211		
Contributions	\$1,944,813	\$2,115,481			\$4,060,294		
Withdrawals	-\$1,576,875	-\$1,237,252			-\$2,814,128		
Net Loan Activity	\$58,259	\$124,026			\$182,285		
Fees	-\$1,407	-\$1,489			-\$2,896		
NET CASH FLOW	\$424,790	\$1,000,766			\$1,425,556		
Change in Value	\$1,586,007	\$3,495,813			\$5,081,820		
Net Transfers	\$932	\$0			\$932		
Ending Market Value	\$173,610,939	\$178,107,518			\$178,107,518		

Annual Net Cash Flow - 2017

		2017						
QUARTER ENDING	March 31st	June 30th	September 30th	December 31st	Jan 1st - Dec 31st			
Cash Flow								
Beginning Market Value	\$150,746,832	\$155,539,416	\$160,966,392	\$165,956,803	\$150,746,832			
Contributions	\$2,016,118	\$2,010,298	\$1,555,694	\$1,591,946	\$7,174,056			
Withdrawals	-\$2,706,288	-\$678,735	-\$996,993	-\$1,171,719	-\$5,553,735			
Net Loan Activity	\$65,945	\$135,221	-\$32,371	\$120,638	\$289,432			
Fees	-\$1,583	-\$1,482	-\$1,603	-\$1,420	-\$6,088			
NET CASH FLOW	-\$625,809	\$1,465,302	\$524,727	\$539,445	\$1,903,665			
Change in Value	\$5,418,393	\$3,961,673	\$4,463,723	\$5,102,963	\$18,946,752			
Net Transfers	\$0	\$0	\$1,961	\$0	\$1,961			
Ending Market Value	\$155,539,416	\$160,966,392	\$165,956,803	\$171,599,211	\$171,599,211			

SECTION IV

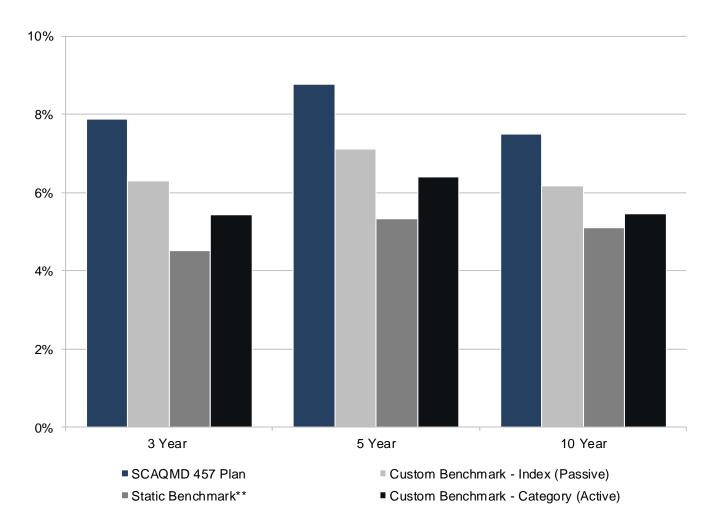
PLAN PERFORMANCE

Weighted Portfolio Return versus Custom Benchmark

			Annualized Returns			3 YR	3 YR	Expense
Performance as of June 30, 2018	3 Month	1 Year	3 Year	5 Year	10 Year	Std Dev	Sharpe	Ratio*
SCAQMD 457 Plan	2.05%	9.73%	7.88%	8.78%	7.50%	5.29	1.33	0.68
Custom Benchmark - Index (Passive)	1.95%	8.04%	6.31%	7.12%	6.17%	4.98	1.11	N/A
Static Benchmark**	0.07%	4.06%	4.51%	5.34%	5.10%	4.46	0.84	N/A
Custom Benchmark - Category (Active)	1.85%	7.72%	5.44%	6.42%	5.47%	5.03	0.94	0.82

^{*}Custom expense ratio represents the weighted expense (based upon current allocation) of Institutional and Retirement share classes in each asset category.

Annualized Returns



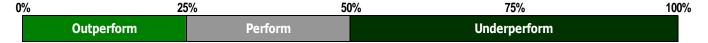
^{**}Static Benchmark is comprised of 60% in Vanguard Total Bond Index and 40% in Vanguard Total World Stock Index.

Individual Fund Ranking

(Per Investment Policy Statement Evaluation Criteria)

Investment Name				
Intermediate-Term Bond				
Metropolitan West Total Return Bd Plan				
Allocation50-70% Equity				
Invesco Equity and Income A				
Large Value				
Hartford Dividend and Growth HLS IA				
Large Blend				
American Funds Fundamental Invs R4				
Neuberger Berman Sustainable Eq R6				
Large Growth				
T. Rowe Price Blue Chip Growth I				
Mid Value				
Vanguard Selected Value Inv				
Mid Growth				
Hartford MidCap HLS IA				
Small Value				
American Beacon Small Cp Val Inst				
Small Growth				
Goldman Sachs Small Cap Gr Insghts Inv				
Foreign Large Equity				
Hartford International Opp HLS IA				
Foreign Small/Mid Equity				
MFS® International New Discovery A				
Healthcare				
Hartford Healthcare HLS IA				
Real Estate				
Invesco Real Estate R5				
Utilities				
MFS® Utilities A				
Target Date Series				
T. Rowe Price Retirement Series				
Average Rank				
Plan Weighted Rank (Reweighted)				

Quarterly Ranking				
2Q18	1Q18	4Q17	3Q17	
6	7	5	3	
43	34	29	27	
3	2	2	2	
18 26	16 30	18 56	14 50	
0	0	0	1	
16	7	6	10	
4	4	4	6	
11	11	9	6	
22	24	23	19	
12	5	6	3	
44	49	51	50	
18	8	10	6	
37	35	37	42	
78	78	83	80	
14	N/A	N/A	N/A	
22 13	21 11	23 12	21 11	



Note: Average and Plan-Weighted Average rankings shown above reflect the actual funds offered in the Plan (and their respective weightings) during the applicable quarter.

SECTION V

APPENDIX



BOARD MEETING DATE: September 13, 2017

REPORT: Deferred Compensation Plan Committee

SYNOPSIS: The Deferred Compensation Plan Committee met on Wednesday,

September 13, 2017 at 2:00pm at SCAQMD headquarters in Diamond Bar. The following is a summary of that meeting.

RECOMMENDED ACTION:

Receive and file.

A. John Olvera, Chair Deferred Compensation Plan

AJO:AM:tc

Committee Members Present

Mr. John Olvera – Asst. Deputy Executive Officer/Admin and Human Resources

Mr. Michael O'Kelly – Chief Administrative Officer

Mr. Bill Richards – Human Resources Manager

Committee Members Absent

Mr. Kurt Wiese – General Counsel

Guests

Ross Hooper, Benefit Financial Services Group ("BFSG") Darren Stewart, BFSG Dario Gomez, MassMutual

Call to Order

Chair Olvera called the meeting to order at 2:00 pm.

ACTION ITEMS:

- 1. **Approval of Prior Meeting Minutes (Administrative):** The minutes from the meeting held on June 7, 2017 were reviewed and unanimously approved by the Committee members in attendance.
- 2. **457 and 401(a) Plans Quarterly Investment Review (Fiduciary):** 2nd Quarter **2017:** The Committee members in attendance reviewed and unanimously approved the 457 Deferred Compensation and 401(a) Plans Quarterly Investment Review for the quarter ending June 30, 2017. Mr. Stewart provided the Committee with an overview of current economic and market conditions including: GDP, unemployment, inflation, interest rates, exchange rates and market/sector returns. The Investment Options offered in the Plan were reviewed in accordance with the Investment Policy Statement. Additional information was provided on the following noteworthy funds:

Metropolitan West Total Return Bond Fund has underperformed its category peers and passive benchmark on a short-term basis. The fund's defensive stance has led to an underweight to corporate bonds, which has detracted from short-term returns. However, the fund has retained strong long-term performance results, outperforming category peers on a 3, 5 and 10-year basis.

Neuberger Berman Socially Responsive Fund is currently on the Watch List due to performance-related issues and a change in fund management. The fund has underperformed its passive benchmark across all measured periods, returning just 2.72% for the quarter compared to 4.67% and 5.19% for the passive index and category average, respectively. The fund's overall Evaluation Methodology score increased from 38 to 46, thus retaining a "perform" rating. The fund's

underperformance during the quarter can be attributed to its strategy of "growth at a reasonable price", causing the fund to have an overweight to value oriented stocks, which have underperformed their growth oriented counterparts. This led the fund to hold a very large overweight position in the poorly performing energy sector, which was the largest detractor from relative performance. After discussion, the Committee members in attendance unanimously agreed to keep the fund on the Watch List.

Invesco Real Estate Fund is currently on the Watch List due to underperformance. The fund outperformed its passive benchmark and category peers for the quarter, and is now beating its category peers across all measured periods. Positive stock selection in the shopping center sector was the largest contributor to relative performance during the quarter. After discussion, the Committee members in attendance unanimously agreed to remove the fund from the Watch List in lieu of the improved performance results.

MFS Utilities Fund was placed on the Watch List in March 2017 due to underperformance. Long-term performance measures remain well below the fund's passive benchmark, with 3-year annualized performance returning just 0.18%, compared to 9.37% for the benchmark. This underperformance can be attributed to poor stock selection in the utilities sector coupled with a large overweight to the underperforming energy sector. However, on a short-term basis the fund is outperforming its passive benchmark and category peers. Conversely to 3-year performance, it was positive stock selection in the utilities sector, which contributed to the funds relative outperformance. After discussion, the Committee members in attendance unanimously agreed to keep the fund on the Watch List, pending further performance improvement.

SSgA Dow Jones Target Date Series uses a conservative strategy by being underweight equities compared to their category peers, which has detracted from performance across all measured periods. Mr. Stewart proposed carrying out a fund search to look for alternative options after the Plan transitions to the new Reflex platform, as more options will then be available. The Committee members in attendance unanimously agreed.

The Plan's Asset Allocation Models outperformed their respective benchmarks across all measured time periods. Although 3-year standard deviations are slightly above their respective benchmarks, the 3-year Sharpe ratio highlights how this small level of increased risk has been rewarded with superior returns.

Based on participant allocations as of June 30, 2017, the Plan outperformed its custom active and passive benchmarks across all measured time periods noted in the Report. Although the Plan has a slightly higher standard deviation than its custom active benchmark, the returns show that this risk has been rewarded. The

plan weighted expense ratio remains around 20% lower than that of the custom active benchmark.

The Committee reviewed the revenue received by MassMutual. The annual revenue per participant remained at approximately \$108, based on the assets as of June 30, 2017. The annual revenue per participant has been marginally increasing since the fee reduction. The Committee will continue to monitor fees on an ongoing basis.

The Committee reviewed the 401(a) Plan Quarterly Investment Review. The Plan had assets of \$12,365 as of June 30, 2017. Based on participant allocations, the Plan outperformed its custom active and passive benchmarks across all measured periods. The Plan weighted expense ratio was around 23% lower than its custom active benchmark.

3. **MassMutual "REFLEX" Platform (Administrative):** Mr. Gomez provided information regarding the benefits of transitioning the 457 Deferred Compensation Plan from the Hartford platform to the Reflex platform offered by MassMutual. These benefits included: a better participant experience as a result of an improved participant website, a larger choice of investment options available for the Plan, enhanced automation to reduce SCAQMD's administrative responsibilities, and the ability to introduce a zero revenue sharing fund lineup with fee levelization.

The transition would involve a series of administrative responsibilities. The transition would take roughly 90 days to complete and would include a week long freeze on transfers and one day in which assets would be completely out of the market. Mr. Gomez confirmed that the service agreement would need to be redrafted and that MassMutual would match the current price (6 basis points on all assets).

Due to the administrative responsibility of transitioning to the new platform, the Committee members in attendance and Mr. Gomez unanimously agreed to begin proceedings in second quarter of 2018, with a target completion date of July 1, 2018.

4. **Annual Board Report (Administrative):** The Committee members in attendance reviewed and unanimously approved the Annual Report to the Governing Board, which was provided by BFSG. The purpose of the Annual Report was to assist the Governing Board in fulfilling its responsibility to monitor the Committee, to which it has delegated fiduciary responsibility. The Committee reviewed the major decisions made during the previous year, including; share class changes in order to reduce revenue sharing, addition of the 401(a) Plan and updates to the Plan Expense Reimbursement Account Policy.

5. Proposed Amendment to Administrative Service Agreement (Administrative): A copy of the proposed amendment to the Administrative Service Agreement for the 457 Deferred Compensation Plan was distributed. The amendment authorizes MassMutual to process benefit payment requests as directed by employees. The benefit payment requests must be submitted in "good order", meaning that SCAQMD will notify MassMutual in a timely fashion, about any Participant that has separated from service on account of termination of employment or retirement. After discussion, the Committee members in attendance unanimously agreed to outsource this administrative process to MassMutual. The effective date of this amendment is November 1, 2017.

Discussion Items:

- 6. Quarterly Plan Review (Administrative): The Committee received and filed the Retirement Plan Review (the "Review") prepared by MassMutual. The Review included the following information for the quarter ending June 30, 2017; assets, contributions, distributions, rollovers, loans, Asset Allocation Models utilization, and plan participation. Positive net cash flow of \$1,330,339 supplemented positive returns to arrive at the new plan balance. The average number of investment options utilized by participants also increased during the quarter. Over the past 5 years the number of participants in the plan is up around 12% and the average account balance is up around 14% over the same period.
- 7. **Quarterly Reimbursement Calculation (Fiduciary):** The Committee received and filed the quarterly reimbursement calculation provided by MassMutual.

OTHER MATTERS:

- 8. **Other Business** Mr. Gomez confirmed that the General Account crediting rate is scheduled to be reduced from 4.0% to 3.5%, effective January 1, 2018. Mr. Gomez agreed that MassMutual will take responsibility for communicating this change to the plan's participants. Kaitlin will put together an email template and send to the Committee for review before the next meeting.
- 9. **Public Comments -** There were no public comments.

Next Meeting Date - The next regular meeting of the Deferred Compensation Plan Committee is scheduled for December 6, 2017.

Adjournment - The meeting adjourned at 3:11 p.m.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT DEFERRED COMPENSATION PLAN COMMITTEE MEETING MINUTES

November 14, 2017

Members Present: Mr. John Olvera – Asst. Deputy Executive Officer/Admin and

Human Resources

Mr. Bill Richards – Human Resources Manager

Mr. Kurt Wiese – General Counsel

Committee Consultants: Mr. Darren Stewart – Benefit Funding Services Group (by phone)

Call to Order: The special meeting of the Deferred Compensation Plan Committee was called to order by Mr. Olvera on November 14, 2017 at 2:00 pm in Conference Room CC-7. It was noted a quorum was present.

Investment Agenda

1. Target Date Fund Search

On November 9, 2017 MassMutual informed the Committee that the SSgA Target Date Funds are closing on December 15, 2017. Accordingly, the Committee held a special meeting on November 14, 2017 to review a Fund Search prepared by BFSG. Area reviewed included: a comparison of available target date funds, glide path, portfolio composition, performance, equity allocation, risk-adjusted returns, volatility and expense. The Committee also discussed the possibility of mapping the assets into the current balanced fund, Invesco Equity & Income. After consideration, the Committee unanimously agreed to replace the current SSgA Target Date Funds with the T. Rowe Price Retirement Funds.

2. Public Comments

Mr. Olvera asked the attending members of the Public for comment but received no reply.

Adjournment

With no further items to address, Mr. Olvera adjourned the meeting at 2:20 pm.



BOARD MEETING DATE: February 2, 2018

REPORT: Deferred Compensation Plan Committee

SYNOPSIS: The Deferred Compensation Plan Committee met on Wednesday,

December 13, 2017 at 2:00pm at SCAQMD headquarters in Diamond Bar. The following is a summary of that meeting.

RECOMMENDED ACTION:

Receive and file.

A. John Olvera, Chair Deferred Compensation Plan

AJO:AM:tc

Committee Members Present

Mr. John Olvera – Asst. Deputy Executive Officer/Admin and Human Resources

Mr. Michael O'Kelly – Chief Administrative Officer

Mr. Bill Richards – Human Resources Manager

Mr. Kurt Wiese – General Counsel

Committee Members Absent

None

Guests

Dario Gomez, MassMutual Aksana Munoz, Benefit Financial Services Group ("BFSG") Darren Stewart, BFSG

Call to Order

Chair Olvera called the meeting to order at 2:00 pm.

ACTION ITEMS:

- 1. **Approval of Prior Meeting Minutes (Administrative):** The minutes from the meetings held on September 13, 2017 and November 14, 2017 were reviewed and unanimously approved by the Committee.
- 2. **457 Plan Quarterly Investment Review (Fiduciary):** 3rd **Quarter 2017:** The Committee reviewed and unanimously approved the Retirement Plan Quarterly Investment Review (the "Report") for the 457 Deferred Compensation Plan (the "Plan") for the quarter ending September 30, 2017. Mr. Stewart provided the Committee with an overview of current economic and market conditions including: GDP, unemployment, inflation, interest rates, exchange rates and market/sector returns. The investment options offered in the Plan were reviewed in accordance with the Investment Policy Statement. Additional information was provided on the following noteworthy funds:

Neuberger Berman Socially Responsive is currently on the Watch List due to performance-related issues and a change in fund management. The fund, which serves as a socially responsible offering for Plan participants, was noted as having trailed the Russell 1000 Growth Index and large cap growth category peers over the most periods noted in the Report. Though categorized by Morningstar as a growth fund, Neuberger Berman Socially Responsible fund management views the fund as more of a large cap blend, using the S&P 500 Index as its benchmark. As a result, the fund's performance struggled as compared to the more growth-oriented large cap growth category peers. An underweight in technology and an overweight in

energy detracted from the fund's overall performance for the year. After discussion, the Committee unanimously agreed to keep the fund on the Watch List.

MFS International New Discovery has underperformed its category peers and passive benchmark on a short-term basis. An overweight in consumer staples detracted from performance over the reporting quarter, but stock selection within the sector positively contributed. On a 3-year basis, the fund underperformed largely due an overweight to United Kingdom and an underweight to China. After discussion, the Committee unanimously agreed to place the fund on the Watch List due to short-term underperformance.

MFS Utilities is currently on the Watch List due to underperformance. The fund rebounded for the quarter, returning 4.08%, compared to 2.87% for the passive benchmark. As of September 30, 2017, roughly 63% of the portfolio was in the utilities sector, one of the lowest weightings in the category and well below the 81% category average. The fund's overweight to energy has detracted from performance for most periods measured in the Report. Although energy outperformed for the quarter, several of the fund's holdings were negatively affected by the hurricanes. After discussion, the Committee unanimously agreed to keep the fund on the Watch List pending further performance improvement.

The Plan's Asset Allocation Models outperformed their respective benchmarks across all measured time periods noted in the Report. Although 3-year standard deviations are slightly above their respective benchmarks, the 3-year Sharpe ratio highlights how this small level of increased risk has been rewarded with superior returns.

Plan assets increased during the quarter to approximately \$165.5 million (excluding loan and Self-Directed Brokerage balances), representing 903 participants with a balance. Based on participant allocations as of September 30, 2017, the Plan outperformed its custom active and passive benchmarks across all measured time periods noted in the Report. Although the Plan has a slightly higher standard deviation than its custom active benchmark, the returns show that this risk has been rewarded. The Plan's weighted expense ratio at 68 basis points remains below the similarly-weighted category average at 83 basis points.

The Committee reviewed the revenue received by MassMutual for recordkeeping and administrative services. The annual revenue per participant remained at approximately \$110, based on the assets as of September 30, 2017. The Committee will continue to monitor fees on an ongoing basis.

401(a) Plan Quarterly Investment Review (Fiduciary): 3rd Quarter 2017: The Committee reviewed and unanimously approved the Retirement Plan Quarterly Investment Review (the "Report") for the SCAQMD 401(a) Plan (the "Plan") for

the quarter ending September 30, 2017. Based on participant allocations, the Plan outperformed its custom active and passive benchmarks across all measured periods noted in the Report. The Plan's weighted expense ratio was around 23% lower than its custom active benchmark.

3. **2018 Meeting Schedule (Administrative).** The Committee reviewed and accepted the 2018 meeting schedule. The meetings will be held at 2:00 pm on March 14th, June 6th, September 12th and December 12th.

DISSCUSSION ITEMS:

4. **Quarterly Plan Review (Administrative):** The Committee received and filed the Your Plan Review for the 457 and 401(a) Plans (the "Review") prepared by MassMutual. The Review of both Plans included the following information for the quarter ending September 30, 2017; assets, contributions, distributions, rollovers, loans, Asset Allocation Models utilization and plan participation.

To address the upcoming change in the General Account crediting rate, Mass Mutual drafted a sample communication email and presented it to the Committee. After review, the Committee unanimously approved the template. Mr. Gomez will provide a copy of the template to Mr. Richards so that he can distribute the notice to participants.

- 5. **Fund Change Update (Fiduciary):** Mr. Gomez informed the Committee that the SSgA Dow Jones Target Date Funds will be replaced by the T. Rowe Price Retirement Funds on December 14, 2017.
- 6. **Quarterly Reimbursement Calculation (Fiduciary):** The Committee received and filed the quarterly reimbursement calculation provided by MassMutual.
- 7. **Appointment of New Member to Committee (Fiduciary):** As Mr. O'Kelly will no longer be an employee of South Coast Air Quality and Management District, a new Committee member will soon be appointed by the Board.

OTHER MATTERS:

- 8. **Other Business** There was no other business.
- 9. **Public Comments** There were no public comments.

Adjournment - The meeting adjourned at 3:35 p.m.



BOARD MEETING DATE: April 11, 2018

REPORT: Deferred Compensation Plan Committee

SYNOPSIS: The Deferred Compensation Plan Committee met on Wednesday,

April 11, 2018 at 2:00pm at SCAQMD headquarters in Diamond

Bar. The following is a summary of that meeting.

RECOMMENDED ACTION:

Receive and file.

A. John Olvera, Chair Deferred Compensation Plan

AJO:RH:tc

Committee Members Present

Mr. John Olvera – Asst. Deputy Executive Officer/Admin and Human Resources

Ms. Sujata Jain - Asst. Deputy Executive Officer/Finance

Mr. Bill Richards – Human Resources Manager

Mr. Bayron Gilchrist – General Counsel

Committee Members Absent

None

Guests

Dario Gomez, MassMutual Ross Hooper, Benefit Financial Services Group ("BFSG") Darren Stewart, BFSG

Call to Order

Chair Olvera called the meeting to order at 2:10 pm.

ACTION ITEMS:

- 1. **Approval of Prior Meeting Minutes (Administrative):** The minutes from the meeting held on February 2, 2018, were reviewed and unanimously approved by the Committee.
- 2. **457 and 401(a) Plan Quarterly Investment Review (Fiduciary): 4th Quarter 2017:** The Committee reviewed and unanimously approved the Retirement Plan Quarterly Investment Review (the "Report") for the 457 Deferred Compensation Plan (the "Plan") for the quarter ending December 31, 2017. Mr. Stewart provided the Committee with an overview of current economic and market conditions including: GDP, unemployment, inflation, interest rates, exchange rates, market/sector returns and earnings. The investment options offered in the Plan were reviewed in accordance with the Investment Policy Statement. Additional information was provided on the following noteworthy funds:

Neuberger Berman Socially Responsive is currently on the Watch List due to performance-related issues and a change in fund management. The fund, which serves as a socially responsible offering for Plan participants, was noted as having trailed the Russell 1000 Growth Index and large cap growth category peers across all time periods noted in the Report. At the time of the report, the fund was classified as a large cap growth fund, which is why it was compared to these benchmarks; however, Morningstar has subsequently reclassified the fund as large cap blend. As such, the fund will be benchmarked against the S&P 500 and large cap blend category peers in future. The fund compares more favorably to the large

blend universe. After discussion, the Committee unanimously agreed to keep the fund on the Watch List, pending improved relative performance in its new category.

MFS International New Discovery is currently on the Watch List due to short-term underperformance. The fund performed well during the quarter, outperforming its category peers by 1.30%, but remains well below on a 1-, 3- and 5-year basis. Management is generally cautious, reflected in their relatively large cash allocation, and tend to perform better during down markets. The fund's current share class shares 50 basis points in revenue, which is another detractor from net performance. It was noted that this share class is the most efficient and it would not be in the best interest of participants to change to a cheaper option. For reference, the zero-revenue sharing option for this fund had an overall Evaluation Methodology rank of 25, "outperform", compared to a rank of 51, "underperform", for the current option. After discussion, the Committee unanimously agreed to keep the fund on the Watch List pending further performance improvement.

MFS Utilities is currently on the Watch List due to underperformance. The fund performed in line with its passive benchmark, but underperformed its category peers during the quarter. The fund has outperformed its benchmark on a 1-year basis but remains well below on a 3- and 5-year basis. Compared to its category peers, this fund historically allocates a much larger portion of its portfolio outside of the utilities sector, which has considerably detracted from performance. During the quarter, stock selection in the energy sector was the largest detractor from relative performance for the fund. It was noted that less than 1% of total Plan assets are currently invested in the fund, and it continues to offer an alternative for participants to improve their diversification. After discussion, the Committee unanimously agreed to keep the fund on the Watch List.

The Plan's Asset Allocation Models outperformed their respective benchmarks across all measured time periods noted in the Report. Although 3-year standard deviations are slightly above their respective benchmarks, the 3-year Sharpe ratio highlights how this small level of increased risk has been rewarded with superior returns.

Plan assets increased during the quarter to approximately \$171 million (excluding loan and Self-Directed Brokerage balances), representing 926 participants with a balance. Based on participant allocations as of December 31, 2017, the Plan outperformed its custom active and passive benchmarks across all measured time periods noted in the Report. Although the Plan has a slightly higher 3-year standard deviation than its custom active benchmark, the 3-year Sharpe ratio shows that this risk has been rewarded. The Plan's weighted expense ratio at 68 basis points remains below the similarly-weighted category average at 83 basis points.

The Committee reviewed the revenue received by MassMutual for recordkeeping and administrative services. The annual revenue per participant increased to approximately \$111, based on the assets as of December 31, 2017. It was noted that the reason the revenue per participant appears to be on the high end of the range is because the bids used to benchmark the market segment, from the 2015 RFI, were lower than the current recordkeeper, as they did not include the favorable crediting rate of the current general account. The Committee will continue to monitor fees on an ongoing basis.

The Committee reviewed and unanimously approved the Retirement Plan Quarterly Investment Review (the "Report") for the SCAQMD 401(a) Plan (the "Plan") for the quarter ending December 31, 2017. Based on participant allocations, the Plan's performance was in line with its passive and active benchmarks across all measured periods noted in the Report. The Plan's weighted expense ratio at 71 basis points remains below the similarly-weighted category average at 92 basis points.

3. **Fund Search Analysis (Fiduciary):** BFSG prepared and distributed a Fund Search Analysis to consider alternative investment options for socially responsible and foreign equity mutual funds. Each investment option was reviewed in accordance with the Plan's Investment Policy Statement criteria, which included performance, risk-adjusted performance, style consistency, and expense, as well as qualitative criteria. After review and discussion, the Committee unanimously agreed to keep the current socially responsible fund and foreign large equity fund in the Plan. The committee decided that the foreign small/mid equity option required more analysis. BFSG will bring an updated fund search for this category to the next meeting.

In addition, the committee wished to discuss the addition of index funds across more categories. As such, BFSG will bring analysis for the committee's consideration to the next meeting.

4. **457 Plan** – **Transition to new MassMutual Platform "Reflex" (Fiduciary):** BFSG prepared and distributed a Share Class Analysis to consider alternative share class options available on the new platform. The Committee reviewed and unanimously approved the proposed changes to the most efficient share classes. Changes include the replacement of all State Street index funds with their corresponding Vanguard index funds. Fund changes in the 401(a) Plan will take place at the time as the 457 Plan transition, and will have the same fund lineup, excluding target date funds, in each Plan.

BFSG prepared and distributed a Fee Analysis to consider the desired levelized fee that will be implemented on the new platform. After review and discussion, the Committee unanimously agreed that an 8 basis point fee will be applied. It was

noted that excess monies in the expense account, after qualified Plan expenses have been paid, will be automatically reallocated to participants at least annually.

Mr. Gomez highlighted some key administrative differences on the new platform and advised that the transfer process will take around 90 days to complete.

DISSCUSSION ITEMS:

5. Quarterly Plan Review (Administrative): The Committee received and filed the Your Plan Review for the 457 and 401(a) Plans (the "Review") prepared by MassMutual. The Review of both Plans included the following information for the quarter ending December 31, 2017; assets, contributions, distributions, rollovers, loans, Asset Allocation Models utilization and plan participation.

The Committee noted that they would like to see the active participation rate in future.

6. Quarterly Reimbursement Calculation (Fiduciary): The Committee received and filed the quarterly reimbursement calculation provided by MassMutual. Mr. Gomez brought the Committee's attention to an administrative error in the third quarter 2017 reimbursement calculation. The additional revenue sharing owed to the Plan will be credited pro rata.

OTHER MATTERS:

- 7. **Other Business** There was no other business.
- 8. **Public Comments** There were no public comments.

Adjournment - The meeting adjourned at 4:15 p.m.



BOARD MEETING DATE: September 7, 2018

REPORT: Deferred Compensation Plan Committee

SYNOPSIS: The Deferred Compensation Plan Committee met on Wednesday,

June 6, 2018 at 2:00pm at SCAQMD headquarters in Diamond

Bar. The following is a summary of that meeting.

RECOMMENDED ACTION:

Receive and file.

A. John Olvera, Chair Deferred Compensation Plan

AJO:RH:tc

Committee Members Present

Mr. John Olvera – Asst. Deputy Executive Officer/Admin and Human Resources

Ms. Sujata Jain - Asst. Deputy Executive Officer/Finance

Mr. Bill Richards – Human Resources Manager

Mr. Bayron Gilchrist – General Counsel

Committee Members Absent

None

Guests

Dario Gomez, MassMutual Darren Stewart, Benefit Financial Services Group ("BFSG") Aksana Munoz, BFSG

Call to Order

Chair Olvera called the meeting to order at 2:10 pm.

ACTION ITEMS:

- 1. Approval of Prior Meeting Minutes (Administrative): The minutes from the meeting held on April 11, 2018, were reviewed and unanimously approved by the Committee as written.
- 2. 457 and 401(a) Plan Quarterly Investment Review (Fiduciary): 1st Quarter 2018: The Committee reviewed and unanimously approved the Retirement Plan Quarterly Investment Review (the "Report") for the 457 Deferred Compensation Plan (the "Plan") for the quarter ending March 31, 2018.

Mr. Stewart provided an overview of the capital markets during the quarter, followed by a quantitative and qualitative review of the funds offered in the Plan, in accordance with the Evaluation Methodology criteria set forth in the Plan's Investment Policy Statement ("IPS").

It was noted the previously agreed upon fund and share class changes are scheduled to occur on July 27, 2018.

Neuberger Berman Socially Responsive is currently on the Watch List due to performance-related issues and a change in fund management. The fund showed marked improvement relative to the large cap blend category peer group as of the quarter ending March 31, 2018. Recent performance benefited from strong stock selection, especially in industrials. During the quarter, an underweight to the technology sector was the largest detractor from relative performance for the fund.

After discussion, the Committee unanimously agreed to keep the fund on the Watch List, pending improved relative performance in its new category.

Vanguard Selected Value returned -4.32% during the quarter, considerably underperforming its passive benchmark and category peers. Poor stock selection in the industrials sector was the largest detractor from relative performance, with a position in Air France-KLM, which lost over 30% during the quarter. An overweight to the consumer discretionary sector also detracted from performance for the quarter. Longer-term performance remains strong, with the fund outperforming its passive benchmark and category peers over all other measured time periods noted in the Report.

MFS International New Discovery is currently on the Watch List due to short-term underperformance. The Report demonstrated improved performance for the quarter and one-year periods. The performance benefited from strong stock selection, especially in the consumer discretionary sector, and an overweight to emerging markets. The fund's overall Evaluation Methodology ranking has improved quarter-over-quarter, from a rank of 51 ("underperform") to a 49 ("perform"). As the fund continues to trail both benchmarks on a 3-and 5-year basis, BFSG proposed maintaining it on the Watch List. The Committee unanimously agreed.

MFS Utilities is currently on the Watch List due to performance-related issues. During the quarter, the fund's performance benefited from its growth tilt, which helped to offset losses from its energy overweight. The fund's one-year performance has improved significantly, but it continues to trail both benchmarks on a 3-and 5-year basis. After discussion, the Committee unanimously agreed to keep the fund on the Watch List.

The Plan's Asset Allocation Models were noted as having outperformed their respective benchmarks over all time periods noted in the Report.

Plan assets increased during the quarter to approximately \$173 million (excluding loan and Self-Directed Brokerage balances), representing 931 participants with a balance. Point-in-time Plan level performance (as weighted by participants) demonstrated outperformance relative to the custom passive and active benchmarks over all time periods noted in the Report. The funds take slightly more risk, as measured by 3-year standard deviation, though participants are rewarded for the additional risk, as measured by 3-year Sharpe ratio. The Plan-weighted expense ratio remains competitive relative to the category average, at 68 basis points versus the category at 82 basis points.

The Committee reviewed the revenue received by MassMutual for recordkeeping and administrative services. The annual revenue per participant was approximately \$111, based on the assets as of March 31, 2018. It was noted that the reason the

revenue per participant appears to be on the high end of the range is because the bids used to benchmark the market segment, from the 2015 RFI, were lower than the current recordkeeper, as they did not include the favorable crediting rate of the current general account. The Committee will continue to monitor fees on an ongoing basis.

The Committee reviewed and unanimously approved the Retirement Plan Quarterly Investment Review (the "Report") for the SCAQMD 401(a) Plan (the "Plan") for the quarter ending March 31, 2018. Point-in-time Plan level performance (as weighted by participants) demonstrated outperformance relative to the custom active and passive benchmarks over all time periods noted in the Report. The Plan- weighted expense ratio remains competitive relative to the category average, at 71 basis points versus the category at 91 basis points.

- **3. Fund Search Analysis (Fiduciary):** BFSG prepared and distributed a Fund Search Analysis to consider alternatives in the large-cap value, small-cap value, real estate, and foreign small/mid equity categories. Each investment option was reviewed in accordance with the Plan's Investment Policy Statement criteria, which included performance, risk-adjusted performance, style consistency, and expense, as well as qualitative criteria. After review and discussion, the Committee unanimously agreed to make the following changes in the 457 and 401(a) Plans:
 - Add DFA US Large Cap Value I as an additional offering in the large-cap value category;
 - Add Vanguard Small Cap Value Index Admiral as a passive option in the smallcap value category.

MassMutual will facilitate these changes as soon as administratively possible.

The Committee unanimously agreed no changes shall be made at this time in the real estate and foreign small/mid equity categories.

A review of available investment options in the emerging market category was tabled to the next meeting.

- **4. 457 Plan Default Investment Selection (Fiduciary):** The Committee unanimously agreed to utilize the T. Rowe Price Target Date series as a primary default investment option for non-participant directed monies in the 457 Plan. Invesco Equity and Income was chosen as a secondary default investment option for participants with no date of birth on file.
- **5. 457 Plan Refinancing (Administrative):** The Committee agreed to permit loan refinancing in the Plan. MassMutual will be responsible for administration of loan refinance requests. Moving forward, participants will be allowed to:

- Extend term of the loan within a maximum of 5-year limit from original loan initiation date:
- Decrease term of loan;
- Change interest rate.

The Plan will also allow for loan repayment after separation from service through ACH payments directly to MassMutual.

DISSCUSSION ITEMS:

- **6.** Advisor Contacts Regarding Fees (Administrative) The Committee unanimously agreed to table the topic to the next meeting.
- 7. The 457 Plan Transition to new MassMutual Platform "Reflex" (Fiduciary): Mr. Olvera noted the transition of the 457 and OBRA Plans is now in process and is scheduled to be completed by end of July 2018.
- **8.** Quarterly Review **457** and **401(a)** Plans (Fiduciary). The Committee was provided with a copy of the Q1 2018 Quarterly Review for both Plans. Due to time constraints, it was unanimously agreed to table the discussion to the next meeting.
- 9. Quarterly Reimbursement Calculation (Fiduciary): The Committee received and filed the quarterly reimbursement calculation provided by MassMutual for the quarter ending March 31, 2018. Per the discussion at the last meeting, the annual reimbursement from the 457 Plan to the SCAQMD will continue to be processed through an Expense Budget Account ("EBA"). Mr. Gomez noted the credit revenue will still be calculated on a quarterly basis and can be used to pay qualified plan-related expenses. Moving forward, any remaining balance in the EBA at the end of the year, will be reallocated by MassMutual to participants pro rata. The Committee will be notified accordingly.

OTHER MATTERS:

- **10.** Other Business There was no other business.
- 11. **Public Comments** There were no public comments.

Adjournment - The meeting adjourned at 4:15 p.m.



AGENDA NO. 19

BOARD MEETING DATE: February 1, 2019

REPORT: Administrative Committee

SYNOPSIS: The Administrative Committee held a meeting on Thursday,

January 10, 2019. The following is a summary of the meeting.

RECOMMENDED ACTION:

Receive and file.

Dr. William A. Burke, Chair Administrative Committee

nv

Committee Members

Present: Dr. William A. Burke/Chair (videoconference)

Council Member Ben Benoit/Vice Chair (videoconference)

Mayor Judith Mitchell (videoconference) Dr. Clark E. Parker, Sr. (videoconference)

Absent: None

Call to Order

Dr. Burke called the meeting to order at 10:00 a.m.

DISCUSSION ITEMS:

- 1. **Board Members' Concerns:** None to report.
- 2. **Chairman's Report of Approved Travel:** As noted on the travel report, Mayor Mitchell will attend the monthly CARB Board meeting as the SCAQMD Board representative in Sacramento, CA, January 24, 2019.
- 3. **Report of Approved Out-of-Country Travel**: Staff will be traveling to China for the Motor Vehicle/Vessel Emission Control (MoVE) Workshop 2019. Dr. Burke asked how many staff members will travel to China and the cost of travel. Wayne Nastri, Executive Officer, responded that the MoVE 2019 workshop relates to the ocean-going initiative, so the conference organizers are paying a portion of his travel and lodging. The airfare for the three additional staff

members is \$1,100 each, but the conference organizers will pay for a portion of their accommodations. Dr. Burke requested that out-of-country be brought to Committee with more advance notice.

- 4. **Review February 1, 2019 Governing Board Agenda**: None to report.
- 5. **Approval of Compensation for Board Member Assistant(s)/Consultant(s):** Supervisor Janice Hahn has selected Diane Moss as her Board Consultant.

Moved by Mitchell; seconded by Parker, unanimously approved.

Ayes: Benoit, Burke, Mitchell, Parker

Noes: None Absent: None

6. Status Report on Major Ongoing and Upcoming Projects for Information **Management:** Assistant Deputy Executive Officer/Chief Information Officer Ron Moskowitz reported that by the end of February 2019, seven projects will be successfully completed, including the Replace Your Ride Phase 3 and the Permit Application Status Dashboard. The mobile application has been well-received, and the application will be promoted at the upcoming Martin Luther King, Jr. event and at the next Environmental Justice meeting. Dr. Parker inquired whether there is a way to identify speakers that choose to speak on multiple agenda items during a Board meeting. Mr. Moskowitz responded that the Request to Speak application will continue to be enhanced to add additional features, and the total number of speakers for the entire Board meeting will be added. Dr. Burke inquired about how to gain access to a webcast as it is being webcasted. Council Member Benoit stated that staff can add the YouTube page to Dr. Burke's iPad. Dr. Burke commended Mr. Moskowitz for Information Management's accomplishments.

ACTION ITEMS:

Appropriate Funds and Amend or Execute Contracts with Outside Counsel and Specialized Legal Counsel and Services: General Counsel Bay Gilchrist reported that this action is to appropriate \$450,000 from the Undesignated Fund Balance to Legal's 2018-19 Budget to amend or execute contracts for legal counsel for specialized, environmental, and other litigation. This includes, but is not limited to, the legal work related to the sales tax legislation, the Anaplex case, the Tesoro appeals and confidentiality issues with respect to modified hydrochloric acid. Dr. Parker inquired about the Tesoro lawsuit. Mr. Gilchrist responded that although the Tesoro integration project was won at the trial level, the petitioners have filed an appeal of that decision and the appeal will be defended by SCAQMD. SCAQMD will initially incur the costs, but will be reimbursed for those costs by Tesoro. Dr. Parker inquired if the Tesoro refunds

are received at one time or as they occur. Mr. Gilchrist responded that he will research the matter.

Moved by Mitchell; seconded by Benoit, unanimously approved.

Ayes: Benoit, Burke, Mitchell, Parker

Noes: None Absent: None

- 8. **Annual Report on 457 Deferred Compensation Plan:** Assistant Deputy Executive Officer/Administrative & Human Resources John Olvera reported this item is to present the 457 Deferred Compensation Plan annual report, covering Fiscal Year 2017-18. The report provides an overview of the plan's assets, the participants, investment performance and the actions taken by the Plan's Oversight Committee. Mr. Gilchrist noted that this item should be a receive and file item rather than an action item, and does not require a vote by the Committee.
- 9. **Issue RFP for Consultant Services for SCAQMD's High School Air Quality Educational Outreach Program:** Dr. Burke reported that during a briefing with Mr. Nastri, it was determined that the cost of \$250,000 for 100 schools would be insufficient to cover the cost of materials and labor. The program cost for the past Long Beach high school conference was closer to \$1 million, which involved approximately 12,000 students in attendance. Assistant Deputy Executive Officer/Legislative, Public Affairs & Media Derrick Alatorre mentioned that the project has a very aggressive schedule since the school year has already begun. It is expected that a consultant will be on board in April, which gives the consultant a few months to get the work done prior to the beginning of the 2019-2020 school year. Due to the amount of work this will take, Dr. Burke recommended that this item be approved for a minimum of \$500,000.

Motion made by Mayor Mitchell to update the amount not to exceed \$500,000. Moved by Mitchell; seconded by Parker, unanimously approved.

Ayes: Benoit, Burke, Mitchell, Parker

Noes: None Absent: None

10. **Transfer and Appropriate Funds and Authorize Purchase of Kids Making Sense Kits:** Mr. Alatorre reported that this item is to transfer appropriate funds and authorize the sole source purchase of 100 Kids Making Sense Kits from Sonoma Technologies to implement an air quality program at 100 high schools in the environmental justice communities. Dr. Parker asked how many students

will be provided with a kit. Mr. Alatorre responded that each school will be given five kits, which includes low-cost sensors, and five cell phones to be used for information being transferred from the sensor to the cell phone to obtain readings. The number of students per school is estimated at 35. Mayor Benoit inquired about the cell phones. Mr. Alatorre responded that the SIM cards will be removed so the ability to use the cell phone for calls will be impossible. Mayor Mitchell inquired about the location of program implementation. Mr. Alatorre responded that the consultant will determine which schools will be involved with the program. Dr. Parker commented that this program should be implemented in areas that are represented by minority families which are usually in lower economic areas. Mr. Alatorre responded that program implementation will be at 40 schools in Los Angeles County and 20 schools in each of the other counties. Mayor Mitchell concurs that the kits should be implemented in economically-disadvantaged communities and spread across the four counties. Mr. Alatorre added that the kits are reusable. After the school year has ended, the kits can be moved to other schools. Dr. Burke commented that the San Bernardino and Riverside communities also have their share of economically challenged communities and believes that the kits should be distributed in all four counties.

Moved by Mitchell; seconded by Parker, unanimously approved.

Ayes: Benoit, Burke, Mitchell, Parker

Noes: None Absent: None

WRITTEN REPORT:

11. Local Government & Small Business Assistance Advisory Group Minutes for the November 9, 2018 Meeting: Mr. Alatorre reported that this item is a written report.

OTHER MATTERS:

12. **Public Comment**

There were no public comments.

13. **Next Meeting Date**

The next regular Administrative Committee meeting is scheduled for February 8, 2019 at 10:00 a.m.

Adjournment

The meeting adjourned at 10:31 a.m.

Attachment

Local Government & Small Business Assistance Advisory Group Minutes for the November 9, 2018 Meeting



LOCAL GOVERNMENT & SMALL BUSINESS ASSISTANCE ADVISORY GROUP FRIDAY, NOVEMBER 9, 2018 MEETING MINUTES

MEMBERS PRESENT:

Ben Benoit, Mayor Pro Tem, City of Wildomar and LGSBA Chairman V. Manuel Perez, Supervisor
Janice Rutherford, Supervisor, Second District, San Bernardino County Felipe Aguirre
Paul Avila, P.B.A. & Associates
Geoffrey Blake, Metal Finishers of Southern California
John DeWitt, JE DeWitt, Inc.
Bill LaMarr, California Small Business Alliance
Rita Loof, RadTech International
Eddie Marquez, Roofing Contractors Association
David Rothbart, Los Angeles County Sanitation District

MEMBERS ABSENT:

Dr. Clark E. Parker, Sr., Senate Rules Committee Appointee Rachelle Arizmendi, Mayor Pro Tempore, City of Sierra Madre Todd Campbell, Clean Energy LaVaughn Daniel, DancoEN Cynthia Moran, Council Member, City of Chino Hills

OTHERS PRESENT:

Mark Abramowitz, Board Member Consultant (*Lyou*) Ruthanne Taylor Berger, Board Member Consultant (*Benoit*) Andy Silva, San Bernardino County

SCAQMD STAFF:

Fabian Wesson, Asst. Deputy Executive Officer/Public Advisor
Jason Low, Ph.D., Asst. Deputy Executive Officer
Nancy Feldman, Principal Deputy District Counsel
Al Baez, Program Supervisor
Vasileios Papapostolou, Program Supervisor
Tom Lee, Senior Air Quality Engineer
De Groeneveld, Sr. Information Technology Specialist
Elaine-Joy Hills, AQ Inspector II
Stacy Garcia, Secretary

Agenda Item #1 - Call to Order/Opening Remarks

Chair Ben Benoit called the meeting to order at 11:32 a.m.

<u>Agenda Item #2 – Approval of October 12, 2018 Meeting Minutes/Review of Follow-Up/Action</u> Items

Chair Benoit called for approval of the October 12, 2018 meeting minutes. The minutes were approved unanimously.

Agenda Item #3 – Follow Up/Action Items

Ms. Fabian Wesson stated that Mr. David Rothbart had requested a presentation on Emission Reductions Credits (ERCs). Mr. Derrick Alatorre checked with SCAQMD staff and they are not ready to present on ERCs at this time.

In response to Supervisor V. Manuel Perez's request for a symposium in Eastern Riverside County, Ms. Wesson indicated that an AB 617 meeting will be scheduled in 2019.

Ms. Wesson stated that during the October meeting, Ms. Rita Loof requested a report on activities that SCAQMD staff is working on with California Air Resources Board (CARB), in regards to AB 617. Ms. Wesson responded that reports are given at each coordination meeting and Ms. Loof stated that she would like a recap. Ms. Wesson indicated that an AB 617 update will be given at a future meeting. Ms. Wesson further stated that the steering committees for the three AB 617 communities have been formed and each consists of approximately 30 people including residents, businesses, and community based organizations. The next AB 617 meeting is in East Los Angeles on November 28, 2018. The meeting information is posted on the AB 617 webpage

(http://www.aqmd.gov/nav/about/initiatives/environmental-justice/ab617-134) and will provide LGSBA members the information via e-mail. Ms. Rita Loof asked how trade associations are going to be able to represent communities and sit on advisory committees. Ms. Wesson stated that SCAQMD staff can provide the list of the steering committee members.

Action Item: Provide presentation on AB 617 updates.

Action Item: Provide list of steering committee members to LGSBA members.

Action Item: E-mail flyer for AB 617 meeting on November 28, 2018 to LGSBA members.

Mr. Bill La Marr requested that AB 617 meeting materials and presentations be posted on our website at least 24 hours in advance of a scheduled meeting. Ms. Wesson stated that it is a work in progress and staff will speak to the coordinator about it.

Ms. Loof reiterated her request on an update on outreach activities entered into with the business industry on Rule 219.

Action Item: Provide presentation on Rule 219 updates.

Mr. Paul Avila previously inquired on SCAQMD's involvement in the Sriracha case to which Ms. Nancy Feldman gave details in that it was a public nuisance matter. Mr. Avila stated that he would like information about SCAQMD's policies regarding public nuisance. Ms. Feldman stated that there is no specific number of complaints and in order to find a public nuisance, a considerable number of people need to be impacted which can vary from case to case. Ms. Feldman offered to present on public nuisance policies in the future.

Action Item: Provide presentation on public nuisance by Nancy Feldman.

Supervisor Janice Rutherford requested for Agenda Item #5 to be moved up.

Agenda Item #5 -Air Quality Sensing & Monitoring in Citizen Science

Mr. Vasileios Papapostolou provided an overview on the U.S. Environmental Protection Agency (EPA) funded Science to Achieve Results grant, entitled "Engage, Educate, and Empower California Communities on the Use and Applications of Low-Cost Air Monitoring Sensors."

Ms. Loof inquired if SCAQMD gets involved with public assistance on sensor usage. Mr. Papapostolou stated that SCAQMD is involved with community groups, community members, CAPCOA agencies, and the Bay Area AQMD.

Mr. Avila inquired about all sensors that were considered. Mr. Papapostolou said that approximately 30 pollutant-type devices have been brought in and around 15 have been tested. Mr. Avila asked about the cost of a dome-type sensor. Mr. Papapostolou responded that they cost around \$200, but do have limitations.

Mr. John DeWitt asked if the sensor sites are listed publicly. Mr. Papapostolou responded that they are displayed on a map on the web. Mr. DeWitt wanted to know about the process of getting a sensor. Mr. Papapostolou indicated that the distribution of sensors are through the STAR Grant Program. Mr. Papapostolou suggested visiting AQ-SPEC webpage (http://www.aqmd.gov/aq-spec/home).

Supervisor Rutherford asked how the program will integrate with AB 617 community monitoring. Mr. Papapostolou said that local sensors will be involved and then will be proposed in AB 617 and other programs.

Mr. LaMarr inquired as to why San Bernardino does not have sensors. Mr. Papapostolou responded that there are sensors in San Bernardino, but are not part of the STAR Grant Program. Mr. LaMarr asked if the emissions data that will be made available at the AB 617 meetings could also be given to this group, to which Mr. Papapostolou responded yes.

Action Item: Provide presentation on AB 617 emissions data.

Ms. Loof stated that different sensors may give differing results on emissions and asked what standard SCAQMD is using to validate certain types of technologies. Mr. Papapostolou stated that we are involved in discussions of establishing a performance verification program at the state level. At the national level, there are discussions of a certification program, which will be led by the US EPA.

Dr. Jason Low indicated that there are limitations to the devices being used, and they are not being used for compliance targets at this point.

Mr. Rothbart asked, for anyone having a device, if they are made aware that it is a screening tool and may identify a potential area that needs to be validated by a regulatory entity. As to AB 617, Dr. Low stated that module 2 will be heavily emphasized on air monitoring.

Mr. Rothbart asked for validation of samples and how to properly sample. Mr. Papapostolou stated that guidance is provided.

Mr. LaMarr asked if data will be reliable enough, if it will be included in other studies. Mr. Papapostolou said that the local sensors are not yet approved methods. They complement existing regulatory networks. Dr. Low stated that the technology provides information, which is good enough to supplement smoke advisory.

Ms. Loof stated that it would be helpful to be part of the conversation in ongoing discussions of certification of sensors.

Supervisor Perez inquired as to what the sensors are monitoring, where they are located in his district, and requested a copy showing the locations of said sensors. He explained that nosebleeds have been reported at the schools around the Salton Sea. Mr. Papapostolou stated that the sensors that he has been discussing measure $PM_{2.5}$ and PM_{10} , with the numbers referring to size of particles. Supervisor Perez asked if there is any link between PM_{10} and nosebleeds. Mr. Papapostolou stated that he is not aware of any association, but exposure to poor air quality can cause nosebleeds. Supervisor Perez requested meetings and further data in regards to nosebleeds at the schools in his district. Dr. Low said that there are three devices in Eastern Coachella, and agreed to facilitate a conversation about PM_{10} data and nosebleeds.

Action Item: Send map with locations of monitors in 4^{th} District to Supervisor Perez. **Action Item:** Schedule meeting to discuss any correlation between nosebleeds and PM_{10} .

Mr. Harvey Eder commented on solar and other environmental issues.

<u>Agenda Item #4 – Proposed Updates to the Best Available Control Technology (BACT) Guidelines</u>
Mr. Al Baez presented on proposed updates on the Best Available Control Technologies (BACT)
Guidelines.

Ms. Loof requested a copy of the Engineering & Permitting policy memorandum. Mr. Tom Lee indicated there is a link to the memorandum on the BACT webpage.

Mr. DeWitt and Mr. LaMarr inquired about costs per ton. Mr. Baez stated that costs were established in 2005 on a cost per ton basis and it will be in the board package. Mr. Baez indicated that in BACT, we get in touch with actual facilities, get input on costs for installation, compare to costs per ton. BACT is case specific.

Mr. Rothbart suggested that BACT should have a more formal process. Mr. Baez said a BACT public meeting for proposed updates will be scheduled and what Mr. Rothbart is suggesting would require Board action.

Mr. Blake asked if BACT guidelines pass, how long it would take for all permits to be re-written. Mr. Baez said rules are not impacted and that it only applies to anything new, modified or relocated.

Mr. Eder requested to enter into the record documents of clerk's transcript from appellate court and commented about solar.

Agenda Item #6 –Monthly Report on Small Business Assistance Activities
No comments

Agenda Item #7 - Other Business

Ms. Wesson stated that the December meeting will be held at Centro Basco. The item on the agenda will be regarding goals and objectives, and to submit any recommendations to Ms. Stacy Garcia.

Agenda Item #8 - Public Comment

Mr. Eder provided public comment on solar and other environmental issues.

Agenda Item #9 – Next Meeting Date

The next regular Local Government & Small Business Assistance Advisory Group meeting is scheduled for Friday, December 14, 2018 at 11:30 a.m. at Centro Basco located at 13432 Central Ave., Chino, 91710.

Adjournment

The meeting adjourned at 12:59 p.m.



BOARD MEETING DATE: February 1, 2019

AGENDA NO. 20

REPORT: Legislative Committee

SYNOPSIS: The Legislative Committee held a meeting on Thursday,

January 10, 2019. The following is a summary of the meeting.

RECOMMENDED ACTION:

Receive and file.

Judith Mitchell, Chair Legislative Committee

DJA:PFC:LTO:jns

Committee Members

Present: Dr. William A. Burke (videoconference)

Dr. Clark E. Parker, Sr. (videoconference) Mayor Judith Mitchell/Chair (videoconference)

Absent: Council Member Joe Buscaino/Vice Chair

Supervisor V. Manuel Perez Supervisor Janice Rutherford

Call to Order

Chair Mitchell called the meeting to order at 9:07 a.m.

DISCUSSION ITEMS:

1. Update on Federal Legislative Issues

SCAQMD's federal legislative consultants (Kadesh & Associates, Carmen Group, and Cassidy & Associates) each provided a written report on various key Washington, D.C. issues.

Mr. Chris Kierig of Kadesh & Associates reported that the federal government had been in partial shutdown for 20 days. The Senate is scheduled to have a final vote on Thursday, January 10, 2019, in the afternoon, then adjourn through the weekend which sent a signal that reaching an agreement to the budget impasse was not in sight.

Mr. Kierig also reported that Representative Nanette Barragán was appointed to the House Energy and Commerce Committee and Representative Norma Torres was appointed to the House Appropriations Committee.

Mayor Mitchell asked Mr. Kierig if he had heard about any efforts by the Administration to stop emergency funding for wildfire issues in California. Mr. Kierig replied that he had not heard of any discussion.

Mr. Gary Hoitsma of the Carmen Group, reported that the President had officially nominated Mr. Andrew Wheeler as the permanent U.S. EPA Administrator. The Senate Environment and Public Works Committee has scheduled the hearing for the nomination of Mr. Wheeler on January 16, 2019.

Mr. Kaleb Froehlich of Cassidy & Associates reported that the Senate approved Ms. Mary Neumayr's nomination as Chairwoman of the Council on Environmental Quality which coordinates environmental policy and regulations across the federal agencies.

2. Update on State Legislative Issues

SCAQMD's state legislative consultants (Joe A. Gonsalves & Son, Quintana, Watts and Hartman, and California Advisors, LLC) each provided written reports on various key issues in Sacramento.

Mr. Paul Gonsalves of Joe A. Gonsalves & Sons reported that Governor Newsom, along with all other statewide constitutional officers, were sworn in on January 7, 2019. Governor Newsom gave an inaugural speech and will be releasing his proposed state budget on January 10, 2019 which will address California's \$15 billion budget surplus. Mr. Gonsalves informed the Committee that this proposed state budget will essentially begin budget negotiations between the Governor and the Legislature. There will a revised budget released by the Governor in May and June 15, 2019 is the deadline for the state budget to be passed.

Ms. Caity Maple of Quintana, Watts and Hartman reported that Jared Blumenfeld has been appointed by Governor Newsom as the new Secretary of the Cal/EPA.

Mr. Will Gonzalez of California Advisors, LLC, reported that SCAQMD staff and representatives have been having ongoing meetings in Sacramento regarding the sales tax ballot measure authorization bill sponsored by SCAQMD. Mr. Gonzalez introduced Ross Buckley the new state legislative consultant that will be working on SCAQMD's issues. Mr. Buckley informed the Committee that Assembly Member Kevin McCarty is looking to introduce a bill relating to establishing a uniform process for shutting down schools when there is very unhealthy air quality, such as in situations when there is severe smoke from wildfires. Further updates will be provided as this legislation develops.

3. Update on Proposed Legislation Regarding a Sales Tax Increase Authorization Ballot Measure for Air Quality Funding

Mr. Philip Crabbe, Public Affairs Manager of Legislative, Public Affairs and Media, presented this item to the Committee and provided an update on an SCAQMD-sponsored proposed legislation, which would authorize a sales tax measure be put on the ballot within the South Coast region. The sales tax would fully fund implementation of the AQMP through incentives to ensure meeting air quality standards and protecting public health.

Mr. Crabbe clarified that the bill does not create a tax or ballot measure directly, but allows Board action or a voter-driven initiative to put a sales tax measure on the ballot. Staff has finalized draft bill language, which was included as an attachment in the January 10, 2019 Legislative Committee meeting packet, for the Committee's information and discussion.

Mr. Crabbe summarized some of the provisions of the bill language, including that the proposed bill:

- Allows a sales tax measure to be voted upon within the South Coast region and establishes procedures regarding the applicable election processes;
- Clarifies that funds raised through a sales tax ballot measure shall be used for financial incentives and programs to accelerate the deployment of loweremission mobile and stationary equipment, along with alternative fueling and charging infrastructure, as necessary, to implement the SCAQMD's 2016 AQMP, and subsequent SCAQMD-adopted plans, in order to attain the state and national ambient air quality standards;
- Authorizes a sales tax increase by ballot measure of up to one percent within the South Coast;
- Ensures that at least 50 percent of funds raised by this measure shall be used for financial incentives awarded to projects located in, and/or benefiting disadvantaged communities;
- Ensures that, in distributing the financial incentives, the SCAQMD shall give preference for any project using equipment that is manufactured or assembled within the South Coast region;
- Prohibits funds raised by the measure from being allocated for the purchase of fully automated cargo handling equipment; and
- Requires legislative oversight through annual reporting by the SCAQMD to the Legislature regarding projects funded and the expected emission reductions from those projects.

Mayor Mitchell inquired if the definition of "disadvantaged communities" in the bill language was related to the CalEnviroScreen tool. Mr. Crabbe responded that the bill referenced a state statute that defined "disadvantaged communities" and that staff would confirm whether or not this involved CalEnviroScreen.

Dr. Parker asked if the bill language is consistent with Board direction regarding introducing a sales tax ballot measure authorization bill. Ms. Barbara Baird, Chief Deputy Counsel, responded that the bill language is consistent with Board direction.

Mr. Aaron Hake from the Riverside County Transportation Commission (RCTC) commented that RCTC has established a 2019 legislative platform that is relevant to SCAQMD's sponsored sales tax ballot measure authorization bill, and that RCTC is interested in collaborating with SCAQMD in the near future to ensure that the bill is consistent with RCTC's legislative platform priorities.

Mayor Mitchell commented that staff should continue to work with the counties in the South Coast region regarding the sales tax ballot measure bill.

OTHER MATTERS:

4. Other Business

There was no other business.

5. Public Comment Period

There were no public comments.

6. Next Meeting Date

The next regular Legislative Committee meeting is scheduled for Friday, February 8, 2019 at 9:00 a.m.

Adjournment

The meeting adjourned at 9:38 a.m.

Attachments

- 1. Attendance Record
- 2. Update on Federal Legislative Issues Written Reports
- 3. Update on State Legislative Issues Written Reports
- 4. Update on Proposed Legislation Regarding a Sales Tax Increase Authorization Ballot Measure for Air Quality Funding

ATTACHMENT 1

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT LEGISLATIVE COMMITTEE MEETING ATTENDANCE RECORD – January 10, 2019

Dr. William A. Burke (videoconference)	SCAQMD Board Member
Mark Abramowitz	Board Consultant (Lyou)
Gary Hoitsma (teleconference) Kaleb Froehlich (teleconference) Chris Kierig (teleconference) Caity Maple (teleconference) Will Gonzalez (teleconference) Paul Gonsalves (teleconference)	Cassidy & Associates Kadesh & Associates The Quintana Cruz Company California Advisors, LLC
Alicia Berhow Kris Flaig Aaron Hake Bill LaMarr Michael Lewis Rita Loof Tammy Yamasaki	LA SanitationRiverside County Transportation CommissionCalifornia Small Business AllianceConstruction Industry Air Quality CoalitionRadTech
Derrick Alatorre Sam Atwood. Barbara Baird (teleconference) Naveen Berry Philip Crabbe Stacy Garcia Bayron Gilchrist Monika Kim Matt Miyasato Ron Moskowitz Wayne Nastri Robert Paud Mary Reichert Jeanette Short Danielle Soto Lisa Tanaka O'Malley Laki Tisopulos Jill Whynot.	SCAQMD StaffSCAQMD Staff
Paul Wright	SCAQMD Staff

ATTACHMENT 2

SCAQMD Report for January 2019 Legislative Meeting covering December 2018 Kadesh & Associates

Overview

As has been widely reported, Congress and the White House failed to agree on legislation to fund the balance of the Fiscal Year (FY) 2019 Appropriations bills or on an additional Continuing Resolution to fund the government. As a result, a partial government shutdown has been in effect since midnight of December 21. Recall, Congress has not passed seven of the annual appropriations bills: *Agriculture, Commerce-Justice, Financial Services, Foreign Operations, Homeland Security, Interior, and Transportation-HUD.* The issue is funding for the President's proposed border wall and neither side appears anxious to resolve the issue.

Incoming Speaker Pelosi (pending her election to that post) has announced the House will take up on January 3 - the first day of the new session - and pass a six-bill omnibus which would also include a Continuing Resolution (CR) until February 8 for the Department of Homeland Security. It is unclear if this bill would pass in the Senate. Until this issue is resolved, most government workers are furloughed or working without pay.

Major action in December

Leadership selections/elections for Congressional Committees and the funding (ultimately shutdown) of the federal government dominated December. Nancy Pelosi appears to be on her way to serve as Speaker for a second time with a formal floor vote to occur January 3, 2019. It also appears that several Members of the California delegation will assume full committee and subcommittee posts in addition to what spots the seven new members of the California delegation will be assigned. Five of the seven new Democratic Members have all or part of their Congressional districts within SCAQMD's area of responsibility. Announcements of Chairs and Ranking Minority Members of House Appropriations Subcommittee will not occur until mid-January.

116th Congress House Committee Leaders

(Bold indicates new leadership role for that Member; Bold/Underline indicates CA Democrat.)

Committee	Chairman	Ranking Republican
Agriculture	Collin Peterson (Minn.)	Mike Conaway (Texas)
Appropriations	Nita Lowey (N.Y.)	Kay Granger (Texas)
Armed Services	Adam Smith (Wash.)	Mac Thornberry (Texas)
Budget	John Yarmuth (Ky.)	Steve Womack (Ark.)
Climate Crisis	Kathy Castor (Fla.)	
Education and Labor	Bobby Scott (Va.)	Virginia Foxx (N.C.)
Energy and Commerce	Frank Pallone (N.J.)	Greg Walden (Ore.)
Ethics	Kenny Marchant (Texas)	
Financial Services	Maxine Waters (Calif.)	Patrick McHenry (N.C.)
Foreign Affairs	Eliot Engel (N.Y.)	Mike McCaul (Texas)
Homeland Security	Bennie Thompson (Miss.)	Mike Rogers (Ala.)
House Administration	Zoe Lofgren (Calif.)	Rodney Davis (III.)
Intelligence	Adam Schiff (Calif.)	Devin Nunes (Calif.)
Judiciary	Jerrold Nadler (N.Y.)	Doug Collins (Ga.)
Natural Resources	Raúl Grijalva (Ariz.)	Rob Bishop (Utah)
Oversight and		
Government Reform	Elijah Cummings (Md.)	Jim Jordan (Ohio)
Rules	Jim McGovern (Mass.)	Tom Cole (Okla.)
Science, Space &		
Technology	Eddie Bernice Johnson (Texas)	Frank Lucas (Okla.)
Small Business	Nydia Velázquez (N.Y.)	Steve Chabot (Ohio)
Transportation &		
Infrastructure	Peter DeFazio (Ore.)	Sam Graves (Mo.)
Veterans' Affairs	Mark Takano (Calif.)	Phil Roe (Tenn.)
	iviair Takano (Cani.)	Tim Noc (Termi)
Ways and Means	Richard Neal (Mass.)	Kevin Brady (Texas)

Funding the Federal Government

Congress returned to Washington for a lame duck session to pass the remaining FY19 Appropriations bills and averting a government shutdown. The remaining appropriations bills are: *Agriculture, CJS, Financial Services, Homeland Security, Interior, Foreign Operations, and Transportation/Housing (THUD).* Funding for the border wall quickly became the single largest sticking point. The FY19 budget request sought \$1.6 billion for new fencing in the Rio Grande Valley. The Senate DHS bill provides that amount. The President, however, is insisting on \$5 billion as a down payment for new construction. The House voted in favor (largely along party lines) for the President's request on December 20. The U.S. House passed a stopgap funding bill that included \$5 billion for a wall on the border with Mexico after President Trump said he wouldn't sign a bill that didn't have the extra money, setting up a conflict with the Senate. The House vote on the amended House version of H.R. 695 was 217-185. Ultimately the 25% of the federal government (as measured by Appropriations spending) began shutting down after December 21, 2018.

Effects

Rulemaking Goes Dark During Shutdown Over Spending Standoff: The partial government shutdown over spending for agencies covering homeland security, environmental protection, and other programs is also depriving the public of new information about behind-the-scenes rulemaking at departments that have funding. Nine major departments and agencies—and the office that reviews all federal regulations—have been shut down since December 22, 2018, with some exceptions for employees who conduct critical tasks. Work on non-emergency regulations has stopped in departments and agencies without funding, such as the Environmental Protection Agency (EPA).

Museums, EPA to Close: More lights are going out in U.S. government offices with the shutdown in its second week as entities from the EPA to the Smithsonian Institution run out of money. Nearly 14,000 workers at the EPA were furloughed, while the Smithsonian said that all museums, research centers and the National Zoo will close, unless the shutdown ends.

How to End the Shutdown

There are three basic ways the shutdown could end: Trump gives up the \$5 billion he wants for the wall, Democrats give Trump his wall money, or both sides come up with a face-saving deal. There are many options for that type of deal. Pelosi says her new Democratic majority will pass legislation to fund the shuttered federal agencies soon after she gets the gavel. Senate Republicans say they won't vote on any spending bill that Trump opposes.

Looking Forward-Lawmakers Prepare for 116th Congress

The House convenes at noon on January 3, 2019, to begin the 116th Congress, and Democrats are preparing to hold the majority in the chamber for the first time since the 111th Congress. Rep. Kathy Castor (D-Fla.) has been tapped by Leader Pelosi to head a select House committee focusing on climate change. Castor is a member of the House Energy and Commerce Committee, which is likely to retain primary jurisdiction in moving any climate legislation in the House in 2019. The new climate panel, to be called the House Select Committee on the Climate Crisis, resurrects a select committee Pelosi launched in 2006, which Republicans abolished when they took control of the House in 2011.

###



MEMORANDUM

To: South Coast AQMD Legislative Committee

From: Carmen Group

Date: January 2, 2019

Re: Federal Update -- Executive Branch

Government Shutdown Hits EPA Among Other Agencies: The dispute between Congressional Republicans and Democrats over President Trump's request for \$5 billion in border wall funding led to a partial federal government shutdown on Dec. 21 affecting nine departments (Agriculture, Commerce, Justice, Homeland, Housing, Interior, State, Transportation, and Treasury) and some smaller agencies including the Environmental Protection Agency (EPA). In all, about 800,000 federal employees -- 25 percent of the federal workforce – were affected through direct furloughs or requirements to work without pay. The remaining 75 percent of federal workers were not affected since Congress previously approved appropriations for their agencies. At the EPA, Acting Administrator Andrew Wheeler indicated his agency would proceed with orderly shutdown plans calling for 700 "essential" workers to stay on the job without pay, while 13,000 remaining employees would be furloughed. On Dec. 20, the Republican controlled House approved appropriations for all the affected agencies while also including the President's request for border wall funding. But the Senate adjourned the following day without taking up the bill since it did not have the 60 votes needed to pass. The impasse will likely intensify when the incoming Democratic-controlled House approves separate bills to open these agencies but without the border funding Trump wants. Negotiations between the two sides in Congress and the President will be needed to resolve the matter.

Infrastructure Rumblings: Despite the shutdown dispute, the President continues to say he wants to work with Democrats to pass on a major infrastructure bill in the new Congress. In December, top Republican and Democratic staff of the incoming House Transportation & Infrastructure Committee briefed a group of transportation lobbyists on some of the significant infrastructure challenges facing Congress and the Administration, holding out a measure of optimism that there could be a path for success provided that the Administration takes the lead on funding and that serious negotiations could be engaged within the first six months on 2019 – tall orders for sure. The staffers noted that Committee hearings would begin early in the year focused largely on surface transportation issues and the need to bring solvency to the Highway Trust Fund, which faces a serious \$160 billion deficit hole in just two years if nothing is done. Committee staffers also said the issue of possibly restoring a process to allow Congressional earmarked funding would be discussed in the new Congress, where there is both considerable support and entrenched opposition.

DOT Announces BUILD Grants: In December, the US Department of Transportation announced its latest round BUILD grant awards (formerly TIGER grants). In all, 91 projects in 49 states received transportation grants totaling \$1.5 billion. Of these, 62 projects (59%) went to rural (as opposed to urban) areas. By prioritizing rural projects, DOT said it was re-balancing a ten-year historical underinvestment in rural communities. The grants were also touted as having contributed to the construction or refurbishment of over 200 bridges nationwide, and also addressed port infrastructure improvements in such states as Texas, Louisiana, Virginia and Maryland. Under the BUILD discretionary program, the maximum grant award is \$25 million, and the minimum is \$5 million in urban areas and \$1 million in rural areas.

DOT Announces Funding Available for New INFRA Grants: In December, the US Department of Transportation announced the expected availability of at least \$855 million for the next round of INFRA grants (formerly FASTLANE grants). These are grants for significant transportation projects addressing freight infrastructure that leverage federal funds and incentivize innovative strategies including public private partnerships. Large projects qualify for minimum grants of \$25 million, while small projects can receive minimum grants of \$5 million. Eligible INFRA project costs may include: reconstruction, rehabilitation, acquisition of property, environmental mitigation, construction contingencies, equipment acquisition and operational improvements directly related to system performance. In 2018, INFRA grants of nearly \$1.5 billion were awarded to 26 projects. Applications for grants in 2019 – subject to pending appropriations – are due on March 4, 2019.

White House Opportunity and Revitalization Council Established: In December, the President acted by executive order to form the "White House Opportunity and Revitalization Council" to coordinate federal activity, investments and programs to address needs in urban and economically distressed communities. The Council will be led by the Secretary of Housing & Urban Development and the Assistant to the President for Domestic Policy, with members from 15 agencies including the Environmental Protection Agency (EPA) and the White House Council on Environmental Quality (CEQ). The council will evaluate how agencies can prioritize support for urban and economically distressed areas, in their grants, financing and other assistance.

EPA Releases Proposal to Revise MATS Supplemental Cost Finding: The Environmental Protection Agency in December issued a revised Supplemental Cost Finding for the Mercury and Air Toxics Standards (MATS) as well as Clean Air Actrequired "risk and technology review." This action proposes to correct flaws in the Supplemental Finding and proposes to make a revised determination that it is not appropriate and necessary to regulate hazardous air pollutant emissions from coal- and oil-fired power plants. The Agency is arguing that a proper consideration of costs under Section 112 of the Clean Air Act would demonstrate that the costs of compliance with the MATS rule (up to \$9.6 billion annually) dwarfs the monetized benefits of the rule (up to only \$6 million annually.) EPA will take comment on the proposal for 60 days and will hold a public hearing on the issue.



733 Tenth Street, N.W., Suite 400 Washington, DC 20001-4886

(202) 347-0773 www.cassidy.com

To: South Coast Air Quality Management District

From: Cassidy & Associates

Date: December 28, 2018

Re: Federal Update

Issues of Interest to SCAQMD

Government Shutdown Update:

Nine Federal Departments and Agencies including the EPA, DOI, FDA and IRS have been shutdown for nearly one week so far, with no discernable end to the shutdown imminent. Both the House and Senate have adjourned until next week for legislative business, ensuring that the partial government shutdown drags on for at least 12 days. Sources continue to say that there have been no breakthroughs in negotiating a way to fund the nine federal departments that are without funding.

Many believe that the impasse cannot be resolved until January 3, when House Minority Leader Nancy Pelosi official assumes the role of speaker under a new Democratic majority. Until then, there is only a small chance that Senate Minority Leader Schumer can agree to a deal with the President, but negotiations are not occurring at this time.

Once Minority Leader Pelosi is sworn in, it is likely the Democrats will immediately work to pass a funding bill to put pressure on the Senate and Senate Majority Leader McConnell to follow suit. What remains to be finalized is the length of the proposed funding bill that will be introduced by House Democrats.

EPA Shutdown Update:

Unlike many of the other agencies, the EPA has remained open through the partial government shutdown so far by using leftover funding, but that funding is expected to run out by Friday, December 28, at which time the agency will begin orderly shutdown procedures.

House Democratic Committee Assignments Update

The House Steering and Policy Committee will continue work through January to assign Democrats to their respective committee postings. Or particular interest to SCAQMD, it is anticipated that assignments to the House Energy and Commerce Committee and the House Ways and Means Committee will be made in the first half of the month of January.

Select Committee on the Climate Crisis

Representative Kathy Castor (Florida) will chair a new select committee entitled the Select Committee on the Climate Crisis in the 116th Congress. In the 115th Congress, Castor was the Vice Ranking Member on the Energy and Commerce Committee which holds jurisdiction over matters relating to air quality in the House of Representatives. While Castor's leadership of the new select committee will help inform and move the debate on a variety matters related to clean air and environmental justice, the Committee is not expected to hold any formal legislative authority. Castor's endorsement of policy proposals though should carry additional weight given her role on the new select committee on the Climate Crisis.

Senate ENR Committee Democratic Update:

The Senate Energy and Natural Resources Committee will have two fewer Democrats on it next year according to Senate Minority Leader Chuck Schumer. Senators Tina Smith of Minnesota and Tammy Duckworth of Illinois will no longer serve on the energy panel and are not being replaced.

Senator Joe Manchin of West Virginia will take over as the ENR ranking Democrat. Senator Manchin's ascension to the Ranking Member position has caused a great deal of angst amongst environmental and liberal groups as he is a centrist and a pro-coal democrat, who many fear will cut unfavorable deals with the Committee Republicans.

Senator Manchin is also unlikely to move forward with any bold climate change legislation but has also signaled that he is willing to work on climate in recent statements. It will be very important for SCAQMD to meet with Senator Manchin and his staff in the near term as he begins his new tenure.

EPA Carbon Limits for Coal Plants Update:

The EPA is proposing to ease carbon dioxide limits placed on newly built coal-fired power plants, according to a coal industry source. The proposal revokes the Obama Administration's requirement that any new coal plant build in the U.S. utilize carbon capture and storage technology to meet stringent emissions requirements. That rule was known as the New Source Performance Standard and it was issued in 2016 alongside the Clean Power Plan, which the Trump administration is retooling significantly.

The EPA announcement was made alongside National Black Chamber of Commerce President and CEO Harry Alford. The group has argued that this rule and other Obama-era regulations raise electricity prices and disproportionately hurt minority communities.

EPA Review Glider Repeal:

EPA's inspector general will probe allegations by Senate Democrats that the agency underestimated the economic impacts of its proposed repeal of the emissions rule for glider trucks in order to avoid triggering additional regulatory requirements. Senators Tom Carper (D-Del.) and Tom Udall (D-N.M.) in October alleged that former Administrator Scott Pruitt and EPA skirted those orders. During interagency review, the proposal's economic impacts were dropped below the \$100 million threshold that would require the more detailed studies, they said, citing internal documents released by EPA.

Although the OIG stays out of policy fights, it can investigate whether the agency complied with executive orders when writing the repeal.

The OIG's memo makes no mention of other issues raised by the Democrats, including their complaints about EPA's use of an industry-funded study and Pruitt's decision to let glider manufacturers ignore a strict production cap. Acting Administrator Andrew Wheeler reversed that decision on the production cap following environmentalist lawsuits. The OIG is separately reviewing EPA's internal 2017 study of glider emissions following complaints from House Republicans.

ATTACHMENT 3



TO: South Coast Air Quality Management District

FROM: Anthony, Jason & Paul Gonsalves

SUBJECT: Legislative Update – December 2018

DATE: Wednesday, January 2, 2019

On December 3, 2018, the Legislature convened an organizational, ceremonial swearing-in session to kick-off the 2019-2020 legislative session. The November 8 elections made serious changes to the California Legislature. The Legislature once again has a supermajority in both houses; The Assembly has 60 Democrats and 20 Republicans and the Senate has 29 Democrats and 11 Republicans.

January 7, 2019 marks the first day of session for the 2019-2020 legislative session. Additionally, Governor elect Gavin Newsome will be sworn-in on January 7, 2019 as the State's next Governor.

CAP-AND-TRADE

On December 13, 2018, the California Air Resources Board (CARB) amended the state's cap-and-trade program to streamline implementation and contain costs through 2030. The amendments set a ceiling on escalation of the price per ton for California companies in the program. This ceiling is designed to ensure the program continues to drive down greenhouse gases emissions while providing certainty about future costs.

In addition to a price ceiling on allowances, the amendments also ensure that California businesses stay competitive against out-of-state companies that do not have cap-and-trade obligations. The changes also implement statutory requirements to reduce the number of carbon offsets allowed after 2020.

The price ceiling prevents the price per ton for carbon emissions in California from rising without limit, especially as the cap on total emissions declines over time. This price control mechanism also includes separate reserves of allowances that will be made available beginning in 2021 at the reserve tiers. These reserve tiers are designed to prevent carbon allowance prices from rising too rapidly.

ALL ELECTRIC BUS FLEETS

On December 14, 2018, CARB approved a first-of-its-kind regulation that sets a statewide goal for public transit agencies to transition to 100% zero-emission bus fleets by 2040.

The Innovative Clean Transit regulation is part of a statewide effort to reduce emissions from the transportation sector, which accounts for 40% of climate-changing gas emissions and 80-90% of smog-forming pollutants. The transition to zero-emission technologies is essential to meeting California's air quality and climate goals.

Full implementation of the regulation is expected to reduce greenhouse gas emissions by 19 million metric tons from 2020 to 2050, which is equivalent to taking 4 million cars off the road. Further, it will reduce harmful tailpipe emissions (nitrogen oxides and particulate matter) by about 7,000 tons and 40 tons respectively during that same 30-year period.

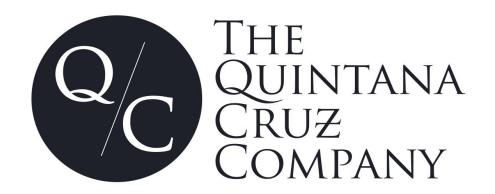
Deployment of zero-emission buses is expected to accelerate rapidly in the coming years – from 153 buses today to 1,000 by 2020, based on the number of buses on order or that are otherwise planned for purchase by transit agencies. Altogether, public transit agencies operate about 12,000 buses statewide. To successfully transition to an all zero-emission bus fleet by 2040, each transit agency will submit a rollout plan under the regulation demonstrating how it plans to purchase clean buses, build out necessary infrastructure and train the required workforce. The rollout plans are due in 2020 for large transit agencies and in 2023 for small agencies.

Agencies will then follow a phased schedule from 2023 until 2029, by which date 100% of annual new bus purchases will be zero-emission. To encourage early action, the zero-emission purchase requirement would not start until 2025 if a minimum number of zero-emission bus purchases are made by the end of 2021.

2019 LEGISLATIVE CALENDAR

- Jan. 1 Statutes take effect
- Jan. 7 Legislature reconvenes
- Jan. 10 Budget must be submitted by Governor
- Jan. 21 Martin Luther King, Jr. Day.
- Jan. 25 Last day to submit bill requests to the Office of Legislative Counsel.
- Feb. 22 Last day for bills to be introduced
- Apr. 11 Spring Recess begins upon adjournment
- Apr. 22 Legislature reconvenes from Spring Recess
- Apr. 26 Last day for policy committees to meet and report to fiscal committees fiscal bills introduced in their house
- May 3 Last day for policy committees to meet and report to the floor non-fiscal bills introduced in their house
- May 10 Last day for policy committees to meet prior to June 3
- May 17 Last day for fiscal committees to meet and report to the floor bills introduced in their house. Last day for fiscal committees to meet prior to June 3

- May 28-31 Floor session only. No committee may meet for any purpose except Rules Committee, bills referred pursuant to A.R. 77.2, and Conference Committees
- May 31 Last day for each house to pass bills introduced in that house
- June 3 Committee meetings may resume
- June 15 Budget Bill must be passed by midnight
- July 10 Last day for policy committees to hear and report fiscal bills to fiscal committees
- July 12 Last day for policy committees to meet and report bills. Summer Recess begins upon adjournment
- Aug. 12 Legislature reconvenes from Summer Recess
- Aug. 30 Last day for fiscal committees to meet and report bills
- Sept. 3-13 Floor session only. No committees may meet for any purpose, except Rules Committee, bills referred pursuant to A.R. 77.2, and Conference Committees
- Sept. 6 Last day to amend bills on the floor
- Sept. 13 Last day for any bill to be passed. Interim Recess begins upon adjournment



January 1st, 2019

TO: South Coast Air Quality Management District

FROM: The Quintana Cruz Company

RE: December 2018 Report

GENERAL UPDATE:

- The Legislature is out of session
- January 7th the Legislature reconvenes

ADMINISTRATION ITEMS OF NOTE:

- Gavin Newsom has hired the following key staff:
 - Ann O'Leary (Chief of Staff)
 - Ana Matosantos (Cabinet Secretary)
 - Jason Elliott (Chief Deputy Cabinet Secretary)
 - Priscilla Cheng (Director of External Affairs)
 - Daniel Zingale (Senior Advisor, Strategic Communications)
 - Nathan Click (Spokesman & Director of Public Affairs)
 - Angie Wei (Chief Deputy Cabinet Secretary, Policy Development)
 - Maricela Rodriguez (Director, Civic Engagement & Strategic Partnerships)
 - John Masterson (Constituent Affairs Assistant)

SCAQMD Report
California Advisors, LLC
January 2, 2019 Legislative Committee Hearing

General Update

As we begin the new year we are monitoring how the Governor-elect Newsom will staff dozens of key administration position. We are also actively awaiting the introductions of hundreds of new bills that will signal the legislative priorities for the new year.

Regarding Governor Newsom, he has yet to name any advisors in the environmental sector. However, he has named his first five staff. Ann O'Leary will serve as Chief of Staff and Ana Matosantos as Cabinet Secretary. Under Ana will be Angie Wei as Chief Deputy Cabinet Secretary for policy development (formerly from CA Labor Federation) and Jason Elliot as Chief Deputy Cabinet Secretary for executive branch operations (former COS to SF Mayor Ed Lee). Finally, Newsom has appointed Anthony Williams as head of all legislation. Anthony formerly was Legislative Director for then Pro Tem Steinberg before running government affairs for Boeing. With Newsom being sworn in as Governor on January 7 and releasing his initial proposed budget on January 10, a flurry of new appointments is expected soon.

Committee Membership Changes

Legislative leadership recently announced new committee Chairs and memberships. Many committees have grown substantially in size and others are now even number memberships.

On the Assembly list, a few key takeaways are that Laura Friedman (D-Glendale) is now chair of Natural Resources, which will hear all air quality related bills. Assemblyman Richard Bloom (D-Santa Monica) will remain chair of Budget Sub 3, which handles all air quality and resource issues. AQMD's sales tax authority bill will likely be heard in Assembly Local Government Committee and/or the Assembly Elections and Redistricting Committee. Those committees will be chaired by Asm. Marc Berman (D-Palo Alto) and Asm. Cecilia Aguiar-Curry (D-Winters), respectively.

On the Senate side, Sen. Ben Allen (D-Santa Monica) is now Chair of Senate Environmental Quality Committee, which hears all bills related to air quality. AQMD's sales tax authority bill will likely be heard in Senate Governance and Finance Committee and/or the Senate Elections and Constitutional Amendments Committee.

Those committees will be chaired by Sen. Mike McGuire (D-Healdsburg) and Sen. Tom Umberg (D-Santa Ana), respectively. Below is a list of key Senate committee chairs:

SENATE:

Appropriations: Sen. Anthony Portantino, Chair; Sen. Patricia Bates, Vice Chair

Budget and Fiscal Review: Sen. Holly Mitchell, Chair; Sen. Jim Nielsen, Vice Chair

Elections and Constitutional Amendments: Sen. Thomas Umberg, Chair; Sen. Jim Nielsen, Vice Chair.

Energy, Utilities and Communications: Sen. Ben Hueso, Chair; Sen. John Moorlach, Vice Chair.

Environmental Quality: Sen. Ben Allen, Chair; Sen. Patricia Bates, Vice Chair.

Governance and Finance: Sen. Mike McGuire, Chair; Sen. John Moorlach, Vice Chair.

Governmental Organization: Sen. Bill Dodd, Chair; Sen. Scott Wilk, Vice Chair.

Natural Resources and Water: Sen. Henry Stern, Chair; Sen. Brian Jones, Vice Chair.

Rules: Pro Tem Toni Atkins, Chair; Sen. Scott Wilk, Vice Chair.

Transportation (new committee): Sen. Jim Beall, Chair; Sen. Shannon Grove, Vice Chair.

Budget Subcommittee #2 on Resources, Environmental Protection, Energy and Transportation: Sen. Bob Wieckowski, Chair

2019 Legislative Priorities

Sales Tax Ballot Initiative Authorization

California Advisors continues preparation for the introduction of AQMD's priority legislation in 2019 related to sales tax authority. We have facilitated dozens of meetings with legislators and their staff as well as interest groups that may be supportive of our efforts. These meetings thus far have been very positive and we will continue to facilitate these conversations in the new year as we prepare to introduce the legislation by the February 22nd deadline.

ATTACHMENT 4

Assembly/Senate Din No. DRAF i	Assembly/Senate Bill No	[DRAFT]
----------------------------------	-------------------------	---------

An act to amend Section 40424.5, and to add Sections 40424.7, 40490, 40495 to the Health and Safety Code; and to add Article 9 (commencing with Section 40550) to Chapter 5.5 of Part 3 of Division 26 of the Health and Safety Code; and to add Section 7252.3 to the Revenue and Taxation Code, and to add Sections 9314.5, and 317.5 to the Elections Code; relating to ballot measures and initiatives for transactions and use taxes for air quality purposes.

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. Section 40424.5 of the Health and Safety Code is amended to read:

40424.5. Except as provided in Section 40424.7, voting by the south coast district board on the adoption of all items on its agenda shall be by rollcall. Unless any board member objects, a substitute rollcall may be used on any agenda item. A substitute rollcall shall consist of a unanimous voice vote of the south coast district board members in attendance and shall be recorded by the clerk of the board as an "aye" vote for all members present. For purposes of this section, any consent calendar is a single item.

SECTION 2. Section 40424.7 is added to the Health and Safety Code, to read:

40424.7 (a) An ordinance solely related to the imposition of transactions and use taxes authorized by, and using procedures set forth in, this code, the Revenue and Taxations Code, and Article 1 (commencing with Section 9300) of Chapter 4 of Division 9 of the Elections Code, may be enacted in the south coast district by means of a ballot measure (i) approved by the south coast district board and placed on the ballot for subsequent approval by the voters, or (ii) placed on the ballot by a voter initiative for subsequent approval by the voters.

(b) Ordinances not related to transactions and use taxes shall not be enacted in the south coast district.

SECTION 3. Section 40490 is added to the Health and Safety Code, to read:

- **40490.** (a) The south coast district board shall appoint a district election official for the purpose of overseeing, supervising, or conducting an election regarding voter approval of a ballot measure for the enactment, modification, or amendment of a transactions and use tax ordinance that is submitted to the voters by the board, without a petition, or by means of a qualified voter initiative.
- (b) The district elections official shall oversee, supervise or conduct such elections specified in subdivision (a) as authorized by this code and shall utilize the applicable procedures set forth in Article 1 (commencing with Section 9300) of Chapter 4 of Division 9 of the Elections Code.

SECTION 4. Section 40495 is added to the Health and Safety Code, to read:

- **40495.** (a) The south coast district board may submit a resolution to the board of supervisors of a county that is entirely or partly within the district to provide services that are reasonable and necessary to conduct an election in the district. Upon the presentation of such resolution by the district board, the county elections official shall provide such services to the district, and such services shall be performed by the county elections official in coordination and consultation with the district's election official. The resolution of the south coast district board shall specify the services requested.
- (b) If the south coast district board submits a resolution to a county that is entirely or partly within the district to direct the county elections official to prepare the district's election materials or provide other services, the county elections official shall work with the district's election official to set and finalize a list of its precincts, or consolidated precincts, as applicable, not later than 61 days before the election.
- (c) Unless other arrangements satisfactory to an individual county has been made, the south coast district shall reimburse each county in full for the reasonable cost of the services performed by the county's election official upon presentation of a bill to the district.

SECTION 5. Article 9 (commencing with Section 40550) is added to Chapter 5.5 of Part 3 of Division 26 of the Health and Safety Code, to read:

ARTICLE 9. Transactions and Use Tax

40550. The Legislature, by the enactment of this article, intends that the south coast district use any funds provided by this article to supplement existing revenues being used for district purposes. All funds received by the south coast district pursuant to this article shall be used for financial incentives and programs to accelerate the deployment of lower-emission mobile and stationary equipment, along with alternative fueling and charging infrastructure, as necessary to implement the district's 2016 Air Quality Management Plan and subsequent district-adopted plans to achieve the state and national ambient air quality standards, except that up to 6.25% of total revenues may be used for administrative costs of implementing the programs authorized by this provision.

- **40560.** Notwithstanding any other provision of law, a transactions and use tax ordinance applicable in the south coast district may be imposed throughout the entire district for specific purposes at a rate of up to 1 percent, that may, in combination with all taxes imposed in accordance with the Transactions and Use Tax Law (Part 1.6 (commencing with Section 7251) of the Revenue and Taxation Code), exceed the limit established by Section 7251.1 of the Revenue and Taxation Code, if all of the following requirements are met:
- (a) An ordinance proposing the transactions and use tax is either adopted by (i) a majority vote of the south coast district board with subsequent submission to the electorate and approval by the

voters pursuant to the applicable voter approval requirement, or (ii) a voter initiative submitted to the electorate and approved by the voters pursuant to the applicable voter approval requirement.

- (b) The transactions and use tax conforms to this article and the Transactions and Use Tax Law (Part 1.6 (commencing with Section 7251) of the Revenue and Taxation Code), other than Section 7251.1 of the Revenue and Taxation Code.
- **40565.** A transactions and use tax ordinance may set a term during which the tax may be imposed.
- **40566.** The district shall ensure that, averaged over three years, a minimum of 50% of the funds used for financial incentives are awarded to projects located in, and/or benefiting individuals living in, disadvantaged communities, as identified pursuant Health & Safety Code Section 39711.
- **40567.** In awarding contracts distributing the financial incentives, the district shall provide a preference for any project using equipment that is manufactured or assembled within the district.
- **40568.** Funds available pursuant to this article shall not be allocated for the purchase of fully automated cargo handling equipment. For the purposes of this section, "fully automated" means equipment that is remotely operated or remotely monitored, with or without the exercise of human intervention or control. This section does not prohibit the use of the funds for a project that includes the purchase of human-operated zero-emission equipment, human-operated near-zero-emission equipment, infrastructure supporting that human-operated equipment, or other technologies that increase freight efficiencies in the human-operated equipment. Furthermore, this section does not prohibit the purchase of devices that support that human-operated equipment, including equipment to evaluate the utilization and environmental benefit of human-operated equipment.
- **40569.** Beginning the year after the first calendar year in which funds are made available to the district pursuant to this article, the district shall include in its report to the legislature required by Health and Safety Code Section 40452 a report of the projects funded for the previous year and the expected emission reductions to be obtained from those projects.
- **40570.** (a) Each of the counties which are situated in whole or in part within the south coast district shall conduct an election called by the south coast district board for the submission of a transactions and use tax to the electorate of the district for approval.
- (b) Unless otherwise specifically provided, the election shall be called by the south coast district board and conducted by each county in the same manner as provided by the Elections Code for the conduct of elections for districts.
- **40573.** (a) The regular election date for the south coast district shall be the date of the statewide general election as provided in Section 1200 of the Elections Code. Such election shall be consolidated with the statewide general election.

- **40574.** (a) Whenever an election is called by the south coast district board, the question or proposition is to appear upon the same ballot as that provided for the statewide general election. The district shall, at least 88 days prior to the date of the election, file with the board of supervisors of each county that is within or partly within the district, with a copy to each county's election official, a resolution of the south coast district board that does all of the following:
- (1) Sets forth the exact form of the question or proposition to be voted upon at the election, as it is to appear on the ballot. The question or proposition to appear on the ballot shall conform to the Election Code provisions governing the wording of propositions submitted to the voters at a statewide election.
- (2) Acknowledges that the consolidated election will be held and conducted in the manner prescribed in Section 10418 of the Elections Code.
- (b) The resolution regarding the form of the question or proposition and consolidation shall be adopted and filed at the same time as the adoption of the ordinance, resolution, or order calling the election.
- **40575.** (a) The returns of the election provided for in this Article and the Elections Code shall be made, and the votes shall be canvassed, by the county elections official in each county contained in the south coast district within (30) days after holding the election, and the county elections officials shall certify the results of the election in each of their respective counties, and shall present such certified results to the district elections official for presentation to the board of the south coast district.
- (b) The returns of the election, the method of canvassing, and the results thereof shall be designated and declared in accordance with Section 10418 of the Elections Code.
- **40580.** (a) Any transactions and use tax ordinance adopted pursuant to this article shall be operative on the first day of the first calendar quarter commencing more than 110 days after the adoption of the ordinance.
- (b) Prior to the operative date of the ordinance, the California Department of Tax and Fee Administration, or such other state agency as provided by law, shall contract with the south coast district to perform all functions incident to the administration and operation of the ordinance.
- **SECTION 6.** Section 7252.3 is added to the Revenue and Taxation Code, to read:
- **7252.3.** "District," as used in this part, also means the South Coast Air Quality Management District, if authorized to impose transactions and use taxes pursuant to this part. This section shall remain in effect as long as Article 9 (commencing with Section 40600) of the Health and Safety Code remains in effect, but shall be repealed upon the repeal of that article.
- **SECTION 7.** Section 9314.5 is added to the Elections Code, to read:

9314.5. (a) As used in this section:

- (1) "South coast district" means the South Coast Air Quality Management District as authorized pursuant to Chapter 5.5 (commencing with Section 40400) of Part 3 of Division 26 of the Health and Safety Code.
- (2) "Legal counsel for the south coast district" means the attorney designated under the district's conflict of interest code as its legal officer pursuant to Article 3 (commencing with Section 87300) of Chapter 7 of Title 9 of the Government Code.
- (b) Whenever a ballot measure is submitted to the voters of the south coast district, the district elections official shall transmit a copy of the measure to the legal counsel of the south coast district. Except as otherwise provided in subdivision (c), the legal counsel for the south coast district shall prepare an impartial analysis of the measure showing the effect of the measure on the existing law and the operation of the measure. The analysis shall include a statement indicating whether the measure was placed on the ballot by a petition signed by the requisite number of voters or by the governing body of the south coast district without a petition. The analysis shall be printed in the voter information guide preceding the arguments for and against the measure. The analysis shall not exceed 500 words in length.

If the entire text of the measure is not printed on the ballot nor in the voter information guide, there shall be printed immediately below the impartial analysis, in not less than 10-point bold type, a legend substantially as follows:

"The above statement is an impartial analysis of Ordinance or Measure ___. If you desire a copy of the ordinance or measure, please call the district elections official's office at (insert telephone number) and a copy will be mailed at no cost to you."

- (c) If there is no legal counsel for the south coast district, or if the legal counsel for the south coast district and county counsel of the county that contains the largest number of registered voters of the district agree, county counsel shall prepare the impartial analysis.
- (d) This section shall remain in effect as long as Article 9 (commencing with Section 40600) of Chapter 5.5 of Part 3 of Division 26 of the Health and Safety Code remains in effect, but shall be repealed upon the repeal of that article.

SECTION 8. Section 317.5 is added to Chapter 4 of Division 0.5 of the Elections Code to read:

317.5. "District" for purposes of Section 1405 of this code, and for purposes of initiative under Article 1 (commencing with Section 9300) of Chapter 4 of Division 9, includes the South Coast Air Quality Management District, as authorized pursuant to Chapter 5.5 (commencing with Section 40400) of Part 3 of Division 26 of the Health and Safety Code.



BOARD MEETING DATE: February 1, 2019

AGENDA NO. 21

REPORT: **Stationary Source Committee**

SYNOPSIS: The Stationary Source Committee held a meeting on Friday,

January 18, 2019. The following is a summary of the meeting.

RECOMMENDED ACTION:

Receive and file.

Ben Benoit, Chair **Stationary Source Committee**

LT:cr

Committee Members

Present: Council Member Ben Benoit/Chair (videoconference)

Dr. Joseph Lyou/Vice Chair Supervisor Janice Hahn Mayor Judith Mitchell

Supervisor V. Manuel Perez (listening only from a non-noticed location via

teleconference)

Supervisor Janice Rutherford (videoconference)

Absent: None

Call to Order

Chair Benoit called the meeting to order at 10:30 a.m.

ACTION ITEM:

1. Determine that Proposed Amendments to BACT Guidelines and Charter for BACT Scientific Review Committee Are Exempt from CEQA, and Amend **BACT Guidelines and Charter for BACT Scientific Review Committee** Al Baez, Program Supervisor/Science and Technology Advancement, presented the proposed updates to SCAQMD BACT Guidelines and BACT Scientific Review Committee Charter.

Rita Loof, representing RadTech, Inc., thanked the Board for their directive for more frequent updates to the BACT guidelines. She also highlighted that CARB's BACT Clearinghouse site has included UV/EB technology and referenced SCAQMD BACT determinations. She requested that additional categories be added.

Dr. Lyou commented that he is also pleased to see an annual update to the BACT guidelines.

Dr. Lyou inquired if staff suggests equipment alternatives such as asking facilities to use a combined cycle turbine for lower emissions instead of simple cycle or thermal oxidizers. He also asked if it would be better to remove the contamination or use bioremediation instead of combusting the vapors from soil extraction. Staff responded that the Clean Fuels Policy has been established since the 1980s to guide applicants to lower emissions, but we do not dictate what equipment an applicant should choose. For example, they can use UV or other coating, as long as it complies with a performance standard. Staff also stated that for a brief period SCAQMD prescribed what basic equipment to use for low emissions but the benefits were outweighed by the complexity and there were potential legal issues.

Dr. Lyou asked why BACT only references performance limits from a permit condition, not what the equipment is able to achieve day-to-day. Staff responded that to be consistent, achieved in practice is defined as an equipment showing compliance with its permit limits. If equipment manufacturers guarantee lower emissions, that level can also be incorporated into permits and specified as BACT.

Dr. Lyou requested clarification on how staff determines averaging times and what is considered more stringent. Staff responded that lower averaging times are typically more stringent but when emission limits are near detection limits of the test method, it can be more difficult to quantify emissions through a source test with a short averaging time. Extending the averaging time is sometimes considered in exchange for a lower emission limit.

Dr. Lyou asked why startups and shutdowns are excluded from the BACT limits. Staff responded that startup and shutdown periods are excluded in BACT because they are excluded in the permits.

Dr. Lyou requested a follow-up regarding the availability of UV/EB technology for categories listed in RadTech's comment letter. Staff responded that these are minor source facilities and it is often difficult to get detailed cost information from them. Staff can provide an update for the next BACT guidelines update or earlier if complete cost data is available sooner. Staff will work with Ms. Loof to get the cost data.

Moved by Mitchell; seconded by Lyou; unanimously approved.

Ayes: Benoit, Hahn, Lyou, Mitchell, Rutherford,

Noes: None Absent: Perez

INFORMATIONAL ITEMS:

2. Update on the Development of Outreach Materials for Rule 1147 – NOx Reductions from Miscellaneous Sources

Michael Krause, Planning and Rules Manager, provided an update on Rule 1147 outreach materials.

Bill LaMarr, California Small Business Alliance, expressed concerns about how long it took to complete the compliance pamphlets, that another month before public release is too long, and the pamphlets are different than what he previously reviewed. He stated that it is unfair for facility owners of heated paint spray booths to conduct biennial source tests in order to demonstrate emissions of <1 lb/day NOx, which has an estimated cost of between \$15,000 to \$20,000, as compared to every five years for Rule 1469 - Hexavalent Chromium Emissions from Chromium Electroplating and Chromic Acid Anodizing Operations.

Susan Nakamura, Assistant Deputy Executive Officer/Planning, Rule Development and Area Sources, responded that the content was the same, but there were format changes to the pamphlets, and offered to meet with Mr. LaMarr and other industry stakeholders to address their concerns before the public release. These pamphlets can serve as a template for other rulemaking outreach efforts, but Rule 1469 is different as it includes parametric monitoring on top of the source test requirements as well as other additional requirements, and that small businesses are granted compliance extensions for source test demonstrations under Rule 1147. Jill Whynot, Chief Operating Officer, noted that a one-month lead time for the outreach pamphlets is needed for the materials to be properly translated, produced and distributed. Mayor Mitchell requested that staff review the biennial source testing requirement for paint spray booth owners.

Dr. Lyou asked if staff has worked with other paint booth manufacturers to bring additional competition for burner retrofits, and requested that staff examine costs associated with source testing. Ms. Nakamura responded that staff will work with manufacturers to provide updates on available manufacturers of burner retrofits. She commented that Rule 1147 includes other options for facilities to demonstrate compliance in lieu of source testing.

3. Summary of Proposed Amended Rules 110, 212, 301, 303, 306, 307.1, 309, 315, 510, 515, 518.2, 812, 1309, 1310, 1605, 1610, 1612, 1620, 1623, 1710, 1714, and 3006

Planning and Rules Manager Michael Morris presented a summary of the proposed amendments to streamline notice requirements. Supervisor Hahn asked if the SCAOMD currently advertises public notices in small and community newspapers or large newspapers. Dr. Laki Tisopulos, Deputy Executive Officer/Engineering & Permitting responded that public notices are currently published in newspapers of general circulation, which includes large newspapers, but some notices are also published in local newspapers. Supervisor Hahn expressed concern over the financial impact to smaller newspapers if notices are not published in those publications. Ms. Whynot responded that notices that are currently emailed or mailed are mostly regulatory notices for rulemaking activities. Chief Deputy Counsel Barbara Baird clarified that there are two types of notices: one for rule development activities; and one for permit actions. Regarding rules, Ms. Baird mentioned that state law still requires newspaper noticing, so the SCAQMD will continue this practice. Regarding permit actions, the SCAQMD now has the option to send notices electronically. Ms. Nakamura added that CEQA, rule development, and Hearing Board notices each have different circulation requirements. Ms. Baird added that the SCAOMD is not changing CEOA noticing requirements. Supervisor Hahn asked how newspaper vendors are selected. Dr. Tisopulos replied that newspaper selection factors in costs of publication and that the objective is for the notice to reach the public. Dr. Lyou asked if the SCAQMD will maintain the same record retention policy for these notices. Ms. Whynot confirmed that electronic noticing would not change SCAQMD's record retention policy. Dr. Lyou asked if staff has explored something similar to NextDoor for public outreach as it would be an effective way to reach people. Ms. Whynot stated that staff will look into NextDoor.

4. Status Report on Reg. XIII – New Source Review

William Thompson, Senior Engineering Manager, gave a presentation on Regulation XIII, New Source Review (NSR) Equivalency for Calendar year 2017, with the conclusion that the SCAQMD's NSR progress is equivalent to federal NSR requirements on an aggregate basis and is projected to maintain equivalency for calendar year 2018 and 2019.

WRITTEN REPORTS:

5. Notice of Violation Penalty Summary

The report was acknowledged by the Committee.

6. Monthly Update of Staff's Work with U.S. EPA on New Source Review Issues for the Transition of RECLAIM Facilities to a Command and Control Regulatory Program

The report was acknowledged by the Committee.

7. Home Rule Advisory Group – November 2018 Meeting Minutes and the 2018 Accomplishments and 2019 Goals & Objectives

The report was acknowledged by the Committee.

8. Twelve-month and Three-month Rolling Price of RTCs for Compliance Years 2018 and 2019

The report was acknowledged by the Committee.

OTHER MATTERS:

9. Other Business

There was no other business.

10. Public Comment Period

Dan McGivney, representing the Southern California Gas Company (SoCalGas), expressed concern about the proposed amendments to Rule 1403 - Asbestos Emissions from Demolition/Renovation Activities. He commented that the proposed amendments go beyond the Federal NESHAP requirements in regard to small renovation jobs less than 100 feet. He stated that small renovation jobs are exempt from notification and the 10-day waiting period under the NESHAP. SoCalGas provides many small renovations daily and the current proposed requirement of notification and wait times will increase their compliance costs and delay work on these small renovation jobs. Mr. McGivney respectfully requested that staff delay the public hearing set for February 1, so that they can continue to work with staff to resolve these remaining issues.

Cindy Parsons, from the Los Angeles Department of Water and Power (LADWP), commented on the proposed amendments to Rule 1403. She commented that new concerns developed at the last working group meeting regarding the two new requirements pertaining to underground piping: one issue requires an onsite inspection and the difficulties that it presents; and the other issue involves filing a procedure five which will require an additional cost. Ms. Parsons also commented on the need to have a standard operating procedure for asbestos clean-up. The LADWP would also like to request a delay of the public hearing for the Rule 1403 amendments.

The Committee Members were concerned about taking this item to the Board due to the concerns of industry. Mayor Mitchell asked about the Committee's authority to request that the February 1 public hearing be postponed. Council Member Benoit suggested taking this item back through one more working group meeting and that he would discuss postponing the public hearing with the Chair of the Board. Ms. Baird advised that since the item was not on the agenda, Committee direction would not be appropriate. Ms. Whynot commented that staff heard the Committee's comments, and will take industry's concerns under consideration. She will speak with Executive Officer Wayne Nastri and staff about postponing the public hearing if the issues cannot be addressed quickly.

11. Next Meeting Date

The next regular Stationary Source Committee meeting is scheduled for Friday, February 15, 2019.

Adjournment

The meeting was adjourned at 11:33 a.m.

Attachments

- 1. Attendance Record
- 2. Notice of Violation Penalty Summary
- 3. Update on New Source Review Issues for the RECLAIM Transition
- 4. Home Rule Advisory Group –November 2018 Meeting Minutes and the 2018 Accomplishments and 2019 Goals & Objectives
- 5. Twelve-month and Three-month Rolling Price of RTCs for Compliance Years 2018 and 2019

ATTACHMENT 1

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT STATIONARY SOURCE COMMITTEE

Attendance – January 18, 2019

Council Member Ben Benoit (videoconference)	SCAQMD Governing Board
Dr. Joseph Lyou	SCAQMD Governing Board
Supervisor Janice Hahn	SCAQMD Governing Board
Mayor Judith Mitchell	SCAQMD Governing Board
Supervisor V. Manuel Perez (teleconference)*	SCAQMD Governing Board
Supervisor Janice Rutherford (videoconference)	SCAQMD Governing Board
Marisa Perez	Board Consultant (Mitchell)
Bill LaMarr	California Small Business Alliance
Curtis Coleman	Southern California Air Quality Alliance
Erin Donnette	World Energy
Kris Flaig	Los Angeles County Sanitation Districts
Kathryn Gleeson	World Energy
Rita Loof	RadTech
Bridget McCann	Western States Petroleum Association
Daniel McGivney	Southern California Gas Company
Bill Pearce	Boeing
David Rothbart	Los Angeles County Sanitation Districts
Peter Whitingham	Whittingham Public Affairs Advisors
Tammy Yamasaki	Southern California Edison
Al Baez	SCAOMD staff
Barbara Baird	
Amir Dejbakhsh	
Bayron Gilchrist	_
Michael Krause	•
Michael Morris	~
Susan Nakamura	
William Thompson	
Laki Tisopulos	-
Jill Whynot	_
•	-

^{*}Listening only (via teleconference)

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT **General Counsel's Office**

December 2018 Settlement Penalty Report

Total Penalties

Civil Settlements: \$271,150.00 MSPAP Settlements: \$24,075.00

Total Cash Settlements: \$295,225.00 **Total SEP Value:** \$0.00

Fiscal Year through 12 / 2018 Cash Total: \$4,727,730.00 Fiscal Year through 12 / 2018 SEP Value Only Total: \$260,000.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
Civil Sett	lements					
22911	CARLTON FORGE WORKS	2004 2009 3002	5	DH	P64149	\$40,000.00
34389	CHAFFEY COLLEGE	46: 1146.: 141: 147: 20: 22:	2 5 0 3	WBW	P62031 P62039	\$19,750.00
4588	HOST MARRIOTT	2202	2 12/27/2018	NSF	P64817	\$10,000.00
95461	HUNTINGTON MEMORIAL HOSPITAL UNIT NO.02	2202	2 12/12/2018	SH	P55315	\$2,500.00
43525	J C PENNEY CO (amount includes Suspended Penalty of \$15,000)	2202	2 12/5/2018	BBB	P60301 P64804	\$21,400.00
141750	NRC ENVIRONMENTAL SERVICES INC	203 (b Page 1 of 4) 12/12/2018	WBW	P63304	\$70,000.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
171109	PHILLIPS 66 COMPANY/LOS ANGELES REFINERY	402	12/12/2018	NAS	P64601	\$93,500.00
		462			P64602	
		1118			P64603	
		1173			P64604	
		1176			P64607	
		2004			P64611	
		2011			P64612	
		2012			P64613	
		2012 Appen A			P64614	
		3002			P65311	
		41700				
168088	POLYNT COMPOSITES USA INC	2004	12/21/2018	DH	P57884	\$12,500.00
157135	SEAL BEACH POLICE DEPARTMENT	203	12/4/2018	VKT	P64217	\$1,500.00

Total Civil Settlements: \$271,150.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement	
MSPAP S	Settlements						
178441	AGROMIN OC CHINO GREEN MATERIAL COMPOST	203(a)	12/7/2018	GC	P66405	\$200.00	
151886	ALPHA MATERIALS, INC.	203 (a)	12/7/2018	GC	P66052	\$200.00	
800196	AMERICAN AIRLINES, INC,	13 CCR 2460	12/7/2018	GC	P66752	\$1,000.00	
156222	AMPARO MEDICAL INC	201 203		GC	P65761	\$1,040.00	
133566	ASBESTOS INSTANT RESPONSE INC	1403	12/7/2018	GC	P65951	\$2,000.00	
136077	CLEAN AIR TESTING, INC	461	12/7/2018	TF	P64993	\$800.00	
185551	CRITICAL ENVIRONMENTS, INC	203 (a)	12/26/2018	GC	P66602	\$200.00	
184317	FAIRMOUNT TERRACE	201 203(a)	12/26/2018	GC	P64128	\$400.00	
179460	H&S ENERGY, LLC. H&S 37	461	12/26/2018	GC	P64994	\$880.00	
800367	IPS CORPORATION	3002	12/7/2018	GC	P50741	\$1,100.00	
172198	JACOS & CO INC/7-ELEVEN STORE 39682A	203(a) 461	12/26/2018	GC	P65726	\$880.00	
186808	MBC PROPERTY INVESTMENT INC	1403	12/26/2018	TF	P66703	\$2,050.00	
139769	MELROSE 76, GLENROSE INC	461	12/26/2018	TF	P68151	\$800.00	
139769	MELROSE 76, GLENROSE INC	461	12/26/2018	TF	P64934	\$500.00	
186361	MGA INVESTMENT INC	203 (a)	12/26/2018	TF	P65263	\$800.00	

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement	
187049	PRESIDO RESIDENTIAL CAPITOL	403	12/26/2018	TF	P63144	\$375.00	
32056	R & S OIL CO/ARCO DEALER	461	12/7/2018	TF	P64933	\$500.00	
181610	ST MARY & ST MICHAEL, INC., 5FM ONTARIO	461 41960.2	12/26/2018	TF	P66359	\$800.00	
139811	SUNNYSIDE 76 CAR CARE CENTER	201	12/7/2018	TF	P65000	\$800.00	
180780	TESORO ARCO #42660	203 461	12/7/2018	GC	P66352	\$3,150.00	
185347	THE CRANE GUYS, LLC.	203 (a)	12/7/2018	GC	P66601	\$800.00	
180854	VILLEGAS POWDER COATING	201 203	12/26/2018	TF	P68051	\$2,400.00	
186859	WILCOX & WILCOX	403	12/26/2018	TF	P67202 P67203	\$2,400.00	

Total MSPAP Settlements: \$24,075.00

DISTRICT'S RULES AND REGULATIONS INDEX FOR DECEMBER 2018 PENALTY REPORT

REGULATION II - PERMITS

Rule 201	Permit to Construct
Rule 203	Permit to Operate

Rule 222 Filing Requirements for Specific Emission Sources Not Requiring a Written permit Pursuant to Regulation II

REGULATION IV - PROHIBITIONS

Rule 402	Nuisance
----------	----------

Rule 403 Fugitive Dust - Pertains to solid particulate matter emitted from man-made activities

Rule 461 Gasoline Transfer and Dispensing

Rule 462 Organic Liquid Loading

REGULATION XI - SOURCE SPECIFIC STANDARDS

Rule 1118 Emissions from Refinery Flare

Rule 1146.2 Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers

Rule 1173 Fugitive Emissions of Volatile Organic Compounds

Rule 1176 Sumps and Wastewater Separators

REGULATION XIV - TOXICS

Rule 1403 Asbestos Emissions from Demolition/Renovation Activities

Rule 1415 Reduction of Refrigerant Emissions from Stationary Refrigeration and Air Conditioning Systems

Rule 1470 Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines

REGULATION XX - REGIONAL CLEAN AIR INCENTIVES MARKET (RECLAIM)

Rule 2004	RECLAIM Program Requirements
Rule 2005	New Source Review for RECLAIM

Rule 2011 Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SO_X) Emissions Rule 2012 Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NO_X) Emissions

Rule 2012

Appendix A Protocol for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NOx) Emissions

REGULATION XXII ON-ROAD MOTOR VEHICLE MITIGATION

Rule 2202 On-Road Motor Vehicle Mitigation Options

REGULATION XXX - TITLE V PERMITS

Rule 3002 Requirements for Title V Permits

CALIFORNIA HEALTH AND SAFETY CODE

41700 Violation of General Limitations41960.2 Gasoline Vapor Recovery

CALIFORNIA CODE OF REGULATIONS

13 CCR 2460 Portable Equipment Testing Requirements

January 2019 Update on Work with U.S. EPA on New Source Review Issues for the RECLAIM Transition

Staff has been working with U.S. EPA to resolve New Source Review issues as RECLAIM facilities exit to a command and control regulatory structure. At the October 5, 2018 Board Meeting, the Board directed staff to provide the Stationary Source Committee with a monthly update of staff's work with U.S. EPA regarding resolving New Source Review issues for the transition of facilities from RECLAIM to a command-and-control regulatory structure. The table below summarizes key activities over the past month.

Item	Discussion
Teleconference with U.S. EPA	Discussed RECLAIM holding requirements, future RTC
– December 14, 2018	holdings, and overall RTC supply
	U.S. EPA is internally discussing staff's initial
	recommendations and findings
RECLAIM Working Group	Revisited discussion on Potential to Emit (PTE) baseline
Meeting – January 10, 2019	calculations post-RECLAIM
	Discussed how SCAQMD will ensure sufficient offsets are
	available for RECLAIM facilities post-RECLAIM
Teleconference with U.S. EPA -	Cancelled due to federal government shutdown
January 8, 2019	
Face-to-face meeting with U.S.	Re-scheduled for February 8, 2019
EPA staff	



HOME RULE ADVISORY GROUP Wednesday, November 14, 2018 MEETING MINUTES

CHAIR: Dr. Joseph Lyou, SCAQMD Governing Board Member

MEMBERS PRESENT:

Mike Carroll (Regulatory Flexibility Group); Curt Coleman (Southern California Air Quality Alliance); Nan Harrold (Orange County Waste & Recycling); Bill LaMarr (California Small Business Alliance); Dan McGivney (Southern California Gas); Art Montez (AMA International); Patty Senecal (Western States Petroleum Association); and TyRon Turner (Dakota Communications). The following member participated by conference call: Rongsheng Luo (SCAG).

MEMBERS ABSENT:

Ben Benoit (SCAQMD Governing Board Member); Michael Downs (Downs Energy); Jaclyn Ferlita (Air Quality Consultants); Bridget McCann (Western States Petroleum Association); Dr. Clark Parker (SCAQMD Governing Board Member); David Rothbart (Los Angeles County Sanitation District); Larry Rubio (Riverside Transit Agency); Larry Smith (Cal Portland Cement); Kristen Torres Pawling (County of Los Angeles, Chief Sustainability Office); Bill Quinn (California Council for Environmental & Economic Balance) and Amy Zimpfer (EPA).

OTHER ATTENDEES:

Mark Abramowitz (Board Consultant to Dr. Lyou); Brian Clerico (CARB); Peter Herzog (NAIOP); and John Ungvarsky (EPA).

SCAOMD STAFF:

Philip Fine Deputy Executive Officer

William Wong Principal Deputy District Counsel

Jo Kay Ghosh Health Effects Officer

Philip Crabbe Community Relations Manager

Pedro Piqueras Air Quality Specialist Ann Scagliola Administrative Secretary

OPENING COMMENTS AND SELF-INTRODUCTIONS

The meeting was called to order at 10:00 a.m. by Dr. Joseph Lyou (Chairman).

APPROVAL OF JULY 2018 MEETING MINUTES

Dr. Lyou asked for comments on the May 9, 2018 meeting minutes. Hearing none, the minutes were approved.

EPA AND FEDERAL ACTIVITIES

John Ungvarsky provided an update on recent U.S. Environmental Protection Agency (EPA) and federal activities.

SCAQMD Related Actions

- Proposed Approval of SCAQMD's AQMP for the 2006 24-hour PM2.5 NAAQS
- 2008 Ozone Plan Proposal Notice
- Finalized Approval of Rule 1113 Architectural Coatings
- SCAQMD Diesel Emissions Reduction Act (DERA) Awards

Technology Advancement/Incentive Programs

• Targeted Air Shed Program

Federal Actions

- Cleaner Truck Initiative (CTI)
- 2015 Ozone SIP Requirement Update
- DERA National Clean Diesel Funding Assistance Program Updates

Discussion

This portion of the webcast recording was inaudible.

CARB REGULATORY ACTIVITIES

Brian Clerico provided CARB updates on proposed and recent regulatory activities.

Follow-up from September 2018 meeting

• Effects of the California wildfires emissions on attainment goals.

Proposed CARB Board and Regulatory Activities

- Statewide Portable Equipment Registration Program (PERP) and Portable Diesel Engine Air Toxic Control Measure (ATCM) - amendments to take place on November 30, 2018 (amendments summarized by James Aguilar)
- Aliso Canyon Mitigation Agreement summary of public comments on CARB website.
- Overview of CARB workshops/webinars/meetings for remainder of 2018.

Discussion

Dr. Lyou commented that PM non-attainment events would normally happen in the winter when the PM levels are higher, and it could be an issue since the fire season might also include winter. Mr. Clerico indicated that this could possibly become a disqualification from being an exceptional event, since it may coincide with baseline ambient higher levels that are exceedances.

Bill La Marr inquired about SCAQMD's attainment goal and the wildfire impacts on the readings. Dr. Lyou indicated that there is a process you would claim that it is an exceptional event, and then it would go through the process with EPA for their verification. Dr. Fine added that you would then exclude the exceptional event data point, since it currently only impacts the 24-hour standard.

Dr. Lyou inquired if the PERP and ATCM updates were made to make enforcement easier or to address the lack of reporting. Mr. Aguilar indicated that it was a combination of both.

Bill La Marr inquired about a proposed regulation for reporting criteria of air pollutants and toxic air contaminants workshop scheduled for December 13, 2018, the same day/time as the CARB Board meeting. Mr. Clerico indicated that he would follow-up and provide an update.

LEGISLATIVE UPDATE

Philip Crabbe reported on key legislative updates.

The Legislative Committee held a meeting on November 9, 2018. SCAQMD's State legislative consultants provided written reports on State legislative activities in Sacramento. The meeting was primarily focused on interviewing consultant firms and recommending execution of contracts for SCAQMD's legislative representation in Washington, D.C. These firms are also SCAQMD's current federal legislative representatives in Washington, D.C. The Legislative Committee members interviewed representatives from the following firms:

- Carmen Group, Inc.;
- Cassidy & Associates, Inc.;
- Kadesh & Associates, Inc.; and
- The Glover Park Group

At the conclusion of the interviews, the Committee Members recommended that the Governing Board authorize the execution of contracts with the Carmen Group, Inc., Cassidy & Associates, Inc. and with Kadesh & Associates, Inc. for legislative representation in Washington, D.C.

UPDATE REGARDING LITIGATION ITEMS AND RELATED EPA ACTIONSWilliam Wong had no updates to report.

UPDATE ON AB 617 IMPLEMENTATION

Dr. Phil Fine gave an update on the SCAQMD AB 617 year-one implementation efforts, which included the key elements for the selected communities and the benchmark milestones for future years.

Discussion

Art Montez inquired about how SCAQMD identified the factors for selecting AB 617 communities. Dr. Fine indicated that we engaged with the communities to identify factors to consider, and then identified the highest ranked communities based on those factors.

TyRon Turner inquired if there is a list of schools, in the South Los Angeles, near industrial areas or freeways. Dr. Fine indicated that a database of schools was used and the inter-active AB 617 maps, on the SCAQMD website, provides this level of detail.

Mr. Turner indicated that at his neighborhood council meetings citizens have raised concerns about the air quality, due to the recent Los Angeles Airport changes in flight patterns. He inquired if air monitors are purchased, will SCAQMD provide training on how to transmit the data. Dr. Fine indicated that the SCAQMD Air Quality Sensor Performance Evaluation Center (AQ Spec) Program does offer deployment and community training, and interested parties should contact the AQ Spec staff for upcoming programs. Dr. Fine added that it is anticipated that there will also be sensor deployment in the selected AB 617 communities. Dr. Lyou commented that the sensors cannot measure everything and suggested considering the PM Purple Air sensors, which have proven to be reliable and accurate for PM.

Mike Carroll commented that he recently toured the AQ Spec setup in the SCAQMD laboratory and recommended that others do the same.

Action Item: Dr. Lyou requested an AQ Spec tour for the Advisory Group, immediately following the January 9, 2019 meeting.

Dan McGivney asked if the AB 617 Community Steering Committee meetings have already occurred. Dr. Fine indicated that two of the three meetings have taken place.

Art Montez asked about the cost of the monitoring systems and if they are difficult to install. Dr. Lyou replied that low-cost sensors cost anywhere from a couple of hundred dollars up to five thousand, depending on what you want to monitor.

Nan Harrold inquired about the December 31, 2023 key milestone deadline for SCAQMD to implement Best Available Retrofit Control Technology (BARCT) and how it relates to the emissions inventory plan. Dr. Fine indicated the BARCT milestones are not necessarily community based but as part of the statute and it will apply to all facilities subject to these rules and will benefit communities throughout the basin. Ms. Harrold further inquired whether this statute applies to everyone in general or are there specific types of equipment. Dr. Fine replied that this specific legislation applies to facilities that are in the statewide greenhouse gas (GHG) cap-and-trade program as of January 1, 2017, as well as other requirements to implement BARCT by the 2023 deadline.

Jo Kay Ghosh indicated that the next AB 617 Community Steering Committee meeting is November 28, 2018, and we are still looking for residents of the Boyle Heights, East Los Angeles and West Commerce area to serve on this committee.

Rongsheng Luo inquired about the \$250M appropriated last year for implementation of AB 617, and how much of that will be allocated to the identified three communities. Dr. Fine indicated that in the first year \$250M was allocated statewide and SCAQMD received approximately \$107M. The legislation was very specific that it had to be spent on Carl Moyer or Prop 1B type programs. SCAQMD was over-subscribed for the Carl Moyer program, so we had many great projects to be funded. Since we did not have the communities selected at that time, SCAQMD made sure that almost 90 percent of the money was spent in disadvantaged communities. This year \$245M was dedicated statewide and SCAQMD does expect to get a portion of this. The guidelines are less restrictive and are open to stationary source incentives. Funding will be prioritized to benefit the selected communities. CARB continues to work on the guidelines for how the \$245M will be spent, and they are still taking comments and feedback for these guidelines. At this time, the money has not been divided up across the districts.

SUBCOMMITTEE STATUS REPORTS

A. Freight Sustainability (Dan McGivney)

An update was provided on the following items.

- December 4, 2018 CARB workshops on light- and heavy-duty fleet requirements and the advanced clean truck regulation.
- December 4 & 5, 2018 CARB workshop on the 3-year plan for light-duty vehicles.
- November 29, 2018 California Freight Advisory Committee meeting

B. Small Business Considerations (Bill La Marr)

An update was provided on the following items.

- Consulted with the Metal Finishing Association and industry, until the adoption of Rule 1369.
- RECLAIM Working Group
- AB 617 Community Steering Committee meetings
- Met with the new EPA Regional Administrator and the Field Office Director of the Los Angeles office.

Bill La Marr requested that staff provide an announcement when rules are adopted to the regulated community, along with a brief summary of the rule content. Dr. Lyou indicated that it used to be standard practice for SCAQMD to provide a notification to the impacted facilities. Dr. Fine said that he would double-check to make sure that this does occur.

C. Environmental Justice and AB 617 Implementation (Curt Coleman)

An update was provided on the following item.

• October 25, 2018 - The CARB Board approved staff's proposed recommendations for the greenhouse gas spending investment priorities for 2018-2019.

D. Climate Change (David Rothbart)

No report was provided.

REPORT FROM AND TO THE STATIONARY SOURCE COMMITTEE

Phil Fine provided a summary of items on the October and November 2018 meeting agendas.

- PAR 1469, 1146, 1146.1, 1146.2, 1403, 1325;
- PR 1110, 1118.1, PR 1407.1;
- AB 617 BARCT Implementation Schedule
- RECLAIM Quarterly Report

The next Stationary Source Committee meeting has been scheduled for December 19, 2018.

APPROVAL OF THE 2019 HOME RULE ADVISORY SCHEDULE

The Home Rule Advisory Group confirmed and Dr. Lyou approved the following meeting schedule for 2019.

January 9	May 8	September 11
March 13	July 10	November 13

Note: All meetings are scheduled to begin at 10:00 a.m. and will be held in Conference Room CC-8.

2018 ACCOMPLISHMENTS AND 2019 GOALS & OBJECTIVES

Dr. Lyou asked for comments the provided Home Rule Advisory Group 2018 Accomplishments and the 2019 Goals and Objectives. Hearing none, the reports were approved.

OTHER BUSINESS

Art Montez inquired about internships available at SCAQMD. Dr. Lyou requested that Mr. Montez be provided with the Summer Governing Board Internship Program link.

Mike Carroll indicated that Latham Watkins has work with the environmental group Ocean Cleanup and to develop a program to remove plastics from the ocean. An award was received for this outstanding project and Mr. Carroll wanted to share the video with others. The link is https://www.lw.com:443/news/The-Ocean-Cleanup-2018-Dell-Prize

PUBLIC COMMENT

There were no comments.

ADJOURNMENT

The meeting was adjourned at 11:44 a.m. The next meeting of the Home Rule Advisory Group is scheduled for 10:00 a.m. on January 9, 2019, and will be held at SCAQMD in Conference Room CC-8.

South Coast Air Quality Management District HOME RULE ADVISORY GROUP – Attendance Record – 2018

	NAME (Term: 1/1/17 - 1/1/2019)	1/10	FEB	3/14	APR	5/9	JUN	7/11	AUG	9/12	OCT	11/14	DEC
	Board/Member, Business & Community Reps, SCAQMD Staff												
1	Dr. Joseph Lyou, Chair	X		X		X		X		X		X	
2	Mayor Ben Benoit, Vice Chair							A		A		A *	
3	Dr. Clark E. Parker, Sr., Governing Board Member			A		A		A		A		A	
4	Dr. Philip Fine (Agency Member) - SCAQMD	X		X		X		X *		X *		X	
5	Zimpfer, Amy (Agency Member) - EPA Representing Elizabeth Adams	T		T*		T		T		T*		T*	
6	Raymond, Johnnie (Agency Member) - CARB Representing Richard Corey	T *		T *		T		T		T*		T *	
7	Chang, Ping (Agency Member) - SCAG <i>Alternate – Rongsheng Luo</i>	T *		T*		T *		T *		T *		T*	
8	Carroll, Mike (Business Representative) Alternate – Robert Wyman	A		A		A		X		X		X	
9	Coleman, Curtis (Business Representative) **Alternate - Susan Stark	X *	_	X	y	X	_	A *	Y	X	_	X	~
10	McCann, Bridget (Business Representative) Alternate – Patty Senecal	X *	dark	X	dark	X	dark	X	dark	X	dark	X*	dark
11	La Marr, Bill (Business Representative)	X	7	X	p	X	7	X	þ	X	p	X	0
12	McGivney, Dan (Business Representative) Alternate – Lauren Nevitt	X		X*		X		A *		A *		X	
13	Roberts, Terry (Environmental Representative)	X		X		A*							
14	Quinn, Bill (Business Representative) <i>Alternate – Janet Whittick</i>	T		T*		T *		T		T		A *	
15	Downs, Michael (Community Representative - McCallon)	A		A		A*		A*		A *		A*	
16	Ferlita, Jaclyn (Community Representative - Lyou)	A		A		X		A		X		A	
17	Harrold, Nan (Community Representative - Nelson)	X		A*		X		A*		X		X	
18	Montez, Art (Community Representative - Lyou)	A		A		X		X		X		X	
19	Rothbart, David (Community Representative - Mitchell)	X		A *		A *		X		X		A*	
20	Rubio, Larry (Community Representative - Ashley)	A *		T		T		A *		A *		A*	
21	Smith, Larry (Community Representative - Benoit)	X		X		A		X		A		A	
22	Pawling Torres, Kristen (Community Representative - Kuehl)	A		X		A		X		A *		A*	
23	Turner, TyRon (Community Representative - Burke)	A		X		X		X		X		X	

	Attendance Codes							
X	X Present T Teleconference A Absence							
Х*	Alternate in Attendance	T*	Alternate Teleconference Participation	А*	Absence Excused			



HOME RULE ADVISORY GROUP 2018 ACCOMPLISHMENTS

In 2018 the following important updates were provided to the Home Rule Advisory Group to keep the group informed and engender discussion on important, relevant issues.

- Low-Cost Air Pollution Sensors
- Alternative Technology Infrastructure
- Community Outreach Efforts
- Facility-Based Mobile Source Measures
- AB 617 Implementation

Climate Change

The Climate Change Subcommittee discussed greenhouse (GHG) programs and the potential to minimize duplicative regulatory efforts. The subcommittee tracked regulatory efforts by California Air Resources Board and Environmental Protection Agency to reduce greenhouse gas emissions. The subcommittee monitored the sale of GHG allowances through the auction market and tracked various climate change bills. Regulatory and legislative developments were monitored to ensure that duplicative requirements would not be imposed on stationary sources.

Environmental Justice

The Environmental Justice Subcommittee monitored and reported on environmental justice activities at CARB and OEHHA, including updates to the CalEnviroScreen 3.0. It also monitored and reported on CARB and SCAQMD implementation of AB 617, including updates on CARB's Community Air Protection Program and CARB's identification of communities for initial program activities.

Freight Sustainability

During the past year, the Freight Sustainability Subcommittee has provided discussion and/or updates on the following items:

- The California Freight Mobility Plan;
- The California Freight Advisory Committee Activities;
- The San Pedro Bay Ports Clean Air Action Plan;
- 2018 Advanced Clean Transportation (ACT) Expo;
- Carl Moyer Guidelines;
- Volkswagen Settlement;
- Facility-Based Mobile Source Measures; and
- Caltrans California Freight Advisory Committee activities.

Small Business Considerations

Reducing the Permit Backlog / Permit Streamlining

Throughout 2018, the Small Business Subcommittee participated in meetings of the Permit Streamlining Task Force Subcommittee and contributed to the discussions between the district staff and industry stakeholders about recommending strategies for reducing the volume of backlogged permits and improving the efficiency by which future permits can be processed, approved and issued.

Through a relationship with the California Small Business Alliance, three trade associations (Korean Drycleaners-Laundry Association, California Auto Body Association, and California Independent Oil Marketers Association) agreed to make their members available to begin populating the new E-Permit system with new applications and testing it prior to launch.

NOx RECLAIM Transition to Command and Control

Throughout 2018, the Small Business Subcommittee participated in the working group meetings and contributed to the discussions between the district staff, industry and community stakeholders on issues relating to New Source Review, the equitable "sunsetting" of RECLAIM, and the orderly transition to a command-and-control program.

Rule 1469 (Hexavalent Chromium Emissions from Chromium Electroplating and Chromic Acid Anodizing

Throughout 2018, the Small Business Subcommittee participated in the working group meetings and public workshops, and contributed to the discussions pertinent to the district's efforts to amend Rule 1469. The Subcommittee continued its participation in these efforts and consulted the leadership of the Metal Finishing Association up to and through adoption of the rule on November 2, 2018.

Rule 1147 (NOx Reductions from Miscellaneous Sources)

The Small Business Subcommittee has reported on the measured pace of rulemaking involved in amending Rule 1147 for the past seven (7) years. On July 7, when the Governing Board finally approved the proposed rule, they did so with stipulations that the staff begin or continue (as appropriate) to accomplish certain tasks that would: 1) mitigate the economic burden of biannual emissions testing on the less than one pound NOx/day facilities; 2) eliminate the monopoly that a single low-NOx burner manufacturer has over all other burner manufacturers; and 3) publish an implementation guide that clearly explains to the regulated community how they can comply with the amended rule. Moreover, the Board stressed that their stipulations to staff be carried out with a sense of immediacy, and in collaboration with business stakeholders.

In July the staff met with business community leaders to share and discuss three (3) draft brochures which are intended to inform stationary sources (businesses) that will be required to install low-NOx burners in their equipment, under the provisions of this rule.

The Subcommittee will report on Rule 1147 post-adoption progress, whenever there is something of substance to report.



HOME RULE ADVISORY GROUP 2019 GOALS AND OBJECTIVES

The Home Rule Advisory Group (HRAG) was established April 14, 1995, by the SCAQMD Governing Board as one element of the Business Clean Air Partnership. The HRAG is a coalition of local business leaders, environmental representatives, regulated agency officials, and air quality regulators dedicated to seeking realistic approaches to attaining clean air goals.

The mission of the Home Rule Advisory Group is to seek consolidation and consistency of federal, state, and local regulations to streamline regulatory compliance while achieving and fulfilling air quality goals and requirements. The group will focus on regulatory proposals and compliance issues that impose duplicative, conflicting or burdensome requirements. These goals will be accomplished by making recommendations including alternatives to the Stationary Source Committee on those issues that the group identifies, as well as pending legislation, litigation and regulatory proposals that have the potential to impose an unreasonable compliance burden on local businesses. The anticipated result is the development of recommendations that support reasonable and efficient approaches to attaining clean air goals.

The term "Home Rule" refers to the process and mechanism of self-governance by local government jurisdictions.

The Home Rule Advisory Group hereby adopts the following 2019 goals and objectives. These goals and objectives may be amended and/or re-prioritized at any time to reflect emerging or changing issues.

The Home Rule Advisory Group will actively examine potential conflicting, duplicative, and/or overly burdensome regulatory activities at local, state, and federal levels, including issues concerning credits and offsets for new sources, relieving air emission burdens on local communities, release of air toxic emissions, best practices to achieve air quality goals, interactions between local air quality and greenhouse gas objectives, etc. The anticipated result is the development of improved strategies to attain clean air goals.

Climate Change

The Home Rule Advisory Group Climate Change Subcommittee will monitor selected local, state, regional federal, and international climate change regulatory, legislative, and non-governmental organizations' developments. The Climate Change Subcommittee will review selected rulemaking and actions taken by U.S. EPA, ARB, and others with an eye toward harmonization of the regulatory process and to prevent or eliminate duplicative, overlapping, and unnecessarily burdensome requirements, while maximizing co-benefits of emission reductions in criteria pollutants and air toxics.

Environmental Justice

The Home Rule Advisory Group Environmental Justice Subcommittee will continue to monitor and report on the development and implementation of environmental justice programs and cumulative impact assessments by federal, state, and local agencies for purposes of evaluating the consistency of those programs and assessments with federal law, state law, and SCAQMD policies. It will also monitor the implementation of AB 617 by SCAQMD and CARB and seek effective ways to address cumulative and disproportionate impacts while providing regulatory certainty and avoiding duplicative and overlapping requirements. It will continue to monitor developments related to OEHHA's AB2588 Risk Assessment Guidelines and CalEnviroScreen Tool and EPA's EJ Screen Tool for assessing environmental justice communities. Finally, it will continue to provide quarterly updates on how proceeds from CARB's GHG auctions are proposed to be used.

Freight Sustainability

One of the largest sources of NOx emissions in the SCAQMD are mobile sources associated with the movement of freight through our region. Currently, the California Air Resources Board and the SCAQMD are developing and implementing SIP and AQMP mobile source reduction strategies, including efforts to address indirect sources of emissions through regulations, MOUs, incentives, and other facility-based measures. Additionally, the State of California, under the guidance of Caltrans, is responsible for implementation of various transportation plans, including the California State Rail Plan, the California Transportation Plan, the California Freight Mobility Plan and the San Pedro Bay Ports have adopted an updated Clean Air Action Plan and will be continuing plan implementation work. The Subcommittee will monitor and report on these and other related activities during the upcoming year.

Small Business Considerations

The Small Business Considerations Subcommittee will continue to provide small business input in the review and undertaking of air quality-related programs and will assure that recommendations to the Stationary Source Committee by the HRAG reflect a balanced view from small businesses and other HRAG members. The Subcommittee will periodically monitor economic and air modeling data, and report on any significant changes that may occur during 2019 and beyond. The Subcommittee representatives will also continue their involvement in the discussions about RECLAIM.

Twelve-Month and Three-Month Rolling Average Price of Compliance Years 2018 and 2019 NOx and SOx RTCs

January 2019 Quarterly Report to Stationary Source Committee

Table I

Twelve-Month Rolling Average Price Data for Compliance Year 2018 NOx RTCs (Report to Governing Board if rolling average price greater than \$22,500/ton)

Tv	Twelve-Month Rolling Average Price Data for Compliance Year 2018 NOx RTC								
Reporting Month	12-Month Period	Total Volume Traded with Price During Past 12-month (tons)	Total Price of Volume Traded During Past 12-month (\$)	Number of Trades with Price	Rolling Average Price ¹ (\$/ton)				
Jan-18	Jan-17 to Dec-17	91.6	\$974,592	3	\$10,639				
Feb-18	Feb-17 to Jan-18	91.6	\$974,592	3	\$10,639				
Mar-18	Mar-17 to Feb-18	100.7	\$1,041,091	4	\$10,337				
Apr-18	Apr-17 to Mar-18	51.6	\$497,246	5	\$9,643				
May-18	May-17 to Apr-18	56.6	\$527,075	8	\$9,320				
Jun-18	Jun-17 to May-18	53.1	\$502,575	7	\$9,473				
Jul-18	Jul-17 to Jun-18	72.6	\$625,883	14	\$8,618				
Aug-18	Aug-17 to Jul-18	80.0	\$660,279	19	\$8,251				
Sep-18	Sep-17 to Aug-18	86.8	\$698,621	28	\$8,050				
Oct-18	Oct-17 to Sep-18	104.3	\$759,871	29	\$7,287				
Nov-18	Nov-17 to Oct-18	196.3	\$1,069,361	47	\$5,447				
Dec-18	Dec-17 to Nov-18	167.5	\$706,811	49	\$4,219				
Jan-19	Jan-18 to Dec-18	270.4	\$1,023,944	57	\$3,786				

^{1.} District Rule 2015(b)(6) - Backstop Provisions provides additional "evaluation and review of the compliance and enforcement aspects of the RECLAIM program" if the average RTC price exceeds \$15,000 per ton.

Table II

Twelve-Month Rolling Average Price Data for Compliance Year 2019 NOx RTCs (Report to Governing Board if rolling average price greater than \$22,500/ton)

Twelve-Month Rolling Average Price Data for Compliance Year 2019 NOx RTC								
Reporting Month	12-Month Period	Total Volume Traded with Price During Past 12-month (tons)	Total Price of Volume Traded During Past 12-month (\$)	Number of Trades with Price	Rolling Average Price ¹ (\$/ton)			
Jan-19	Jan-18 to Dec-18	18.2	\$103,000	5	\$5,646			

^{1.} District Rule 2015(b)(6) - Backstop Provisions provides additional "evaluation and review of the compliance and enforcement aspects of the RECLAIM program" if the average RTC price exceeds \$15,000 per ton.

Table IIIThree-Month Rolling Average Price Data for Compliance Year 2018 NOx RTCs (Report to Governing Board if rolling average price greater than \$35,000/ton)

Three-Month Rolling Average Price Data for Compliance Year 2018 NOx RTC							
Reporting Month	3-Month Period	Total Volume Traded with Price During Past 3- month (tons)	Total Price of Volume Traded During Past 3-month (\$)	Number of Trades with Price	Rolling Average Price (\$/ton)		
Jan-18	Oct-17 to Dec-17	38.1	\$400,092	1	\$10,500		
Feb-18	Nov-17 to Jan-18	38.1	\$400,092	1	\$10,500		
Mar-18	Dec-17 to Feb-18	9.1	\$66,499	1	\$7,300		
Apr-18	Jan-18 to Mar-18	10.0	\$72,654	3	\$7,295		
May-18	Feb-18 to Apr-18	15.0	\$102,483	6	\$6,855		
Jun-18	Mar-18 to May-18	5.8	\$35,984	5	\$6,160		
Jul-18	Apr-18 to Jun-18	24.6	\$153,137	10	\$6,235		
Aug-18	May-18 to Jul-18	27.0	\$157,704	12	\$5,848		
Sep-18	Jun-18 to Aug-18	33.7	\$196,046	21	\$5,813		
Oct-18	Jul-18 to Sep-18	31.7	\$133,988	15	\$4,233		
Nov-18	Aug-18 to Oct-18	116.3	\$409,081	28	\$3,517		
Dec-18	Sep-18 to Nov-18	118.9	\$408,282	22	\$3,435		
Jan-19	Oct-18 to Dec-18	204.3	\$664,165	29	\$3,251		

Table IV

Three-Month Rolling Average Price Data for Compliance Year 2019 NOx RTCs (Report to Governing Board if rolling average price greater than \$35,000/ton)

Three-Month Rolling Average Price Data for Compliance Year 2019 NOx RTC							
Reporting Month	3-Month Period	Total Volume Traded with Price During Past 3- month (tons)	Total Price of Volume Traded During Past 3-month (\$)	Number of Trades with Price	Rolling Average Price (\$/ton)		
Jan-19	Oct-18 to Dec-18	18.2	\$102,300	4	\$5,621		

Please Note:

Table listing "Twelve-Month Rolling Average Price Data for Infinite-Year Block NOx RTCs" is removed pursuant to October 5, 2018 amendment to Rule 2002, which eliminated the requirement to calculate infinite-year block NOx RTC prices and report to the Governing Board if prices fall below \$200,000 per ton.

Table VTwelve-Month Rolling Average Price Data for Compliance Year 2018 SOx RTCs (Report to Governing Board if rolling average price greater than \$50,000/ton)

Twelve-Month Rolling Average Price Data for Compliance Year 2018 SOx RTC							
Reporting Month	12-Month Period	Total Volume Traded with Price During Past 12- month (tons)	Total Price of Volume Traded During Past 12-month (\$)	Number of Trades with Price	Rolling Average Price ¹ (\$/ton)		
Jan-18	Jan-17 to Dec-17	None	-	-	-		
Feb-18	Feb-17 to Jan-18	None	-	-	-		
Mar-18	Mar-17 to Feb-18	None	-	-	-		
Apr-18	Apr-17 to Mar-18	None	-	-	-		
May-18	May-17 to Apr-18	None	-	-	-		
Jun-18	Jun-17 to May-18	34.2	\$23,974	3	\$700		
Jul-18	Jul-17 to Jun-18	34.2	\$23,974	3	\$700		
Aug-18	Aug-17 to Jul-18	80.2	\$57,354	5	\$715		
Sep-18	Sep-17 to Aug-18	95.2	\$67,854	6	\$713		
Oct-18	Oct-17 to Sep-18	163.3	\$135,429	10	\$829		
Nov-18	Nov-17 to Oct-18	173.3	\$165,429	11	\$955		
Dec-18	Dec-17 to Nov-18	173.3	\$165,429	11	\$955		
Jan-19	Jan-18 to Dec-18	173.3	\$165,429	11	\$955		

^{1.} District Rule 2015(b)(6) - Backstop Provisions provides additional "evaluation and review of the compliance and enforcement aspects of the RECLAIM program" if the average RTC price exceeds \$15,000 per ton.

Table VI

Twelve-Month Rolling Average Price Data for Compliance Year 2019 SOx RTCs (Report to Governing Board if rolling average price greater than \$50,000/ton)

Twelve-Month Rolling Average Price Data for Compliance Year 2019 SOx RTC								
Reporting Month	12-Month Period	Total Volume Traded with Price During Past 12- month (tons)	Total Price of Volume Traded During Past 12-month (\$)	Number of Trades with Price	Rolling Average Price ¹ (\$/ton)			
Jan-19	Jan-18 to Dec-18	None	-	-	-			

^{1.} District Rule 2015(b)(6) - Backstop Provisions provides additional "evaluation and review of the compliance and enforcement aspects of the RECLAIM program" if the average RTC price exceeds \$15,000 per ton.



BOARD MEETING DATE: February 1, 2019 AGENDA NO. 22

REPORT: Technology Committee

SYNOPSIS: The Technology Committee held a meeting on Friday,

January 18, 2019. The following is a summary of the meeting.

RECOMMENDED ACTION:

Receive and file.

Joe Buscaino, Chair Technology Committee

MMM:pmk

Committee Members

Present: Council Member Joe Buscaino/Chair (videoconference)

Mayor Pro Tem Larry McCallon

Mayor Judith Mitchell

Council Member Dwight Robinson

Absent: Supervisor Janice Hahn and Supervisor V. Manuel Perez

Call to Order

Council Member Buscaino called the meeting to order at 12:02 pm.

ACTION ITEMS:

Chair Buscaino asked the Committee to take Items #2 and 4 on consent. Mayor Pro Tem McCallon commented that he does not have a financial interest, but is required to identify for the record that he is a Board Member of the Southern California Regional Rail Authority (SCRRA) which is involved in Item #4. There were no public comments on either item. On the motion of Chair Buscaino, moved by Mitchell, seconded by Robinson, the committee unanimously approved Items #2 and 4 without objection.

1. Amend Contract to Demonstrate Low NOx Combustion Technology on Refinery Boiler

In September 2017, the Board awarded a contract to ClearSign Combustion Corporation to demonstrate their DuplexTM low NOx combustion technology on a refinery boiler in an amount not to exceed \$320,000 from the Rule 1118 Mitigation Fund (54). Torrance Refining Company was identified as the host site for the demonstration, but they are no longer able to act as the host site due to operational schedule changes and higher than anticipated project costs. However, ClearSign has identified an alternate in-basin refinery to serve as the host site using a smaller-sized heater for the demonstration. This action is to amend the contract with ClearSign, changing the host site to Lunday-Thagard Company dba World Oil Refining and reducing the contract value to an amount not to exceed \$220,000 from the Rule 1118 Mitigation Fund (54). This action is to also authorize the Executive Officer to execute additional no-cost amendments to this contract, as needed.

Mayor Pro Tem McCallon inquired if the flame can be sustained in the ceramic substrate. Staff responded that once the startup burner gets the unit to temperature, the burner is shut off and the ceramic substrate has small chambers that maintain short flames at lower temperatures, similar to the way a radiant heat burner operates.

Mayor Mitchell asked where World Oil Refining is located. Staff responded that the facility is located in South Gate.

Moved by Mitchell; seconded by McCallon; unanimously approved.

Ayes: Buscaino, McCallon, Mitchell and Robinson

Noes: None

Absent: Hahn and Perez

2. Renew SCAQMD's Membership in CaFCP for Calendar Year 2019 and Receive and File California Fuel Cell Partnership Executive Board Meeting Agenda and Quarterly Updates

The Port of Long Beach and its project partners have received \$50,000,000 in funding and the Port of Los Angeles and its project partners have received \$41,122,260 under CARB's Low Carbon Transportation Investments grant solicitation to demonstrate near-zero and zero emissions on-road, off-road and marine vehicles and equipment, including battery electric and hydrogen fuel cell trucks and supporting infrastructure. Total anticipated projects costs are \$102,998,742 and \$82,547,024 for the Ports of Long Beach and Los Angeles, respectively. This action is to execute contracts from the Clean Fuels Program Fund (31) with the Port of Long Beach in an amount not to exceed \$500,000 and the Port of Los Angeles in an amount not to exceed \$1,000,000 for SCAOMD's project cost-share.

3. Execute Contract to Develop Optimal Operation Model for Renewable Electrolytic Fuel Production

The University of California Irvine (UCI) through its Advanced Power and Energy Program is developing a roadmap for deployment of renewable electrolytic hydrogen production facilities in California. This project leverages resources to develop a hydrogen generation model to optimize dispatch and operation of facilities, including impacts on air quality. This action is to execute a contract with UCI in an amount not to exceed \$100,000 from the Clean Fuels Program Fund (31).

Mayor Mitchell inquired about the overall power to gas process and if hydrogen produced is considered renewable. Staff explained the process of using excess renewable electricity that can be used to provide renewable hydrogen for vehicle fuel or routing the hydrogen into the gas pipeline to lower the overall carbon content. Considering that this path may be more efficient than battery storage, this concept is being initiated in Europe. Council Member Robinson supported the work underway at UCI on fuel cells and hydrogen.

Moved by Robinson; seconded by McCallon; unanimously approved.

Ayes: Buscaino, McCallon, Mitchell and Robinson

Noes: None

Absent: Hahn and Perez

4. Amend Contract for Tier 4 Passenger Locomotives and Carl Moyer Program Award

Under the "Year 16" Carl Moyer Program, the Southern California Regional Rail Authority (SCRRA) requested \$58.85 million to cofund the replacement of 17 and the purchase of 3 new Tier 4 locomotives. In September 2015, the Board awarded \$22.85 million to SCRRA from the Carl Moyer Program AB 923 Fund (80), with a commitment to consider the remaining \$36 million over four phases. In December 2016 and 2017, the Board approved \$18 million of the remaining \$36 million. The SCAQMD cost-share of this \$129 million project is only for the replacement component of the project. This action is to amend the contract with SCRRA, adding \$9 million, comprised of \$8.5 million from the Carl Moyer Program AB 923 Fund (80) and \$500,000 from the Advanced Technology, Outreach and Education Fund (17), for a revised award total of \$49.85 million. The remaining \$9 million requested by SCRRA will be considered in a future Board request. This action is to also amend a "Year 19" Carl Moyer award approved in November 2017 to McMillan Farm Management for replacement of two instead of three off-road equipment.

OTHER MATTERS:

5. Other Business

Council Member Robinson mentioned that having a tour of the ports, focusing on rail/ship/trucking advances that have been achieved would be beneficial. With Committee members' concurrence, staff will look into a possible satellite meeting at the ports sometime in 2019 and incorporate a tour.

6. Public Comment Period

Sam Anderson, Transportation Manager of Redlands Unified School District, and the Chapter 1, Orange County President of CA Association of School Transportation Officials (CASTO). Mr. Anderson commented that SCAQMD changed the emission levels for the Lower Emission School Bus Program after the Program Announcement, and he recommended the SCAQMD honor the 0.2 g/bhp-hr NOx emission level specified in the Program Announcement. He stated a preference for the propane bus due to this bus meeting the highest safety standards.

Gingi Borg, Director of Transportation of Ocean View School District, and the Chapter 2, Orange County President of CASTO, stated a preference for the propane bus due to the larger driver compartment and crash mitigation systems. She recommended the SCAQMD honor the 0.2 g/bhp-hr NOx emission level specified in the Program Announcement.

Donna Wittenberg, Transportation Operations Supervisor from Anaheim Elementary School District, read a letter from Jesse Chavarria, Director of Transportation thanking the SCAQMD for the school bus replacement program. She continued by stating a preference for the propane bus with the PSI engine meeting the 0.2 g/bhp-hr NOx level since this bus provides high safety standards for children and drivers. She requested that the SCAQMD honor the 0.2 g/bhp-hr NOx emission level specified in the Program Announcement.

Javier Rodriquez, Director of Maintenance, Operations and Transportation for the Garden Grove USD. Mr. Rodriguez requested that SCAQMD honor the 0.2 g/bhp-hr NOx emission level specified in the original Program Announcement. He stated a preference for the propane bus and commented that the other option with a Roush engine is a conversion from gasoline to propane. He commented that the IC bus has an ergonomically sound driver compartment and meets their safety standards.

Jason Hohalek of Creative Bus Sales, a dealer of the IC bus product, commented that the Program Announcement allowed for 0.2 g/bhp-hr NOx certified engines, and that they have this engine ready to be delivered to the school districts. However, when the grants were issued in April 2018, the emission level was reduced to 0.05 g/bhp-hr NOx.

Mr. Hohalek explained that PSI was in agreement to have the 0.05 g/bhp-hr engine certified and ready to meet the delivery requirement in November, but is not able to meet this timeline. PSI is now focusing its efforts on certification of the 0.02 g/bhp-hr NOx engine which will not be ready until 2020. He requested the SCAQMD honor the 0.2 g/bhp-hr NOx emission level specified in the original Program Announcement so that the buses can be delivered by November.

Council Member Buscaino expressed his appreciation to all members of the public providing comment. Staff will work with the Committee Chair and the Executive Officer to agendize future follow-up.

7. Next Meeting Date

The next regular Technology Committee meeting is scheduled for Friday, February 15, 2019 at noon.

Adjournment

The meeting adjourned at 12:42 p.m.

Attachment

Attendance Record

ATTACHMENT

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT TECHNOLOGY COMMITTEE MEETING Attendance Record – January 18, 2019

Council Member Joe Buscaino (videoconference) Mayor Pro Tem Larry McCallon	
Mayor Judith Mitchell	_
Council Member Dwight Robinson	=
Council Memoer Dwight Roomson	Seriquid dourd Member
Sam Anderson	Redlands Unified School District
Gingi Borg	Ocean View School District
Todd Fraissa	Buswest
Sue Gornick	World Oil Corp.
Jason Hohalek	Creative Bus Sales
Matt Hosie	ClearSign Combustion Corp.
Joe Ordonez	Buswest
Steve Sock	ClearSign Combustion Corp.
Donna Wittenberg	Anaheim Elementary SD
Tammy Yamasaki	
Al Baez	_
Naveen Berry	SCAQMD Staff
Marjorie Eaton	
Mike Garibay	SCAQMD Staff
Seungbum Ha	
Scangoum Ha	SCAQMD Staff
Joseph Impullitti	
	SCAQMD Staff
Joseph Impullitti	SCAQMD Staff SCAQMD Staff
Joseph Impullitti Pat Krayser Lisa Mirisola	SCAQMD Staff SCAQMD Staff SCAQMD Staff
Joseph Impullitti Pat Krayser	SCAQMD Staff SCAQMD Staff SCAQMD Staff SCAQMD Staff
Joseph Impullitti	SCAQMD Staff SCAQMD Staff SCAQMD Staff SCAQMD Staff SCAQMD Staff
Joseph Impullitti Pat Krayser Lisa Mirisola Matt Miyasato Veera Tyagi	SCAQMD Staff
Joseph Impullitti Pat Krayser Lisa Mirisola Matt Miyasato Veera Tyagi Alejandra Vega	SCAQMD Staff
Joseph Impullitti Pat Krayser Lisa Mirisola Matt Miyasato Veera Tyagi Alejandra Vega Donna Vernon	SCAQMD Staff
Joseph Impullitti Pat Krayser Lisa Mirisola Matt Miyasato Veera Tyagi Alejandra Vega Donna Vernon Mei Wang	SCAQMD Staff
Joseph Impullitti Pat Krayser Lisa Mirisola Matt Miyasato Veera Tyagi Alejandra Vega Donna Vernon Mei Wang Vicki White	SCAQMD Staff



BOARD MEETING DATE: February 1, 2019 AGENDA NO. 23

REPORT: Mobile Source Air Pollution Reduction Review Committee

SYNOPSIS: Below is a summary of key issues addressed at the MSRC's

meeting on January 17, 2019. The next meeting is scheduled for Thursday, February 21, 2019, at 2:00 p.m., in Conference Room

CC8.

RECOMMENDED ACTION:

Receive and file.

Ben Benoit SCAQMD Representative to MSRC

MMM:NB:psc

Meeting Minutes Approved

The MSRC unanimously approved the minutes of the August 16 and September 20, 2018 meetings. Those approved minutes are attached for your information (*Attachment 1 & 2*).

Adoption of 2019 Meeting Schedule

The MSRC adopted its 2019 meeting schedule (*Attachment 3*). The MSRC will continue to meet on the third Thursday of every month at 2:00 p.m. Its Technical Advisory Committee will continue to meet on the first Thursday of every month at 1:30 p.m., except for the months of January, July and December which have been moved to the second Thursday because of holiday conflicts. Both meetings are usually conducted in Room CC8.

Joint Retreat Review and Update on the FYs 2018-'21 Work Program Development Process

The MSRC and MSRC-TAC held their joint Retreat on October 23, 2018. Staff provided a review of the outcomes of the Retreat and gave an update on current MSRC-TAC activities in the Work Program Development Process. The MSRC-TAC recommended that the MSRC consider: a) expanding the FYs 2018-20 Work Program to FYs 2018-21 to encompass three years of funding; b) directing the MSRC-TAC to develop a proposed large-scale incentive program concept for which leveraging funds would be sought; and c) directing the MSRC-TAC to consider recommendations on

which previous programs should be continued/reprised as well as potential new programs. The MSRC approved the MSRC-TAC's recommendations and directed MSRC staff and the MSRC-TAC to proceed accordingly, with the goal of presenting some strategic options and a timeline at the next MSRC meeting.

FYs 2014-16 Transportation Control Measure CTC Partnership Program

As part of its FYs 2014-16 Transportation Control Measure CTC Partnership Program, the MSRC awarded San Bernardino County Transportation Authority (SBCTA, formerly San Bernardino Associated Governments) \$1,000,000 to update the San Bernardino Valley Coordinated Traffic Signal System. The MSRC approved an extension in October 2018, but the contract lapsed on November 6, 2018, prior to modification documents being mailed out for signature. The MSRC considered and approved a 14-month replacement contract in the amount of \$1,000,000 as part of the FYs 2014-16 Work Program. This contract award will be considered by the SCAQMD Board at its February 1, 2019 meeting.

FYs 2014-16 Local Government Match Program

As part of its FYs 2014-16 Local Government Match Program, the MSRC awarded the City of Palm Springs \$40,000 to install bicycle racks and conduct bicycle outreach. The City completed a Bicycle Friendly Business District Plan and was working with downtown merchants on implementation. Due to changes requested by the merchants and the death of the City's consultant, the work was not able to be completed within the original time frame. The contract to effectuate the project lapsed on October 3, 2017. In October 2018, the City submitted a request to complete the project. The MSRC considered and approved a 12-month replacement contract in the amount of \$40,000 as part of the FYs 2014-16 Work Program.

FYs 2016-18 Local Government Partnership Program

As part of its FYs 2016-18 Work Program, the MSRC allocated \$21,180,650 for the Local Government Partnership Program and released an Invitation to Negotiate. As part of this program, in September 2018 the MSRC approved awards of \$52,800 and \$85,000 to the Cities of La Puente and San Clemente, respectively. The SCAQMD Board approved these awards at their October 5, 2018 meeting. However, the descriptions for these two awards did not accurately reflect the projects as presented to, and approved by, the MSRC. The MSRC seeks Board approval of the following amended project descriptions, with no change to the award amounts:

- a. A contract with the City of La Puente in an amount not to exceed \$52,800 to procure one heavy-duty near-zero emission vehicle (rather than one heavy-duty zero emission vehicle), one light-duty zero emission vehicle, and install at least one electric vehicle charging station; and
- b. A contract with the City of San Clemente in an amount not to exceed \$85,000 to procure up to four light-duty zero emission vehicles (rather than three light-duty zero emission vehicles) and install at least two electric vehicle charging stations.

At this time, the MSRC requests the SCAQMD Board to approve the contract awards and modifications as part of approval of the FYs 2014-16 and 2016-18 AB 2766 Discretionary Fund Work Programs 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. These contract awards will be considered by the SCAQMD Board at its February 1, 2019 meeting.

Contract Modification Requests

The MSRC considered five contract modification requests and took the following actions:

- 1. For Waste Resources, Inc., Contract # MS14079, which provides \$100,000 to install a new limited access CNG Station, 7-month term extension;
- 2. For Rialto Unified School District (RUSD), Contract #MS14076, which provides \$225,000 to install a public access CNG station, term extension to June 25, 2023;
- 3. For the City of Pomona, Contract #ML16008, which provides \$60,000 to purchase three medium-duty and one heavy-duty CNG vehicles, 18-month term extension;
- 4. For City of Monterey Park, Contract #ML16013, which provides \$90,000 to purchase three heavy-duty CNG vehicles, 1-year term extension; and
- 5. For the Los Angeles Department of Water and Power (LADWP), Contract #ML16022, which provides \$360,000 to purchase twelve heavy-duty CNG vehicles, 18-month term extension.

Received and Approved Final Reports

The MSRC received and unanimously approved five final reports this month as follows:

- 1. Grand Central Recycling & Transfer Station, #MS14082, which provided \$150,000 to construct new public access CNG station.
- 2. Burrtec Waste & Recycling Services, LLC, MS#16087, which provided \$100,000 to construct new limited-access CNG station.
- 3. Orange County Transportation Authority, #MS16093, which provided \$1,553,657 to implement a Mobile Ticketing System.
- 4. Huntington Beach Union High School District, #MS16105, which provided \$175,000 for the expansion of existing CNG infrastructure.
- 5. Orange County Transportation Authority, #MS18004, which provided \$503,272 to provide Special Rail Service to Angel Stadium.

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 September 27, 2018 through January 3, 2019 is attached (*Attachment 4*) for your information.

Attachments

Attachment 1 – Approved August 16, 2018 Meeting Minutes

Attachment 2 – Approved September 20, 2018 Meeting Minutes

Attachment 3 – Adopted 2019 Meeting Schedule

Attachment 4 – September 27, 2018 through January 3, 2019 Contracts Administrator's Report



MOBILE SOURCE AIR POLLUTION REDUCTION REVIEW COMMITTEE THURSDAY, AUGUST 16, 2018 MEETING MINUTES

21865 Copley Drive, Diamond, Bar, CA 91765 - Conference Room CC-8

MEMBERS PRESENT:

(Chair) Larry McCallon, representing SBCTA
(Vice-Chair) Greg Winterbottom, representing OCTA
Brian Berkson (Alt.), representing RCTC
Greg Pettis, representing RCTC
Dolores Roybal Saltarelli (Alt.), representing Regional Rideshare Agency (via v/c)
Mark Yamarone (Alt.), representing Los Angeles County MTA (via v/c)

MEMBERS ABSENT:

Ben Benoit, representing SCAQMD Jack Kitowski, representing California Air Resources Board Michele Martinez, representing SCAG Steve Veres, representing LA County MTA

MSRC-TAC MEMBERS PRESENT:

Nicholas Nairn-Birch, representing California Air Resources Board Rongsheng Luo, representing SCAG Kelly Lynn, representing SBCTA Vicki White, representing SCAQMD

OTHERS PRESENT:

Nadeem Syed, City of San Bernardino Jason Lewis, SoCalGas Ric Teano, OCTA

SCAOMD STAFF & CONTRACTORS

Leah Alfaro, MSRC Contracts Assistant
Naveen Berry, Asst. Deputy Executive Officer
Penny Shaw Cedillo, MSRC Administrative Liaison
Megan Lorenz, Principal Deputy District Counsel
Matt MacKenzie, MSRC Contracts Assistant
Fred Minassian, Asst. Deputy Executive Officer
Cynthia Ravenstein, MSRC Contracts Administrator

CALL TO ORDER

Call to Order

MSRC Chair Larry McCallon called to order at 2:00 p.m.

Roll call was taken at the start of the meeting. The following members and alternates were present: BRIAN BERKSON, LARRY MCCALLON, GREG PETTIS, DOLORES ROYBAL SALTARELLI, GREG WINTERBOTTOM, MARK YAMARONE.

• Opening Comments

Fred Minassian, Asst. Deputy Executive Officer, announced Naveen Berry, who was the Technology Demonstration Manager for the Technology Advancement Office, has been promoted to my current position of Assistant Deputy Executive Officer, as I'll be retiring three months. Our Board has approved that we overlap each other during the coming three months to basically transfer all the responsibilities. Starting next month, Naveen will take my place at this board meeting. MSRC Chair Larry McCallon congratulated Fred on his retirement and welcomed Naveen Berry.

STATUS REPORT

Copies of the Clean Transportation Policy Update were distributed at the meeting.

CONSENT CALENDAR (Items 1 through 7)

MSRC Vice Chair Greg Winterbottom stated for the record that for Agenda Items #1 and #12, he does not have any financial interest, but is required to identify that he is a Member of the Board of Directors for the Southern California Regional Rail Authority (Metrolink), and for Agenda Items #11 that he is a Member of the Board of Directors for the Orange County Transportation Authority, which are involved in these items.

MSRC Alternate Dolores Roybal Saltarelli stated that she does not have any financial interest in Item #1, but is required to identify that she is employed by Los Angeles County Metropolitan Transportation Authority, which is involved in this item.

MSRC Alternate Mark Yamarone stated that he does not have any financial interest in Item #1, but is required to identify that he is employed by Los Angeles County Metropolitan Transportation Authority, which is involved in this item.

MSRC Member Greg Pettis stated for the record that for Agenda Item #4, he does not have any financial interest, but is required to identify that he is a Regional Councilmember for the

Southern California Association of Governments, and for Agenda Item #13, he recused himself because he was a former employee of California Consulting, which is involved in that item.

MSRC Chair Larry McCallon stated, for the record, that for Agenda Item #1 and #12 he doesn't have a financial interest in these items, but he is required to announce that he is a Board Member of the Southern California Regional Rail Authority, for Agenda Item #4 he is on the Transportation Committee for the South California Association of Governments and also for Agenda Items #6 and #10, he is the Mayor for the City of Highland, which is involved in these items.

Receive and Approve

Agenda Item #1 – Summary of Final Reports by MSRC Contractors

The MSRC received and approved four final report summaries this month, as follows:

- 1. Fullerton Joint Union High School District, Contract #MS14075, which provided \$300,000 for the Expansion of Existing CNG Infrastructure/Maintenance Facility Modifications;
- 2. Los Angeles County Metropolitan Transportation Authority (LA Metro), Contract #MS16001, which provided \$1,350,000 to implement the 2015-16 Seasons of Dodgers Stadium Express service;
- 3. Los Angeles County Metropolitan Transportation Authority (LA Metro), Contract #MS18001, which provided \$807,945 to implement 2017 Season of Dodgers Stadium Express service; and
- 4. Southern California Regional Rail Authority (Metrolink), Contract #MS18011, which provided \$239,565 for Special Train Service to the Festival of Lights.

ON MOTION BY MSRC MEMBER GREG PETTIS AND SECONDED BY MSRC VICE-CHAIR GREG WINTERBOTTOM, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #7, THE MSRC UNANIMOUSLY APPROVED THE FINAL REPORTS LISTED ABOVE.

AYES: MCCALLON, PETTIS, ROYBAL SALTARELLI, WINTERBOTTOM, YAMARONE.

NOES: NONE.

ACTION: MSRC staff will file the final reports and release any retention on the contracts.

Information Only - Receive and File

Agenda Item #2 – MSRC Contracts Administrator's Report

The MSRC AB 2766 Contracts Administrator's Report for May 31 through July 25, 2018 was included in the agenda package.

ON MOTION BY MSRC MEMBER GREG PETTIS AND SECONDED BY MSRC VICE-CHAIR GREG WINTERBOTTOM, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #7, THE MSRC UNANIMOUSLY VOTED TO RECEIVE AND FILE THE CONTRACTS ADMINISTRATOR'S REPORT FOR MAY 31 THROUGH JULY 25, 2018 WHICH WAS INCLUDED IN THE AGENDA PACKAGE.

AYES: MCCALLON, PETTIS, ROYBAL SALTARELLI, WINTERBOTTOM, YAMARONE.
NOES: NONE.

ACTION: Staff will include the MSRC Contracts Administrator's Report in the MSRC Committee Report for the September 7, 2018 SCAQMD Board meeting.

Agenda Item #3 – Financial Report on AB 2766 Discretionary Fund

A financial report on the AB 2766 Discretionary Fund for July 2018 was included in the agenda package.

ON MOTION BY MSRC MEMBER GREG PETTIS AND SECONDED BY MSRC VICE-CHAIR GREG WINTERBOTTOM, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #7, THE MSRC UNANIMOUSLY VOTED TO RECEIVE AND FILE THE FINANCIAL REPORT FOR THE PERIOD ENDING MAY 2018.

AYES: MCCALLON, PETTIS, ROYBAL SALTARELLI, WINTERBOTTOM, YAMARONE.

NOES: NONE.

ACTION: No further action is required.

For Approval – As Recommended

<u>Agenda Item #4 – Consider Addition of Matching Projects and Six-Month Term Extension</u> by Southern California Association of Governments (SCAG), Contract #MS18002 (\$2,500,000 – Regional Active Transportation Partnership Program)

In order to meet match funding requirements more expeditiously, SCAG requests to add a project by the Los Angeles Department of Transportation and SCAG's own "Go Human Loaner" program to the previously-approved list of projects. SCAG also requests a six-month no-cost contract term extension. The MSRC-TAC unanimously recommends approval.

ON MOTION BY MSRC MEMBER GREG PETTIS AND SECONDED BY MSRC VICE-CHAIR GREG WINTERBOTTOM, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #7, MSRC UNANIMOUSLY VOTED TO APPROVE A MODIFIED SCOPE AND A SIX-MONTH TERM EXTENSION FOR SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENT.

AYES: MCCALLON, PETTIS, ROYBAL SALTARELLI, WINTERBOTTOM,

YAMARONE. NOES: NONE.

ACTION: MSRC Staff will amend the above contract accordingly.

<u>Agenda Item #5 – Consider Nine-Month Term Extension by City of Santa Monica,</u> Contract #MS12060 (Implement Westside Bikeshare Program)

The City requests a nine-month no-cost contract term extension due to the update of their travel demand forecasting model taking longer than anticipated. The MSRC-TAC unanimously recommends approval.

ON MOTION BY MSRC MEMBER GREG PETTIS AND SECONDED BY MSRC VICE-CHAIR GREG WINTERBOTTOM, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #7, MSRC UNANIMOUSLY VOTED TO APPROVE A NINE-MONTH TERM EXTENSION FOR THE CITY OF SANTA MONICA.

AYES: MCCALLON, PETTIS, ROYBAL SALTARELLI, WINTERBOTTOM,

YAMARONE. NOES: NONE.

ACTION: MSRC Staff will amend the above contract accordingly.

<u>Agenda Item #6 – Consider Two-Year Term Extension by City of Highland, Contract #ML16071 (Implement Boulder Avenue "Complete Streets" Project)</u>

The City requests a two-year no-cost contract term extension due to the time consuming requirements associated with the project's federal Projects of National and Regional Significance program co-funding. The MSRC-TAC unanimously recommends approval.

ON MOTION BY MSRC MEMBER GREG PETTIS AND SECONDED BY MSRC VICE-CHAIR GREG WINTERBOTTOM, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #7, MSRC UNANIMOUSLY VOTED TO APPROVE A TWO-YEAR TERM EXTENSION FOR THE CITY OF HIGHLAND.

AYES: MCCALLON, PETTIS, ROYBAL SALTARELLI, WINTERBOTTOM,

YAMARONE. NOES: NONE.

ACTION: MSRC Staff will amend the above contract accordingly.

Agenda Item #7 – Consider Contract Replacement by City of South Pasadena, Contract #ML14066 (Bicycle Trail Improvements)

Due to the expiration of the City of South Pasadena's prior contract, the City requests a contract replacement to complete the scope of work for the contract. The MSRC-TAC unanimously recommends approval.

ON MOTION BY MSRC MEMBER GREG PETTIS AND SECONDED BY MSRC VICE-CHAIR GREG WINTERBOTTOM, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #7, MSRC UNANIMOUSLY VOTED TO APPROVE A CONTRACT REPLACEMENT FOR THE CITY OF SOUTH PASADENA.

AYES: MCCALLON, PETTIS, ROYBAL SALTARELLI, WINTERBOTTOM, YAMARONE.
NOES: NONE.

ACTION: This item will be considered by the SCAQMD Governing Board at its September 7, 2018 meeting.

ACTION CALENDAR (Items 8 through 13)

Agenda Item #8 – Consider FY 2018-19 Administrative Budget

Fred Minassian, Asst. DEO/Science and Technology Advancement, reported the South Coast Air Quality Management District can be reimbursed for administration costs and in line with AB 2766 and the Moyer Program that is 6.25% of the entire fund. For FYs 2018-19, it's projected that the 6.25% is going to be \$1,012,500, but we are projecting the admin costs will be \$750,000. The remaining \$249,000 will remain unallocated. There's only about \$19,000 cost increase over the prior year due to labor negotiation and adjustments.

MSRC Chair Larry McCallon questioned under the contract administration and program support, who's the Staff Specialist? Mr. Minassian replied Cynthia Ravenstein. Mr. McCallon questioned who are the Contracts Assistants? Mr. Minassian replied Matt MacKenzie and Leah Alfaro. Mr. McCallon questioned who is the Senior Administrative Secretary? Mr. Minassian replied Penny Shaw Cedillo. AQMD provides all the administrative support for the MSRC.

ON MOTION BY MSRC MEMBER GREG PETTIS AND SECONDED BY MSRCVICE-CHAIR GREG WINTERBOTTOM, THE MSRC UNANIMOUSLY VOTED TO APPROVE THE FY 2018-19 ADMINISTRATIVE BUDGET.

AYES: MCCALLON, PETTIS, ROYBAL SALTARELLI, WINTERBOTTOM,

YAMARONE. NOES: NONE.

ACTION: This item will be considered by the SCAQMD Board at its September 7, 2018 meeting.

<u>Agenda Item #9 – Consider Potential Updates to MSRC Website and \$6,000 Contract Value Increase by Geographics, Contract #MS18003 (\$56,953 – Design, Host and Maintain MSRC Website)</u>

Cynthia Ravenstein, MSRC Contracts Administrator, reported the MSRC has its own website and Geographics is the company maintaining it. Part of their contract included some funding that wasn't specifically allocated to any task. We need to make a few modifications. A few meetings ago, MSRC Member Martinez had inquired whether it might be possible to add the Google translate service to the MSRC website; Geopgrahics has informed us they can add that for about \$600. There was some concern if we spend that much, might we be left without enough balance if there's something critical that needs to be dealt with before we can come back to the Committee. The Subcommittee looked at that upgrade, as well as some other potential upgrades such as troubleshooting the test email functions and adding a feature to change the display order of the RFP postings. The MSRC-TAC recommended approval to make these changes and recommended a \$6,000 contract value increased so there would be some balance for other things that were identified that needed immediate attention.

ON MOTION BY MSRC VICE-CHAIR GREG WINTERBOTTOM AND SECONDED BY MSRC MEMBER GREG PETTIS, THE MSRC UNANIMOUSLY VOTED TO APPROVE UPDATES TO THE MSRC WEBSITE AND A \$6,000 VALUE INCREASE TO GEOGRAPHICS' CONTRACT.

AYES: MCCALLON, PETTIS, ROYBAL SALTARELLI, WINTERBOTTOM, YAMARONE.

NOES: NONE.

ACTION: This item will be considered by the SCAQMD Board at its September 7, 2018 meeting.

FYs 2016-18 WORK PROGRAM

<u>Agenda Item #10 – Consider Funding for Applications Received under the Local</u> Government Partnership Program

Cynthia Ravenstein, MSRC Contracts Administrator, reported this is a snapshot of the Local Government Partnership Program status. This opportunity opened September 1, 2017 and the original closing date was March 2nd. But at your February meeting, the MSRC decided to extend the deadline to August 2nd. There were 162 eligible jurisdictions, that's the four counties and all of the cities that receive AB 2766 Funds. There are a few cities that have opted not to participate in that process and generally they're very small. The MSRC allocated \$21,180,650. Basically the amount allocated for each jurisdiction is the amount they get annually in AB 2766 Subvention Funds. The only deviations from that are for the City of Los Angeles, whose allocation is capped at \$3 million, otherwise, it would have been close to \$5 million, and the smaller jurisdictions who receive less than \$50,000 Subvention Funds per year were brought up to an allocation of \$50,000 each.

Now, this Program had an unprecedented level of outreach of any program that I've worked on for the MSRC for the last decade. There were the MSRC staff, SCAQMD's Transportation group and Public Affairs, your outreach coordinator The Better World Group, and MSRC-TAC members all involved in trying to get the word out on this. We did multiple direct electronic mailings and a webcast. We had it on the MSRC website including multiple articles in our electronic newsletter, there were presentations that COG meetings, and telephone calls to City Manager's offices. 121 applications were received. Those represented 109 unique applicants as several of them put in their applications in pieces for different departments. That's a participation rate of 67% of the funding that was reserved. The amount requested is about 72% percent of the funding that you reserved or \$15,640,897. On average, the jurisdictions that were requesting funding asked for 88.5% of their allocation. There has been a Local Government Match Program almost continuously since the late 1990s. There were 31 applicants who had not participated in any Local Match programs before, so this did certainly succeed in bringing in some new project partners. Of the total funding, the first-time first requests were 12% percent.

Public access EV charging stations were the most popular, second most popular were medium-and heavy-duty zero-emission vehicles. In numbers of vehicles, it's a lot less than the light-duty, but because they can be so much more expensive and the MSRC was offering to fund up to \$100,000 per vehicle not to exceed 50%, the funding for this subcategory was higher. For the small cities that were allocated \$50,000 each, participation was about even between Los Angeles, Riverside and San Bernardino counties and not as much in Orange County. Regarding the application receipt pattern, there's always lots of concern as to why aren't we getting more applications. But we had quite a spike that came in at the last minute before the original deadline and then before the final deadline.

Here are some initial observations on lessons learned, although we're going to still be analyzing and talking about it as part of your next Work Program development process. There was a rush at the deadline to submit the applications. We know that there are still a few that didn't quite make it. The Program did allow for a high level of flexibility in terms of how they put their application together. We found the participants didn't really like that. They would rather have an application template where they fill in the boxes rather than a free form. There was some resistance from City staff to making a presentation to their City Councils. We're not sure those presentations were all that effective, so that might be something to think about next time. Some of the things we heard from people who weren't participating was that the categories didn't fit their needs or wants. There was a sense that they may be could have used more information on other available funding sources to help them make a project work. There was information available on our website, but that probably could have been highlighted more as to how to go about getting other funding for their projects. And one category, First Mile Last Mile, just had no interest at all. We are wondering if perhaps \$50,000 is just not enough to do a meaningful project.

The second-to-last last group of 19 applications is recommended for funding for a total of \$1,476,700. One of these, from the city of San Fernando, was previously not awarded funding because they were only asking for money for signal cabinets not for the synchronization itself. They were informed that just installing signal cabinets did not achieve emission reductions, and they did modify their application to include the signal synchronization. So now that is recommended for funding.

ON MOTION BY MSRC VICE-CHAIR GREG WINTERBOTTOM AND SECONDED BY MSRC MEMBER GREG PETTIS, THE MSRC UNANIMOUSLY VOTED TO APPROVE AWARDS TO THE CITIES OF SAN FERNARDO, SOUTH EL MONTE, ORANGE, LOS ANGELES, MURRIETA, BIG BEAR LAKE, GLENDORA, SANTA CLARITA, TEMECULA, SOUTH PASADENA, MONTEREY PARK, LAGUNA WOODS, GARDENA, HIGHLAND, TEMPLE CITY, REDONDO BEACH, LAGUNA HILLS, BREA AND BURBANK FOR A TOTAL OF \$1,476,700.

AYES: MCCALLON, PETTIS, ROYBAL SALTARELLI, WINTERBOTTOM, YAMARONE.

NOES: NONE.

ACTION: This item will be considered by the SCAQMD Board at its September 7, 2018 meeting.

Agenda Item #11 – Consider Work Plan Received under the CTC Partnership Program

Ray Gorski, MSRC Technical Advisor, reported this is under the 2016-18 County Transportation Commission (CTC) Partnership Program. The MSRC allocated a total of \$8 million, \$2 million for each CTC to implement projects that improve air quality as well as enhance mobility. To date, you have received applications from three of the CTCs, and this is the fourth request for funding. This is from OCTA and they're requesting consideration to apply their \$2 million allocation toward three specific projects: (1) a micro transit project called OC Flex, which will be implemented in the Laguna Niguel area, as well as Mission Viejo and Aliso Viejo; the specific amount of funding requested of the \$2M is \$1,146,000. They will be providing co-funding through their fare revenue in the amount \$135,000; (2) the installation of hydrogen detection system. OCTA has been demonstrating hydrogen fuel cell buses. They need to have facilities which are capable of maintaining the vehicles. Gaseous fuel vehicles need special accommodations for indoor maintenance because of the volatile nature of the fuel. They are requesting the use of their funding in the amount of \$642,000 to install a hydrogen detection system; and (3) implementation of a college transit fare subsidy program. College pass programs are implemented in many areas throughout the South Coast region. This would fund the initial part of that program, to allow the students to try this, with the expectation that it will be successful and that a future program would be funded by the students themselves through a referendum that would be held at the college. They're seeking \$212,000 to implement the College Transit Pass Program.

ON MOTION BY MSRC VICE-CHAIR GREG WINTERBOTTOM AND SECONDED BY MSRC MEMBER GREG PETTIS, THE MSRC UNANIMOUSLY VOTED TO APPROVE AN AWARD TO ORANGE COUNTY TRANSPORTATION AUTHORITY FOR \$2 MILLION. AYES: MCCALLON, PETTIS, ROYBAL SALTARELLI, WINTERBOTTOM, YAMARONE. NOES: NONE.

ACTION: This item will be considered by the SCAQMD Board at its September 7, 2018 meeting.

<u>Agenda Item #12 – Consider Applications Received under the Major Event Center Transportation Program</u>

Ray Gorski, MSRC Technical Advisor, reported there are two applications which have been received. I'd like to take them separately because the MSRC-TAC's recommendations are different for each. The first is a request by the Southern California Regional Rail Authority (SCRRA) to fund special train service in support of the 2018 Festival of Lights, which is held in downtown Riverside. This program would operate three specific lines: Los Angeles to Riverside, Laguna Niguel to Riverside and Perris to Riverside. It offers service for Friday and Saturday nights, which are typically the peak periods for attendance at the Festival of Lights.

As you recall the MSRC funded this program in 2017. The Final Report for that program was received and it went through a staff analysis. Based upon the results of the 2017 program, the staff engaged both SCRRA as well as RCTC, first of all to identify the lessons learned from the prior service, and importantly to identify where MSRC investments could be made that would result in or maximize the air quality benefits which are attributable to this program. As a result of that discussion, there were changes made to the program for 2018, specifically to ensure that the MSRC investment would result in the air quality benefits that should result from the investment of air quality funds. These specific modifications to the original proposal were to align MSRC funding with those train trips which are expected to have the highest ridership.

We can ensure that it will in fact yield a positive air quality benefit. We also had a discussion to realign the service for the return trains. It was determined that in 2017 they had trains for the departure times were simply too close to each other and people would all hop on the first train and then no one would ride on the second train. We asked that they reconfigure that. The result is a reduction in the total amount of funding which is being requested. The current request is \$252,900. This is in keeping with your past award for the 2017 service. Every effort has been made to work directly with SCRRA and RCTC to ensure that the MSRC funding is utilized for those elements of the service which will yield the highest quality benefits.

ON MOTION BY MSRC MEMBER DOLORES ROYBAL SALTARELLI AND SECONDED BY MEMBER MARK YARAMONE, THE MSRC UNANIMOUSLY VOTED TO APPROVE A \$252,696 AWARD TO SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY (METROLINK) FOR THE FESTIVAL OF LIGHTS SERVICE.

AYES: MCCALLON, PETTIS, ROYBAL SALTARELLI, WINTERBOTTOM, YAMARONE.

NOES: NONE.

For the next request, the recommendation from your MSRC-TAC is to not fund the project. This is for transit service at the Rose Bowl in support of major events which are planned for the 2018-2019 season. The original funding request was \$788,082. This one probably could use some additional explanation. This project was submitted in a prior year also and at that time the MSRC did not provide funding. This would provide transportation services in addition to the regular services that they provide, for events such as the UCLA Bruin football games at the Rose Bowl. This would be for additional events such as the Arroyo Seco Music Festival, soccer matches

which are planned throughout the year, some anticipated concerts as well as one additional football game. The issues which were confronted both in the prior application are certainly in the one that's before you today. It's very clear that the Rose Bowl suffers from a parking issue and this service has been designed to alleviate the parking issues associated with these events. The issues that were confronted by your Technical Committees were that it's not being implemented in a way which would be necessarily beneficial towards air quality. This means that they have service which is very convenient in that they have a lot of buses running, but from analysis of the data which they were able to provide it appears that many of these buses are simply not near capacity.

Therefore, also factoring in the bus deadhead miles, it's very difficult to make a determination as to whether or not the passenger vehicle emission reductions would in fact be offsetting the emissions generated from those buses. For the service which has been proposed, they would not be using state-of-the-art buses, per se. They are natural gas, but they're 2010 vintage. We asked if it was feasible for them to use some of the new near-zero buses or some of the zero emission buses which are in the Foothill fleet and unfortunately at this time, they cannot make that guarantee. They are suggesting they will have cleaner fuel buses in a future year but for this application the buses would be 2010 vintage buses or at least certified to 2010 emission standard. There were also concerns expressed relative to the number of trips which are being eliminated. They are deploying these buses at parking lots, and the parking lots themselves are rather restricted as to the number of cars that could be there. In looking at how many cars could show up, and what the average vehicle occupancy would be, you can predict what the ridership is going to be. Looking at the data that they were able to provide we had difficulty quantifying a positive air quality benefit. This means that the number of people on the buses who were actually displacing a motor vehicle trip, probably would not offset the number of emissions that the bus would generate. Staff actually sat down across the table with representatives from the Rose Bowl; we had very cordial meetings. We felt that they were very productive. We had the General Manager of the Rose Bowl come in and sit down with us. We tried to walk through what some of the issues were, but more importantly, we communicated that the TAC and the Subcommittee had specific recommendations to improve the service to make it more of an air quality project as opposed to simply a project to mitigate a parking problem.

They received the recommendations, went back and submitted a revised or clarified proposal. The clarified proposal, however did not have any substantive changes from their original proposal. The only thing it did was reduce the request from a two-year request to a one-year request. There are no modifications in the method in which that transit would be deployed and there's a reason for that. It turns out that the service which they're proposing to utilize is for all intents and purposes contractually set in stone, meaning that they do not have the ability to make any modifications. So the proposal we have is what they are going to do. It also became apparent that the funding to implement that special transit service is already in place. The MSRC monies would be offsetting monies that they already have available to them. The rationale for the recommendation not to fund this project is the following: (1) in its current design, we feel that it would not guarantee the MSRC the ability to achieve a net air quality improvement; (2) we realize that they are unable to make any modifications to their service at this time because it's already in place; and (3) while they would of course, appreciate a contribution from the MSRC, the project is in fact fully funded and is going to take place irrespective of MSRC involvement.

The MSRC staff does have a good working relationship with the Rose Bowl. In the event they are able to acquire cleaner, more advanced technology near-zero buses, and then if they're potentially able to have closer coordination with other transit services including that operated by Metro, then there might be an opportunity for the Rose Bowl to come forth and participate in a potential future MSRC program.

ON MOTION BY MSRC VICE-CHAIR GREG WINTERBOTTOM AND SECONDED BY MSRC CHAIR LARRY MCCALLON, THE MSRC UNANIMOUSLY VOTED NOT TO AWARD FUNDING TO THE ROSE BOWL AND FOOTHILL TRANSIT FOR SPECIAL SHUTTLE SERVICE. AYES: MCCALLON, PETTIS, ROYBAL SALTARELLI, WINTERBOTTOM,

YAMARONE. NOES: NONE

ACTION: This item will be considered by the SCAQMD Board at its September 7, 2018 meeting.

[At this time, MSRC Member Greg Pettis left the meeting at 2:45 p.m. to allow MSRC Alternate Brian Berkson to comment as the representative for Riverside County Transportation Commission on this item.]

<u>Agenda Item #13 – Consider Applications Received under the Natural Gas Infrastructure Program</u>

Cynthia Ravenstein, MSRC Contracts Administrator, reported there were 20 additional applications received, requesting a total of \$3,926,680, since you last considered an application under the Natural Gas Infrastructure Program. Now, all of these applications have been reviewed and they meet the program requirements. There's \$2,843,500 remaining of the original \$4 million that was allocated. On superpage 105, Table One is the recommended awards going up to that remaining balance of what you had originally allocated. There's actually one project, LBA Realty, that's moved up ahead in the queue to meet the geographic minimum for San Bernardino County. That's why #25 comes before #24. The City of Redondo Beach application is right on the line, this would give them about half of the money that they were requesting. The TAC is further recommending that the MSRC allocate an additional \$1,083,180 to the Natural Gas Infrastructure Program to fund all the projects on the backup list. That's the remainder of Redondo Beach's request, as well as five other applications. There were quite a few who are proposing to use renewable natural gas and are thereby entitled to an additional \$100,000.

PUBLIC COMMENT: Jason Lewis, SoCalGas, commented last time I was here advocating for the continuation of the program. I am pleased my industry peers rose to the occasion. I'd also like to point out, SoCalGas is also building stations while we did not request funding for our Fontana station. It is open today. If you know any fleets who want some free natural gas, we've just been approved opening by San Bernardino County Weights and Measures and we're offering to get some heavy-duty fleets to come and test it out for us. I would also like to encourage any future consideration of a natural gas program with the 11.9 liter engine now reaching full production. Cummins Westport and SoCalGas are very happy to be supporting the industry and we would

hope that the industry's building stations will continue the nascent heavy-duty natural gas industry.

ON MOTION BY MSRC ALTERNATE BRIAN BERKSON AND SECONDED BY MSRC VICE-CHAIR GREG WINTEBOTTOM, THE MSRC UNANIMOUSLY VOTED TO APPROVE 15 AWARDS TOTALING \$2,843,500 AS DESCRIBED IN THE ATTACHED STAFF REPORT. THE MSRC-TAC FURTHER RECOMMENDS \$1,083,180 BE ALLOCATED TO THE NATURAL GAS INFRASTRUCTURE PROGRAM AND THAT THE SEVEN APPLICATIONS ON THE BACKUP LIST APPROVED. AYES: BERKSON, MCCALLON, ROYBAL SALTARELLI, WINTERBOTTOM,

YAMARONE. GREG PETTIS ABSTAINED

NOES: NONE.

ACTION: This item will be considered by the SCAQMD Board at its September 7, 2018 meeting.

Agenda Item #14 – Other Business

Ray Gorski, MSRC Technical Advisor, commented we are looking to have the MSRC and your TAC have a joint Retreat. The current date is October 23rd. It will be approximately 1/2 day, probably starting around 10 a.m., having a luncheon and then having it adjourn no later than 2:00 - 2:30. We're thinking that it will be held here at the South Coast Air Quality Management District. It's going to be highly focused. We will come in, get to business and have you out the door before the traffic. If there's anything specific you'd like your staff or your TAC to address, by all means, let us know and we will ensure that that's on the agenda.

PUBLIC COMMENT PERIOD

Public comments were allowed during the discussion of each agenda item. No comments were made on non-agenda items.

ADJOURNMENT

There being no further business, the MSRC meeting adjourned at 2:53 p.m.

NEXTMEETING

Thursday, September 20, 2018 at 2:00 p.m., Room CC8.

[Prepared by Penny Shaw Cedillo]



MOBILE SOURCE AIR POLLUTION REDUCTION REVIEW COMMITTEE THURSDAY, SEPTEMBER 20, 2018 MEETING MINUTES

21865 Copley Drive, Diamond, Bar, CA 91765 - Conference Room CC-8

MEMBERS PRESENT:

(Vice-Chair) Greg Winterbottom, representing OCTA
Jack Kitowski, representing California Air Resources Board
Michele Martinez, representing SCAG
Dolores Roybal Saltarelli (Alt.), representing Regional Rideshare Agency (via v/c)
Brian Berkson (Alt.), representing RCTC
Mark Yamarone (Alt.), representing Los Angeles County MTA (via v/c)

MEMBERS ABSENT:

Ben Benoit, representing SCAQMD (Chair) Larry McCallon, representing SBCTA Greg Pettis, representing RCTC Steve Veres, representing Los Angeles County MTA

MSRC-TAC MEMBERS PRESENT:

Rongsheng Luo, representing SCAG Kelly Lynn, representing SBCTA Vicki White, representing SCAQMD

OTHERS PRESENT:

Lauren Dunlap, SoCalGas Ric Teano, OCTA

SCAQMD STAFF & CONTRACTORS

Leah Alfaro, MSRC Contracts Assistant
Naveen Berry, Asst. Deputy Executive Officer
Jennifer de la Loza, Secretary
Ray Gorski, MSRC Technical Advisor-Contractor
John Kampa, Financial Analyst
Megan Lorenz, Principal Deputy District Counsel
Matt Mackenzie, MSRC Contracts Assistant
Cynthia Ravenstein, MSRC Contracts Administrator
Paul Wright, Information Technology Specialist

CALL TO ORDER

• Call to Order

MSRC Vice-Chair Greg Winterbottom called the meeting to order at 2:08 p.m.

Roll call was taken at the start of the meeting. The following members and alternates were present: BRIAN BERKSON, JACK KITOWSKI, DOLORES ROYBAL SALTARELLI, GREG WINTERBOTTOM, MARK YAMARONE.

Opening Comments

Staff has requested to pull item #8, the requestor has withdrawn the request for funding.

[MSRC Member Michele Martinez arrived at 2:12 p.m.]

STATUS REPORT

Copies of the Clean Transportation Policy Update were distributed at the meeting.

Cynthia Ravenstein, MSRC Contracts Administrator, reported the California Air Resources Board has published their annual evaluation of fuel cell electric vehicle deployment and hydrogen fuel station development. There have been new goals set for the amount of fuel cell vehicles and the network of hydrogen stations that are very ambitious with a relatively short time to achieve those goals. So it's going to require a significant change in the pace of the development of the stations going forward and there are some good indicators that stations have been getting developed more rapidly than they have been previously. Hopefully we're moving in that direction, but it looks like there's still a need to get them moving forward even more quickly and to complete the transition from demonstration stations to full retail stations. Also, there's funding available for EV fast charging. The Southern California incentive project has \$29 million available to increase deployment of these stations throughout Los Angeles, Orange, Riverside and San Bernardino counties. With some of the projects that the MSRC has approved, and will perhaps be approving today, under the Local Partnership program, some of the cities may be looking for this as some of their co-funding for those who proposed to do fast chargers.

MSRC Vice-Chair Greg Winterbottom stated at OCTA Legislative Committee today, it appears there is some legislation regarding fuel cell buses. MSRC Member Jack Kitoswski responded there is some legislation for heavy-duty vehicles, as well as a lot of industry is waiting for alternative fuel vehicles that meet a zero-emission or near zero emission standard. CARB is going to their board next week on a long awaited transit regulation that will transition the California transit bus fleet to zero emission by 2040. We've worked pretty closely with the California Transit Association and the governmental groups. It has required phases starting in 2023; it has an appropriate balance of pushing the technology with appropriate safeguards in there if the technology advancements don't progress.

MSRC Alternate Brian Berkson stated for the record that for Agenda Item #7, he does not have any financial interest, but is required to identify that he is a Commissioner for the Riverside County Transportation Commission, which is involved in this item.

CONSENT CALENDAR (Items 1 through 7)

Receive and Approve

Agenda Item #1 – Minutes for the June 21, 2018 MSRC Meeting

The minutes of the June 21, 2018 MSRC meeting were distributed at the meeting.

ON MOTION BY MSRC MEMBER MICHELE MARTINEZ, AND SECONDED BY MSRC ALTERNATE BRIAN BERKSON, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #7, THE MSRC UNANIMOUSLY APPROVED THE JUNE 21, 2018 MSRC MEETING MINUTES.

AYES: BERKSON, KITOWSKI, MARTINEZ, ROYBAL SALTARELLI,

WINTERBOTTOM, YAMARONE.

NOES: NONE.

ACTION: Staff will include the June 21, 2018 MSRC meeting minutes in the MSRC Committee Report for the October 5, 2018 SCAQMD Board meeting, and will place a copy on the MSRC's website.

Agenda Item #2 – Summary of Final Report by MSRC Contractors

The MSRC received and approved one final report summary this month, as follows:

 Nasa Services, Inc., Contract #MS16102, which provided \$100,000 to construct a Limited-Access CNG Fueling Station

ON MOTION BY MSRC MEMBER MICHELE MARTINEZ, AND SECONDED BY MSRC ALTERNATE BRIAN BERKSON, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #7, THE MSRC UNANIMOUSLY APPROVED THE FINAL REPORT LISTED ABOVE.

AYES: BERKSON, KITOWSKI, MARTINEZ, ROYBAL SALTARELLI, WINTERBOTTOM, YAMARONE.

NOES: NONE.

ACTION: MSRC staff will file the final report and release any retention on the contract.

Information Only - Receive and File

Agenda Item #3 - MSRC Contracts Administrator's Report

The MSRC AB 2766 Contracts Administrator's Report for July 26 through August 29, 2018 was included in the agenda package.

ON MOTION BY MSRC MEMBER MICHELE MARTINEZ, AND SECONDED BY MSRC ALTERNATE BRIAN BERKSON, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #7, THE MSRC UNANIMOUSLY VOTED TO RECEIVE AND FILE THE CONTRACTS ADMINISTRATOR'S REPORT FOR JULY 26 THROUGH AUGUST 29, 2018.

AYES: BERKSON, KITOWSKI, MARTINEZ, ROYBAL SALTARELLI, WINTERBOTTOM, YAMARONE.

NOES: NONE.

ACTION: Staff will include the MSRC Contracts Administrator's Report in the MSRC Committee Report for the October 5, 2018 SCAQMD Board meeting.

Agenda Item #4 – Financial Report on AB 2766 Discretionary Fund

A financial report on the AB 2766 Discretionary Fund for August 2018 was included in the agenda package.

ON MOTION BY MSRC MEMBER MICHELE MARTINEZ, AND SECONDED BY MSRC ALTERNATE BRIAN BERKSON, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #7, THE MSRC UNANIMOUSLY VOTED TO RECEIVE AND FILE THE FINANCIAL REPORT FOR THE PERIOD ENDING AUGUST 2018.

AYES: BERKSON, KITOWSKI, MARTINEZ, ROYBAL SALTARELLI, WINTERBOTTOM, YAMARONE.

NOES: NONE.

ACTION: No further action is required.

For Approval – As Recommended

<u>Agenda Item #5 – Consider Contract Term Extension to September 30, 2020 by Riverside County Regional Park and Open Space District, Contract #ML14021 (\$250,000 – Bicycle Trail Improvements)</u>

The Riverside County Regional Park and Open Space District requests a no-cost term extension due to delays associated with significant staff turnover. The MSRC-TAC unanimously recommends approval.

ON MOTION BY MSRC MEMBER MICHELE MARTINEZ, AND SECONDED BY MSRC ALTERNATE BRIAN BERKSON, MSRC UNANIMOUSLY VOTED TO APPROVE THE NO-COST TERM EXTENSION FOR RIVERSIDE COUNTY REGIONAL PARK AND OPEN SPACE DISTRICT, CONTRACT #ML14021.

AYES: BERKSON, KITOWSKI, MARTINEZ, ROYBAL SALTARELLI,

WINTERBOTTOM, YAMARONE.

NOES: NONE

ACTION: MSRC Staff will amend the above contract accordingly.

<u>Agenda Item #6 – Consider Contract Term Extension to October 31, 2023 by City of San Fernando, Contract #ML14062 (\$387,091 – Expand Existing CNG Station)</u>

The City of San Fernando requests a no-cost term extension due to delays associated with federal co-funding and an extensive procurement process. The MSRC-TAC unanimously recommends approval.

ON MOTION BY MSRC MEMBER MICHELE MARTINEZ, AND SECONDED BY MSRC ALTERNATE BRIAN BERKSON, MSRC UNANIMOUSLY VOTED TO APPROVE THE NO-COST TERM EXTENSION FOR THE CITY OF SAN FERNANDO, CONTRACT #ML14062. AYES: BERKSON, KITOWSKI, MARTINEZ, ROYBAL SALTARELLI,

WINTERBOTTOM, YAMARONE.

NOES: NONE

ACTION: MSRC Staff will amend the above contract accordingly.

<u>Agenda Item #7 – Consider Contract Replacement for Riverside County Transportation</u> Commission (RCTC), Contract #MS16082 (Extended Freeway Service Patrol Service)

Due to expiration of RCTC's prior contract, staff requests a contract replacement to complete the scope of work for the contract. The MSRC-TAC unanimously recommends approval.

ON MOTION BY MSRC MEMBER MICHELE MARTINEZ, AND SECONDED BY MSRC ALTERNATE BRIAN BERKSON, MSRC UNANIMOUSLY VOTED TO APPROVE THE REPLACEMENT CONTRACT FOR RIVERSIDE COUNTY TRANSPORTATION COMMISSION (RCTC), CONTRACT #MS16082.

AYES: BERKSON, KITOWSKI, MARTINEZ, ROYBAL SALTARELLI,

WINTERBOTTOM, YAMARONE.

NOES: NONE

ACTION: This item will be considered by the SCAQMD Board at its October 5, 2018 meeting.

ACTION CALENDAR (Items 8 through 10) FYs 2016-18 WORK PROGRAM

<u>Agenda Item #8 – Consider Nine-Month Extension of Negotiations with VNG Lakeview,</u> <u>Contract #MS16111 (proposed) (Construct CNG Station)</u>

This item was withdrawn by VNG Lakeview.

<u>Agenda Item #9 – Consider Funding for Applications Received under the Local</u> <u>Government Partnership Program</u>

Cynthia Ravenstein, MSRC Contracts Administrator, clarified that on the cover agenda, the dollar amount that's recommended for funding is incorrect, it's actually \$5,100,575 as stated in the staff report. There are 47 applications that are being brought forward but that translates to 48 awards because the County of San Bernardino has clarified that they would like their award to be split into two, one to the county and the other to San Bernardino County Flood Control District. Not included here are the City of San Bernardino--we're asking them to clarify their application--and the City of Coachella. There was a numbering mix-up with those applications; they will be coming next month. For San Bernardino and Coachella, \$337,000 would need to be reserved out of the balance for the future consideration. The MSRC-TAC is recommending approval of 48 awards, totaling \$5,100,575.

MSRC Alternate Brian Berkson questioned do we request or require any photographs of the finished products? Might be useful to put them on the website. Ms. Ravenstein replied we do ask them to submit photographs. If anybody's interested in getting pictures of those projects we can provide them.

MSRC Member Jack Kitowski stated this got off to kind of a slow start, what flipped and are there lessons that we learn from this and how does that feed into what we end up doing when we need to program next year's funds. Ray Gorski, MSRC Technical Advisor, replied last month we had a presentation that went through the initial results of the Local Government Partnership Program and we tried to illustrate not only who did what or who's requesting what but also looking at some of the lessons learned that staff has gleaned from numerous conversations and feedback that we received from the various program participants and there are a lot of lessons learned.

MSRC Member Michele Martinez stated we're doing a lot of EV charging stations, which is great, and public access. I'd like commend the cities for doing that because most of the time I've seen it's just been for government. I'm glad that they're providing public access. On the active transportation side, we're making progress and whether they're doing bike racks or doing a Bike Share Program, it would be beneficial to those cities. What I realize as I talk to my colleagues, sometimes they don't have an understanding of what those matching funds are and they're always looking for money to do small projects like this. They purchased bike racks or do some kind of bike program and they're always told we're not going to use our general fund money. Then they are limited and then they're going out to go and get bigger grants, whether it's through the state level or the federal. Sometimes they can't compete for those funds because they're too small of a

jurisdiction. How do we leverage these kinds of funds? Maybe portrayed a little differently. Whether it's our policy update or our website, doing it in layman terms like a third grader, here are some benefits of this funding. Ms. Ravenstein replied you brought up another point that we raised last month, I think that there could have been more information for them about sources that they could use for the co-funding. We have updated the information on our website.

Mr. Berkson added for the next go-around can we possibly do some things that will make it easier for councils and the upper staff at City Hall. I report on all my meetings, if all of the councilmembers could do that. Every time I reported on this meeting, it was like a blank stare from our city manager and assistant city manager. It was like they didn't know about the funds. What's happening is whoever is getting contacted at the City Halls, it's not at a level high enough for anything to get done because we do our budgets or CIP plans way in advance of when these kinds of things roll in. You've got to start at the top and work your way down in these types of scenarios. I believe if you provided a little handout that showed, you can use this money for charging stations, and show picture of the charging station or a picture of the bike rack or whatever. Mr. Gorski replied we need to do a pre-solicitation effort, like an Outreach Program before the actual solicitation hits the ground, to get everyone aware.

ON MOTION BY MSRC MICHELE MARTINEZ AND SECONDED BY MSRC ALTERNATE BRIAN BERKSON, THE MSRC UNANIMOUSLY VOTED TO APPROVE AWARDS TO 48 CITIES TOTALING \$5,100,575, AS DESCRIBED IN THE STAFF REPORT.

AYES: BERKSON, KITOWSKI, MARTINEZ, ROYBAL SALTARELLI,

WINTERBOTTOM, YAMARONE.

NOES: NONE

ACTION: This item will be considered by the SCAQMD Board at its October 5, 2018 meeting.

<u>Agenda Item #10 – Consider Funding for Application Received under the Hydrogen Infrastructure Partnership Program</u>

Ray Gorski, MSRC Technical Advisor, reported this item is submitted for your consideration by the Infrastructure Subcommittee. This is the first application we've received under your Hydrogen Infrastructure Partnership Program. The MSRC set aside \$3 million to partner with other agencies to implement hydrogen refueling within the South Coast jurisdiction and the intent of this program was a little bit different compared to past programs. This program was looking to work with the regulatory agency partners, local and statewide, to help identify programs and then pool our resources to fund hydrogen infrastructure, which tends to be rather expensive. The primary participants in this partnership program include the California Energy Commission, the South Coast Air Quality Management District and the California Air Resources Board. The agreement was that we'd all more or less work together and the MSRC would set aside funding to help implement projects if they were brought to your attention from one of your sister agencies.

The first application is submitted by the South Coast Air Quality Management District on behalf of the University of California, Irvine seeking a \$1 million investment to upgrade their hydrogen refueling infrastructure. It's currently a station which can dispense on the order of 180 kilograms

per day of gaseous hydrogen. This is going to increase its capacity to approximately 800 kilograms of liquid hydrogen. The Subcommittee believes UC Irvine is a good location because of some of the earliest deployments of hydrogen light-duty vehicles are within the Orange County area. From a demographic perspective, we believe that this is a good location. This is going to be designed to help service medium- and heavy-duty vehicles. It's going to be both an attractive location for light- duty vehicles, which are owned by consumers as well as shuttle vehicles, which are operated by the university system and also serve as a backup to OCTA for their growing fleet of hydrogen fuel cell buses. This went through a process in which it had multiple evaluations. The MSRC-TAC Infrastructure Subcommittee did their evaluation of this project but they also relied heavily upon the input from the South Coast AQMD and the other participants including California Energy Commission. The beauty of this program is that we have experts in hydrogen infrastructure telling us, yes, we've gone through an extensive evaluation, we believe that this project warrants funding and we'd like to partner with you to pool enough funds to make this project actually viable. In this case, the amount of funding necessary to do this substantial upgrade to the station is approximately \$1.8 million. The MSRC is asked to put in \$1 million out of the Hydrogen Infrastructure Fund and this will be matched by \$400,000 from the South Coast Air Quality Management District, as well as \$400,000 from the California Energy Commission. In fact, they're going to their business meeting tomorrow to secure that \$400,000. The program is actually working exactly as it was intended to. We have the MSRC as a partner along with the CEC, CARB, and the SCAQMD to identify projects which need a little extra money to be implemented. Multiple partners are contributing financial resources to make it viable and the MSRC in this case will be entering into a contract with the University of California. Irvine to effectuate the contract.

ON MOTION BY MSRC ALTERNATE BRIAN BERKSON AND SECONDED BY MSRC MEMBER JACK KITOWSKI, THE MSRC UNANIMOUSLY VOTED TO APPROVE AN AWARD TO THE UNIVERSITY OF CALIFORNIA, IRVINE FOR \$1,000,000.

AYES: BERKSON, KITOWSKI, MARTINEZ, ROYBAL SALTARELLI,

WINTERBOTTOM, YAMARONE.

NOES: NONE.

ACTION: This item will be considered by the SCAQMD Board at its October 5, 2018 meeting.

Agenda Item #11 – Other BusinessNo other business was introduced.

PUBLIC COMMENT PERIOD

Public comments were allowed during the discussion of each agenda item. No comments were made on non-agenda items.

ADJOURNMENT

There being no further business, the MSRC meeting adjourned at 2:26 p.m.

NEXTMEETING

Thursday, October 23, 2018 at 10:00 a.m., Room GB.

[Prepared by Penny Shaw Cedillo]



PROPOSED 2019 MEETING SCHEDULE

TAC Meeting Dates
Thursday, January 10

MSRC Meeting Dates
Thursday, January 17

(second Thursday)

Thursday, February 7 Thursday, February 21

Thursday, March 7 Thursday, March 21

(at 2:30 p.m., followed by MSRC-TAC Dinner)

Thursday, April 4 Thursday, April 18

Thursday, May 2 Thursday, May 16

Thursday, June 6 Thursday, June 20

Thursday, July 11 Thursday, July 18

(second Thursday)

Thursday, August 1 Thursday, August 15

Thursday, September 5 Thursday, September 19

Thursday, October 3 Thursday, October 17

Thursday, November 7 Thursday, November 21

Thursday, December 12 Thursday, December 19

(second Thursday)

All regularly scheduled MSRC-TAC meetings are held on the first Thursday of every month at 1:30 p.m. in Conference Room CC8, unless otherwise noted. All regularly scheduled MSRC meetings are held on the third Thursday of every month at 2:00 p.m. in Board Conference Room CC8, unless otherwise noted.

Meeting agendas can be viewed on the MSRC's website at http://www.cleantransportationfunding.org.



MSRC Agenda Item No. 4

DATE: January 17, 2019

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

September 27, 2018 to January 3, 2019.

RECOMMENDATION: Receive and file report

WORK PROGRAM IMPACT: None

Contract Execution Status

2016-18 Work Program

On July 8, 2016, the SCAQMD Governing Board approved an award under the Event Center Transportation Program. This contract is executed.

On October 7, 2016, the SCAQMD Governing Board approved three awards under the Event Center Transportation Program and one award for a Regional Active Transportation Partnership Program. These contracts are executed.

On January 6, 2017, the SCAQMD Governing Board approved an award for development, hosting and maintenance of a new MSRC website. This contract is executed.

On April 7, 2017, the SCAQMD Governing Board approved an award under the Event Center Transportation Program. This contract is executed.

On June 2, 2017, the SCAQMD Governing Board approved an award under the Event Center Transportation Program. This contract is executed.

On July 7, 2017, the SCAQMD Governing Board approved an award under the Event Center Transportation Program. This contract is executed.

On September 1, 2017, the SCAQMD Governing Board approved one award under the Event Center Transportation Program and one award under the Natural Gas Infrastructure Program. These contracts are executed.

On October 6, 2017, the SCAQMD Governing Board approved two awards under the Event Center Transportation Program and one award under the Natural Gas Infrastructure Program. These contracts are executed.

On December 1, 2017, the SCAQMD Governing Board approved sole source awards for a Hydrogen Infrastructure Partnership Program, for a Southern California Future Communities Partnership Program, and for electric vehicle charging infrastructure planning analysis. These contracts are executed. The MSRC has replaced the award to the California Energy Commission with a Program Opportunity Notice for the Hydrogen Infrastructure Partnership Program.

On February 2, 2018, the SCAQMD Governing Board approved one award under the Event Center Transportation Program, two awards under the Natural Gas Infrastructure Program, four awards under the Local Government Partnership Program, and two awards under the County Transportation Commission Partnership Program. These contracts are with the prospective contractor for signature or executed.

On March 2, 2018, the SCAQMD Governing Board approved one award under the Major Event Center Transportation Program, two awards under the Natural Gas Infrastructure Program, and one award under the Local Government Partnership Program. These contracts are executed.

On April 6, 2018, the SCAQMD Governing Board approved one award under the Natural Gas Infrastructure Program and eight awards under the Local Government Partnership Program. These contracts are with the prospective contractor for signature or executed.

On May 4, 2018, the SCAQMD Governing Board approved twenty-seven awards under the Local Government Partnership Program and one award under the County Transportation Commission Partnership Program. These contracts are undergoing internal review, with the prospective contractor for signature, with the SCAQMD Board Chair for signature, or executed.

On June 1, 2018, the SCAQMD Governing Board approved six awards under the Local Government Partnership Program, one award under the Natural Gas Infrastructure Program, and one award under the County Transportation Commission Partnership Program. These contracts are with the prospective contractor for signature, with the SCAQMD Board Chair for signature, or executed.

On July 6, 2018, the SCAQMD Governing Board approved nine awards under the Local Government Partnership Program. These contracts are with the prospective contractor for signature, with the SCAQMD Board Chair for signature, or executed.

On September 7, 2018, the SCAQMD Governing Board approved nineteen awards under the Local Government Partnership Program, three awards under the County Transportation Commission Partnership Program, one award under the Major Event Center Transportation Program, and twenty awards under the Natural Gas Infrastructure 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 October 5, 2018, the SCAQMD Governing Board approved forty-eight awards under the Local Government Partnership Program and one award under the Hydrogen Infrastructure

Program. These contracts are under development, undergoing internal review, with the prospective contractor for signature, or with the SCAQMD Board Chair for signature.

2014-16 Work Program

On December 5, 2014, the SCAQMD Governing Board approved an award under the AB118 Enhanced Fleet Maintenance Program. This contract is executed.

On June 5, 2015, the SCAQMD Governing Board approved two awards under the Event Center Transportation Program and one award to provide low-emission transportation services to the Special Olympics World Games. These contracts are executed.

On September 4, 2015, the SCAQMD Governing Board approved 25 awards under the Local Government Match Program and one award under the Transportation Control Measure Partnership Program. These contracts are executed.

On October 2, 2015, the SCAQMD Governing Board approved 11 awards under the Local Government Match Program and one award under the Alternative Fuel Infrastructure Program. These contracts are executed.

On November 6, 2015, the SCAQMD Governing Board approved 37 awards under the Local Government Match Program. These contracts are executed.

On December 4, 2015, the SCAQMD Governing Board approved one award under the Major Event Center Transportation Program, one award under the Alternative Fuel Infrastructure Program, and one award under the Transportation Control Measure Partnership Program. These contracts are executed.

On January 8, 2016, the SCAQMD Governing Board approved two awards under the Major Event Center Transportation Program, one award under the Local Government Match Program, and one award under the Transportation Control Measure Partnership Program. These contracts are executed.

On March 4, 2016, the SCAQMD Governing Board approved two awards under the Alternative Fuel Infrastructure Program. These contracts are executed.

On April 1, 2016, the SCAQMD Governing Board approved one award under the Major Event Center Transportation Program and five awards under the Transportation Control Measure Partnership Program. These contracts are executed.

On May 6, 2016, the SCAQMD Governing Board approved one award under the Major Event Center Transportation Program and one award under the Transportation Control Measure Partnership Program. These contracts are executed.

On June 3, 2016, the SCAQMD Governing Board approved one award under the Alternative Fuel Infrastructure Program. This contract is executed.

On October 7, 2016, the SCAQMD Governing Board approved ten awards under the Alternative Fuel Infrastructure Program and five awards under the Near-Zero Natural Gas Engine Incentives

Program. These contracts are with the prospective contractor for signature, with the SCAQMD Board Chair for signature, or executed.

On January 6, 2017, the SCAQMD Governing Board approved an award under the Alternative Fuel Infrastructure Program and an award under the Near-Zero Natural Gas Engine Incentives Program. These contracts are executed.

Work Program Status

Contract Status Reports for work program years with open and/or pending contracts are attached.

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 2007-08 Work Program Contracts

3 contracts from this work program year are open; and 2 are in "Open/Complete" status.

FY 2007-08 Invoices Paid

No invoices were paid during this period.

FY 2008-09 Work Program Contracts

One contract from this work program year is open; and 3 are in "Open/Complete" status. One contract closed during this period: City of Covina, Contract #ML09043 – Upgrade Existing CNG Station.

FY 2008-09 Invoices Paid

One invoice in the amount of \$450,000.00 was paid during this period.

FY 2010-11 Work Program Contracts

3 contracts from this work program year are open; and 26 are in "Open/Complete" status. 5 contracts closed during this period: City of Redlands, Contract #ML11026 – Purchase 3 Heavy-Duty Natural Gas Vehicles; Torrance Unified School District, Contract #MS11066 – Expand Existing CNG Station; Ryder System, Contract #MS11068 – Install Public Access L/CNG Station (Fontana); Ryder System, Contract #MS11069 - Install Public Access L/CNG Station (Orange); and City of Los Angeles, Department of General Services, Contract #MS11034 – Purchase 21 Heavy-duty CNG vehicles. One contract moved into "Open/Complete" status during this period: City of Gardena, Contract #ML11032 – Purchase Heavy-Duty CNG Vehicle, Install CNG Station and Upgrade Maintenance Facility.

FY 2010-11 Invoices Paid

Two invoices totaling \$111,250.00 were paid during this period.

FY 2011-12 Work Program Contracts

8 contracts from this work program year are open, and 30 are in "Open/Complete" status. 6 contracts closed during this period: City of Coachella, Contract #MS12077 – Install New CNG Station; Airport Mobil, Contract #MS12084 – Install New CNG Station; Community Action

Partnership of Orange County, Contract #MS12029 – Purchase One Medium-Heavy-Duty Vehicle; Final Assembly, Inc., Contract #MS12031 – Purchase 2 Medium-Heavy-Duty Vehicles; Jim & Doug Carter's Automotive/VSP, Contract #MS12036 – Purchase 2 Medium-Heavy-Duty Vehicles; and City of Manhattan Beach, Contract #ML12055 – Purchase One Medium-Duty Vehicle.

FY 2011-12 Invoices Paid

No invoices were paid during this period.

FYs 2012-14 Work Program Contracts

28 contracts from this work program year are open, and 25 are in "Open/Complete" status. One replacement contract is also pending execution. One contract closed during this period: City of Manhattan Beach, Contract #ML14071 – Install Electric Vehicle Charging Infrastructure. One contract passed into "Open/Complete" status during this period: Fullerton Joint Union High School District, Contract #MS14075 – Expand Existing CNG Station.

FYs 2012-14 Invoices Paid

3 invoices totaling \$662,516.17 were paid during this period.

FYs 2014-16 Work Program Contracts

63 contracts from this work program year are open, and 19 are in "Open/Complete" status. One replacement contract is also pending execution. 2 contracts closed during this period: City of Pomona, Contract #ML16020 – Install Road Surface Bicycle Detection Systems; and County of Orange, Contract #ML16064 – Implement "Open Streets" events with various local governments. One contract passed into "Open/Complete" status during this period: Arrow Services, Inc., Contract #MS16013 – Install Limited-Access CNG Station.

FYs 2014-16 Invoices Paid

5 invoices totaling \$2,267,852.10 were paid during this period.

FYs 2016-18 Work Program Contracts

58 contracts from this work program year are open.

FYs 2016-18 Invoices Paid

6 invoices totaling \$592,532.47 were paid during this period.

Administrative Scope Changes

10 administrative scope changes were initiated during the period of September 27, 2018 to January 3, 2019:

- City of Corona, Contract #ML14019 (Install EV Charging Stations, Bicycle Racks, and Bicycle Lockers) Reduce contract value by \$66,456 due to lower than anticipated costs
- City of Yucaipa, Contract #ML16057 (Implement Complete Streets Project along County Line Road) – 12-month no-cost term extension
- County of Los Angeles, Contract #ML14060 (Install EV Charging Stations) 48-month no cost term extension which includes 12 months for installation and 36 month operational period originally omitted in error
- City of Laguna Hills, Contract #ML18099 (pending) (Install Electric Vehicle Charging Stations)
 Reduce stations from six to four, with a corresponding value decrease from \$50,000 to

\$32,250

- County of Los Angeles, Department of Public Works, Contract #ML14093 (San Gabriel BikeTrail Underpass Improvements) – Seven-month no-cost term extension
- City of Westlake Village, Contract #ML18035 (Install Electric Vehicle Charging Stations) Increase stations from six to twenty-two
- City of San Fernando, Contract #ML16075 (Install Class I Bikeway) One-year no-cost term extension
- Orange County Transportation Authority, Contract #MS18005 (Implement Special Bus Service to Orange County Fair) – Remove "per year" reimbursement limit from cost schedule
- City of Grand Terrace, Contract #ML18030 (Install Electric Vehicle Charging Stations) –
 Increase number and upgrade type of stations, at no additional cost to MSRC, and extend
 contract term three years (one year for installations and two years additional operation
 requirement)
- City of Westminster, Contract #ML18037 (Procure Three Light- and One Medium-Duty ZEVs and Install EV Charging Stations) Modify scope to install three Level II stations and one Level III station, instead of four Level II stations, and extend contract term 30 months (six months for installation and two years additional operation requirement)

Attachments

 FY 2004-05 through FYs 2016-18 (except FY 2005-06, FY 2006-07 and FY 2009-10) Contract Status Reports



AB2766 Discretionary Fund Program Invoices

September 27, 2018 to January 3, 2019

Contract Admin.	MSRC Chair	MSRC Liaison	Finance	Contract #	Contractor	Invoice #	Amount
2008-	-2009 Work Prog	gram					
12/27/2018				ML09033	City of Beverly Hills	FINAL	\$450,000.00
Total: \$450,0	00.00						
2010-	-2011 Work Prog	gram					
11/7/2018	11/14/2018	11/16/2018	11/27/2018	ML11032	City of Gardena	05140-FINAI	\$102,500.00
10/16/2018	10/23/2018	10/23/2018	10/24/2018	MS11071	City of Torrance Transit Department	}-00151199-F	\$8,750.00
Total: \$111,2	50.00						
2012-	-2014 Work Prog	gram					
11/13/2018	11/14/2018	11/16/2018	11/27/2018	MS14082	Grand Central Recycling & Transfer Station	1	\$135,000.00
12/6/2018	12/7/2018	12/11/2018	12/11/2018	MS14072	San Bernardino County Transportation Authority	3	\$313,766.17
10/26/2018	11/14/2018	11/16/2018	11/27/2018	MS14076	Rialto Unified School District	3055	\$213,750.00
Total: \$662,5	16.17						
2014-	-2016 Work Prog	gram					
11/13/2018	12/7/2018	12/11/2018	12/11/2018	MS16087	Burrtec Waste & Recycling Services, LLC	5150	\$90,000.00
12/4/2018	12/7/2018	12/11/2018	12/11/2018	MS16093	Orange County Transportation Authority	A140300-Fin	\$1,499,575.85
12/19/2018	12/19/2018	12/19/2018	12/21/2018	MS16030	Better World Group Advisors	1706	\$12,026.25
11/13/2018	11/14/2018	11/16/2018	11/27/2018	MS16105	Huntington Beach Union High School District	2018-01	\$166,250.00
12/11/2018	12/19/2018	12/19/2018	12/21/2018	ML16036	City of Brea	1-FINAL	\$500,000.00
Total: \$2,267	,852.10						
2016-	-2018 Work Prog	gram					
12/6/2018	12/7/2018	12/11/2018		MS18003	Geographics	21240/21241	\$573.00
10/3/2018	10/23/2018	10/23/2018	10/24/2018	MS18004	Orange County Transportation Authority	FA140173	\$23,331.40
10/4/2018	10/23/2018	10/23/2018	10/24/2018	MS18003	Geographics	18-21136	\$373.00
10/17/2018	10/23/2018	10/23/2018	10/24/2018	MS18010	Southern California Regional Rail Authority (Metr	1005376	\$148,570.20
10/17/2018	10/23/2018	10/23/2018	10/24/2018	MS18002	Southern California Association of Governments	318002-01, -(\$419,111.87
11/9/2018	11/14/2018	11/16/2018	11/27/2018	MS18003	Geographics	-21191, -212	\$573.00

Total: \$592,532.47

Contract	MSRC	MSRC					
Admin.	Chair	Liaison	Finance	Contract #	Contractor	Invoice #	Amount

Total This Period: \$4,084,150.74



FYs 2004-05 Through 2016-18 AB2766 Contract Status Report

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
FY 2004	1-2005 Contracts								
Open Cont	racts								
ML05014	Los Angeles County Department of P	5/21/2007	11/20/2008	12/20/2018	\$204,221.00	\$0.00	Traffic Signal Synchronization	\$204,221.00	No
Total: 1					I.	<u> </u>		I.	
Declined/C	ancelled Contracts								
ML05005	City of Highland				\$20,000.00	\$0.00	2 Medium Duty CNG Vehicles	\$20,000.00	No
ML05008	Los Angeles County Department of P				\$140,000.00	\$0.00	7 Heavy Duty LPG Street Sweepers	\$140,000.00	No
ML05010	Los Angeles County Department of P				\$20,000.00	\$0.00	1 Heavy Duty CNG Bus	\$20,000.00	No
MS05030	City of Inglewood				\$31,662.00	\$0.00	2 CNG Street Sweepers	\$31,662.00	No
MS05032	H&C Disposal				\$34,068.00	\$0.00	2 CNG Waste Haulers	\$34,068.00	No
MS05044	City of Colton				\$78,720.00	\$0.00	CNG Station Upgrade	\$78,720.00	No
Total: 6					1			1	-
Closed Cor	ntracts								
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 P	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 P	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 P	8/24/2009	5/23/2010	1/23/2011	\$349,000.00	\$349,000.00	Traffic Signal Synchronization (LADOT)	\$0.00	Yes
MS05001	A-Z Bus Sales, Inc.	2/4/2005	12/31/2005	12/31/2006	\$1,385,000.00	\$1,385,000.00	CNG School Bus Buydown	\$0.00	Yes

			Original	Amended	Contract			Award	Billing
Cont.#	Contractor	Start Date	End Date	End Date	Value	Remitted	Project Description	Balance	Complete?
MS05002	California Bus Sales	2/4/2005	12/31/2005	12/31/2006	\$1,800,000.00	\$1,800,000.00	CNG School Bus Buydown	\$0.00	Yes
MS05003	BusWest	1/28/2005	12/31/2005	12/31/2006	\$2,100,000.00	\$1,620,000.00	CNG School Bus Buydown	\$480,000.00	Yes
MS05004	Johnson/Ukropina Creative Marketin	11/27/2004	1/18/2006	4/18/2006	\$1,000,000.00	\$994,612.56	Implement "Rideshare Thursday" Campaign	\$5,387.44	Yes
MS05031	City of Ontario, Housing & Municipal	7/22/2005	3/21/2007		\$191,268.00	\$191,268.00	11 CNG Waste Haulers	\$0.00	Yes
MS05033	Waste Management of the Desert	9/26/2005	5/25/2007		\$202,900.00	\$202,900.00	10 CNG Waste Haulers	\$0.00	Yes
MS05034	Sukut Equipment, Inc.	9/9/2005	5/8/2007		\$1,151,136.00	\$1,151,136.00	Repower 12 Scrapers	\$0.00	Yes
MS05035	Varner Construction Inc.	11/28/2005	4/27/2007	2/27/2008	\$334,624.00	\$334,624.00	Repower 5 Off-Road H.D. Vehicles	\$0.00	Yes
MS05036	Camarillo Engineering	8/18/2005	1/17/2007		\$1,167,276.00	\$1,167,276.00	Repower 12 Scrapers	\$0.00	Yes
MS05037	Road Builders, Inc.	11/21/2005	4/20/2007	6/20/2008	\$229,302.00	\$229,302.00	Repower 2 Scrapers	\$0.00	Yes
MS05038	SunLine Transit Agency	3/30/2006	9/29/2007		\$135,000.00	\$135,000.00	15 CNG Buses	\$0.00	Yes
MS05039	Los Angeles County MTA	4/28/2006	4/27/2008		\$405,000.00	\$405,000.00	75 CNG Buses	\$0.00	Yes
MS05040	Orange County Transportation Autho	3/23/2006	12/22/2007	6/22/2008	\$200,000.00	\$200,000.00	25 CNG Buses	\$0.00	Yes
MS05041	The Regents of the University of Cali	9/5/2006	8/4/2007	9/4/2008	\$15,921.00	\$15,921.00	CNG Station Upgrade	\$0.00	Yes
MS05042	City of Ontario, Housing & Municipal	11/21/2005	9/20/2006	7/20/2007	\$117,832.00	\$74,531.27	CNG Station Upgrade	\$43,300.73	Yes
MS05043	Whittier Union High School District	9/23/2005	7/22/2006		\$15,921.00	\$15,921.00	CNG Station Upgrade	\$0.00	Yes
MS05045	City of Covina	9/9/2005	7/8/2006		\$10,000.00	\$7,435.61	CNG Station Upgrade	\$2,564.39	Yes
MS05046	City of Inglewood	1/6/2006	5/5/2007		\$139,150.00	\$56,150.27	CNG Station Upgrade	\$82,999.73	Yes
MS05047	Orange County Transportation Autho	10/20/2005	10/19/2006	1/19/2007	\$75,563.00	\$75,563.00	CNG Station Upgrade	\$0.00	Yes
MS05048	City of Santa Monica	7/24/2006	11/23/2007		\$150,000.00	\$150,000.00	CNG Station Upgrade	\$0.00	Yes
MS05049	Omnitrans	9/23/2005	2/22/2007		\$25,000.00	\$7,250.00	CNG Station Upgrade	\$17,750.00	Yes
MS05050	Gateway Cities Council of Governme	12/21/2005	4/20/2010		\$1,464,839.00	\$1,464,838.12	Truck Fleet Modernization Program	\$0.88	Yes
MS05051	Jagur Tractor	1/16/2006	4/15/2007	10/15/2007	\$660,928.00	\$660,928.00	Repower 6 Scrapers	\$0.00	Yes
MS05052	Caufield Equipment, Inc.	8/3/2005	1/2/2007		\$478,000.00	\$478,000.00	Repower 4 Scrapers	\$0.00	Yes
MS05070	Haaland Internet Productions (HIP D	6/24/2005	5/31/2007	11/30/2011	\$100,715.00	\$92,458.24	Design, Host & Maintain MSRC Website	\$8,256.76	Yes
Total: 44									•
Closed/Inc	omplete Contracts								
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

\$56,666.00

\$349,000.00

\$20,000.00

\$0.00

\$0.00

\$0.00

2 Propane Refueling Stations

1 CNG Bus

Traffic Signal Synchronization (LADOT)

\$56,666.00

\$349,000.00

\$20,000.00

No

No

No

ML05023 **Total: 4**

ML05009

ML05012

Los Angeles County Department of P

Los Angeles County Department of P

City of La Canada Flintridge

6/22/2006

11/10/2006

3/30/2005

12/21/2007

5/9/2008

2/28/2006

9/30/2011

1/9/2009

8/28/2008

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
FY 2000	6-2007 Contracts								
	Cancelled Contracts								
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
MS07090	Sud-Chemie				\$27,345.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$27,345.00	No
Total: 27									
Closed Co.	ntracts								
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	Yes
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
ML07025	City of San Bernardino	8/12/2008	7/11/2010		\$350,000.00	\$350,000.00	Maintenance Facility Modifications	\$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

			Original End Date	Amended End Date	Contract Value			Award Balance	Billing
Cont.#	Contractor	Start Date		End Date	1	Remitted	Project Description		Complete?
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
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
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
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
ML07042	City of La Quinta	8/15/2008	9/14/2010		\$100,000.00	\$100,000.00	Street Sweeping Operations	\$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
ML07044	City of Santa Monica	9/8/2008	3/7/2015	3/7/2017	\$600,000.00	\$600,000.00	24 H.D. Nat. Gas Vehicles	\$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
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
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
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	9/17/2017	\$1,900,000.00	\$1,900,000.00	Purchase 95 Transit Buses	\$0.00	Yes
MS07009	Orange County Transportation Autho	5/14/2008	4/13/2016		\$800,000.00	\$800,000.00	Purchase 40 Transit Buses	\$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
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
MS07019	City of Cathedral City	1/9/2009	6/8/2010		\$32,500.00	\$32,500.00	Maintenance Facility Modifications	\$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	Yes

Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?	
Better World Group Advisors	11/17/2007	11/16/2009	11/16/2011	\$247,690.00	\$201,946.21	MSRC Programmatic Outreach Services	\$45,743.79	Yes	
County Sanitation Districts of L.A. Co	9/5/2008	9/4/2010	7/14/2012	\$231,500.00	\$231,500.00	Off-Road Diesel Equipment Retrofit Program	\$0.00	Yes	
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	
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	Yes	
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	Yes	
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	
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	
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	Yes	
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	
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	
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	Yes	
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	Yes	
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	
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	
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	
City of Los Angeles Bureau of Sanita	10/31/2008	8/30/2010	8/28/2016	\$63,192.00	\$62,692.00	Off-Road Diesel Equipment Retrofit Program	\$500.00	No	
BusWest	10/16/2009	3/15/2010		\$33,660.00	\$33,660.00	Provide Lease for 2 CNG School Buses	\$0.00	Yes	
Riverside County Transportation Co	9/1/2010	10/31/2011		\$350,000.00	\$350,000.00	"511" Commuter Services Campaign	\$0.00	Yes	
omplete Contracts									
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	
BusWest	7/2/2007	7/1/2009		\$90,928.00	\$68,196.00	Provide Lease for 2 CNG School Buses	\$22,732.00	No	
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	
PEED Equipment Co.	10/31/2008	8/30/2010		\$11,600.00	\$0.00	Off-Road Diesel Equipment Retrofit Program	\$11,600.00	No	
olete Contracts									
CSULA Hydrogen Station and Resea	10/30/2009	12/29/2015	10/29/2019	\$250,000.00	\$250,000.00	New Hydrogen Fueling Station	\$0.00	Yes	
	Better World Group Advisors County Sanitation Districts of L.A. Co Community Recycling & Resource R City of Los Angeles, Department of Shimmick Construction Company, In Altfillisch Contractors, Inc. Sukut Equipment Inc. Griffith Company Tiger 4 Equipment Leasing City of Culver City Transportation De Dan Copp Crushing Reed Thomas Company, Inc. USA Waste of California, Inc. USA Waste of California, Inc. Riverside County Transportation Co City of Los Angeles Bureau of Sanita BusWest Riverside County Transportation Co complete Contracts City of Inglewood BusWest Skanska USA Civil West California D PEED Equipment Co.	Better World Group Advisors County Sanitation Districts of L.A. Co 9/5/2008 Community Recycling & Resource R 3/7/2008 City of Los Angeles, Department of Shimmick Construction Company, In 4/26/2008 Altfillisch Contractors, Inc. 9/19/2008 Sukut Equipment Inc. 1/23/2009 Griffith Company 4/30/2008 Tiger 4 Equipment Leasing City of Culver City Transportation De Dan Copp Crushing Reed Thomas Company, Inc. USA Waste of California, Inc. 5/1/2009 USA Waste of California, Inc. 5/1/2009 Riverside County Transportation Co 1/30/2009 City of Los Angeles Bureau of Sanita BusWest 10/16/2009 Riverside County Transportation Co 9/1/2010 Complete Contracts City of Inglewood BusWest 7/2/2007 Skanska USA Civil West California D 6/28/2008 PEED Equipment Co.	Contractor Start Date End Date Better World Group Advisors 11/17/2007 11/16/2009 County Sanitation Districts of L.A. Co 9/5/2008 9/4/2010 Community Recycling & Resource R 3/7/2008 1/6/2010 City of Los Angeles, Department of 10/31/2008 8/30/2010 Shimmick Construction Company, In 4/26/2008 2/25/2010 Altfillisch Contractors, Inc. 9/19/2008 7/18/2010 Sukut Equipment Inc. 1/23/2009 11/22/2010 Griffith Company 4/30/2008 2/28/2010 Tiger 4 Equipment Leasing 9/19/2008 7/18/2010 City of Culver City Transportation De 4/4/2008 2/3/2010 Dan Copp Crushing 9/17/2008 7/16/2010 Reed Thomas Company, Inc. 8/15/2008 6/14/2010 USA Waste of California, Inc. 5/1/2009 12/31/2014 USA Waste of California, Inc. 5/1/2009 12/31/2014 Riverside County Transportation Co 1/30/2009 7/29/2013 City of Los Angeles Bureau of Sanita 10/31/2008 8/30/2010 <td colspa<="" td=""><td>Contractor Start Date End Date End Date Better World Group Advisors 11/17/2007 11/16/2009 11/16/2011 County Sanitation Districts of L.A. Co 9/5/2008 9/4/2010 7/14/2012 Community Recycling & Resource R 3/7/2008 1/6/2010 7/6/2011 City of Los Angeles, Department of 10/31/2008 8/30/2010 2/28/2013 Shimmick Construction Company, In 4/26/2008 2/25/2010 8/25/2011 Altfillisch Contractors, Inc. 9/19/2008 7/18/2010 1/18/2011 Sukut Equipment Inc. 1/23/2009 11/22/2010 5/22/2012 Griffith Company 4/30/2008 2/28/2010 8/28/2012 Tiger 4 Equipment Leasing 9/19/2008 7/18/2010 1/18/2013 City of Culver City Transportation De 4/4/2008 2/3/2010 8/3/2011 Dan Copp Crushing 9/17/2008 7/16/2010 1/16/2012 Reed Thomas Company, Inc. 8/15/2008 6/14/2010 3/14/2012 USA Waste of California, Inc. 5/1/2009 12/31/2014 12/31/2014 USA Waste of California, Inc.</td><td>Contractor Start Date End Date End Date Value Better World Group Advisors 11/17/2007 11/16/2009 11/16/2011 \$247,690.00 County Sanitation Districts of L.A. Co 9/5/2008 9/4/2010 7/14/2012 \$231,500.00 Community Recycling & Resource R 3/7/2008 1/6/2010 7/6/2011 \$177,460.00 City of Los Angeles, Department of 10/31/2008 8/30/2010 2/28/2013 \$40,626.00 Shimmick Construction Company, In 4/26/2008 2/25/2010 8/25/2011 \$80,800.00 Altfillisch Contractors, Inc. 9/19/2008 7/18/2010 1/18/2011 \$160,000.00 Sukut Equipment Inc. 1/23/2009 11/22/2010 5/22/2012 \$26,900.00 Griffith Company 4/30/2008 2/28/2010 8/28/2012 \$168,434.00 Tiger 4 Equipment Leasing 9/19/2008 7/18/2010 1/18/2013 \$210,937.00 City of Culver City Transportation De 4/4/2008 2/3/2010 8/38/2011 \$72,865.00 Dan Copp Crushing 9/17/2008 7/16/2010 1/16/2012 \$7</td><td>Contractor Start Date End Date End Date Value Remitted Better World Group Advisors 11/17/2007 11/16/2009 11/16/2011 \$247,690.00 \$201,946.21 County Sanitation Districts of L.A. Co 9/5/2008 9/4/2010 7/14/2012 \$231,500.00 \$231,500.00 Community Recycling & Resource R 3/7/2008 1/6/2010 7/6/2011 \$177,460.00 \$98,471.00 City of Los Angeles, Department of Shimmick Construction Company, In 4/26/2008 8/30/2010 2/28/2013 \$40,626.00 \$40,626.00 Shimmick Contractors, Inc. 9/19/2008 7/18/2010 1/18/2011 \$160,000.00 \$11,556.37 Altfillisch Contractors, Inc. 9/19/2008 7/18/2010 1/18/2011 \$160,000.00 \$155,667.14 Sukut Equipment Inc. 1/23/2009 11/22/2010 5/22/2012 \$26,900.00 \$26,900.00 Griffith Company 4/30/2008 2/28/2010 8/28/2012 \$168,434.00 \$125,504.00 Tiger 4 Equipment Leasing 9/19/2008 7/18/2010 1/18/2013 \$210,937.00 \$108,808.97</td><td> Better World Group Advisors</td><td> Better World Group Advisors 11/17/2007 11/16/2019 11/16/2019 11/16/2019 12/16/2019 247,690.0 2521,590.00 2521,590.00 Off-Road Diesel Equipment Retrofit Program \$0.00 </td></td>	<td>Contractor Start Date End Date End Date Better World Group Advisors 11/17/2007 11/16/2009 11/16/2011 County Sanitation Districts of L.A. Co 9/5/2008 9/4/2010 7/14/2012 Community Recycling & Resource R 3/7/2008 1/6/2010 7/6/2011 City of Los Angeles, Department of 10/31/2008 8/30/2010 2/28/2013 Shimmick Construction Company, In 4/26/2008 2/25/2010 8/25/2011 Altfillisch Contractors, Inc. 9/19/2008 7/18/2010 1/18/2011 Sukut Equipment Inc. 1/23/2009 11/22/2010 5/22/2012 Griffith Company 4/30/2008 2/28/2010 8/28/2012 Tiger 4 Equipment Leasing 9/19/2008 7/18/2010 1/18/2013 City of Culver City Transportation De 4/4/2008 2/3/2010 8/3/2011 Dan Copp Crushing 9/17/2008 7/16/2010 1/16/2012 Reed Thomas Company, Inc. 8/15/2008 6/14/2010 3/14/2012 USA Waste of California, Inc. 5/1/2009 12/31/2014 12/31/2014 USA Waste of California, Inc.</td> <td>Contractor Start Date End Date End Date Value Better World Group Advisors 11/17/2007 11/16/2009 11/16/2011 \$247,690.00 County Sanitation Districts of L.A. Co 9/5/2008 9/4/2010 7/14/2012 \$231,500.00 Community Recycling & Resource R 3/7/2008 1/6/2010 7/6/2011 \$177,460.00 City of Los Angeles, Department of 10/31/2008 8/30/2010 2/28/2013 \$40,626.00 Shimmick Construction Company, In 4/26/2008 2/25/2010 8/25/2011 \$80,800.00 Altfillisch Contractors, Inc. 9/19/2008 7/18/2010 1/18/2011 \$160,000.00 Sukut Equipment Inc. 1/23/2009 11/22/2010 5/22/2012 \$26,900.00 Griffith Company 4/30/2008 2/28/2010 8/28/2012 \$168,434.00 Tiger 4 Equipment Leasing 9/19/2008 7/18/2010 1/18/2013 \$210,937.00 City of Culver City Transportation De 4/4/2008 2/3/2010 8/38/2011 \$72,865.00 Dan Copp Crushing 9/17/2008 7/16/2010 1/16/2012 \$7</td> <td>Contractor Start Date End Date End Date Value Remitted Better World Group Advisors 11/17/2007 11/16/2009 11/16/2011 \$247,690.00 \$201,946.21 County Sanitation Districts of L.A. Co 9/5/2008 9/4/2010 7/14/2012 \$231,500.00 \$231,500.00 Community Recycling & Resource R 3/7/2008 1/6/2010 7/6/2011 \$177,460.00 \$98,471.00 City of Los Angeles, Department of Shimmick Construction Company, In 4/26/2008 8/30/2010 2/28/2013 \$40,626.00 \$40,626.00 Shimmick Contractors, Inc. 9/19/2008 7/18/2010 1/18/2011 \$160,000.00 \$11,556.37 Altfillisch Contractors, Inc. 9/19/2008 7/18/2010 1/18/2011 \$160,000.00 \$155,667.14 Sukut Equipment Inc. 1/23/2009 11/22/2010 5/22/2012 \$26,900.00 \$26,900.00 Griffith Company 4/30/2008 2/28/2010 8/28/2012 \$168,434.00 \$125,504.00 Tiger 4 Equipment Leasing 9/19/2008 7/18/2010 1/18/2013 \$210,937.00 \$108,808.97</td> <td> Better World Group Advisors</td> <td> Better World Group Advisors 11/17/2007 11/16/2019 11/16/2019 11/16/2019 12/16/2019 247,690.0 2521,590.00 2521,590.00 Off-Road Diesel Equipment Retrofit Program \$0.00 </td>	Contractor Start Date End Date End Date Better World Group Advisors 11/17/2007 11/16/2009 11/16/2011 County Sanitation Districts of L.A. Co 9/5/2008 9/4/2010 7/14/2012 Community Recycling & Resource R 3/7/2008 1/6/2010 7/6/2011 City of Los Angeles, Department of 10/31/2008 8/30/2010 2/28/2013 Shimmick Construction Company, In 4/26/2008 2/25/2010 8/25/2011 Altfillisch Contractors, Inc. 9/19/2008 7/18/2010 1/18/2011 Sukut Equipment Inc. 1/23/2009 11/22/2010 5/22/2012 Griffith Company 4/30/2008 2/28/2010 8/28/2012 Tiger 4 Equipment Leasing 9/19/2008 7/18/2010 1/18/2013 City of Culver City Transportation De 4/4/2008 2/3/2010 8/3/2011 Dan Copp Crushing 9/17/2008 7/16/2010 1/16/2012 Reed Thomas Company, Inc. 8/15/2008 6/14/2010 3/14/2012 USA Waste of California, Inc. 5/1/2009 12/31/2014 12/31/2014 USA Waste of California, Inc.	Contractor Start Date End Date End Date Value Better World Group Advisors 11/17/2007 11/16/2009 11/16/2011 \$247,690.00 County Sanitation Districts of L.A. Co 9/5/2008 9/4/2010 7/14/2012 \$231,500.00 Community Recycling & Resource R 3/7/2008 1/6/2010 7/6/2011 \$177,460.00 City of Los Angeles, Department of 10/31/2008 8/30/2010 2/28/2013 \$40,626.00 Shimmick Construction Company, In 4/26/2008 2/25/2010 8/25/2011 \$80,800.00 Altfillisch Contractors, Inc. 9/19/2008 7/18/2010 1/18/2011 \$160,000.00 Sukut Equipment Inc. 1/23/2009 11/22/2010 5/22/2012 \$26,900.00 Griffith Company 4/30/2008 2/28/2010 8/28/2012 \$168,434.00 Tiger 4 Equipment Leasing 9/19/2008 7/18/2010 1/18/2013 \$210,937.00 City of Culver City Transportation De 4/4/2008 2/3/2010 8/38/2011 \$72,865.00 Dan Copp Crushing 9/17/2008 7/16/2010 1/16/2012 \$7	Contractor Start Date End Date End Date Value Remitted Better World Group Advisors 11/17/2007 11/16/2009 11/16/2011 \$247,690.00 \$201,946.21 County Sanitation Districts of L.A. Co 9/5/2008 9/4/2010 7/14/2012 \$231,500.00 \$231,500.00 Community Recycling & Resource R 3/7/2008 1/6/2010 7/6/2011 \$177,460.00 \$98,471.00 City of Los Angeles, Department of Shimmick Construction Company, In 4/26/2008 8/30/2010 2/28/2013 \$40,626.00 \$40,626.00 Shimmick Contractors, Inc. 9/19/2008 7/18/2010 1/18/2011 \$160,000.00 \$11,556.37 Altfillisch Contractors, Inc. 9/19/2008 7/18/2010 1/18/2011 \$160,000.00 \$155,667.14 Sukut Equipment Inc. 1/23/2009 11/22/2010 5/22/2012 \$26,900.00 \$26,900.00 Griffith Company 4/30/2008 2/28/2010 8/28/2012 \$168,434.00 \$125,504.00 Tiger 4 Equipment Leasing 9/19/2008 7/18/2010 1/18/2013 \$210,937.00 \$108,808.97	Better World Group Advisors	Better World Group Advisors 11/17/2007 11/16/2019 11/16/2019 11/16/2019 12/16/2019 247,690.0 2521,590.00 2521,590.00 Off-Road Diesel Equipment Retrofit Program \$0.00

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
FY 200	7-2008 Contracts								
Open Cont									
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
MS08007	United Parcel Service West Region	12/10/2008	10/9/2014	4/9/2019	\$300,000.00	\$270,000.00	10 H.D. Nat. Gas Vehicles	\$30,000.00	Yes
MS08013	United Parcel Service West Region	12/10/2008	10/9/2014	3/9/2019	\$480,000.00	\$432,000.00	12 H.D. Nat. Gas Yard Tractors	\$48,000.00	No
Total: 3					1	1			.4
Declined/C	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
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
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: 17		I.		J.	1	1		*	
Closed Co.	ntracts								
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
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	Yes
ML08026	Los Angeles County Department of P	7/20/2009	7/19/2016		\$250,000.00	\$250,000.00	10 LPG Heavy-Duty Vehicles	\$0.00	Yes
ML08027	Los Angeles County Department of P	7/20/2009	1/19/2011	1/19/2012	\$6,901.00	\$5,124.00	34 Vehicles (Diagnostic)	\$1,777.00	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
ML08030	City of Azusa	5/14/2010	3/13/2016		\$25,000.00	\$25,000.00	1 CNG Heavy-Duty Vehicle	\$0.00	No
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
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
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
ML08035	City of La Verne	3/6/2009	11/5/2009		\$11,925.00	\$11,925.00	53 Vehicles (Diagnostic)	\$0.00	Yes

Comt #	Contractor	Stort Data	Original End Date	Amended End Date	Contract Value	Domittod	Decical December	Award Balance	Billing
Cont.# ML08036	Contractor City of South Pasadena	Start Date 5/12/2009	7/11/2013	Life Date		Remitted	Project Description New CNG Station	\$0.00	Complete?
	,				\$169,421.00	\$169,421.00		· · · · · · · · · · · · · · · · · · ·	
ML08037 ML08038	City of Glendale	5/20/2009	5/19/2015		\$325,000.00	\$325,000.00	13 CNG Heavy Duty Vehicles	\$0.00	Yes
	Los Angeles Department of Water an	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, Housing & Municipal	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
ML08045	City of Santa Clarita	2/20/2009	6/19/2010		\$3,213.00	\$3,150.00	14 Vehicles (Diagnostic)	\$63.00	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
MS08001	Los Angeles County MTA	12/10/2010	6/9/2014		\$1,500,000.00	\$1,499,999.66	Big Rig Freeway Service Patrol	\$0.34	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 Progra	\$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 Progra	\$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
MS08015	Yosemite Waters	5/12/2009	5/11/2015		\$180,000.00	\$117,813.60	11 H.D. Propane Vehicles	\$62,186.40	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
MS08017	Omnitrans	12/13/2008	12/12/2015	12/12/2016	\$900,000.00	\$900,000.00	30 CNG Buses	\$0.00	Yes
MS08018	Los Angeles County Department of P	8/7/2009	10/6/2016	4/6/2018	\$60,000.00	\$60,000.00	2 CNG Vehicles	\$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
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
MS08058	Clean Energy Fuels Corp.	11/26/2009	3/25/2016	3/25/2017	\$400,000.00	\$400,000.00	New CNG Station - Ontario Airport	\$0.00	Yes
MS08061	Clean Energy Fuels Corp.	12/4/2009	3/3/2015		\$400,000.00	\$400,000.00	New CNG Station - L.ALa 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	6/18/2016	\$311,600.00	\$254,330.00	New CNG Station	\$57,270.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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
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 Progra	\$60,000.00	Yes
MS09004	A-Z Bus Sales, Inc.	1/30/2009	3/31/2009		\$156,000.00	\$156,000.00	Alternative Fuel School Bus Incentive Progra	\$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 Progra	\$0.00	Yes
Total: 58						1			
Closed/Inco	omplete Contracts								
ML08025	Los Angeles County Department of P	10/30/2009	3/29/2011		\$75,000.00	\$0.00	150 Vehicles (Diagnostic)	\$75,000.00	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
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: 3									
Open/Comp	olete Contracts								
ML08040	City of Riverside	9/11/2009	9/10/2016	3/10/2019	\$455,500.00	\$455,500.00	16 CNG Vehicles, Expand CNG Station & M	\$0.00	Yes
ML08043	City of Desert Hot Springs	9/25/2009	3/24/2016	3/24/2021	\$25,000.00	\$25,000.00	1 CNG Heavy-Duty Vehicle	\$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
FY 200	8-2009 Contracts								
Open Con	tracts								
ML09033	City of Beverly Hills	3/4/2011	5/3/2017	1/3/2019	\$550,000.00	\$550,000.00	10 Nat. Gas Heavy-Duty Vehicles & CNG St	\$0.00	No
Total: 1									1
Declined/0	Cancelled Contracts								
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 an	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 P				\$8,250.00	\$0.00	Remote Vehicle Diagnostics/15 Vehicles	\$8,250.00	No
ML09025	Los Angeles County Department of P	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
Total: 11	-	1	II.		1	1		1	
Closed Co	ontracts								
ML09007	City of Rancho Cucamonga	2/26/2010	4/25/2012		\$117,500.00	\$62,452.57	Maintenance Facility Modification	\$55,047.43	Yes
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	Yes
ML09010	City of Palm Springs	1/8/2010	2/7/2016		\$25,000.00	\$25,000.00	1 Nat. Gas Heavy-Duty Vehicle	\$0.00	Yes
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
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
ML09023	Los Angeles County Department of P	12/10/2010	12/9/2017		\$50,000.00	\$50,000.00	2 Heavy-Duty Alternative Fuel Transit Vehicl	\$0.00	Yes
	1	40/45/0040	10/11/0010	6/14/2013	\$400,000.00		Maintenance Facility Modifications	\$400,000.00	No
ML09024	Los Angeles County Department of P	10/15/2010	12/14/2012	6/14/2013	Ψ400,000.00	\$0.00	Maintenance racinty Modifications	\$400,000.00	
ML09024 ML09027	Los Angeles County Department of P Los Angeles County Department of P	7/23/2010	3/22/2012	6/14/2013	\$150,000.00	\$0.00 \$150,000.00	Freeway Detector Map Interface	\$0.00	Yes
	, ,						<u> </u>		
ML09027	Los Angeles County Department of P	7/23/2010	3/22/2012		\$150,000.00	\$150,000.00	Freeway Detector Map Interface	\$0.00	Yes
ML09027 ML09029	Los Angeles County Department of P City of Whittier	7/23/2010 11/6/2009	3/22/2012 4/5/2016		\$150,000.00 \$25,000.00	\$150,000.00 \$25,000.00	Freeway Detector Map Interface 1 Nat. Gas Heavy-Duty Vehicle	\$0.00 \$0.00	Yes Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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	6/16/2018	\$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 an	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
ML09047	Los Angeles County Department of P	8/13/2014	8/12/2015	11/12/2015	\$400,000.00	\$272,924.53	Maintenance Facility Modifications	\$127,075.47	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: 29				•					
Open/Comp	olete Contracts								

\$125,930.00

\$150,000.00

\$875,000.00

\$125,930.00

\$80,411.18

\$875,000.00

CNG Station Expansion

3 Off-Road Vehicles Repowers

Purchase 35 Natural Gas Refuse Trucks

\$0.00

\$0.00

\$69,588.82

Yes

Yes

Yes

ML09036

Total: 3

ML09009

ML09026

City of South Pasadena

Los Angeles County Department of P

City of Long Beach Fleet Services B

11/5/2010

10/15/2010

5/7/2010

12/4/2016

10/14/2017

5/6/2017

3/4/2019

4/14/2019

11/6/2022

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
FY 2010	0-2011 Contracts								
Open Cont	racts								
ML11029	City of Santa Ana	9/7/2012	3/6/2020	3/6/2023	\$262,500.00	\$75,000.00	Expansion of Existing CNG Station, Install N	\$187,500.00	No
ML11045	City of Newport Beach	2/3/2012	8/2/2018	3/2/2021	\$30,000.00	\$0.00	Purchase 1 Nat. Gas H.D. Vehicle	\$30,000.00	No
MS11065	Temecula Valley Unified School Distr	8/11/2012	1/10/2019		\$50,000.00	\$46,112.64	Expansion of Existing CNG Station	\$3,887.36	No
Total: 3								1 1	
Declined/C	ancelled Contracts								
ML11038	City of Santa Monica	5/18/2012	7/17/2018		\$400,000.00	\$0.00	Maintenance Facility Modifications	\$400,000.00	No
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 Showc	\$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	Cattrac Construction, Inc.				\$500,000.00	\$0.00	Install DECS on Eight Off-Road Vehicles	\$500,000.00	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
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: 22			ı	ı	•	1	'		
Closed Co.	ntracts								
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
ML11022	City of Anaheim	3/16/2012	7/15/2018		\$150,000.00	\$150,000.00	Purchase of 5 H.D. Vehicles	\$0.00	Yes
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
ML11027	City of Los Angeles, Dept. of Genera	5/4/2012	7/3/2015	1/3/2016	\$300,000.00	\$300,000.00	Maintenance Facility Modifications	\$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

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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
ML11034	City of Los Angeles, Department of	5/4/2012	1/3/2019		\$630,000.00	\$630,000.00	Purchase 21 H.D. CNG Vehicles	\$0.00	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
ML11039	City of Ontario, Housing & Municipal	1/27/2012	9/26/2018		\$180,000.00	\$180,000.00	Purchase 6 Nat. Gas H.D. Vehicles	\$0.00	Yes
ML11042	City of Chino	2/17/2012	4/16/2018		\$30,000.00	\$30,000.00	Purchase 1 Nat. Gas H.D. Vehicle, Repower	\$0.00	Yes
MS11001	Mineral LLC	4/22/2011	4/30/2013	4/30/2015	\$111,827.00	\$103,136.83	Design, Develop, Host and Maintain MSRC	\$8,690.17	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 Progra	\$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 Progra	\$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
MS11017	CR&R, Inc.	3/2/2012	2/1/2018		\$100,000.00	\$100,000.00	Expansion of existing station - Garden Grove	\$0.00	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
MS11056	Better World Group Advisors	12/30/2011	12/29/2013	12/29/2015	\$206,836.00	\$186,953.46	Programmatic Outreach Services	\$19,882.54	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
MS11058	L A Service Authority for Freeway E	5/31/2013	4/30/2014		\$123,395.00	\$123,395.00	Implement 511 "Smart Phone" Application	\$0.00	Yes
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	Yes
MS11062	Load Center	9/7/2012	1/6/2016	12/6/2016	\$175,384.00	\$169,883.00	Retrofit Six Off-Road Vehicles under Showc	\$5,501.00	Yes
MS11066	Torrance Unified School District	11/19/2012	9/18/2018		\$42,296.00	\$42,296.00	Expansion of Existing CNG Station	\$0.00	Yes
MS11068	Ryder System Inc.	7/28/2012	10/27/2018		\$175,000.00	\$175,000.00	New Public Access L/CNG Station (Fontana)	\$0.00	Yes
MS11069	Ryder System Inc.	7/28/2012	8/27/2018		\$175,000.00	\$175,000.00	New Public Access L/CNG Station (Orange)	\$0.00	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
MS11086	DCL America Inc.	6/7/2013	10/6/2016		\$500,000.00	\$359,076.96	Retrofit Eight H.D. Off-Road Vehicles Under	\$140,923.04	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
MS11091	California Cartage Company, LLC	4/5/2013	8/4/2016	2/4/2018	\$55,000.00	\$0.00	Retrofit Two H.D. Off-Road Vehicles Under	\$55,000.00	No
MS11092	Griffith Company	2/15/2013	6/14/2016	12/14/2017	\$390,521.00	\$78,750.00	Retrofit 17 H.D. Off-Road Vehicles Under Sh	\$311,771.00	No
Total: 33		<u> </u>							
Closed/Inco	omplete Contracts								
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

\$424,801.00

\$45,416.00

\$65,958.00

\$159,012.00

\$0.00

\$0.00

\$0.00

\$4,350.00

Retrofit of 13 Off-Road Diesel Vehicles with

Retrofit Seven H.D. Off-Road Vehicles Unde

Install DECS on Two Off-Road Vehicles

Install DECS on Four Off-Road Vehicles

No

No

Yes

\$424,801.00

\$45,416.00

\$61,608.00

\$159,012.00

MS11085 Total: 5

MS11076

MS11081

MS11082

Open/Complete Contracts

SA Recycling, LLC

Metropolitan Stevedore Company

City of Long Beach Fleet Services B

Baumot North America, LLC

5/24/2012

9/7/2012

8/2/2012

8/23/2013

9/23/2015

1/6/2016

12/1/2015

12/22/2016

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML11020	City of Indio	2/1/2013	3/31/2019	9/30/2020	\$15,000.00	\$9,749.50	Retrofit one H.D. Vehicles w/DECS, repower	\$5,250.50	Yes
ML11021	City of Whittier	1/27/2012	9/26/2018	6/26/2019	\$210,000.00	\$210,000.00	Purchase 7 Nat. Gas H.D. Vehicles	\$0.00	Yes
ML11023	City of Rancho Cucamonga	4/20/2012	12/19/2018	9/19/2020	\$260,000.00	\$260,000.00	Expand Existing CNG Station, 2 H.D. Vehicl	\$0.00	Yes
ML11024	County of Los Angeles, Dept of Publi	12/5/2014	6/4/2022		\$90,000.00	\$90,000.00	Purchase 3 Nat. Gas H.D. Vehicles	\$0.00	Yes
ML11025	County of Los Angeles Department o	3/14/2014	9/13/2021		\$150,000.00	\$150,000.00	Purchase 5 Nat. Gas H.D. Vehicles	\$0.00	Yes
ML11032	City of Gardena	3/2/2012	9/1/2018	10/1/2020	\$102,500.00	\$102,500.00	Purchase Heavy-Duty CNG Vehicle, Install	\$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
ML11036	City of Riverside	1/27/2012	1/26/2019	3/26/2021	\$670,000.00	\$670,000.00	Install New CNG Station, Purchase 9 H.D. N	\$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
ML11040	City of South Pasadena	5/4/2012	1/3/2019	1/3/2022	\$30,000.00	\$30,000.00	Purchase 1 Nat. Gas H.D. Vehicle	\$0.00	Yes
ML11041	City of Santa Ana	9/7/2012	11/6/2018	1/6/2021	\$265,000.00	\$244,651.86	Purchase 7 LPG H.D. Vehicles, Retrofit 6 H.	\$20,348.14	Yes
ML11043	City of Hemet Public Works	2/3/2012	2/2/2019		\$60,000.00	\$60,000.00	Purchase 2 H.D. Nat. Gas Vehicles	\$0.00	Yes
ML11044	City of Ontario, Housing & Municipal	1/27/2012	6/26/2019		\$400,000.00	\$400,000.00	Expand Existing CNG Station	\$0.00	Yes
MS11008	USA Waste of California, Inc.	10/24/2013	4/23/2020		\$125,000.00	\$125,000.00	Expansion of Existing LCNG Station	\$0.00	Yes
MS11009	USA Waste of California, Inc.	10/24/2013	4/23/2020		\$125,000.00	\$125,000.00	Expansion of Existing LCNG Station	\$0.00	Yes
MS11010	Border Valley Trading	8/26/2011	10/25/2017	4/25/2020	\$150,000.00	\$150,000.00	New LNG 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
MS11016	CR&R Incorporated	4/12/2013	10/11/2019		\$100,000.00	\$100,000.00	New CNG Station - Perris	\$0.00	Yes
MS11019	City of Corona	11/29/2012	4/28/2020		\$225,000.00	\$225,000.00	Expansion of Existing CNG Station	\$0.00	Yes
MS11055	KEC Engineering	2/3/2012	8/2/2018	8/2/2019	\$200,000.00	\$200,000.00	Repower 5 H.D. Off-Road Vehicles	\$0.00	Yes
MS11060	Rowland Unified School District	8/17/2012	1/16/2019	1/16/2020	\$175,000.00	\$175,000.00	New Limited Access CNG Station	\$0.00	Yes
MS11067	City of Redlands	5/24/2012	11/23/2018	11/23/2019	\$85,000.00	\$85,000.00	Expansion of Existing CNG Station	\$0.00	Yes
MS11071	City of Torrance Transit Department	12/22/2012	1/21/2019	1/21/2020	\$175,000.00	\$175,000.00	New Limited Access CNG Station	\$0.00	Yes
MS11073	Los Angeles Unified School District	9/11/2015	2/10/2022		\$175,000.00	\$175,000.00	Expansion of Existing CNG Station	\$0.00	Yes
MS11079	Bear Valley Unified School District	2/5/2013	10/4/2019		\$175,000.00	\$175,000.00	New Limited Access CNG Station	\$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
FY 201	1-2012 Contracts								
Open Cont									
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
ML12018	City of West Covina	10/18/2013	10/17/2020	8/17/2023	\$300,000.00	\$0.00	Expansion of Existing CNG Station	\$300,000.00	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	6/13/2022	\$400,000.00	\$0.00	Install New CNG Station	\$400,000.00	No
ML12057	City of Coachella	8/28/2013	8/27/2019	1/27/2022	\$57,456.00	\$40,375.80	Purchase One Nat. Gas H.D. Vehicle/Street	\$17,080.20	No
ML12090	City of Palm Springs	10/9/2015	10/8/2021		\$21,163.00	\$0.00	EV Charging Infrastructure	\$21,163.00	No
ML12091	City of Bellflower	10/5/2018	10/4/2019		\$100,000.00	\$0.00	EV Charging Infrastructure	\$100,000.00	No
MS12060	City of Santa Monica	4/4/2014	8/3/2017	8/3/2019	\$500,000.00	\$434,202.57	Implement Westside Bikeshare Program	\$65,797.43	No
Total: 8					, ,	, ,	,	, ,	
Declined/C	Cancelled Contracts								
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
ML12038	City of Long Beach Public Works				\$26,000.00	\$0.00	Electric Vehicle Charging Infrastructure	\$26,000.00	No
ML12040	City of Duarte				\$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
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
ML12052	City of Whittier	3/14/2013	7/13/2019		\$165,000.00	\$0.00	Expansion of Existing CNG Station	\$165,000.00	No
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-Acess CNG Station	\$100,000.00	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
MS12030	Complete Landscape Care, Inc.				\$150,000.00	\$0.00	Purchase 6 Medium-Heavy Duty Vehicles	\$150,000.00	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
MS12070	Valley Music Travel/CID Entertainme				\$99,000.00	\$0.00	Implement Shuttle Service to Coachella Mus	\$99,000.00	No
Total: 12									
Closed Co.	ntracts								
ML12013	City of Pasadena	10/19/2012	3/18/2015	9/18/2015	\$200,000.00	\$65,065.00	Electric Vehicle Charging Infrastructure	\$134,935.00	Yes
ML12019	City of Palm Springs	9/6/2013	7/5/2015		\$38,000.00	\$16,837.00	EV Charging Infrastructure	\$21,163.00	Yes
ML12021	City of Rancho Cucamonga	9/14/2012	1/13/2020		\$40,000.00	\$40,000.00	Four Medium-Duty Nat. Gas Vehicles	\$0.00	Yes
ML12023	County of Los Angeles Internal Servi	8/1/2013	2/28/2015		\$250,000.00	\$192,333.00	EV Charging Infrastructure	\$57,667.00	Yes
ML12037	Coachella Valley Association of Gov	3/14/2013	3/13/2014		\$250,000.00	\$250,000.00	Street Sweeping Operations	\$0.00	Yes
ML12041	City of Anaheim Public Utilities Depa	4/4/2014	11/3/2015	11/3/2017	\$68,977.00	\$38,742.16	EV Charging Infrastructure	\$30,234.84	Yes
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
ML12049	City of Rialto Public Works	7/14/2014	9/13/2015		\$30,432.00	\$3,265.29	EV Charging Infrastructure	\$27,166.71	Yes
ML12050	City of Baldwin Park	4/25/2013	4/24/2014	10/24/2014	\$402,400.00	\$385,363.00	EV Charging Infrastructure	\$17,037.00	Yes
ML12054	City of Palm Desert	9/30/2013	2/28/2015		\$77,385.00	\$77,385.00	EV Charging Infrastructure	\$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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
ML12056	City of Cathedral City	3/26/2013	5/25/2014		\$25,000.00	\$25,000.00	Regional Street Sweeping Program	\$0.00	Yes
ML12066	City of Manhattan Beach	1/7/2014	4/6/2015		\$5,900.00	\$5,900.00	Electric Vehicle Charging Infrastructure	\$0.00	Yes
MS12001	Los Angeles County MTA	7/1/2012	4/30/2013		\$300,000.00	\$211,170.00	Clean Fuel Transit Service to Dodger Stadiu	\$88,830.00	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
MS12012	Rim of the World Unified School Dist	12/20/2012	5/19/2014		\$75,000.00	\$75,000.00	Vehicle Maintenance Facility Modifications	\$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
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	Yes
MS12031	Final Assembly, Inc.	11/2/2012	11/1/2018		\$50,000.00	\$32,446.00	Purchase 2 Medium-Heavy Duty Vehicles	\$17,554.00	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
MS12059	Orange County Transportation Autho	2/28/2013	12/27/2014		\$75,000.00	\$75,000.00	Maintenance Facilities Modifications	\$0.00	Yes
MS12061	Orange County Transportation Autho	3/14/2014	3/13/2017		\$224,000.00	\$114,240.00	Transit-Oriented Bicycle Sharing Program	\$109,760.00	Yes
MS12062	Fraser Communications	12/7/2012	5/31/2014		\$998,669.00	\$989,218.49	Develop & Implement "Rideshare Thursday"	\$9,450.51	Yes
MS12064	Anaheim Transportation Network	3/26/2013	12/31/2014		\$127,296.00	\$56,443.92	Implement Anaheim Circulator Service	\$70,852.08	Yes
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
MS12076	City of Ontario, Housing & Municipal	3/8/2013	4/7/2015		\$75,000.00	\$75,000.00	Maintenance Facilities Modification	\$0.00	Yes
MS12078	Penske Truck Leasing Co., L.P.	1/7/2014	1/6/2016		\$75,000.00	\$73,107.00	Maintenance Facility Modifications - Vernon	\$1,893.00	Yes
MS12081	Penske Truck Leasing Co., L.P.	1/7/2014	1/6/2016		\$75,000.00	\$75,000.00	Maintenance Facility Modifications - Santa A	\$0.00	Yes
MS12085	Bear Valley Unified School District	4/25/2013	6/24/2014		\$75,000.00	\$75,000.00	Maintenance Facility Modifications	\$0.00	Yes
MS12087	Los Angeles County MTA	8/29/2013	11/28/2015		\$125,000.00	\$125,000.00	Implement Rideshare Incentives Program	\$0.00	Yes
MS12088	Orange County Transportation Autho	12/6/2013	3/5/2016		\$125,000.00	\$18,496.50	Implement Rideshare Incentives Program	\$106,503.50	Yes
MS12089	Riverside County Transportation Co	10/18/2013	9/17/2015		\$249,136.00	\$105,747.48	Implement Rideshare Incentives Program	\$143,388.52	No
MS12Hom	Mansfield Gas Equipment Systems				\$296,000.00	\$0.00	Home Refueling Apparatus Incentive Progra	\$296,000.00	No
Total: 38									
Closed/Inco	omplete Contracts								
ML12051	City of Bellflower	2/7/2014	2/6/2016	5/6/2018	\$100,000.00	\$0.00	EV Charging Infrastructure	\$100,000.00	No
MS12077	City of Coachella	6/14/2013	6/13/2020		\$225,000.00	\$0.00	Construct New CNG Station	\$225,000.00	No
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
MS12084	Airport Mobil Inc.	12/6/2013	5/5/2020		\$150,000.00	\$0.00	Install New CNG Infrastructure	\$150,000.00	No
Total: 4						•			*

\$40,000.00

\$40,000.00

HD CNG Vehicle, Expand CNG Station

\$0.00

Yes

Open/Complete Contracts

City of Fullerton

4/25/2013

11/24/2020

11/24/2021

ML12015

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML12017	City of Los Angeles, Bureau of Sanit	6/26/2013	5/25/2020	11/25/2021	\$950,000.00	\$950,000.00	32 H.D. Nat. Gas Vehicles	\$0.00	Yes
ML12020	City of Los Angeles, Department of	9/27/2012	3/26/2019	3/26/2020	\$450,000.00	\$450,000.00	15 H.D. Nat. Gas Vehicles	\$0.00	Yes
ML12020	City of Los Angeles, Department of City of La Puente	12/6/2013	6/5/2020	3/26/2020	\$110,000.00	\$110,000.00	2 Medium-Duty and Three Heavy-Duty CNG	\$0.00	Yes
ML12022	,	2/8/2013	10/7/2019					\$0.00	Yes
	City of Redlands				\$90,000.00	\$90,000.00	Three Heavy-Duty Nat. Gas Vehicles		Yes
ML12046	City of Irvine	8/11/2013	3/10/2021		\$30,000.00	\$30,000.00	One Heavy-Duty Nat. Gas Vehicle	\$0.00	
ML12047	City of Orange	2/1/2013	1/31/2019		\$30,000.00	\$30,000.00	One Heavy-Duty Nat. Gas Vehicle	\$0.00	Yes
MS12004	USA Waste of California, Inc.	10/24/2013	11/23/2019		\$175,000.00	\$175,000.00	Construct New Limited-Access CNG Station	\$0.00	Yes
MS12008	Bonita Unified School District	7/12/2013	12/11/2019	4/11/2021	\$175,000.00	\$175,000.00	Construct New Limited-Access CNG Station	\$0.00	Yes
MS12009	Sysco Food Services of Los Angeles	1/7/2014	4/6/2020		\$150,000.00	\$150,000.00	Construct New Public-Access LNG Station	\$0.00	Yes
MS12010	Murrieta Valley Unified School Distric	4/5/2013	9/4/2019		\$242,786.00	\$242,786.00	Construct New Limited-Access CNG Station	\$0.00	Yes
MS12011	Southern California Gas Company	6/14/2013	6/13/2019	5/28/2021	\$150,000.00	\$150,000.00	Construct New Public-Access CNG Station -	\$0.00	Yes
MS12024	Southern California Gas Company	6/13/2013	12/12/2019	11/12/2020	\$150,000.00	\$150,000.00	Construct New Public-Access CNG Station -	\$0.00	Yes
MS12026	U-Haul Company of California	3/14/2013	3/13/2019		\$500,000.00	\$353,048.26	Purchase 23 Medium-Heavy Duty Vehicles	\$146,951.74	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
MS12033	Mike Diamond/Phace Management	12/22/2012	12/21/2018	6/21/2021	\$148,900.00	\$148,900.00	Purchase 20 Medium-Heavy Duty Vehicles	\$0.00	No
MS12034	Ware Disposal Company, Inc.	11/2/2012	11/1/2018	5/1/2022	\$133,070.00	\$133,070.00	Purchase 8 Medium-Heavy Duty Vehicles	\$0.00	No
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
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
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	Yes
MS12071	Transit Systems Unlimited, Inc.	5/17/2013	12/16/2018		\$21,250.00	\$21,250.00	Expansion of Existing CNG Station	\$0.00	Yes
MS12072	99 Cents Only Stores	4/5/2013	9/4/2019		\$100,000.00	\$100,000.00	Construct New CNG Station	\$0.00	Yes
MS12073	FirstCNG, LLC	7/27/2013	12/26/2019		\$150,000.00	\$150,000.00	Construct New CNG Station	\$0.00	Yes
MS12074	Arcadia Unified School District	7/5/2013	9/4/2019		\$175,000.00	\$175,000.00	Expansion of Existing CNG Infrastructure	\$0.00	Yes
MS12075	CR&R Incorporated	7/27/2013	1/26/2021	1/26/2022	\$100,000.00	\$100,000.00	Expansion of Existing CNG Infrastructure	\$0.00	No
MS12080	City of Pasadena	11/8/2013	8/7/2020	2/7/2022	\$225,000.00	\$225,000.00	Expansion of Existing CNG Infrastructure	\$0.00	Yes
MS12082	City of Los Angeles, Bureau of Sanit	11/20/2013	2/19/2021	2/19/2023	\$175,000.00	\$175,000.00	Install New CNG Infrastructure	\$0.00	Yes
MS12083	Brea Olinda Unified School District	7/30/2015	2/29/2024		\$59,454.00	\$59,454.00	Install New CNG Infrastructure	\$0.00	Yes
MS12086	SuperShuttle International, Inc.	3/26/2013	3/25/2019		\$225,000.00	\$225,000.00	Purchase 23 Medium-Heavy Duty Vehicles	\$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
FY 2012	2-2014 Contracts								
Open Cont									
ML14012	City of Santa Ana	2/13/2015	10/12/2021		\$244,000.00	\$0.00	EV Charging and 7 H.D. LPG Vehicles	\$244,000.00	No
ML14018	City of Los Angeles, Department of	3/6/2015	9/5/2021	12/5/2022	\$810,000.00	\$720,000.00	Purchase 27 H.D. Nat. Gas Vehicles	\$90,000.00	No
ML14019	City of Corona Public Works	12/5/2014	6/4/2020	3/6/2023	\$178,263.00	\$111,517.18	EV Charging, Bicycle Racks, Bicycle Locker	\$66,745.82	No
ML14021	Riverside County Regional Park and	7/24/2014	12/23/2016	9/30/2020	\$250,000.00	\$0.00	Bicycle Trail Improvements	\$250,000.00	No
ML14023	County of Los Angeles Department o	10/2/2015	9/1/2017	9/1/2019	\$230,000.00	\$0.00	Maintenance Fac. Modifications-Westcheste	\$230,000.00	No
ML14024	County of Los Angeles Department o	10/2/2015	9/1/2017	9/1/2019	\$230,000.00	\$0.00	Maintenance Fac. Modifications-Baldwin Par	\$230,000.00	No
ML14025	County of Los Angeles Dept of Publi	10/2/2015	7/1/2018	7/1/2024	\$300,000.00	\$0.00	Construct New CNG Station in Malibu	\$300,000.00	No
ML14026	County of Los Angeles Dept of Publi	10/2/2015	5/1/2023	5/1/2024	\$300,000.00	\$0.00	Construct New CNG Station in Castaic	\$300,000.00	No
ML14027	County of Los Angeles Dept of Publi	10/2/2015	5/1/2023	6/1/2024	\$500,000.00	\$0.00	Construct New CNG Station in Canyon Coun	\$500,000.00	No
ML14030	County of Los Angeles Internal Servi	1/9/2015	3/8/2018	6/8/2019	\$425,000.00	\$25,000.00	Bicycle Racks, Outreach & Education	\$400,000.00	No
ML14049	City of Moreno Valley	7/11/2014	3/10/2021		\$105,000.00	\$48,250.00	One HD Nat Gas Vehicle, EV Charging, Bicy	\$56,750.00	No
ML14055	City of Highland	10/10/2014	3/9/2018	3/9/2019	\$500,000.00	\$0.00	Bicycle Lanes and Outreach	\$500,000.00	No
ML14060	County of Los Angeles Internal Servi	10/6/2017	1/5/2019		\$104,400.00	\$0.00	Electric Vehicle Charging Infrastructure	\$104,400.00	No
ML14062	City of San Fernando	3/27/2015	5/26/2021	10/31/2023	\$387,091.00	\$0.00	Expand Existing CNG Fueling Station	\$387,091.00	No
ML14067	City of Duarte	12/4/2015	1/3/2023	6/3/2024	\$60,000.00	\$0.00	Purchase Two Electric Buses	\$60,000.00	No
ML14068	City of South Pasadena	9/12/2014	10/11/2015	1/11/2020	\$10,183.00	\$0.00	Electric Vehicle Charging Infrastructure	\$10,183.00	No
ML14069	City of Beaumont	3/3/2017	3/2/2025		\$200,000.00	\$0.00	Construct New CNG Infrastructure	\$200,000.00	No
ML14070	City of Rancho Cucamonga	9/3/2016	12/2/2018		\$365,245.00	\$0.00	Bicycle Trail Improvements	\$365,245.00	No
ML14072	City of Cathedral City	8/13/2014	1/12/2021		\$136,000.00	\$0.00	Medium & H.D. Vehicles, EV Charging, Bike	\$136,000.00	No
ML14093	County of Los Angeles Dept of Publi	8/14/2015	1/13/2019		\$150,000.00	\$0.00	San Gabriel BikeTrail Underpass Improveme	\$150,000.00	No
MS14037	Penske Truck Leasing Co., L.P.	4/7/2017	6/6/2020		\$75,000.00	\$0.00	Vehicle Maint. Fac. Modifications - Carson	\$75,000.00	No
MS14057	Los Angeles County MTA	11/7/2014	10/6/2019	10/6/2020	\$1,250,000.00	\$0.00	Implement Various Signal Synchronization P	\$1,250,000.00	No
MS14059	Riverside County Transportation Co	9/5/2014	3/4/2018	4/4/2020	\$1,250,000.00	\$0.00	Implement Various Signal Synchronization P	\$1,250,000.00	No
MS14072	San Bernardino County Transportatio	3/27/2015	3/26/2018	3/26/2020	\$1,250,000.00	\$887,566.17	Implement Various Signal Synchronization P	\$362,433.83	No
MS14076	Rialto Unified School District	6/17/2015	2/16/2022		\$225,000.00	\$213,750.00	New Public Access CNG Station	\$11,250.00	No
MS14079	Waste Resources, Inc.	9/14/2016	8/13/2022	8/13/2023	\$100,000.00	\$0.00	New Limited Access CNG Station	\$100,000.00	No
MS14082	Grand Central Recycling & Transfer	12/4/2015	3/3/2023	3/3/2024	\$150,000.00	\$135,000.00	Construct New Public Access CNG Station	\$15,000.00	No
MS14083	Hacienda La Puente Unified School	7/10/2015	3/9/2022		\$175,000.00	\$0.00	New Limited Access CNG Station	\$175,000.00	No
Total: 28	1		I		_I	1		I	
Pending E.	xecution Contracts								
ML14095	City of South Pasadena				\$142,096.00	\$134,182.09	Bicycle Trail Improvements	\$7,913.91	No
Total: 1									
Declined/C	ancelled Contracts								
ML14063	City of Hawthorne				\$32,000.00	\$0.00	Expansion of Existing CNG Infrastructure	\$32,000.00	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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
MS14038	Penske Truck Leasing Co., L.P.				\$75,000.00	\$0.00	Vehicle Maint. Fac. Modifications - Fontana	\$75,000.00	No
MS14043	City of Anaheim				\$175,000.00	\$0.00	Expansion of Existing CNG Station	\$175,000.00	No
MS14078	American Honda Motor Co., Inc.	9/4/2015	8/3/2022		\$150,000.00	\$0.00	New Public Access CNG Station	\$150,000.00	No
MS14085	Prologis, L.P.				\$100,000.00	\$0.00	New Limited Access CNG Station	\$100,000.00	No
MS14086	San Gabriel Valley Towing I				\$150,000.00	\$0.00	New Public Access CNG Station	\$150,000.00	No
MS14091	Serv-Wel Disposal				\$100,000.00	\$0.00	New Limited-Access CNG Infrastructure	\$100,000.00	No
Total: 9		1	I .	JI.				I	
Closed Cor	ntracts								
ML14010	City of Cathedral City	8/13/2014	10/12/2015		\$25,000.00	\$25,000.00	Street Sweeping Operations	\$0.00	Yes
ML14011	City of Palm Springs	6/13/2014	1/12/2016		\$79,000.00	\$78,627.00	Bicycle Racks, Bicycle Outreach & Educatio	\$373.00	Yes
ML14015	Coachella Valley Association of Gov	6/6/2014	9/5/2015		\$250,000.00	\$250,000.00	Street Sweeping Operations	\$0.00	Yes
ML14020	County of Los Angeles Dept of Publi	8/13/2014	1/12/2018		\$150,000.00	\$0.00	San Gabriel BikeTrail Underpass Improveme	\$150,000.00	No
ML14029	City of Irvine	7/11/2014	6/10/2017		\$90,500.00	\$71,056.78	Bicycle Trail Improvements	\$19,443.22	Yes
ML14051	City of Brea	9/5/2014	1/4/2017	7/4/2018	\$450,000.00	\$450,000.00	Installation of Bicycle Trail	\$0.00	Yes
ML14054	City of Torrance	11/14/2014	4/13/2017	7/13/2017	\$350,000.00	\$319,908.80	Upgrade Maintenance Facility	\$30,091.20	Yes
ML14056	City of Redlands	9/5/2014	5/4/2016	5/4/2018	\$125,000.00	\$125,000.00	Bicycle Lanes	\$0.00	Yes
ML14065	City of Orange	9/5/2014	8/4/2015		\$10,000.00	\$10,000.00	Electric Vehicle Charging Infrastructure	\$0.00	Yes
ML14071	City of Manhattan Beach	1/9/2015	11/8/2018		\$22,485.00	\$22,485.00	Electric Vehicle Charging Infrastructure	\$0.00	Yes
ML14094	City of Yucaipa	6/9/2017	6/8/2018		\$84,795.00	\$84,795.00	Installation of Bicycle Lanes	\$0.00	Yes
MS14001	Los Angeles County MTA	3/6/2015	4/30/2015		\$1,216,637.00	\$1,199,512.68	Clean Fuel Transit Service to Dodger Stadiu	\$17,124.32	Yes
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	Yes
MS14003	Orange County Transportation Autho	8/1/2013	4/30/2014	10/30/2014	\$194,235.00	\$184,523.00	Implement Metrolink Service to Angel Stadiu	\$9,712.00	Yes
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	Yes
MS14005	Transit Systems Unlimited, Inc.	4/11/2014	2/28/2016		\$515,200.00	\$511,520.00	Provide Expanded Shuttle Service to Hollyw	\$3,680.00	Yes
MS14007	Orange County Transportation Autho	6/6/2014	4/30/2015		\$208,520.00	\$189,622.94	Implement Special Metrolink Service to Ang	\$18,897.06	Yes
MS14008	Orange County Transportation Autho	8/13/2014	5/31/2015		\$601,187.00	\$601,187.00	Implement Clean Fuel Bus Service to Orang	\$0.00	Yes
MS14009	A-Z Bus Sales, Inc.	1/17/2014	12/31/2014	3/31/2015	\$388,000.00	\$388,000.00	Alternative Fuel School Bus Incentive Progra	\$0.00	Yes
MS14039	Waste Management Collection and	7/10/2015	4/9/2016		\$75,000.00	\$75,000.00	Vehicle Maint. Fac. Modifications - Irvine	\$0.00	Yes
MS14040	Waste Management Collection and	7/10/2015	4/9/2016		\$75,000.00	\$75,000.00	Vehicle Maint. Fac. Modifications - Santa An	\$0.00	Yes
MS14047	Southern California Regional Rail Au	3/7/2014	9/30/2014		\$49,203.00	\$32,067.04	Special Metrolink Service to Autoclub Speed	\$17,135.96	Yes
				1		1	- 1		

\$940,850.00

\$1,250,000.00

\$221,312.00

\$239,645.00

\$79,660.00

\$847,850.00

\$221,312.00

\$195,377.88

\$66,351.44

\$1,250,000.00

Alternative Fuel School Bus Incentive Progra

Implement Various Signal Synchronization P

Implement Special Metrolink Service to Ang

Special Metrolink Service to Autoclub Speed

Anaheim Resort Circulator Service

\$93,000.00

\$44,267.12

\$13,308.56

\$0.00

\$0.00

Yes

Yes

Yes

Yes

Yes

MS14048

MS14058

MS14073

MS14087

MS14088

BusWest

Orange County Transportation Autho

Orange County Transportation Autho

Southern California Regional Rail Au

Anaheim Transportation Network

3/14/2014

11/7/2014

1/9/2015

8/14/2015

5/7/2015

12/31/2014

4/6/2016

4/30/2017

4/30/2016

9/30/2015

5/31/2015

4/6/2017

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
MS14089	Top Shelf Consulting, LLC	1/18/2017	8/4/2016	3/31/2017	\$200,000.00	\$200,000.00	Enhanced Fleet Modernization Program	\$0.00	Yes
Total: 28	<u> </u>					1	-		
Closed/Inco	omplete Contracts								
ML14050	City of Yucaipa	7/11/2014	9/10/2015	7/1/2016	\$84,795.00	\$0.00	Installation of Bicycle Lanes	\$84,795.00	No
ML14066	City of South Pasadena	9/12/2014	7/11/2016	2/11/2018	\$142,096.00	\$0.00	Bicycle Trail Improvements	\$142,096.00	No
MS14092	West Covina Unified School District	9/3/2016	12/2/2022		\$124,000.00	\$0.00	Expansion of Existing CNG Infrastructure	\$124,000.00	No
Total: 3									
Open/Comp	olete Contracts								
ML14013	City of Los Angeles, Bureau of Sanit	10/7/2016	2/6/2025		\$400,000.00	\$400,000.00	Purchase 14 H.D. Nat. Gas Vehicles	\$0.00	Yes
ML14014	City of Torrance	9/5/2014	12/4/2019		\$56,000.00	\$56,000.00	EV Charging Infrastructure	\$0.00	Yes
ML14016	City of Anaheim	4/3/2015	9/2/2021		\$380,000.00	\$380,000.00	Purchase 2 H.D. Vehicles, Expansion of Exi	\$0.00	Yes
ML14022	County of Los Angeles Department o	10/2/2015	5/1/2022		\$270,000.00	\$270,000.00	Purchase 9 H.D. Nat. Gas Vehicles	\$0.00	Yes
ML14028	City of Fullerton	9/5/2014	1/4/2022		\$126,950.00	\$126,950.00	Expansion of Exisiting CNG Infrastructure	\$0.00	Yes
ML14031	Riverside County Waste Manageme	6/13/2014	12/12/2020		\$90,000.00	\$90,000.00	Purchase 3 H.D. CNG Vehicles	\$0.00	Yes
ML14032	City of Rancho Cucamonga	1/9/2015	1/8/2022		\$113,990.00	\$104,350.63	Expansion of Existing CNG Infras., Bicycle L	\$9,639.37	Yes
ML14033	City of Irvine	7/11/2014	2/10/2021	2/10/2022	\$60,000.00	\$60,000.00	Purchase 2 H.D. CNG Vehicles	\$0.00	Yes
ML14034	City of Lake Elsinore	9/5/2014	5/4/2021		\$56,700.00	\$56,700.00	EV Charging Stations	\$0.00	Yes
ML14061	City of La Habra	3/11/2016	3/10/2022		\$41,600.00	\$41,270.49	Purchase Two Heavy-Duty Nat. Gas Vehicle	\$329.51	Yes
ML14064	City of Claremont	7/11/2014	7/10/2020	1/10/2021	\$60,000.00	\$60,000.00	Purchase Two Heavy-Duty Nat. Gas Vehicle	\$0.00	Yes
MS14041	USA Waste of California, Inc.	9/4/2015	10/3/2021		\$175,000.00	\$175,000.00	Limited-Access CNG Station, Vehicle Maint.	\$0.00	Yes
MS14042	Grand Central Recycling & Transfer	6/6/2014	9/5/2021		\$150,000.00	\$150,000.00	Expansion of Existing CNG Station	\$0.00	Yes
MS14044	TIMCO CNG Fund I, LLC	5/2/2014	11/1/2020		\$150,000.00	\$150,000.00	New Public-Access CNG Station in Santa A	\$0.00	Yes
MS14045	TIMCO CNG Fund I, LLC	6/6/2014	12/5/2020		\$150,000.00	\$150,000.00	New Public-Access CNG Station in Inglewoo	\$0.00	Yes
MS14046	Ontario CNG Station Inc.	5/15/2014	5/14/2020	11/14/2021	\$150,000.00	\$150,000.00	Expansion of Existing CNG Infrastructure	\$0.00	Yes
MS14052	Arcadia Unified School District	6/13/2014	10/12/2020		\$78,000.00	\$78,000.00	Expansion of an Existing CNG Fueling Statio	\$0.00	Yes
MS14053	Upland Unified School District	1/9/2015	7/8/2021		\$175,000.00	\$175,000.00	Expansion of Existing CNG Infrastructure	\$0.00	No
MS14074	Midway City Sanitary District	1/9/2015	3/8/2021		\$250,000.00	\$250,000.00	Limited-Access CNG Station & Facility Modif	\$0.00	Yes
MS14075	Fullerton Joint Union High School Di	7/22/2016	11/21/2023		\$300,000.00	\$293,442.00	Expansion of Existing CNG Infrastructure/Ma	\$6,558.00	Yes
MS14077	County Sanitation Districts of L.A. Co	3/6/2015	5/5/2021		\$175,000.00	\$175,000.00	New Limited Access CNG Station	\$0.00	Yes
MS14080	CR&R Incorporated	6/1/2015	8/31/2021	8/31/2022	\$200,000.00	\$200,000.00	Expansion of Existing CNG Infrastructure/Ma	\$0.00	No
MS14081	CR&R Incorporated	6/1/2015	5/30/2021		\$175,000.00	\$100,000.00	Expansion of Existing CNG Infrastructure/Ma	\$75,000.00	No
MS14084	US Air Conditioning Distributors	5/7/2015	9/6/2021		\$100,000.00	\$100,000.00	Expansion of Existing CNG Infrastructure	\$0.00	Yes
MS14090	City of Monterey Park	5/7/2015	5/6/2021		\$225,000.00	\$225,000.00	Expansion of Existing CNG Infrastructure	\$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
FY 2014	4-2016 Contracts								
Open Cont	tracts								
ML16005	City of Palm Springs	3/4/2016	10/3/2017		\$40,000.00	\$0.00	Install Bicycle Racks, and Implement Bicycl	\$40,000.00	No
ML16006	City of Cathedral City	4/27/2016	4/26/2022		\$55,000.00	\$0.00	Purchase 1 H.D. Nat. Gas Vehicle, Bicycle	\$55,000.00	No
ML16007	City of Culver City Transportation De	10/6/2015	4/5/2023		\$246,000.00	\$210,000.00	Purchase 7 H.D. Nat. Gas Vehicles, EV Cha	\$36,000.00	No
ML16008	City of Pomona	9/20/2016	11/19/2022	11/19/2023	\$60,000.00	\$0.00	Purchase 3 Medium-Duty and 1 Heavy-Duty	\$60,000.00	No
ML16009	City of Fountain Valley	10/6/2015	2/5/2018	2/5/2019	\$46,100.00	\$0.00	Install EV Charging Infrastructure	\$46,100.00	No
ML16010	City of Fullerton	10/7/2016	4/6/2023		\$370,500.00	\$0.00	Expand Existing CNG Station, EV Charging I	\$370,500.00	No
ML16013	City of Monterey Park	12/4/2015	7/3/2022	7/3/2023	\$90,000.00	\$0.00	Purchase 3 Heavy-Duty Nat. Gas Vehicles	\$90,000.00	No
ML16016	City of Los Angeles, Department of	2/5/2016	12/4/2022		\$630,000.00	\$540,000.00	Purchase 21 Heavy-Duty Nat. Gas Vehicles	\$90,000.00	No
ML16017	City of Long Beach	2/5/2016	8/4/2023		\$1,445,400.00	\$951,400.00	Purchase 50 Medium-Duty, 19 H.D. Nat. Ga	\$494,000.00	No
ML16018	City of Hermosa Beach	10/7/2016	1/6/2023		\$29,520.00	\$23,768.44	Purchase 2 M.D. Nat. Gas Vehicles, Bicycle	\$5,751.56	No
ML16019	City of Los Angeles, Dept of General	1/25/2017	3/24/2020		\$102,955.00	\$0.00	Install EV Charging Infrastructure	\$102,955.00	No
ML16021	City of Santa Clarita	10/7/2016	6/6/2024		\$49,400.00	\$0.00	Install EV Charging Infrastructure	\$49,400.00	No
ML16022	Los Angeles Department of Water an	5/5/2017	3/4/2024		\$360,000.00	\$0.00	Purchase 13 H.D. Nat. Gas Vehicles	\$360,000.00	No
ML16025	City of South Pasadena	6/22/2016	4/21/2023	4/21/2024	\$180,535.00	\$0.00	Purchase H.D. Nat. Gas Vehicle, Expand Ex	\$180,535.00	No
ML16032	City of Azusa	9/9/2016	4/8/2019	4/8/2020	\$474,925.00	\$0.00	Implement a "Complete Streets" Pedestrian	\$474,925.00	No
ML16034	City of Riverside	3/11/2016	10/10/2018	10/10/2019	\$500,000.00	\$0.00	Implement a "Complete Streets" Pedestrian	\$500,000.00	No
ML16038	City of Palm Springs	4/1/2016	7/31/2022		\$230,000.00	\$0.00	Install Bicycle Lanes & Purchase 4 Heavy-D	\$230,000.00	No
ML16039	City of Torrance Transit Department	1/6/2017	9/5/2022		\$32,000.00	\$0.00	Install EV Charging Infrastructure	\$32,000.00	No
ML16040	City of Eastvale	1/6/2017	7/5/2022		\$110,000.00	\$0.00	Install EV Charging Infrastructure	\$110,000.00	No
ML16041	City of Moreno Valley	9/3/2016	1/2/2021	1/2/2022	\$20,000.00	\$0.00	Install EV Charging Infrastructure	\$20,000.00	No
ML16042	City of San Dimas	4/1/2016	12/31/2019	12/31/2020	\$55,000.00	\$0.00	Install EV Charging Infrastructure	\$55,000.00	No
ML16045	City of Anaheim	6/22/2016	8/21/2019		\$275,000.00	\$0.00	Maintenance Facility Modifications	\$275,000.00	No
ML16046	City of El Monte	4/1/2016	5/31/2021	5/31/2023	\$20,160.00	\$0.00	Install EV Charging Infrastructure	\$20,160.00	No
ML16047	City of Fontana	1/6/2017	8/5/2019		\$500,000.00	\$0.00	Enhance an Existing Class 1 Bikeway	\$500,000.00	No
ML16048	City of Placentia	3/26/2016	5/25/2021	6/25/2022	\$90,000.00	\$18,655.00	Install a Bicycle Locker and EV Charging Infr	\$71,345.00	No
ML16052	City of Rancho Cucamonga	9/3/2016	11/2/2019		\$315,576.00	\$0.00	Install Two Class 1 Bikeways	\$315,576.00	No
ML16053	City of Claremont	3/11/2016	7/10/2018	5/10/2020	\$498,750.00	\$0.00	Implement a "Complete Streets" Pedestrian	\$498,750.00	No
ML16054	City of Yucaipa	3/26/2016	7/26/2018	7/26/2019	\$120,000.00	\$0.00	Implement a "Complete Streets" Pedestrian	\$120,000.00	No
ML16056	City of Ontario	3/23/2016	9/22/2020	9/22/2021	\$150,000.00	\$0.00	Expansion of an Existing CNG Station	\$150,000.00	No
ML16057	City of Yucaipa	4/27/2016	1/26/2019	1/26/2020	\$380,000.00	\$0.00	Implement a "Complete Streets" Pedestrian	\$380,000.00	No
ML16058	Los Angeles County Department of P	10/7/2016	4/6/2024		\$491,898.00	\$0.00	Purchase 15 H.D. Nat. Gas Vehicles and Ins	\$491,898.00	No
ML16060	City of Cudahy	2/5/2016	10/4/2017		\$73,910.00	\$0.00	Implement an "Open Streets" Event	\$73,910.00	No
ML16069	City of West Covina	3/10/2017	6/9/2021		\$54,199.00	\$0.00	Installation of EV Charging Infrastructure	\$54,199.00	No
ML16070	City of Beverly Hills	2/21/2017	6/20/2023		\$90,000.00	\$90,000.00	Purchase 3 H.D. Nat. Gas Vehicles	\$0.00	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML16071	City of Highland	5/5/2017	1/4/2020		\$264,500.00	\$0.00	Implement a "Complete Streets" Pedestrian	\$264,500.00	No
ML16075	City of San Fernando	10/27/2016	2/26/2019		\$354,000.00	\$0.00	Install a Class 1 Bikeway	\$354,000.00	No
ML16076	City of San Fernando	2/21/2017	8/20/2021		\$100,000.00	\$0.00	Install EV Charging Infrastructure	\$100,000.00	No
ML16077	City of Rialto	5/3/2018	10/2/2021		\$463,216.00	\$0.00	Pedestrian Access Improvements, Bicycle L	\$463,216.00	No
ML16083	City of El Monte	4/1/2016	4/30/2021	4/30/2023	\$57,210.00	\$0.00	Install EV Charging Infrastructure	\$57,210.00	No
ML16122	City of Wildomar	6/8/2018	6/7/2019		\$500,000.00	\$0.00	Install Bicycle Lanes	\$500,000.00	No
MS16029	Orange County Transportation Autho	1/12/2018	6/11/2020		\$851,883.00	\$0.00	Transportation Control Measure Partnership	\$851,883.00	No
MS16030	Better World Group Advisors	12/19/2015	12/31/2017	12/31/2019	\$256,619.00	\$169,082.93	Programmic Outreach Services to the MSR	\$87,536.07	No
MS16086	San Bernardino County Transportatio	9/3/2016	10/2/2021		\$800,625.00	\$229,589.91	Freeway Service Patrols	\$571,035.09	No
MS16087	Burrtec Waste & Recycling Services,	7/8/2016	3/7/2023		\$100,000.00	\$90,000.00	Construct New Limited-Access CNG Station	\$10,000.00	No
MS16090	Los Angeles County MTA	10/27/2016	4/26/2020		\$2,500,000.00	\$0.00	Expansion of the Willowbrook/Rosa Parks Tr	\$2,500,000.00	No
MS16091	San Bernardino County Transportatio	10/7/2016	11/6/2018		\$1,000,000.00	\$0.00	Traffic Signal Synchronization Projects	\$1,000,000.00	No
MS16092	San Bernardino County Transportatio	2/3/2017	1/2/2019		\$242,937.00	\$242,016.53	Implement a Series of "Open Streets" Event	\$920.47	No
MS16093	Orange County Transportation Autho	9/3/2016	3/2/2018	9/2/2018	\$1,553,657.00	\$1,499,575.85	Implement a Mobile Ticketing System	\$54,081.15	No
MS16094	Riverside County Transportation Co	1/25/2017	1/24/2022		\$1,909,241.00	\$0.00	MetroLink First Mile/Last Mile Mobility Strate	\$1,909,241.00	No
MS16096	San Bernardino County Transportatio	10/27/2016	12/26/2019		\$450,000.00	\$0.00	EV Charging Infrastructure	\$450,000.00	No
MS16097	Walnut Valley Unified School District	10/7/2016	11/6/2022		\$250,000.00	\$175,000.00	Expand CNG Station & Modify Maintenance	\$75,000.00	No
MS16102	Nasa Services, Inc.	2/21/2017	4/20/2023		\$100,000.00	\$90,000.00	Construct a Limited-Access CNG Station	\$10,000.00	No
MS16105	Huntington Beach Union High School	3/3/2017	7/2/2024		\$175,000.00	\$175,000.00	Expansion of Existing CNG Infrastructure	\$0.00	No
MS16110	City of Riverside	10/6/2017	2/5/2025		\$300,000.00	\$0.00	Expansion of Existing CNG Station and Main	\$300,000.00	No
MS16112	Orange County Transportation Autho	4/14/2017	3/13/2024		\$1,470,000.00	\$465,000.00	Repower Up to 98 Transit Buses	\$1,005,000.00	No
MS16113	Los Angeles County MTA	5/12/2017	4/11/2024		\$1,875,000.00	\$0.00	Repower Up to 125 Transit Buses	\$1,875,000.00	No
MS16115	City of Santa Monica	4/14/2017	7/13/2025		\$870,000.00	\$256,500.00	Repower 58 Transit Buses	\$613,500.00	No
MS16117	Omnitrans	4/21/2017	6/20/2023		\$175,000.00	\$166,250.00	Expansion of Existing CNG Infrastructure	\$8,750.00	No
MS16118	Omnitrans	4/21/2017	6/20/2023		\$175,000.00	\$166,250.00	Expansion of Existing CNG Infrastructure	\$8,750.00	No
MS16119	Omnitrans	4/21/2017	8/20/2022		\$150,000.00	\$0.00	New Public Access CNG Station	\$150,000.00	No
MS16120	Omnitrans	4/7/2017	5/6/2025		\$945,000.00	\$0.00	Repower 63 Existing Buses	\$945,000.00	No
MS16121	Long Beach Transit	11/3/2017	4/2/2024		\$600,000.00	\$0.00	Repower 39 and Purchase 1 New Transit Bu	\$600,000.00	No
Total: 62									
Pending Ex	xecution Contracts								
MS16106	City of Lawndale				\$175,000.00	\$0.00	Expansion of Existing CNG Infrastructure	\$175,000.00	No
MS16123	Orange County Transportation Autho				\$91,760.00	\$0.00	Install La Habra Union Pacific Bikeway	\$91,760.00	No
MS16124	Riverside County Transportation Co				\$253,239.00	\$0.00	Extended Freeway Service Patrols	\$253,239.00	No
Total: 3									
Declined/C	ancelled Contracts								
		l	I .	1	1 *	A	1	1 *	1

\$153,818.00

\$500,000.00

\$0.00

\$0.00

ML16014

ML16065

City of Dana Point

City of Temple City

Extend an Existing Class 1 Bikeway

Implement a "Complete Streets" Pedestrian

\$153,818.00

\$500,000.00

No

No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML16067	City of South El Monte				\$73,329.00	\$0.00	Implement an "Open Streets" Event	\$73,329.00	No
ML16074	City of La Verne	7/22/2016	1/21/2023		\$365,000.00	\$0.00	Install CNG Fueling Station	\$365,000.00	No
MS16043	LBA Realty Company LLC				\$100,000.00	\$0.00	Install Limited-Access CNG Station	\$100,000.00	No
MS16080	Riverside County Transportation Co				\$1,200,000.00	\$0.00	Passenger Rail Service for Coachella and St	\$1,200,000.00	No
MS16098	Long Beach Transit				\$198,957.00	\$0.00	Provide Special Bus Service to Stub Hub Ce	\$198,957.00	No
MS16104	City of Perris				\$175,000.00	\$0.00	Expansion of Existing CNG Infrastructure	\$175,000.00	No
MS16107	Athens Services				\$100,000.00	\$0.00	Construct a Limited-Access CNG Station	\$100,000.00	No
MS16108	VNG 5703 Gage Avenue, LLC				\$150,000.00	\$0.00	Construct Public-Access CNG Station in Bell	\$150,000.00	No
MS16109	Sanitation Districts of Los Angeles C				\$275,000.00	\$0.00	Expansion of an Existing L/CNG Station	\$275,000.00	No
MS16111	VNG 925 Lakeview Avenue, LLC				\$150,000.00	\$0.00	Construct Public Access CNG Station in Pla	\$150,000.00	No
Total: 12									
Closed Con	tracts								
ML16015	City of Yorba Linda	3/4/2016	11/3/2017		\$85,000.00	\$85,000.00	Install Bicycle Lanes	\$0.00	No
ML16020	City of Pomona	4/1/2016	2/1/2018	8/1/2018	\$440,000.00	\$440,000.00	Install Road Surface Bicycle Detection Syste	\$0.00	No
ML16026	City of Downey	5/6/2016	9/5/2017		\$40,000.00	\$40,000.00	Install EV Charging Infrastructure	\$0.00	No
ML16028	City of Azusa	9/9/2016	4/8/2018		\$25,000.00	\$25,000.00	Enhance Existing Class 1 Bikeway	\$0.00	Yes
ML16031	City of Cathedral City	12/19/2015	2/18/2017		\$25,000.00	\$25,000.00	Street Sweeping in Coachella Valley	\$0.00	Yes
ML16033	Coachella Valley Association of Gov	4/27/2016	4/26/2018		\$250,000.00	\$250,000.00	Street Sweeping Operations in Coachella Va	\$0.00	Yes
ML16035	City of Wildomar	4/1/2016	11/1/2017		\$500,000.00	\$0.00	Install Bicycle Lanes	\$500,000.00	No
ML16036	City of Brea	3/4/2016	12/3/2018		\$500,000.00	\$500,000.00	Install a Class 1 Bikeway	\$0.00	Yes
ML16049	City of Buena Park	4/1/2016	11/30/2018		\$429,262.00	\$429,262.00	Installation of a Class 1 Bikeway	\$0.00	Yes
ML16051	City of South Pasadena	2/12/2016	1/11/2017	12/11/2017	\$320,000.00	\$258,691.25	Implement "Open Streets" Event with Variou	\$61,308.75	Yes
ML16064	County of Orange, OC Parks	2/21/2017	10/20/2018		\$204,073.00	\$157,632.73	Implement "Open Streets" Events with Vario	\$46,440.27	No
ML16066	City of Long Beach Public Works	1/13/2017	9/12/2018		\$75,050.00	\$63,763.62	Implement an "Open Streets" Event	\$11,286.38	Yes
ML16068	Riverside County Dept of Public Heal	12/2/2016	8/1/2018		\$171,648.00	\$171,648.00	Implement "Open Streets" Events with Vario	\$0.00	Yes
ML16073	City of Long Beach Public Works	1/13/2017	7/12/2017		\$50,000.00	\$50,000.00	Implement an "Open Streets" Event	\$0.00	Yes
ML16078	City of Moreno Valley	5/6/2016	11/5/2017	5/5/2018	\$32,800.00	\$31,604.72	Install Bicycle Infrastructure & Implement Bi	\$1,195.28	Yes
MS16001	Los Angeles County MTA	4/1/2016	4/30/2017		\$1,350,000.00	\$1,332,039.84	Clean Fuel Transit Service to Dodger Stadiu	\$17,960.16	Yes
MS16002	Orange County Transportation Autho	10/6/2015	5/31/2016		\$722,266.00	\$703,860.99	Clean Fuel Transit Service to Orange Count	\$18,405.01	Yes
MS16003	Special Olympics World Games Los	10/9/2015	12/30/2015		\$380,304.00	\$380,304.00	Low-Emission Transportation Service for Sp	\$0.00	Yes

\$27,690.00

\$565,600.00

\$78,033.00

\$128,500.00

\$694,645.00

\$50,000.00

\$80,455.00

\$9,300.00

\$396,930.00

\$64,285.44

\$128,500.00

\$672,864.35

\$50,000.00

\$66,169.43

Design, Develop, Host and Maintain MSRC

Implement Special Shuttle Service from Uni

Special MetroLink Service to Autoclub Spee

Implement Special Bus Service to Angel Sta

Implement Special Bus Service to Orange C

Provide Special Bus Service to the Los Ange

Provide Metrolink Service to Autoclub Speed

\$18,390.00

\$168,670.00

\$13,747.56

\$21,780.65

\$14,285.57

\$0.00

\$0.00

Yes

No

No

Yes

Yes

Yes

Yes

Mineral LLC

Foothill Transit

Transit Systems Unlimited, Inc.

Southern California Regional Rail Au

Orange County Transportation Autho

Orange County Transportation Autho

Southern California Regional Rail Au

9/4/2015

5/6/2016

3/11/2016

7/8/2016

7/22/2016

3/3/2017

5/5/2017

7/3/2017

2/28/2018

9/30/2016

4/30/2017

5/31/2017

3/31/2017

9/30/2017

1/3/2018

MS16004

MS16084

MS16085

MS16089

MS16095

MS16099

MS16100

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
Total: 25									
Closed/Inco	omplete Contracts								
MS16082	Riverside County Transportation Co	9/3/2016	8/2/2018		\$590,759.00	\$337,519.71	Extended Freeway Service Patrols	\$253,239.29	No
Total: 1									
Open/Comp	olete Contracts								
ML16011	City of Claremont	10/6/2015	6/5/2022		\$90,000.00	\$90,000.00	Purchase 3 Heavy-Duty Nat. Gas Vehicles	\$0.00	Yes
ML16012	City of Carson	1/15/2016	10/14/2022		\$60,000.00	\$60,000.00	Purchase 2 Heavy-Duty Nat. Gas Vehicles	\$0.00	Yes
ML16023	City of Banning	12/11/2015	12/10/2021		\$30,000.00	\$30,000.00	Purchase 1 H.D. Nat. Gas Vehicle	\$0.00	Yes
ML16024	City of Azusa	4/27/2016	2/26/2022		\$30,000.00	\$30,000.00	Purchase 1 H.D. Nat. Gas Vehicle	\$0.00	Yes
ML16027	City of Whittier	1/8/2016	11/7/2022		\$30,000.00	\$30,000.00	Purchase 1 H.D. Nat. Gas Vehicle	\$0.00	Yes
ML16037	City of Rancho Cucamonga	2/5/2016	11/4/2022		\$30,000.00	\$30,000.00	Purchase One Heavy-Duty Natural Gas Vehi	\$0.00	Yes
ML16050	City of Westminster	5/6/2016	7/5/2020	5/5/2022	\$115,000.00	\$93,925.19	Installation of EV Charging Infrastructure	\$21,074.81	No
ML16055	City of Ontario	5/6/2016	5/5/2022		\$270,000.00	\$270,000.00	Purchase Nine Heavy-Duty Natural-Gas Veh	\$0.00	Yes
ML16059	City of Burbank	4/1/2016	2/28/2022		\$180,000.00	\$180,000.00	Purchase 6 H.D. Nat. Gas Vehicles	\$0.00	No
ML16061	City of Murrieta	4/27/2016	1/26/2020		\$11,642.00	\$9,398.36	Installation of EV Charging Infrastructure	\$2,243.64	Yes
ML16062	City of Colton	6/3/2016	7/2/2020		\$25,000.00	\$21,003.82	Installation of EV Charging Infrastructure	\$3,996.18	Yes
ML16063	City of Glendora	3/4/2016	4/3/2022		\$30,000.00	\$30,000.00	Purchase One H.D. Nat. Gas Vehicle	\$0.00	Yes
ML16072	City of Palm Desert	3/4/2016	1/4/2020	1/3/2022	\$56,000.00	\$56,000.00	Installation of EV Charging Infrastructure	\$0.00	Yes
ML16079	City of Yucaipa	4/1/2016	3/31/2020		\$5,000.00	\$5,000.00	Purchase Electric Lawnmower	\$0.00	Yes
MS16081	EDCO Disposal Corporation	3/4/2016	10/3/2022		\$150,000.00	\$150,000.00	Expansion of Existing Public Access CNG St	\$0.00	Yes
MS16088	Transit Systems Unlimited, Inc.	5/12/2017	1/11/2023		\$17,000.00	\$17,000.00	Expansion of Existing CNG Station	\$0.00	Yes
MS16103	Arrow Services, Inc.	2/3/2017	4/2/2023		\$100,000.00	\$100,000.00	Construct a Limited-Access CNG Station	\$0.00	Yes
MS16114	City of Norwalk	3/3/2017	6/2/2024		\$45,000.00	\$32,170.00	Purchase 3 Transit Buses	\$12,830.00	Yes
MS16116	Riverside Transit Agency	3/3/2017	1/2/2023		\$10,000.00	\$9,793.00	Purchase One Transit Bus	\$207.00	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
FY 2010	6-2018 Contracts								
Open Cont	tracts								
ML18019	City of Hidden Hills	5/3/2018	5/2/2022		\$49,999.00	\$10,000.00	Purchase Two Light-Duty ZEVs and EVSE	\$39,999.00	No
ML18020	City of Colton	5/3/2018	4/2/2024		\$67,881.00	\$0.00	Purchase One Medium-Duty and One Heavy	\$67,881.00	No
ML18021	City of Signal Hill	4/6/2018	1/5/2022		\$49,661.00	\$0.00	Install EVSE	\$49,661.00	No
ML18022	City of Desert Hot Springs	5/3/2018	1/2/2020		\$50,000.00	\$0.00	Traffic Signal and Synchronization Project	\$50,000.00	No
ML18028	City of Artesia	6/28/2018	3/27/2025		\$50,000.00	\$0.00	Install EVSE	\$50,000.00	No
ML18030	City of Grand Terrace	6/28/2018	3/27/2022		\$45,000.00	\$0.00	Install EVSE	\$45,000.00	No
ML18031	City of Diamond Bar	9/7/2018	11/6/2025		\$73,930.00	\$0.00	Install EVSE, Purchase up to 2-LD Vehicles	\$73,930.00	No
ML18033	City of Duarte	8/8/2018	2/7/2025		\$50,000.00	\$0.00	Purchase 1-HD ZEV	\$50,000.00	No
ML18034	City of Calabasas	6/8/2018	3/7/2022		\$50,000.00	\$0.00	Install EVSE	\$50,000.00	No
ML18035	City of Westlake Village	8/8/2018	11/7/2022		\$50,000.00	\$0.00	Install EVSE	\$50,000.00	No
ML18036	City of Indian Wells	8/8/2018	5/7/2023		\$50,000.00	\$0.00	Install EVSE	\$50,000.00	No
ML18037	City of Westminster	6/28/2018	6/27/2024		\$120,900.00	\$0.00	Install EVSE, Purchase up to 3-LD ZEV & 1-	\$120,900.00	No
ML18038	City of Anaheim	10/5/2018	5/4/2025		\$221,500.00	\$0.00	Purchase 5 Light-Duty ZEVs and Install EVS	\$221,500.00	No
ML18039	City of Redlands	6/28/2018	7/27/2024		\$87,000.00	\$0.00	Purchase 1 Medium/Heavy-Duty ZEV and In	\$87,000.00	No
ML18040	City of Agoura Hills	7/13/2018	6/12/2022		\$50,000.00	\$0.00	Install EV Charging Infrastructure	\$50,000.00	No
ML18041	City of West Hollywood	8/8/2018	12/7/2023		\$50,000.00	\$0.00	Install EV Charging Infrastructure	\$50,000.00	No
ML18042	City of San Fernando	6/28/2018	2/27/2024		\$10,000.00	\$0.00	Purchase 1 Lighty-Duty ZEV	\$10,000.00	No
ML18043	City of Yorba Linda	9/7/2018	12/6/2023		\$87,990.00	\$0.00	Install EV Charging Infrastructure	\$87,990.00	No
ML18044	City of Malibu	8/8/2018	10/7/2022		\$50,000.00	\$0.00	Install EV Charging Infrastructure	\$50,000.00	No
ML18045	City of Culver City Transportation De	6/28/2018	6/27/2025		\$51,000.00	\$0.00	Purchase Light-Duty ZEV	\$51,000.00	No
ML18046	City of Santa Ana	11/9/2018	7/8/2026		\$385,000.00	\$0.00	Purchase 6 Light-Duty ZEVs, 9 Heavy-Duty	\$385,000.00	No
ML18047	City of Whittier	8/8/2018	4/7/2026		\$113,910.00	\$0.00	Purchase 5 Heavy-Duty Near ZEVs	\$113,910.00	No
ML18048	City of Lynwood	6/28/2018	10/27/2024		\$93,500.00	\$0.00	Purchase Up to 3 Medium-Duty Zero-Emissi	\$93,500.00	No
ML18049	City of Downey	7/6/2018	5/5/2023		\$148,260.00	\$0.00	Install EVSE	\$148,260.00	No
ML18050	City of Irvine	9/7/2018	8/6/2028		\$330,490.00	\$0.00	Purchase 1 Medium/Heavy-Duty ZEV and In	\$330,490.00	No
ML18052	City of Garden Grove	8/8/2018	10/7/2022		\$53,593.00	\$0.00	Purchase 4 L.D. ZEVs and Infrastructure	\$53,593.00	No
ML18053	City of Paramount	9/7/2018	3/6/2023		\$72,580.00	\$0.00	Install EV Charging Infrastructure	\$72,580.00	No
ML18054	City of La Habra Heights	8/8/2018	4/7/2022		\$9,200.00	\$0.00	Purchase 1 L.D. ZEV	\$9,200.00	No
ML18055	City of Long Beach Fleet Services B	11/29/2018	11/28/2026		\$622,220.00	\$0.00	Install EV Charging Stations	\$622,220.00	No
ML18057	City of Carson	10/5/2018	7/4/2023		\$106,250.00	\$0.00	Purchase 5 Zero-Emission Vehicles and Infr	\$106,250.00	No
ML18058	City of Perris	10/12/2018	11/11/2024		\$94,624.00	\$0.00	Purchase 1 Med. H.D. ZEV and EV Chargin	\$94,624.00	No
ML18060	County of Los Angeles Internal Servi	10/5/2018	8/4/2026		\$1,367,610.00	\$0.00	Purchase 29 Light-Duty ZEVs, 1 Med/Heavy	\$1,367,610.00	No
ML18062	City of Beaumont	8/8/2018	9/7/2024		\$25,000.00	\$0.00	Purchase 1 Heavy-Duty Near-ZEV	\$25,000.00	No
ML18067	City of Pico Rivera	9/7/2018	11/6/2022		\$83,500.00	\$0.00	Instal EVSE	\$83,500.00	No

C	Comtrontor	Ctant Data	End Date	End Date	Value	Domittod	Dunings Decembring	Balance	Billing
Cont.#	Contractor	Start Date		Liid Date		Remitted	Project Description		Complete?
ML18071	City of Chino Hills	9/7/2018	10/6/2022		\$30,000.00	\$0.00	Purchase 2 Light-Duty ZEVs and Install EVS	\$30,000.00	No
ML18076	City of Culver City Transportation De	10/5/2018	10/4/2023		\$1,130.00	\$0.00	Purchase Light-Duty ZEV	\$1,130.00	No
ML18077	City of Orange	11/2/2018	10/1/2022		\$59,776.00	\$0.00	Four Light-Duty ZEV and EV Charging Infras	\$59,776.00	No
ML18078	County of Riverside	10/5/2018	10/4/2028		\$425,000.00	\$0.00	Purchase 17 Heavy-Duty Vehicles	\$425,000.00	No
ML18079	City of Pasadena	12/7/2018	11/6/2023		\$183,670.00	\$0.00	EV Charging Infrastructure	\$183,670.00	No
ML18081	City of Beaumont	10/5/2018	10/4/2022		\$31,870.00	\$0.00	EV Charging Infrastructure	\$31,870.00	No
ML18083	City of San Fernando	11/2/2018	11/1/2022		\$20,000.00	\$0.00	Implement Traffic Signal Synchronization	\$20,000.00	No
ML18095	City of Gardena	11/9/2018	12/8/2024		\$25,000.00	\$0.00	Purchase Heavy-Duty Near-ZEV	\$25,000.00	No
MS18001	Los Angeles County MTA	6/29/2017	4/30/2018		\$807,945.00	\$468,050.00	Provide Clean Fuel Transit Service to Dodge	\$339,895.00	No
MS18002	Southern California Association of G	6/9/2017	11/30/2018	6/30/2019	\$2,500,000.00	\$419,111.87	Regional Active Transportation Partnership	\$2,080,888.13	No
MS18003	Geographics	2/21/2017	2/20/2021		\$56,953.00	\$50,783.36	Design, Host and Maintain MSRC Website	\$6,169.64	No
MS18004	Orange County Transportation Autho	8/3/2017	4/30/2019		\$503,272.00	\$216,260.53	Provide Special Rail Service to Angel Stadiu	\$287,011.47	No
MS18005	Orange County Transportation Autho	1/5/2018	4/30/2019		\$834,222.00	\$405,709.29	Clean Fuel Bus Service to OC Fair	\$428,512.71	No
MS18006	Anaheim Transportation Network	10/6/2017	2/28/2020		\$219,564.00	\$9,488.22	Implement Anaheim Circulator Service	\$210,075.78	No
MS18008	Foothill Transit	1/12/2018	3/31/2019		\$100,000.00	\$49,406.61	Special Transit Service to LA County Fair	\$50,593.39	No
MS18009	Penske Truck Leasing Co., L.P.	8/8/2018	12/7/2020		\$82,500.00	\$0.00	Modify Maintenance Facility & Train Technici	\$82,500.00	No
MS18010	Southern California Regional Rail Au	12/28/2017	7/31/2019		\$351,186.00	\$148,570.20	Implement Special Metrolink Service to Unio	\$202,615.80	No
MS18012	City of Hermosa Beach	2/2/2018	2/1/2024		\$36,000.00	\$0.00	Construct New Limited-Access CNG Station	\$36,000.00	No
MS18014	Regents of the University of Californi	10/5/2018	12/4/2019		\$254,795.00	\$0.00	Planning for EV Charging Infrastructure Inve	\$254,795.00	No
MS18015	Southern California Association of G	7/13/2018	2/28/2021		\$2,000,000.00	\$0.00	Southern California Future Communities Par	\$2,000,000.00	No
MS18018	City of Norwalk	6/8/2018	9/7/2019		\$75,000.00	\$0.00	Vehicle Maintenance Facility Modifications	\$75,000.00	No
MS18023	Riverside County Transportation Co	6/28/2018	6/27/2021		\$500,000.00	\$0.00	Weekend Freeway Service Patrols	\$500,000.00	No
MS18024	Riverside County Transportation Co	6/28/2018	8/27/2021		\$1,500,000.00	\$0.00	Vanpool Incentive Program	\$1,500,000.00	No
MS18026	Omnitrans	10/5/2018	1/4/2020		\$83,000.00	\$0.00	Modify Vehicles Maintenance Facility and Tr	\$83,000.00	No
MS18027	City of Gardena	11/2/2018	9/1/2026		\$365,000.00	\$0.00	Install New Limited Access CNG, Modify Mai	\$365,000.00	No
MS18029	Irvine Ranch Water District	8/8/2018	10/7/2024		\$190,000.00	\$0.00	Install New Limited Access CNG Station & T	\$190,000.00	No
Total: 60					1			1	
Pendina Ex	recution Contracts								
ML18032	City of Arcadia				\$74,650.00	\$0.00	Purchase 1-HD ZEV & 1-HD Near-ZEV	\$74,650.00	No
ML18051	City of Rancho Cucamonga				\$227,040.00	\$0.00	Purchase 9 Light-Duty ZEVs, 2 Med-Duty Z	\$227,040.00	No
ML18056	City of Chino				\$103,868.00	\$0.00	Install EV Charging Infrastructure	\$103,868.00	No
ML18059	City of Glendale Water & Power				\$260,500.00	\$0.00	Install Electric Vehicle Charging Infrastructur	\$260,500.00	No
ML18061	City of Moreno Valley				\$25,000.00	\$0.00	Purchase 1 Heavy-Duty Near-ZEV	\$25,000.00	No
ML18063	City of Riverside				\$383,610.00	\$0.00	Expand Existing CNG Fueling Station	\$383,610.00	No
ML18064	City of Eastvale				\$80,400.00	\$0.00	Purchase 2 Med. H.D. Zero Emission Vehicl	\$80,400.00	No
ML18068	City of Mission Viejo				\$125,690.00	\$0.00	Purchase 2 Light-Duty ZEVs, Install EVSE &	\$125,690.00	No
	5.1, 5. Mission vioje				\$120,000.00	Ψ0.00	. s. s. ass z Eight Baty ZE vo, motali E voe a	\$120,000.00	110

\$187,400.00

\$0.00

Purchase 4 Heavy-Duty Near ZEV and Instal

Contract

Award

\$187,400.00

No

Original

ML18069

City of Torrance

Amended

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML18070	City of Lomita				\$6,250.00	\$0.00	Purchase 1 Light-Duty ZEV	\$6,250.00	No
ML18072	City of Anaheim				\$239,560.00	\$0.00	Purchase 9 Light-Duty ZEVs & 2 Med/Hvy-D	\$239,560.00	No
ML18074	City of Buena Park				\$107,960.00	\$0.00	EV Charging Infrastructure	\$107,960.00	No
ML18080	City of Santa Monica				\$121,500.00	\$0.00	EV Charging Infrastructure	\$121,500.00	No
ML18082	City of Los Angeles Bureau of Sanita				\$900,000.00	\$0.00	Purchase Medium-Duty Vehicles and EV Ch	\$900,000.00	No
ML18084	City of South El Monte				\$30,000.00	\$0.00	EV Charging Infrastructure	\$30,000.00	No
ML18085	City of Orange				\$50,000.00	\$0.00	Purchase Two Heavy-Duty Near-Zero Emiss	\$50,000.00	No
ML18086	City of Los Angeles Bureau of Street				\$300,000.00	\$0.00	Install Sixty EV Charging Stations	\$300,000.00	No
ML18087	City of Murrieta				\$143,520.00	\$0.00	Install Four EV Charging Stations	\$143,520.00	No
ML18088	City of Big Bear Lake				\$50,000.00	\$0.00	Install Bicycle Trail	\$50,000.00	No
ML18089	City of Glendora				\$50,760.00	\$0.00	Purchase a medium-duty ZEV	\$50,760.00	No
ML18090	City of Santa Clarita				\$122,000.00	\$0.00	Install Eight EV Charging Stations	\$122,000.00	No
ML18091	City of Temecula				\$141,000.00	\$0.00	Install Sixteen EV Charging Stations	\$141,000.00	No
ML18092	City of South Pasadena				\$50,000.00	\$0.00	Procure Two Light-Duty ZEVs and Install EV	\$50,000.00	No
ML18093	City of Monterey Park				\$25,000.00	\$0.00	Purchase Heavy-Duty Near-ZEV	\$25,000.00	No
ML18094	City of Laguna Woods				\$50,000.00	\$0.00	Install Two EV Charging Stations	\$50,000.00	No
ML18096	City of Highland				\$70,210.00	\$0.00	Purchase Light-Duty ZEV and Install Three	\$70,210.00	No
ML18097	City of Temple City				\$16,000.00	\$0.00	Purchase Two Light-Duty ZEVs	\$16,000.00	No
ML18098	City of Redondo Beach				\$89,400.00	\$0.00	Install Six EV Charging Stations	\$89,400.00	No
ML18099	City of Laguna Hills				\$32,250.00	\$0.00	Install Six EV Charging Stations	\$32,250.00	No
ML18100	City of Brea				\$56,500.00	\$0.00	Install Thirteen EV Charging Stations	\$56,500.00	No
ML18101	City of Burbank				\$137,310.00	\$0.00	Install Twenty EV Charging Stations	\$137,310.00	No
ML18126	City of Lomita				\$26,500.00	\$0.00	Install bicycle racks and lanes	\$26,500.00	No
ML18127	City of La Puente				\$52,800.00	\$0.00	Purchase One Light-Duty ZEV, One Heavy-	\$52,800.00	No
ML18128	City of Aliso Viejo				\$65,460.00	\$0.00	Purchase Two Light-Duty ZEVs and Install S	\$65,460.00	No
ML18129	City of Yucaipa				\$63,097.00	\$0.00	Install Six EVSEs	\$63,097.00	No
ML18130	City of Lake Forest				\$106,480.00	\$0.00	Install Twenty-One EVSEs	\$106,480.00	No
ML18131	City of Los Angeles				\$19,294.00	\$0.00	Purchase Three Light-Duty ZEVs	\$19,294.00	No
ML18132	City of Montclair				\$50,000.00	\$0.00	Puchase Light-Duty ZEV and Install Eight E	\$50,000.00	No
ML18133	City of Rancho Mirage				\$50,000.00	\$0.00	Traffic Signal Synchronization	\$50,000.00	No
ML18134	City of Los Angeles, Department of				\$290,000.00	\$0.00	Purchase Five Medium-Duty ZEVs	\$290,000.00	No
ML18135	City of Azusa				\$55,000.00	\$0.00	Purchase Three Light-Duty ZEVs and One H	\$55,000.00	No
ML18136	City of Orange				\$42,500.00	\$0.00	Purchase Four Light-Duty ZEVs and Install	\$42,500.00	No
ML18137	City of Wildomar				\$50,000.00	\$0.00	Install Bicycle Trail	\$50,000.00	No
ML18138	City of La Canada Flintridge				\$50,000.00	\$0.00	Install Four EVSEs and Install Bicycle Racks	\$50,000.00	No
ML18139	City of Calimesa				\$50,000.00	\$0.00	Install Bicycle Lane	\$50,000.00	No
ML18140	City of Bell Gardens				\$50,000.00	\$0.00	Purchase Two Heavy-Duty Near-ZEVs	\$50,000.00	No

			Original End Date	Amended End Date	Contract Value			Award Balance	Billing
Cont.#	Contractor	Start Date	Elia Date	End Date		Remitted	Project Description	1	Complete?
ML18141	City of Rolling Hills Estates				\$40,000.00	\$0.00	Purchase One Light-Duty ZEV and Install T	\$40,000.00	No
ML18142	City of La Quinta				\$51,780.00	\$0.00	Install Two EVSEs	\$51,780.00	No
ML18143	City of La Habra				\$80,700.00	\$0.00	Install Two EVSEs	\$80,700.00	No
ML18144	City of Fontana				\$269,090.00	\$0.00	Install Twelve EVSEs	\$269,090.00	No
ML18145	City of Los Angeles Dept of Transpor				\$1,400,000.00	\$0.00	Provide One Hundred Rebates to Purchaser	\$1,400,000.00	No
ML18146	City of South Gate				\$127,400.00	\$0.00	Purchase Five Light-Duty ZEVs and Install T	\$127,400.00	No
ML18147	City of Palm Springs				\$60,000.00	\$0.00	Install Eighteen EVSEs	\$60,000.00	No
ML18148	City of San Dimas				\$50,000.00	\$0.00	Implement Bike Share Program	\$50,000.00	No
ML18149	City of Sierra Madre				\$50,000.00	\$0.00	Implement Bike Share Program	\$50,000.00	No
ML18150	City of South El Monte				\$20,000.00	\$0.00	Implement Bike Share Program	\$20,000.00	No
ML18151	County of San Bernardino Departme				\$200,000.00	\$0.00	Purchase Eight Heavy-Duty Near Zero Emis	\$200,000.00	No
ML18152	County of San Bernardino Flood Con				\$108,990.00	\$0.00	Purchase Five Heavy-Duty Near Zero Emissi	\$108,990.00	No
ML18153	City of Cathedral City				\$52,215.00	\$0.00	Install EV Charging Infrastructure	\$52,215.00	No
ML18154	City of Hemet				\$30,000.00	\$0.00	Purchase Two Light-Duty ZEV and EV Char	\$30,000.00	No
ML18155	City of Claremont				\$50,000.00	\$0.00	Install EV Charging Infrastructure	\$50,000.00	No
ML18156	City of Covina				\$63,800.00	\$0.00	Purchase Four Light-Duty ZEVs and EV Cha	\$63,800.00	No
ML18157	City of Los Angeles Bureau of Street				\$85,000.00	\$0.00	Purchase One Medium-Duty ZEV	\$85,000.00	No
ML18158	City of Inglewood				\$146,000.00	\$0.00	Purchase 4 Light-Duty Zero Emission, 4 Me	\$146,000.00	No
ML18159	City of Rialto				\$135,980.00	\$0.00	Purchase Nine Light-Duty ZEVs and EV Cha	\$135,980.00	No
ML18160	City of Irwindale				\$14,263.00	\$0.00	Purchase Two Light-Duty ZEVs	\$14,263.00	No
ML18161	City of Indio				\$50,000.00	\$0.00	Purchase 1 Light-Duty Zero Emission, 1 Hea	\$50,000.00	No
ML18162	City of Costa Mesa				\$148,210.00	\$0.00	Purchase Four Light-Duty ZEVs and EV Cha	\$148,210.00	No
ML18163	City of San Clemente				\$85,000.00	\$0.00	Purchase Three Light-Duty ZEVs and EV Ch	\$85,000.00	No
ML18164	City of Pomona				\$200,140.00	\$0.00	Purchase Three Heavy-Duty ZEVs	\$200,140.00	No
ML18165	City of Baldwin Park				\$49,030.00	\$0.00	Expansion of Existing CNG Infrastructure	\$49,030.00	No
ML18166	City of Placentia				\$25,000.00	\$0.00	Purchase One Heavy-Duty Near-Zero Emiss	\$25,000.00	No
ML18167	City of Beverly Hills				\$50,000.00	\$0.00	Purchase Two Heavy-Duty Near-Zero Emiss	\$50,000.00	No
ML18168	City of Maywood				\$7,059.00	\$0.00	Purchase EV Charging Infrastructure	\$7,059.00	No
ML18169	City of Alhambra				\$111,980.00	\$0.00	Install EV Charging Infrastructure	\$111,980.00	No
ML18170	City of Laguna Niguel				\$85,100.00	\$0.00	Purchase Two Light-Duty ZEVs and EV Cha	\$85,100.00	No
ML18171	City of El Monte				\$119,757.00	\$0.00	Purchase One Heavy-Duty ZEVs and EV Ch	\$119,757.00	No
ML18172	City of Huntington Park				\$65,450.00	\$0.00	Purchase One Heavy-Duty ZEV	\$65,450.00	No
ML18173	City of Manhattan Beach				\$49,000.00	\$0.00	Purchase Two Light-Duty ZEVs and EV Cha	\$49,000.00	No
ML18174	City of Bell				\$25,000.00	\$0.00	Purchase One Heavy-Duty ZEV	\$25,000.00	No
ML18176	City of Coachella				\$58,020.00	\$0.00	Install EV Charging Stations	\$58,020.00	No
ML18177	City of San Bernardino				\$279,088.00	\$0.00	Purchase Medium- and Heavy-Duty Evs and	\$279,088.00	No
MS18016	Southern California Regional Rail Au				\$87,764.00	\$73,140.89	Special Train Service to Auto Club Speedwa	\$14,623.11	No

			Original	Amended	Contract			Award	Billing
Cont.#	Contractor	Start Date	End Date	End Date	Value	Remitted	Project Description	Balance	Complete?
MS18025	Los Angeles County MTA				\$1,324,560.00	\$0.00	Special Bus and Train Service to Dodger Sta	\$1,324,560.00	No
MS18065	San Bernardino County Transportatio				\$2,000,000.00	\$0.00	Implement Metrolink Line Fare Discount Pro	\$2,000,000.00	No
MS18066	El Dorado National				\$100,000.00	\$0.00	Install New Limited-Access CNG Station	\$100,000.00	No
MS18073	Los Angeles County MTA				\$2,000,000.00	\$0.00	Purchase 40 Zero-Emission Transit Buses	\$2,000,000.00	No
MS18102	Orange County Transportation Autho				\$1,146,000.00	\$0.00	Implement OC Flex Micro-Transit Pilot Proje	\$1,146,000.00	No
MS18103	Orange County Transportation Autho				\$642,000.00	\$0.00	Install Hydrogen Detection System	\$642,000.00	No
MS18104	Orange County Transportation Autho				\$212,000.00	\$0.00	Implement College Pass Transit Fare Subsi	\$212,000.00	No
MS18105	Southern California Regional Rail Au				\$252,696.00	\$0.00	Special Train Service to the Festival of Light	\$252,696.00	No
MS18106	R.F. Dickson Co., Inc.				\$265,000.00	\$0.00	Expansion of Existing Infrastructure/Mechani	\$265,000.00	No
MS18107	Huntington Beach Union High School				\$225,000.00	\$0.00	Expansion of Existing Infrastructure	\$225,000.00	No
MS18108	Capistrano Unified School District				\$116,000.00	\$0.00	Expansion of Existing Infrastructure & Train	\$116,000.00	No
MS18109	City of South Gate				\$175,000.00	\$0.00	Install New Limited-Access CNG Infrastructu	\$175,000.00	No
MS18110	Mountain View School District				\$275,000.00	\$0.00	Install New Limited-Access CNG Infrastructu	\$275,000.00	No
MS18111	Newport-Mesa Unified School Distric				\$175,000.00	\$0.00	Expansion of Existing CNG Infrastructure	\$175,000.00	No
MS18112	Banning Unified School District				\$275,000.00	\$0.00	Install New CNG Infrastructure	\$275,000.00	No
MS18114	Los Angeles County Department of P				\$175,000.00	\$0.00	Install New Limited-Access CNG Infrastructu	\$175,000.00	No
MS18115	City of Commerce				\$275,000.00	\$0.00	Expansion of Existing L/CNG Infrastructure	\$275,000.00	No
MS18116	Los Angeles County Department of P				\$175,000.00	\$0.00	Install New Limited-Access CNG Infrastructu	\$175,000.00	No
MS18117	City of San Bernardino				\$240,000.00	\$0.00	Expansion of Existing CNG Infrastructure/Me	\$240,000.00	No
MS18118	City of Beverly Hills				\$85,272.00	\$0.00	Expansion of Existing CNG Infrastructure	\$85,272.00	No
MS18119	LBA Realty Company XI LP				\$100,000.00	\$0.00	Install New Limited-Access CNG Infrastructu	\$100,000.00	No
MS18120	City of Redondo Beach				\$275,000.00	\$0.00	Install New Limited-Access CNG Infrastructu	\$275,000.00	No
MS18121	City of Montebello				\$70,408.00	\$0.00	Expansion of Existing CNG Infrastructure	\$70,408.00	No
MS18122	Universal Waste Systems, Inc.				\$200,000.00	\$0.00	Install New Limited Acess CNG Infrastructur	\$200,000.00	No
MS18123	City Rent A Bin DBA Serv-Wel Dispo				\$200,000.00	\$0.00	Install New Limited-Access CNG Infrastructu	\$200,000.00	No
MS18124	County Sanitation Districts of Los An				\$275,000.00	\$0.00	Install New Limited-Access CNG Infrastructu	\$275,000.00	No
MS18125	US Gain				\$200,000.00	\$0.00	Install New Limited-Access CNG Infrastructu	\$200,000.00	No
MS18175	UC Irvine The Henry Samueli School				\$1,000,000.00	\$0.00	Expansion of Existing Hydrogen Station	\$1,000,000.00	No
Total: 111			I.	1					.1
Declined/Ca	ancelled Contracts								
ML18075	City of Orange				\$25,000.00	\$0.00	One Heavy-Duty Vehicle	\$25,000.00	No
MS18013	California Energy Commission			1	\$3,000,000.00	\$0.00	Advise MSRC and Administer Hydrogen Infr	\$3,000,000.00	No
MS18017	City of Banning				\$225,000.00	\$0.00	Expansion of Existing CNG Infrastructure	\$225,000.00	No
MS18113	City of Torrance				\$100,000.00	\$0.00	Expansion of Existing CNG Infrastructure	\$100,000.00	No
Total: 4	- ,		<u> </u>		Ţ,300.00	Ψ0.00	The second secon	Ţ,000.00	

\$239,565.00

\$221,725.12

Special Train Service to Festival of Lights

\$17,839.88

Yes

Closed Contracts

MS18011

Southern California Regional Rail Au

2/9/2018

6/30/2018

			Original	Amended	Contract			Award	Billing
Cont.#	Contractor	Start Date	End Date	End Date	Value	Remitted	Project Description	Balance	Complete?



BOARD MEETING DATE: February 1, 2019

AGENDA NO. 24

REPORT: California Air Resources Board Monthly Meeting

SYNOPSIS: The California Air Resources Board met on January 24, 2019 in Fresno,

CA. The following is a summary of the meeting.

RECOMMENDED ACTION:

Receive and file.

Judith Mitchell, Member SCAQMD Governing Board

dg

The California Air Resources Board's (CARB or Board) held a meeting on January 24, 2019 in Fresno at the Grand. Key items presented are summarized below.

DISCUSSION ITEMS

19-1-1: Public Meeting to Consider the 2018 PM2.5 and 2016 Moderate Plan State Implementation Plans for the San Joaquin Valley

The Board adopted the 2018 PM2.5 Plan that sets forth a comprehensive strategy to meet four federal standards for PM2.5, for which the Valley is currently in nonattainment: the 65 ug/m3 standard (24-hour); the 15 ug/m3 standard (annual); the 35 ug/m3 standard (24-hour); and the 12 ug/m3 standard (annual).

In 2016, the Board considered the 2016 Moderate Plan. That plan demonstrated the Valley could not attain the $12 \,\mu g/m3$ annual PM2.5 standard by the Moderate area deadline, and the Board therefore tabled the 2016 Moderate Plan. At that time, the Board directed staff to work with the District to conduct a more thorough public process, explore opportunities for additional NOx and direct PM2.5 reductions from both mobile and stationary sources, and return to the Board when a path had been identified for attaining all PM2.5 standards in the Valley.

As a result of this outreach effort and the input received, the 2018 PM2.5 Plan includes a State commitment to reduce 32 tons per day (tpd) of NOx and 1 tpd of PM2.5 from mobile sources. The Plan also includes District commitments to control NOx from stationary sources and reduce PM2.5 from residential wood burning and commercial cooking. Taken together, these District and CARB measures implemented for the 2018 PM2.5 Plan will enable the Valley to meet all four of the PM2.5 standards and provide significant health benefits for Valley residents.

19-1-2: Public Hearing to Consider the Proposed Amendments to On-Road Heavy-Duty Diesel-Fueled Residential and Commercial Solid Waste Collection Vehicles Regulation to Include Heavy Cranes

The Board adopted the amendments to *On-Road Heavy-Duty Diesel-Fueled Residential and Commercial Solid Waste Collection Vehicles Regulation to Include Heavy Cranes.*The two distinct changes to the Solid Waste Collection Vehicle (SWCV) regulation will ensure that compliant SWCVs do not experience delays in California Department of Motor Vehicles (DMV) registration due to recent changes in California law, and also provides a feasible compliance option for specialized cranes. The first amendment also will add a reporting requirement for owners of SWCVs to improve enforceability and to avoid delays with California DMV registration starting in 2020. The second amendment will expand the scope of the SWCV regulation to include heavy cranes with a newly-added phase-in schedule that mirrors the amended 2014 requirements. The amendments would allow sufficient time for crane operators to upgrade equipment while continuing to meet crane certification safety standards and continuing to make progress in reducing emissions to protect public health.

19-1-3: Report to the Board on the California Air Resources Board Program Priorities for 2019

Executive Officer Richard Corey provided the Board with an overview of CARB accomplishments in 2018 and program priorities for 2019. The 2018 accomplishments included CARB and the air districts' launch of the AB 617 Community Protection Program, meeting California's 2020 greenhouse gas emission target four years ahead of schedule, and making significant progress on zero emission technologies. Mr. Corey also detailed CARB enhanced actions on climate change and adoption of important criteria pollutant and toxics emissions reporting regulations. The 2019 program priorities include continuing implementation of AB 617, meeting the statewide carbon neutrality goal, acting on the Climate Change Scoping Plan and State Implementation Plans, developing a more holistic approach to transportation, and strengthening our collaboration with other states and nations.

Attachment

CARB January 24, 2019 Meeting Agenda



PUBLIC MEETING AGENDA

Thursday, January 24, 2019

Webcast

LOCATION:

The Grand at 1401 1401 Fulton Street, 10th Floor Ballroom Fresno, California 93721

This facility is accessible by public transit. For transit information, call (559) 621-RIDE, website: https://www.fresno.gov/transportation/ (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 January 24, 2019 9:00 a.m.

DISCUSSION ITEMS:

Note: The following agenda items may be heard in a different order at the Board meeting.

Agenda Item

19-1-1: Public Meeting to Consider the 2018 PM2.5 and 2016 Moderate Plan State Implementation Plans for the San Joaquin Valley

The Board will consider adopting the 2018 PM2.5 State Implementation Plan (SIP) for the San Joaquin Valley. This SIP addresses multiple PM2.5 National Ambient Air Quality Standards, including the 12 micrograms per cubic meter (ug/m3) annual standard and the 35 ug/m3 24-hour standard. If approved, the California Air Resource Board (CARB or Board) will submit this Plan to the United States Environmental Protection Agency as a revision to the California SIP.

More Information

Staff Presentation

19-1-2: Public Hearing to Consider the Proposed Amendments to the On-Road Heavy-Duty Diesel-Fueled Residential and Commercial Solid Waste Collection Vehicles Regulation to Include Heavy Cranes

The Board will consider amendments to the On-Road Heavy-Duty Diesel-Fueled Residential and Commercial Solid Waste Collection Vehicles (SWCV) regulation. The proposed amendments include two distinct changes to the regulation, (1) to ensure that compliant SWCVs do not experience registration delays at the California Department of Motor Vehicles due to recent changes in California law; (2) to provide a more cost-effective compliance option for specialized heavy cranes.

More Information

Staff Presentation

19-1-3: Report to the Board on the California Air Resources Board Program Priorities for 2019

Executive Officer Richard Corey will provide the Board with an overview of anticipated California Air Resources Board priorities for 2019.

Staff Presentation

CLOSED SESSION

The Board may 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):

American Fuels and Petrochemical Manufacturers, et al. v. Jane O'Keeffe, et al., U.S. District Court (D. Ore. Portland), Case No. 3:15-CV-00467; Plaintiffs' appeal, U.S. Court of Appeals, Ninth Circuit, Case No. 15-35834.

California Air Resources Board v. United States Environmental Protection Agency, U.S. Court of Appeals, District of Columbia Circuit, Case No. 18-1085.

Electric Power Supply Association, et al. v. Star, et al., U.S. Court of Appeals, Seventh Circuit, Case No. 17-2445.

POET, LLC, et al. v. California Air Resources Board, et al., Fresno County Superior Court, Case No. 09CECG04659; plaintiffs' appeal, California Court of Appeal, Fifth District, Case No. F064045; California Supreme Court, Case No. S213394 [remanded to trial court]; plaintiff's appeal of trial court order discharging peremptory writ of mandate, Court of Appeal, Fifth District, Case No. F073340.

POET, LLC, et al. v. California Air Resources Board, et al., Fresno County Superior Court, Case No. 15CECG03380.

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. 12-15131 [remanded to trial court].

American Fuels and Petrochemical Manufacturers, 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 [remanded to trial court].

Sowinski v. California Air Resources Board, et al., U.S. District Court, Central District of California, Case No. 8:15-CV-02123; Orange County Superior Court, Case No. 30-2018-00970852-CU-IP-CXC.

State of California, et al. v. United States Environmental Protection Agency, U.S. Court of Appeals, District of Columbia Circuit, Case No. 18-1114.

State of California, et al. v. United States Bureau of Land Management, et al., U.S. District Court, Northern District of California Circuit, Case No. 3:17-cv-07186-WHO.

State of New York, et al. v. United States Environmental Protection Agency, U.S. District Court, District of Columbia, Case No. 1:18-cv-00773.

State of North Dakota, et al. v. United States Environmental Protection Agency, U.S. Court of Appeals, District of Columbia Circuit, Case No. 16-1242.

State of North Dakota v. United States Environmental Protection Agency, U.S. Court of Appeals, District of Columbia Circuit, Case No. 15-1381.

State of West Virginia et al. v. United States Environmental Protection Agency, U.S. Court of Appeals, District of Columbia Circuit, Case No. 15-1363.

State of Wyoming, et al. v. United States Department of the Interior, et al., U.S. District Court, District of Wyoming, Case No. 16-CV-285-SWS.

The Two Hundred, et al. v. California Air Resources Board, et al., Fresno County Superior Court, Case No. 18CECG01494.

Truck Trailer Manufacturers Association, Inc. v. United States Environmental Protection Agency, et al., U.S. Court of Appeals, District of Columbia Circuit, Case No. 16-1430.

Valero Refining Co. California v. Hearing Board of the Bay Area Air Quality Management District et al., Court of Appeal, First Appellate District, Case No. A151004.

Alliance for California Business v. California Air Resources Board, et al., Glenn County Superior Court, Case No. 13CV01232; plaintiffs' appeal, Court of Appeal, Third District, Case No. C082828.

Alliance for California Business v. California State Transportation Agency, et al., Sacramento County Superior Court, Case No. 34-2016-80002491.

American Coatings Association, Inc. v. State of California and California Air Resources Board, Sacramento County Superior Court, Case No. 04CS01707.

Jack Cody dba Cody Transport v. California Air Resources Board, et al., Sacramento Superior Court, Case No. 34-2015-80002116; plaintiff's appeal, Court of Appeal, Third District, Case No. C083083.

Dalton Trucking, Inc. v. United States Environmental Protection Agency, U.S. Court of Appeals, District of Columbia Circuit, Case No. 13-1283 (dismissed), U.S. Court of Appeals, Ninth Circuit, Case No. 13-74019.

John R. Lawson Rock & Oil, Inc. et al. v. California Air Resources Board et al., Fresno County Superior Court, Case No. 14-CECG01494; ARB's appeal, Court of Appeal, Fifth District, Case No. F074003.

Murray Energy Corporation v. United States Environmental Protection Agency, U.S. Court of Appeals, District of Columbia Circuit, Case No. 15-1385.

State of California, et al. v. United States Environmental Protection Agency et al., U.S. District Court, Northern District of California, Oakland Division, Case No. 4:17-cv-6936-HSG.

State of New York, et al. v. United States Environmental Protection Agency et al., U.S. Court of Appeals, District of Columbia Circuit, Case No. 17-1185.

California Air Resources Board v. Adam Brothers Farming Inc., Santa Barbara County Superior Court, Case No. 16CV01758.

People v. Southern California Gas Company, Los Angeles Superior Court, Case No. BC 602973.

In re: Volkswagen "Clean Diesel" MDL, United States District Court, Northern District of California, Case No. 15-MD-2672-CRB (JSC).

Friends of Oceano Dunes, Inc. v. California Coastal Commission, et al., San Luis Obispo County Superior Court, Case No. 17CV-0576; U.S. District Court for the Central District of California, Case No. 2:17-cv-8733.

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:

https://www.arb.ca.gov/lispub/comm/bclist.php

(Note: not all agenda items are available for electronic submittals of written comments.)

PLEASE NOTE: No outside memory sticks or other external devices may be used at any time with the Board audio/visual system or any CARB computers. Therefore, PowerPoint presentations to be displayed at the Board meeting must be electronically submitted via email to the Clerk of the Board at cotb@arb.ca.gov no later than noon on the business day prior to the scheduled Board meeting.

IF YOU HAVE ANY QUESTIONS, PLEASE CONTACT THE CLERK OF THE BOARD: 1001 I Street, 23rd Floor, Sacramento, California 95814 (916) 322-5594

CARB Homepage: 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 envié 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.

Status Update on PR 1410 -Hydrogen Fluoride Storage and Use at Petroleum Refineries



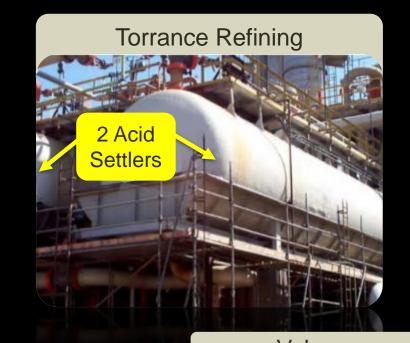
Governing Board Meeting

February 1, 2019 Diamond Bar, California

HF Background

- Hydrogen fluoride (HF) is a strong, potentially lethal acid
- HF is used to produce alkylate which is a blending component of high-octane gasoline
- Used at two California refineries: Torrance Refining and Valero
- Both refineries use modified HF (MHF), designed to reduce its exposure

Approximate Volumes (gallons)		
	Valero (Wilmington)	Torrance Refining
Storage on-site	55,000	25,000
Use in acid settlers	7,000 with baffle	12,000 in two tanks





Regulatory Background

- April 1991 Board adopted Rule 1410 –
 Hydrogen Fluoride Storage and Use
 - Established a 7-year phase-out of HF unless a performance standard could be achieved
 - Required interim control measures
- Lawsuit challenged Rule 1410
 - □SCAQMD's authority to phase out HF was upheld¹
 - o "[T]he Legislature clearly intended to vest AQMD with the authority to adopt preemptive measures designed to prevent air pollution episodes"
 - Rule invalidated due to procedural error in circulating CEQA document

(Adopted April 5, 1991)

RULE 1410. HYDROGEN FLUORIDE STORAGE AND USE

(a) Purpos

This rule is intended to minimize the possibility of harm to the public due to an accidental release of hydrogen fluoride.

(b) Applicability

All subsections of this rule apply to refrigerant production facilities and petroleum refineries. Any other facility which stores or uses hydrogen fluoride must comply with subparagraphs (d)(4)(A) and (d)(5) only.

(c) Definition

- ALKYLATION is a process in which high-octane components for gasoline are obtained from the combination of an isoparaffin and olefins in the presence of a catalyst.
- (2) ATMOSPHERIC HYDROGEN FLUORIDE DETECTION AND ALARM SYSTEM is any continuous sensor specific to hydrogen fluoride that activates a local or remote audible alarm system(s) when the concentration of hydrogen fluoride exceeds six parts per million in the ambient air.
- (3) CONTAINMENT SYSTEM is any system that is designed to collect or hold, and to neutralize or treat all hydrogen fluoride and water that is required to comply with subparagraph (d)(2)(B)(iii), containing-runoff material from hydrogen fluoride loading, unloading, transfer, storage and processing equipment areas.
- (4) EMERGENCY ISOLATION VALVE is any valve activated by remote control to shut off the flow of materials containing hydrogen fluoride.
- (5) EVACUATION SYSTEM is any process capable of emptying substantially all hydrogen fluoride from process, storage and transfer equipment, including, but not limited to, tanks, pumps, pipes, and processing equipment.
- (6) FACILITY is any collection of equipment that stores, processes, loads, unloads or transfers hydrogen fluoride, which are located on one or more contiguous properties in actual physical contact or separated solely by a public roadway or other public right-of-way, and are owned or operated by the same person (or by persons under common control).

1410 - 1

³

Decision Not to Pursue Re-Adoption of Rule 1410

1991

Mobil Refinery² entered into a court consent decree

- □ Phase-out of HF by 1997 or
- Allow use of MHF if demonstrates no formation of dense vapor cloud

1999

Consent decree was changed to allow a significant reduction of the modifier

2003

SCAQMD signed MOU with Ultramar³ to phase-out HF and allow use of MHF

2017

Torrance Refining provided SCAQMD with confidential information about MHF



² Currently Torrance Refining Company

³ Ultramar is currently Valero

Events Leading to the Investigative Hearing in April 2017

2015

"Near Miss"
40 ton
debris lands
within 5 feet
from MHF
tanks at
Torrance
Refining



2016-2017

Series of large flaring events and fire event that raised concerns about safety at Torrance Refining



10 MHF Leaks Since 2017



9 PPM

Unknown⁵

10.45 PPM

10 PPM⁴

10 PPM⁴

⁴ HF point sensors can only measure up to 10 ppm. Concentrations could have been higher.

⁵ 5 gallons of HF released at loading rack. No HF point sensors at loading rack. Closest HF point sensor is ~ 25 feet.

Public Process Following Investigative Hearing

Comment Letters and

Emails

Site Visits

1,300+ Comment Letters and Emails

- 500+ commenters opposing a phase-out
- 800+ commenters supporting a phase-out
- 7 letters from elected officials

Multiple Site Visits

 Observed current mitigation and safety measures at both refineries

19 Individual Stakeholder Meetings

- 12 meetings with refineries
- 5 meetings with community groups
- 2 meetings with EPA/Cal OSHA

Refinery Committee Meetings

> Working Group Meetings

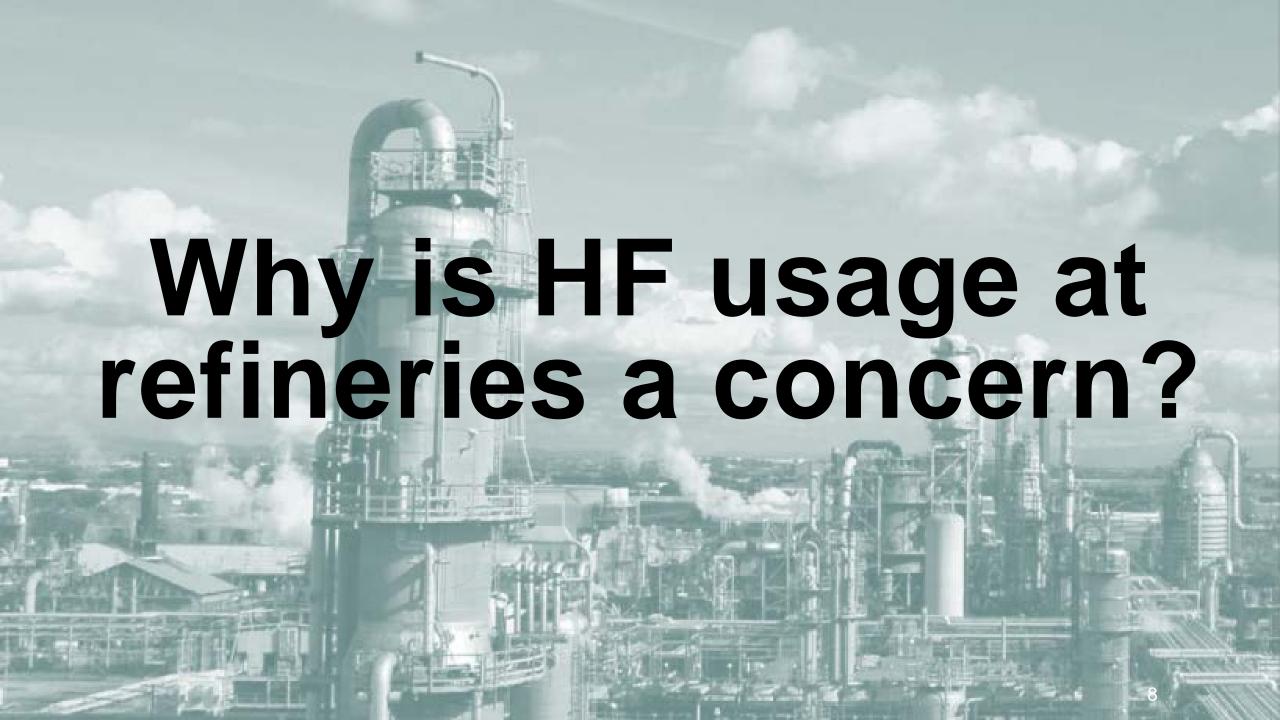
Individual Meetings

4 Refinery Committee Meetings

- ~ 600 attendees per meeting
- ~ 80 commenters per meeting
- 8 expert presentations

9 Rule Working Group Meetings

- ~ 100 participants
- 3 meetings in the community
- 9 expert presentations



Refineries use large volumes of MHF...

2 inch hole could release 1,000 gallons in 2 minutes⁶

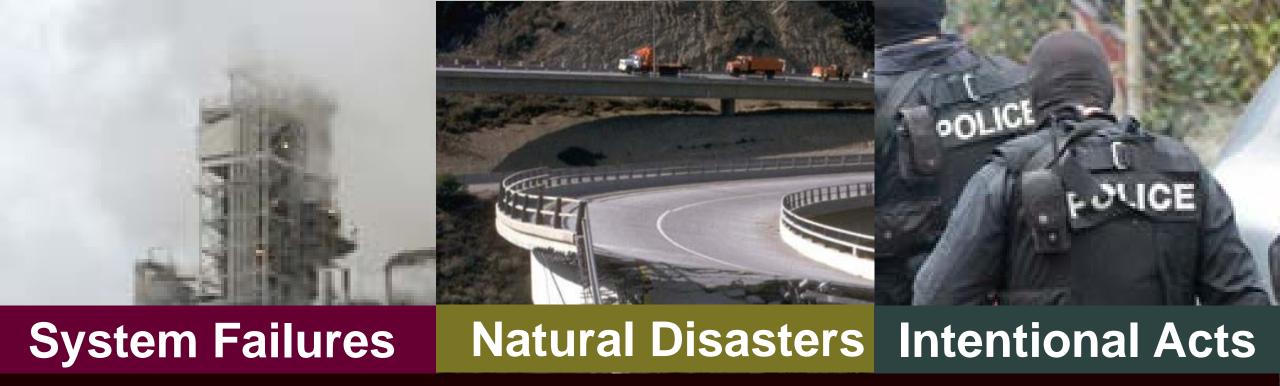
Ground hugging cloud upon release...



Maximum concentration below 8 feet⁷ within breathing height



Large-scale unexpected incidents such as...



Can lead to cascading failures



High population densities...

Greater potential for widespread human harm

Torrance Refining
Company



Valero Wilmington Refinery



245,000 People within 3 Miles Nearest Residence ~0.3 miles

153,000 People within 3 Miles Nearest Residence ~0.8 miles

Uniquely hazardous health effects that result in deep tissue and bone damage...



In 1986 Amoco and Allied Signal Corporation sponsored the "Goldfish" tests to assess HF release

Single release point was 1.65 inches (size of a golf ball)

1,000 gallons was released in 2 minutes

Ground hugging cloud travelled at wind speed of 18 feet per second

Cloud rapidly expanded upon release

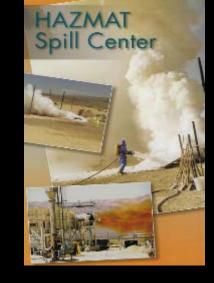
HF concentration was twice the lethal level at 2 miles from release point

100% remained airborne



Field Tests

- Nevada Test Site
 - Goldfish test large scale outdoor testing
 - Hawk Test smaller wind tunnel tests on water spray mitigation



- Quest Consultants Inc. conducted two field tests for MHF⁹ (1992-1993) in Oklahoma
 - Mobil and Phillips
 - Texaco and UOP

Nevada Test Site			
Name	Year	Material	
Avocet	1978	LNG	
Burro	1980	LNG	
Coyote	1981	LNG	
Desert Tortoise	1983	Ammonia	
Eagle	1983	N_2O_4	
Goldfish	1986	HF	
Hawk	1988	HF	

⁹ Both field tests were not at the current operating conditions (temperature, pressure, and additive concentration) used at refineries.

Acute Exposure Levels for HF for 10 Minutes¹⁰

Mild Health Effects

- 1 ppm
- Not disabling
- Notable discomfort
- Reversible health effects

Serious Health Effects

- 95 ppm
- Impaired ability to escape
- Long-lasting health effects
- Irreversible health effects

Lethal Health Effects

- 170 ppm
- Life threatening
- Death

HF Levels Measured in Goldfish Study

0.2 miles 27,000 ppm

0.6 miles 3,000 ppm

1.9 miles 400 ppm

Release Point

> 160 times the lethal level¹¹

18 times the lethal level¹¹

2 times the lethal level¹¹

How much safer is MHF than HF?

Background on MHF

- Jointly developed by Mobil/Phillips in early 90's
- Modifier added to HF to reduce vapor-forming tendency
- Intent was for most of HF to rainout or fall to the ground
 - □ Initial additive concentration was ~30 percent, but led to "operational instability" 12
 - □ Additive concentration decreased to ~7 percent
- Torrance Refining claims that 50% of MHF will rainout

SCAQMD's Analysis of MHF

- Based on a review of technical documents and discussions with Torrance Refinery
 - □Some, but uncertain, benefits of MHF
 - □ At most 35 percent benefit, but likely less
- No testing conducted at current operating conditions (additive concentration, pressure, and temperature)
- Most of the data is not publicly available
- Use of MHF is only one of many mitigation measures, but alone does not provide adequate safety for workers and community

HF and MHF Have Similar Concerns

- Ability of MHF to prevent formation of a vapor/aerosol cloud is highly uncertain
- Release of MHF will result in exposure to HF with same health effects
 - Any rainout will be HF liquid droplets
 - ■HF vapor cloud will still form
 - □HF and MHF have same hazards and medical treatment

Material Safety Data Sheet

HYDROFLUORIC ACID, ANHYDROUS

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Hydrofluoric Acid, Anhydrous

OTHER/GENERIC NAMES: HF, Anhydrous HF, AHF, Hydrogen Fluoride, HF Acid

PRODUCT USE: Chemical Derivatives, Alkylation Catalyst

MANUFACTURER: Honeywell International

Industrial Fluorines 101 Columbia Road

Box 1053

Morristown, New Jersey 07962-1053

Material Safety Data Sheet

MODIFIED HYDROFLUORIC ACID

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Modified Hydrofluoric Acid

OTHER/GENERIC NAMES: MHF, Modified HF, Modified Hydrogen Fluoride, Modified HF Acid Additized HF

PRODUCT USE: Alkylation Catalyst

MANUFACTURER: Honeywell International

Industrial Products 101 Columbia Road

Box 1053

EMERGENCY OVERVIEW: Clear, colorless, corrosive fuming liquid with an extremely acrid odor. Forms dense white vapor clouds if released. Both liquid and vapor can cause severe burns to all parts of the body. Specialized medical treatment is required for all exposures.

reasons

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Clear, colorless, corrosive fuming liquid with an extremely acrid odor. Forms dense white vapor clouds if released. Both liquid and vapor can cause severe burns to all parts of the body. Specialized medical treatment is required for all exposures.

 Hydrofluoric Acid
 7664-39-3
 85

 Sulfolane
 126-33-0
 15

Trace impurities and additional material names not listed above may also appear in the Regulatory Information Section 15 towards the end of the MSDS. These materials may be listed for local "Right-To-Know" compliance and for other reasons.

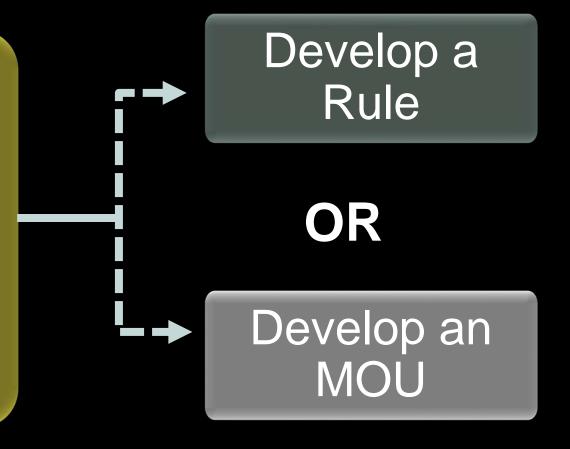
3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Clear, colorless, corrosive fuming liquid with an extremely acrid odor. Forms dense white vapor clouds if released. Both liquid and vapor can cause severe burns to all parts of the body. Specialized medical treatment is required for all exposures.

The Discussion

Direction from Refinery Committee

- Enhanced mitigation measures; and
- Phase-out MHF and explore option for a performance standard



Areas of General Agreement

HF and MHF are dangerous acids





Enhanced mitigation measures are needed

HF and MHF have the same health effects





Other than sulfuric acid, additional time needed for other alternative technologies

Overview of Enhanced Mitigation



Alternative HF Technologies









Sulfuric Acid (Conventional)

- At 39 US refineries
- Safer than HF, but 50 more truck trips per day

Sulfuric Acid (Advanced)

- CDAlky uses 30-50% less acid – commercially proven
- ConvEx designed for HF conversion

 not commercially proven

Solid Acid Catalyst

- Petrochemical plant in China
- 2,700 bpd startup in 2015

Ionic Liquid Catalyst

- Chevron, Salt Lake City
- Small pilot plant in 2005
- 5,000 bpd HF
 Alkylation
 conversion startup
 in 2020

Costs and Potential Market Impacts

- Torrance Refining's cost estimate of grassroots sulfuric acid unit¹³
 - \$600 million for alkylation unit
 - \$300 million for acid regeneration
- Valero has commented their facility has space constraints
- Advanced sulfuric acid units are expected to be substantially less
- Alternative technologies
 - Cost unknown
 - Torrance Refining views commercially viable as constructed at scale to California standards for two four-year turnaround cycles (Minimum of 12 years)
- Potential impacts to gasoline supply and cost
 - Any impacts would be temporary
 - Planned phase-out is different than an unplanned shutdown less disruptive

Discussion on MHF Phase-Out

No Phase-out

Yes Phase-out

Alternative technologies not commercially proven



Longer implementation schedule with a technology assessment

Phase-out could result in a gasoline shortage



Lead time to plan - other options for alkylate supply

Refineries state they have and will continue to use MHF safely



Uncertain a consequential release can be mitigated

Refinery estimate: \$900 million (Alkylation Unit and Acid Plant)



Lives at risk – cost of large release must be considered

Uncertain that Enhanced Mitigation Can Protect the Community

- Can consequential release be mitigated?
 - Can mitigation capture initial cloud?
 - Can water be deployed rapidly?
 - Can the mitigation system target exact location?
- Can the refineries supply enough water?
- Can sufficient redundancy guard against system failure?

What is a Performance Standard?

Performance Standard

- Benchmark that refineries would need to meet for continued use of MHF
- Needed to ensure enhanced mitigation can protect community
- Possible examples:
 - Concentration limit at fenceline or nearest receptor
 - Demonstrate MHF will not form dense vapor cloud
- 1991 Rule 1410 included a performance standard:
 - □20 ppm for 5 minutes; and
 - □ 120 ppm for 1 minute at the fenceline

Rule 1410 (Cont.)

(Adapted April 5, 1991)

- (7) HYDROGEN FLUORIDE is anhydrous, aqueous or any organic mixture of (b) HYDROGEN PLEORIDE SENSITIVE PAINT is any posting formulated to
- change color upon contact with hydrogen throuds
- (9) REFERGERANT PRODUCTION is any process in which hydrogen fluoride is used as a chemical constant to enclare obligations representations of
- (10) SERVOUS, NEAR WORST-CASE ACCIDENTAL RELEASE W 2000 accidental release occurring under conditions specified in gradelines prepared. by the Baccative Officer. Such guidelines shall, at a minimum, specify the
 - (A) Makerology condition in near worst-case empage of sensors in the vicinity of the release or determined forcials the use of the DRGADES. model, or other model determined by the Executive Officer to be equivalent, and appropriate model variables approved by the traceutive
 - (ii) A two-inch diameter opining in the hydrogen fluoride-combining
 - (C) No unitisation of the release by gherrical or mechanical means

- (A) On and offer Jamary 1, 1998, an owner or operator of a refinery shall not use, store, transport, or solicit or contract for the transport of, hydrogen flooride within the South Const Air Quality Management District for use in an alcylation process, unless such hydrosen fluoride a contained in a mortice which upon senses, new worst-case accidental relevae, will not result in atmospheric concentrations equal to or anester than 10 mats per million for five minutes and 120 mats. per million for one minute at or outside of the facility boundary
- On and after January 1, 1999, an owner or operator of a refrigerant for the transport of, hydrogen disords within the South Coast Air. Quality Management District for use in a refrigerent production

Three Key Elements of Performance Standard







Release Scenario

- Key parameters
 - Rate of release
 - Locations
 - Unit parameters

Standard

 Performance standard that must be met if MHF is released

Demonstration

- Demonstrate standard is met through
 - Modeling
 - Testing

Staff is Seeking Direction

- Continue with approach based on direction from Refinery Committee
 - □ Develop rule or MOU that requires refineries to:
 - oPhase-out MHF within 5 to 7 years; or
 - oDemonstrate, based on enhanced mitigation measures, that they meet a performance standard (to be developed) that ensures a consequential release will not impact the community



BOARD MEETING DATE: February 1, 2019 AGENDA NO. 26

REPORT: Status Report on Regulation XIII – New Source Review

SYNOPSIS: This report presents the federal preliminary determination of

equivalency for January 2017 through December 2017. As such, it provides information regarding the status of Regulation XIII – New Source Review in meeting federal NSR requirements and shows that

SCAQMD's NSR program is in preliminary compliance with applicable federal requirements from January 2017 through

December 2017.

COMMITTEE: Stationary Source Committee, January 18, 2019

RECOMMENDED ACTION:

Receive and file.

Wayne Nastri Executive Officer

LT:WCT:SKT

Summary

SCAQMD's New Source Review (NSR) rules and regulations are designed to comply with federal and state Clean Air Act requirements and to ensure that emission increases from new and modified sources do not interfere with efforts to attain and maintain the federal and state air quality standards, while economic growth in the South Coast region is not unnecessarily impeded. Regulation XIII - New Source Review, regulates and accounts for all emission changes (both increases and decreases) from the permitting of new, modified, and relocated stationary sources within SCAQMD, excluding NOx and SOx sources that are subject to Regulation XX – Regional Clean Air Incentives Market (RECLAIM)¹.

While the RECLAIM program is different than command and control rules for NOx and SOx, its NSR requirements, as specified in Rule 2005, are designed to comply with the governing principles of NSR contained in the federal Clean Air Act (CAA) and the California State Health and Safety Code.

Rule 1315 – Federal New Source Review Tracking System, was adopted by the Board on February 4, 2011 to maintain SCAQMD's ability to issue permits to major sources that require offsets, but obtain offset credits from the SCAQMD's Priority Reserve under Rule 1309.1 - Priority Reserve, and/or that are exempt from offsets under SCAQMD Rule 1304 - Exemptions. In addition, Rule 1315 requires that, commencing with calendar year 2010, and for each calendar year thereafter, the Executive Officer prepare a Preliminary Determination of Equivalency (PDE) and Final Determination of Equivalency (FDE) which cover NSR activities for twelve-month periods. The calendar year 2017 PDE and FDE are required to be reported to the SCAQMD Board at the February and September 2019 Board meetings, respectively. Rule 1315 also requires the Executive Officer to aggregate and track offsets debited from and deposited to SCAQMD's offset accounts for specified periods between October 1, 1990 and December 31, 2005 and each calendar year from 2006 through 2030 for purpose of making periodic determinations of compliance. The last annual report submitted to the SCAQMD Board on September 7, 2018 presented the FDE for calendar year 2016 and demonstrated that SCAQMD's NSR program met the federal offset requirements for calendar year 2016.

This report, which presents the PDE covering the calendar year 2017 reporting period, demonstrates compliance with federal NSR requirements by establishing aggregate equivalence with federal offset requirements for sources that were not exempt from federal offset requirements, but were either exempt from SCAQMD offset requirements or obtained their offsets from SCAQMD pursuant to Regulation XIII.

The PDE for the calendar year 2017 is summarized in Table 1. Additionally, the projections of SCAQMD's federal offset account balances for January 2018 through December 2018 and January 2019 through December 2019 as specified and required pursuant to Rule 1315(e) are presented in Table 2. These results demonstrate that there were, and project that there will be, adequate offsets available to mitigate all applicable emission increases during these reporting periods. This report demonstrates that, for calendar years 2017 through 2019, SCAQMD's NSR program continues to meet and is projected to meet federal offset requirements and is equivalent to those requirements on an aggregate basis². Since U.S. EPA designated the SCAQMD as attainment with the federal CO standard effective June 11, 2007, SCAQMD does not need to report CO accumulated credits and account balances in this report. All data will be maintained in the unlikely event it is needed in the future.

_

² SCAQMD's NSR program is deemed to be equivalent to federal offset requirements because SCAQMD's ending offset account balances remained positive, indicating there were adequate offsets during this reporting period.

Table 1
PDE for January 2017 through December 2017

DESCRIPTION	VOC	NOx	SOx	PM10
2016 Actual Ending Balance ^a (tons/day)	105.76	22.70	4.32	16.15
2017 Discount of Credits for Surplus Adjustment ^b (ton/day)	0.00	-0.05	0.00	0.00
2017 Starting Balance (tons/day)	105.76	22.65	4.32	16.15
2017 Actual Total Credits ^c (lb/day)	0	0	0	0
2017 Actual Total Credits ^c (ton/day)	0.00	0.00	0.00	0.00
2017 Actual Total Debits ^d (lbs/day)	-2,592	-797	-467	-1,309
2017 Actual Total Debits ^d (tons/day)	-1.3	-0.4	-0.23	-0.65
2017 Preliminary Ending Balance ^e (tons/day)	104.46	22.25	4.09	15.50

^a "2016 Actual Ending Balance" is from Table 1 of the 2016 FDE report dated September 7, 2018.

This adjustment is surplus at the time of use discount, which is also discussed in Rule 1315(c)(4).

^c PDE does not account for any credits for calendar year 2017, however, credits will be included in the Final Determination of Equivalency.

For an explanation of the sources of debits please refer to page 7 of this report, as well as Rule 1315(c) and the February 4, 2011 Rule 1315 staff report.

e "2017 Preliminary Ending Balance" equals the "2016 Actual Ending Balance" reduced by any surplus adjustments and the sum of actual debits.

Table 2
Projections of SCAQMD's Federal Offset Account Balances for
January 2018 through December 2018, and
January 2019 through December 2019

DESCRIPTION	VOC	NOx	SOx	PM10
2017 Preliminary Ending Balance ^a (tons/day)	104.46	22.25	4.09	15.50
2018 Projected Discount of Credits for Surplus Adjustment ^b (tons/day)	-0.12	-1.52	0.00	0.00
2018 Projected Starting Balance (tons/day)	104.34	20.73	4.09	15.50
2018 Total Projected Credits ^c (lbs/day)	9,567	2,341	573	1,329
2018 Total Projected Debits ^c (lbs/day)	-505	-400	0	-39
2018 Sum of Projected Credits/Debits ^c (lbs/day)	9,062	1,941	573	1,290
2018 Sum of Projected Credits/Debits ^c (tons/day)	4.53	0.97	0.29	0.65
2018 Projected Ending Balance ^d (tons/day)	108.87	21.70	4.38	16.15
2019 Projected Discount of Credits for Surplus Adjustment ^b (tons/day)	-0.13	-1.48	0.00	0.00
2019 Projected Starting Balance (tons/day)	108.74	20.22	4.38	16.15
2019 Total Projected Credits ^c (lbs/day)	9,567	2,341	573	1,329
2019 Total Projected Debits ^c (lbs/day)	-505	-400	0	-39
2019 Sum of Projected Credits/Debits ^c (lbs/day)	9,062	1,941	573	1,290
2019 Sum of Projected Credits/Debits ^c (tons/day)	4.53	0.97	0.29	0.65
2019 Projected Ending Balance ^e (tons/day)	113.27	21.19	4.67	16.80

^a "2017 Preliminary Ending Balance" is as shown in Table 1.

This adjustment is surplus at the time of use discount, which is also discussed in Rule 1315(c)(4).

For an explanation of the sources of debits and credits please refer to page 7 of this report, as well as Rule 1315(c) and the Rule 1315 staff report. Credits are shown as positive and debits as negative, while the sum of credits/debits are shown as positive or negative, as appropriate.

[&]quot;2018 Projected Ending Balance" equals the "2017 Preliminary Ending Balance" plus any projected surplus adjustments and the sum of projected credits and projected debits.

e "2019 Projected Ending Balance" equals the "2018 Projected Ending Balance" plus any projected surplus adjustments and the sum of projected credits and projected debits.

Background

SCAQMD originally adopted its New Source Review Rules and Regulations (NSR program) in 1976. U.S. EPA approved SCAQMD's NSR program into the State Implementation Plan (SIP) initially on January 21, 1981 (46FR5965) and again on December 4, 1996 (61FR64291). U.S. EPA approved SCAQMD's May 3, 2002 Rule 1309.1 amendments into the SIP on June 19, 2006 (71FR35157). The original program has evolved into the current version of the Regulation XIII rules in response to federal and state legal requirements and the changing needs of the local environment and economy. Specific amendments to the NSR rules were adopted by the Board on December 6, 2002 to facilitate and provide additional options for credit generation and use. Rule 1315 was adopted and re-adopted on September 8, 2006 and August 3, 2007, respectively. Rule 1309.1 was amended and replaced on September 8, 2006 and August 3, 2007, respectively. On November 3, 2008, in response to a law suit filed by a group of environmental organizations, a California State Superior Court Judge in the County of Los Angeles invalidated the August 3, 2007 adopted Rule 1315 and amendments to Rule 1309.1, and prohibited SCAQMD from taking any action to implement Rule 1315 or the amendments to Rule 1309.1 until it had prepared a new environmental assessment under the California Environmental Quality Act (CEQA). On February 4, 2011 SCAQMD adopted a revised and enhanced version of Rule 1315, which included a new CEQA assessment. U.S. EPA approved Rule 1315 in 2012 (77FR31200).

One element of SCAQMD's NSR program design is to offset emission increases in a manner at least equivalent to federal and state statutory NSR requirements. SCAQMD's NSR program implements the federal and state statutory requirements for NSR and ensures that construction and operation of new, relocated and modified stationary sources does not interfere with progress towards attainment of the National and State Ambient Air Quality Standards. SCAQMD's computerized emission tracking system is used to demonstrate equivalence with federal and state offset requirements on an aggregate basis. Specific NSR requirements of federal law are presented below.

Federal Law

Federal NSR requirements vary with respect to the area's attainment status and classification. Based on their classification in 2007, the South Coast Air Basin (SOCAB) and Salton Sea Air Basin (SSAB) must comply with the requirements for severe 17³ and severe non-attainment areas, respectively, for ozone precursors (*i.e.*, VOC and NOx). However, in May 2010, the SOCAB was re-designated as an extreme non-attainment area for ozone. During the 2017 equivalency period, both the SOCAB and the SSAB complied with their respective requirements for ozone non-attainment and serious non-attainment for PM10 and its precursors (*i.e.*, VOC, NOx and SOx)⁴. SSAB is considered

-

³ For more information, see U.S. EPA Green Book - Ozone Designation and Classification Information https://www.epa.gov/green-book/ozone-designation-and-classification-information).

⁴ As of July 26, 2013, SOCAB was redesignated as attainment for the federal 24-hour PM10 standard and U.S. EPA approved a PM10 maintenance plan; however, Rule 1303 still requires offsets for PM10 since SOCAB is

attainment for CO. U.S. EPA designated the SOCAB as attainment with federal CO standards on June 11, 2007. Starting calendar year 2017, SCAQMD will not report CO accumulated credits and account balances in this status report. Both SOCAB and SSAB are considered attainment for SO2 and NO2, however SOx and NOx are precursors to pollutants for which both SOCAB and SSAB are designated as non-attainment⁵. The Mojave Desert Air Basin (MDAB) is currently classified as moderate non-attainment for ozone precursors (*i.e.*, VOC and NOx) and as attainment for NO2, SO2, and CO. Federal law requires the use of Lowest Achievable Emission Rate (LAER) and offsets for emissions of nonattainment pollutants (or their precursors) for new, modified, and relocated stationary sources, when the source is considered a major stationary source⁶ for the nonattainment pollutants (or their precursors). This report demonstrates compliance with the federal NSR offsets requirements.

Overview of Analysis Methodology

The two most important elements of federal non-attainment NSR requirements are LAER and emission offsetting for major sources. As set forth in SCAQMD's Best Available Control Technology (BACT) Guidelines, SCAQMD's BACT requirements are at least as stringent as federal LAER for major sources. Furthermore, the NSR emission offset requirements that SCAQMD implements through its permitting process ensure that sources provide emission reduction credits (ERCs) to offset their emission increases in compliance with federal requirements. As a result, these sources each comply with federal offset requirements by providing RCs. However, certain sources are exempt from SCAQMD's offset requirements pursuant to Rule 1304 or qualify for offsets from SCAQMD's Community Bank (applications received between October 1, 1990 and February 1, 1996 only) or Priority Reserve, both pursuant to Rule 1309.1. Providing offset exemptions and the Priority Reserve (as well as the previously-administered Community Bank) is important to the NSR program and the local economy. Therefore, SCAQMD has assumed the responsibility of providing the necessary offsets for exempt sources, the Priority Reserve, and the Community Bank. This report examines withdrawals from SCAQMD emission offset accounts during calendar year 2017 and

_

⁶ The major source thresholds for SOCAB, SSAB and MDAB, based on their attainment status during the calendar year 2007 through 2017 reporting periods are summarized below:

Pollutant	SOCAB	SSAB	MDAB
VOC	10 tons/year	25 tons/year	100 tons/year
NOx	10 tons/year	25 tons/year	100 tons/year
SOx	100 tons/year	100 tons/year	100 tons/year
PM10	100 tons/year	70 tons/year	100 tons/year
СО	100 tons/year	100 tons/year	100 tons/year

considered non-attainment for state PM10 Ambient Air Quality Standards, so that pollutant continues to be tracked. Although the Clean Air Act no longer requires offsets for PM10 major sources in SOCAB, PM2.5 is not covered by Rule 1315 or Rule 1304 and is subject to Rule 1325 - Federal PM2.5 New Source Review Program.

⁵ SOx is a precursor to PM10 and NOx is a precursor to both PM10 and ozone.

demonstrates programmatic equivalence on an aggregate basis with federal emission offset requirements for the sources exempt from providing offsets and the sources that receive offsets from the Priority Reserve or the Community Bank.

SCAQMD's Offset Accounts

For the purposes of this report, federal debit and credit accounting for SCAQMD offset accounts was conducted pursuant to the same procedures previously agreed to by U.S. EPA and as delineated in Rule 1315 and described in the staff report dated January 7, 2011. Each of the pollutants subject to offset requirements has its own federal offset account. SCAQMD's NSR program is considered to provide equivalent or greater offsets of emissions as required by federal requirements for each subject pollutant provided the balance of offsets in SCAQMD's federal offset account for each pollutant remains positive, indicating that there were adequate offsets available.

Debit Accounting

Staff tracks all emission increases that are offset through the Priority Reserve or the Community Bank, as well as all increases that are exempt from offset requirements pursuant to Rule 1304 – Exemptions. These increases are all debited from SCAQMD's federal offset accounts when they occur at federal major sources. For federal equivalency demonstrations, SCAQMD uses an offset ratio of 1.2-to-1.0 for extreme non-attainment pollutants (ozone and ozone precursors, *i.e.*, VOC and NOx) and uses 1.0-to-1.0 for all other non-attainment pollutants (non-ozone precursors, *i.e.*, SOx and PM10) to offset any such increases. That is, 1.2 pounds are deducted from SCAQMD offset accounts for each pound of maximum allowable permitted potential to emit VOC or NOx increase at a major source and 1.0 pound is deducted for each pound of maximum allowable permitted potential to emit SOx or PM10 at a major source. A more detailed description of federal debit accounting is provided in the Rule 1315 staff report dated January 7, 2011 and Rule 1315(c)(2).

Furthermore, to comply with U.S. EPA's NSR Reform requirements applicable to extreme non-attainment areas for ozone, the SCAQMD tracks changes to facility-wide limits under Rule 1304 – Exemptions, and debit any increases from the federal offset accounts accordingly.

Credit Accounting

When emissions from a permitted source are permanently reduced (*e.g.*, installation of control equipment, removal of the source) and the emission reduction is not required by rule or law and is not called for by an AQMP control measure that has been assigned a target implementation date⁷, the permit holder may apply for ERCs for the pollutants reduced. If the permit holder for the source generating the emission reduction had

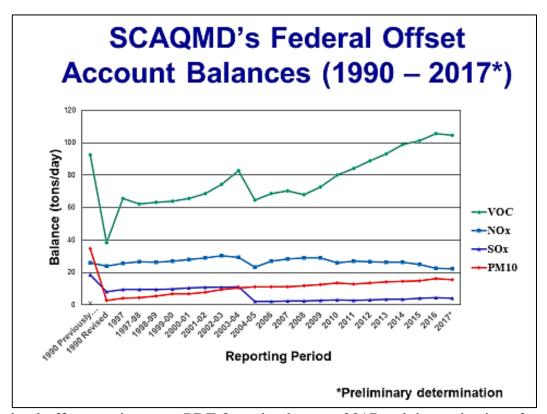
 $^{7}\,$ Refer to Rule 1309(b) for a complete explanation of eligibility requirements.

-7-

previously received offsets from SCAQMD or has a "positive NSR balance" (*i.e.*, pre-1990 net emission increase), the quantity of SCAQMD offsets used or the amount of the positive NSR balance is subtracted from the reduction and "paid back" to SCAQMD's accounts prior to issuance of an ERC pursuant to Rule 1306. In certain other cases, permit holders do not always submit applications to claim ERCs or do not qualify to obtain ERCs for their equipment shutdowns or other eligible emission reductions. These unclaimed reductions are referred to as "orphan shutdowns" and are deposited in SCAQMD's offset accounts. ERCs provided as offsets by major sources in excess of the applicable federally-required offset ratio and all ERCs provided as offsets by minor sources not subject to federal offset requirements are also deposited in SCAQMD's federal offset accounts. A more detailed description of federal credit accounting is provided in Rule 1315(c)(3)(A) and its staff report dated January 7, 2011.

Determination of Equivalency With Federal Offset Requirements

Figure 1 illustrates SCAQMD's federal offset account balances for calendar years 1990 and after. The calendar year 2017 balances are based on preliminary determinations.



The federal offset requirements PDE for calendar year 2017 and the projections for calendar years 2018 and 2019 are summarized in Tables 1 and 2, respectively. The detailed listing of actual final withdrawals, deposits, and sum of withdrawals and deposits are shown in Tables A and B of Attachment 1 to this letter.

The account balances shown in Tables A and B reflect the tracking sequence described under Rule 1315(c)(5).

Conclusions

The analysis presented in this report demonstrates the following:

- For calendar year 2017, SCAQMD's NSR program provided equivalent offsets to those required by federal NSR requirements and is at least preliminarily equivalent to the federal requirements on an aggregate basis. This conclusion is based on the fact that the preliminary ending offset account balances for the calendar year reporting period, as shown in Table 1, remained positive for all pollutants.
- SCAQMD's projected offset account balances for 2018 and 2019 are projected to remain positive. This means that the sum of the estimated deposits to and withdrawals from SCAQMD's offset accounts during 2018 and 2019 are projected to remain positive.

Attachments

- 1. Detailed Listing of Actual Debits, Preliminary Credits, and Sum of Debits and Credits
- 2. Board Meeting Presentation

ATTACHMENT 1

Detailed Listing of Actual Final Debits, Credits and Sum of Debits and Credits

Table A
Total Actual Debits from SCAQMD's Federal Offset Accounts
(January 2017 through December 2018)

DISTRICT OFFSETS USED	VOC	NOx	SOx	PM10
Priority Reserve (lbs/day)	-50	-59	-185	0
Community Bank (lb/day)	0	0	0	0
Rule 1304 Exemptions (lbs/day)	-2,110	-605	-282	-1,309
Sum Total of SCAQMD Offsets (lbs/day)	-2,160	-664	-467	-1,309
1.2-to-1.0 Offset Ratio (lbs/day)	-432	-133	N/A	N/A
Total Actual Debits to SCAQMD Account (lbs/day)	-2,592	-797	-467	-1,309
Total Actual Debits to SCAQMD Account (tons/day)	-1.30	-0.40	-0.23	-0.65

Table B
Sum of Preliminary Credits/Debits Activities in SCAQMD's Federal Offset Accounts
(January 2017 through December 2018)

	VOC	NOx	SOx	PM10
Total Actual Debits* (lbs/day)	-2,592	-797	-467	-1,309
Total Actual Credits* (lb/day)	0	0	0	0
Sum of Actual Debits(-)/Credits(+)* (lbs/day)	-2,592	-797	-467	-1,309
Sum of Actual Debits(-)/Credits(+)* (tons/day)	-1.3	-0.4	-0.23	-0.65

^{*} Debits are shown as negative and Credits as positive, while their sum is shown as negative or positive, as appropriate. No credits are accounted for in the Preliminary Determination of Equivalency analysis.



Status Report on Regulation XIII – New Source Review

Governing Board Meeting February 1, 2019



NSR Status Report Overview

Purpose:

Demonstrate SCAQMD's NSR program meets federal NSR offset requirements for Major Sources, as required by EPA, for sources that are exempt from offsets under SCAQMD's NSR rule



NSR Status Report History

- SCAQMD has produced Annual NSR Status Reports since 1990
- Around 2002-2004 EPA requested SCAQMD adopt a rule to memorialize equivalency demonstrations
- SCAQMD adopted Rule 1315 (Federal NSR Tracking System) in 2006/2007 and adopted a revised Rule 1315 in 2011
- EPA approved Rule 1315 into the SIP and it became effective on June 25, 2012



Rule 1315 Federal NSR Tracking System

- Rule 1315 established procedures to demonstrate equivalency with federal NSR offset requirements
 - Tracks debits from and credits to SCAQMD's federal internal offset account for each pollutant
 - Annual Preliminary Determinations of Equivalency (PDE),
 Final Determinations of Equivalency (FDE) and Projections
 - Balances in SCAQMD's federal offset accounts must remain positive

SCAQMD's Federal NSR Offset Accounts Preliminary Determination of Equivalency (PDE)* (CY 2017)

DESCRIPTION	VOC	NOx	SOx	PM10
2016 Final Ending Balance (tons/day)	105.76	22.70	4.32	16.15
2017 Total Credits (tons/day)*	0.00	0.00	0.00	0.00
2017Total Debits (tons/day)	-1.3	-0.4	-0.23	-0.65
2017 Total Discount of Credits for Surplus Adjustment (tons/day)	0.00	-0.05	0.00	0.00
2017 Preliminary Ending Balance (tons/day)	104.46	22.25	4.09	15.50

^{*}PDE does not account for any credits for CY 2017, however, credits will be included in the Final Determination of Equivalency.



SCAQMD's Projected Federal NSR Offset Accounts CY 2018

DESCRIPTION	VOC	NOx	SOx	PM10
2017 Preliminary Ending Balance (tons/day)	104.46	22.25	4.09	15.50
2018 Total Projected Credits (tons/day)		1.17	0.29	0.67
2018 Total Projected Debits (tons/day)	_I	-0.20	0.00	-0.02
2018 Total Projected Discount of Credits for Surplus Adjustment (tons/day)		-1.52	0.00	0.00
2018 Projected Ending Balance (tons/day)	108.87	21.70	4.38	16.15

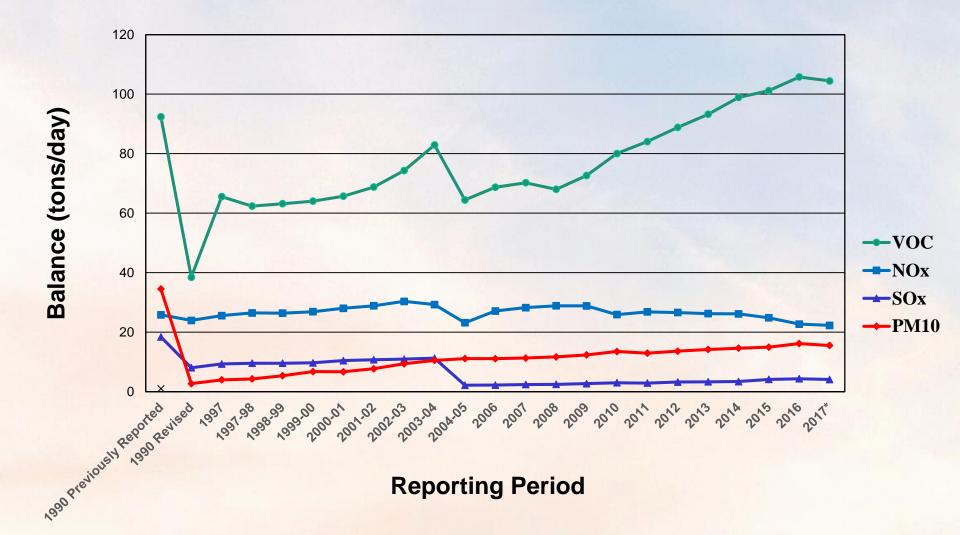


SCAQMD's Projected Federal NSR Offset Accounts CY 2019

DESCRIPTION	VOC	NOx	SOx	PM10
2018 Projected Ending Balance (tons/day)	108.87	21.70	4.38	16.15
2019 Total Projected Credits (tons/day)	/I / X	1.17	0.29	0.67
2019 Total Projected Debits (tons/day)	_() / \	-0.20	0.00	-0.02
2019 Total Projected Discount of Credits for Surplus Adjustment (tons/day)		-1.48	0.00	0.00
2019 Projected Ending Balance (tons/day)	113.26	21.19	4.67	16.80



SCAQMD's Federal Offset Account Balances (1990 – 2017*)





Conclusions

- The <u>Preliminary</u> analysis for CY 2017 shows SCAQMD's NSR program continued to be equivalent to the federal NSR offset requirements
- For CYs 2018 and 2019 it is also projected that SCAQMD's NSR program will continue to be equivalent to the federal NSR offset requirements
- Next <u>Final</u> Demonstration of Equivalency for CY 2017 will be presented to the Board on September 6, 2019



BOARD MEETING DATE: February 1, 2019

AGENDA NO. 27

PROPOSAL:

Determine that Proposed Amendments to Rule 1403 - Asbestos Emissions from Renovation/Demolition Activities are Exempt from CEQA and Amend Rule 1403

Staff is recommending that the public hearing on this item be withdrawn from consideration.

SYNOPSIS:

Proposed amendments to Rule 1403 will provide revisions to further clarify existing rule requirements, enhance enforceability, and align the requirements with the applicable U.S. EPA NESHAP and with other state and local agency regulations. The proposed amendments include clarifying who is covered by the rule, standard and emergency notification procedures, specifying information to be included in survey reports, and reinforcing minimum sampling requirements for determining whether materials are asbestoscontaining. This action is to adopt the Resolution: 1) Determining that the proposed amendments to Rule 1403 - Asbestos Emissions from Renovation/Demolition Activities are exempt from the requirements of the California Environmental Quality Act; and 2) Amending Rule 1403 - Asbestos Emissions from Renovation/Demolition Activities. (Reviewed: Stationary Source

Committee, November 16 and December 19, 2018)



BOARD MEETING DATE: February 1, 2019

AGENDA NO. 28

PROPOSAL: Determine that Proposed Amendments to BACT Guidelines and

Charter for BACT Scientific Review Committee Are Exempt from

CEQA, and Amend BACT Guidelines and Charter for BACT

Scientific Review Committee

SYNOPSIS: Periodically, staff proposes amendments to the BACT Guidelines

to add new or update determinations and/or policy. These actions are to add new and amended listings to Part B: Lowest Achievable Emission Rate Determinations for Major Polluting Facilities, Part D: BACT Determinations for Non-Major Polluting Facilities and update Parts A and C Policy for Major and Non-Major Polluting

Facilities. Additionally, these actions are to determine the

proposed amendments to the BACT Guidelines and the Charter for

BACT Scientific Review Committee are exempt from the California Environmental Quality Act, amend the BACT Guidelines to make them consistent with recent changes to

SCAQMD rules and regulations as well as state requirements, and

approve amendments to the charter for the BACT Scientific

Review Committee.

COMMITTEE: Stationary Source, January 18, 2019; Recommended for Approval

RECOMMENDED ACTIONS:

- Determine that the proposed amendments to the BACT Guidelines and the Charter for BACT Scientific Review Committee are exempt from the requirements of CEOA;
- 2. Approve proposed amendments to BACT Guidelines Overview and Parts A, B, C and D (Parts E and F are not being amended); and
- 3. Approve proposed amendments to Charter for the BACT Scientific Review Committee.

Wayne Nastri Executive Officer

Background

Regulation XIII – New Source Review (NSR) requires permit applicants to use BACT for new sources, relocated sources and modifications to existing sources that may result in an emissions increase of any nonattainment air contaminant, any ozone depleting compound (ODC) or ammonia. Regulation XIII also requires the Executive Officer to periodically publish BACT Guidelines that establish the procedures and the requirements for applying BACT to commonly permitted equipment.

The BACT Guidelines are separated into two parts: major polluting facilities and nonmajor polluting facilities. A facility is a major polluting facility if it emits, or has the potential to emit, a criteria air pollutant at a level that equals or exceeds the emissions thresholds in Regulation XXX - Title V Permits. Major polluting facilities that are subject to NSR are required by the federal Clean Air Act (CAA) to have the Lowest Achievable Emission Rate (LAER). The SCAQMD implements the federal CAA requirement for LAER through its BACT process. The Part B LAER determinations for major polluting facilities are only examples of past determinations that help in determining LAER for new permit applications. At the state level, California Health and Safety Code (H&SC) Section 40405 defines BACT in a similar manner to federal LAER and requires the application of BACT for all new and modified permitted sources subject to NSR. For non-major polluting facilities, minor source BACT (MSBACT) is as specified in Part D of the BACT Guidelines and determined in accordance with state law H&SC Section 40440.11 at the time an application is deemed complete. In updating Part D with new more stringent MSBACT, SCAQMD must follow a more rigorous process than for major polluting facilities, including a cost-effectiveness analysis, notification to the public, presentation at the BACT Scientific Review Committee (BACT SRC) meeting and Board approval.

The BACT SRC was established as a standing committee by the Board to enhance the public participation process with technical review and comments by a focused committee at periodic intervals, prior to updating the BACT Guidelines.

Proposed Amendments to the BACT Guidelines

The proposed amendments are to update the Overview, Parts A, B, C and D of the BACT Guidelines, and maintain consistency with recent changes to SCAQMD rules and state requirements. Parts E and F of the guidelines are not being amended. The BACT SRC and other interested parties were provided with detailed descriptions of the proposed amended BACT Guidelines at three scheduled publicly noticed meetings. The proposed amendments to the BACT Guidelines were posted on SCAQMD's website and a 30-day public comment period was provided. Comments by BACT SRC members and the general public along with staff responses are included in Attachment J.

Overview

The Overview consists of five chapters which provide an introduction to the BACT Guidelines and a summary of how BACT and LAER is implemented in the SCAQMD. The proposed amendment to the Overview section includes referencing an Engineering and Permitting Division policy for the prevention of circumvention of BACT requirements for emissions increases greater than or equal to one pound per day. A summary of the proposed Overview amendment is included in Attachment A, with the complete proposed amended Overview section included in Attachment B.

Part A – Policy and Procedures for Major Polluting Facilities

Part A describes the policy and procedures for major polluting facilities and explains what LAER is, why it is required, when it is required and how it is determined for major polluting facilities. The proposed amendment to Part A is to reference SCAQMD's Air Quality-Related Energy policy established in September 2011. The policy requires new or repowered in-basin fossil-fueled power plants to incorporate LAER/BACT as required by District rules, considering energy efficiency for the application. A summary of the proposed Part A amendments is included in Attachment A, with the complete proposed amended Part A included in Attachment C.

New and Updated Listings, Part B - LAER Determinations for Major Polluting Facilities

Part B consists of three sections: Section I contains listings of LAER determinations made by SCAQMD; Section II contains listings of LAER determinations for equipment in other air districts; and Section III contains listings of emerging technologies which have been in operation with an air quality permit but do not yet qualify as LAER. The proposed Part B LAER determinations of Sections I and II are summarized below with the complete proposed determinations included in Attachment D. The other portions of Sections I, II and III are not included in this Board package because they are not being updated at this time.

Section I – SCAQMD LAER/BACT Determinations

Two new proposed listings include External Floating Roof Storage Tank-Dome Installation and Soil Vapor Extraction-Thermal Oxidation at 30 parts per million (ppm) NOx. Nine proposed updated listings include Gas Turbines combined cycle/simple cycle natural gas, landfill, digester and produced gas-fired, internal combustion (I.C.) engine portable and I.C. engine emergency fire pump.

The new "External Floating Roof Storage Tank" listing is based on several permitted floating roof storage tanks at a refinery ranging in capacity from 14,000 barrels to 615,000 barrels equipped with domes to minimize wind induced emissions. These tanks commenced operation and storage of crude oil, gas oil, mixed naphtha and wastewater in April 2016 and have been operating in compliance ever since.

The new "Soil Vapor Extraction" listing is for an in-situ soil vapor extraction remediation system using a thermal catalytic oxidizer achieving 30 ppm NOx burner-only emissions at a gasoline storage facility. The catalytic oxidizer rated at 4 MMBtu/hr began operation in late 2016 with source test showing compliance with the permitted emissions limit of 30 ppm NOx.

The "Gas Turbine" LAER category is being updated with several listings consisting of: 1) combined cycle, natural gas-fired, 56.1 megawatt (MW) with selective catalytic reduction (SCR) permitted at 2 ppm NOx, 2 ppm CO, 2 ppm VOC and 5 ppm ammonia slip; 2) simple cycle, natural gas-fired, 100.1 MW with SCR permitted at 2.5 ppm NOx, 4 ppm CO, 2 ppm VOC and 5 ppm ammonia slip; 3) simple cycle, landfill gas-fired, 4.9 MW permitted at 12.5 ppm NOx, 21.5 ppm CO and 10.5 ppm VOC; 4) combined cycle, digester gas-fired, 11.35 MW permitted at 18.8 ppm NOx, 60 ppm CO, 25 ppm VOC and 10 ppm ammonia slip; 5) simple cycle, produced gas-fired, 5.6 MW permitted at 5 ppm NOx, 6 ppm CO, 2 ppm VOC and 5 ppm ammonia slip. All gas turbines have been in operation for 1.5 years or longer and showed compliance with permitted limits and were verified through source test and continuous emissions monitoring systems (CEMS) data.

The "I.C. Engine, Portable Compression Ignition" LAER category is being updated with a listing of a 123.4 horsepower (HP) diesel fueled engine with oxidation catalyst and SCR. The engine powers a hydraulic pump for the refuse truck tipper platform at a landfill. This engine was permitted to achieve Tier 4 emissions standards with manufacturer certification. The engine commenced operation mid-2017 and has operated since that time.

The "I.C. Engine, Emergency Fire Pump Compression Ignition" LAER category is being updated with a listing of a 183 HP diesel-fueled engine. The engine is used to provide emergency water supply for fire suppression at a fuel storage tank facility. This engine was permitted to achieve Tier 3 emissions standards with manufacturer certification. The engine commenced operation mid-2010 and has operated since that time.

Section II – Other LAER/BACT Determinations

The "Gas Turbine" LAER category is being updated with a listing from a permit issued by the Virginia State Air Pollution Control Board consisting of three Gas Turbines, combined cycle, natural gas-fired, 299.6 MW each with SCR permitted at 2 ppm NOx one-hour average, 1.5 ppm CO one-hour average without duct burner. All gas turbines showed compliance with permitted limits and verified through source test and CEMS data. The gas turbine units commenced operation in late 2014 and continue operation to date.

Proposed Deletions of Outdated Part B, Sections I and II LAER Determinations
In an effort to maintain current and up-to-date listings of LAER determinations which reflect the latest permitted achieved in practice technologies, staff is proposing to remove outdated LAER determinations from Part B, sections I and II of the BACT Guidelines. The complete list of proposed LAER determinations to be deleted is included in Attachment D.

Part C – Policy and Procedures for Non-Major Polluting Facilities

Part C describes the policy and procedures for non-major polluting facilities and explains what BACT is, why it is required, when it is required and how it is determined for non-major polluting facilities. The proposed amendments to Part C are to reference SCAQMD's Air Quality-Related Energy policy established in September 2011. The policy requires new or repowered in-basin fossil-fueled power plants to incorporate LAER/BACT as required by District rules, considering energy efficiency for the application. In addition, staff is proposing to update the Maximum Cost-Effectiveness Values on Table 5 consistent with the third quarter 2018 Marshall and Swift equipment index in accordance with the BACT Guidelines policy. A summary of the proposed Part C amendments is included in Attachment A, with the complete proposed amended Part C included in Attachment E.

<u>Proposed Amendments to Part D BACT Determinations for Non-Major Polluting</u> Facilities

Part D consists of BACT determinations for minor sources which are established in accordance with state law at the time an application is deemed complete. The proposed new and updated amendments to Part D are for equipment and processes which have been achieved in practice and to maintain consistency with recent changes to SCAQMD rules and state requirements. All proposed Part D amendments and updates, with the exception of the proposed new Thermal/Catalytic Oxidizer listing, will not result in more stringent requirements than would otherwise occur through SIP-approved rule compliance which constitutes MSBACT under Part C – Policy Guidance. Therefore, it was not required for staff to evaluate the achieved-in-practice status nor cost-effectiveness of these underlying technologies. The proposed amendments comply with the requirements of H&SC Section 40440.11. The proposed amended Part D BACT determinations are summarized below, with the complete proposed amended Part D included in Attachment F.

Boiler

-- Current Language

Minor source BACT for Boiler, subcategory "Natural Gas or Propane Fired, ≥ 20 and < 75 MM Btu/hr" for NOx is "With Low NOx Burner: ≤ 9 ppmv dry corrected to 3% O₂; With Add-On Controls: ≤ 7 ppmv dry corrected to 3% O₂."

--Proposal

To be consistent with the current applicable requirements of Rule 1146, staff is proposing to remove language stated above and replace with "Compliance with SCAQMD Rule 1146".

Composting

-- Current Language

Minor source BACT for Composting currently does not have a subcategory listing for Greenwaste Composting.

--Proposal

Staff is proposing to add a subcategory for Greenwaste Composting and language to this BACT determination for VOC and Inorganic Ammonia stating "Compliance with SCAQMD Rule 1133.3".

Fryer – Deep Fat

-- Current Language

Minor source BACT listing for Fryer - Deep Fat, Rating/Size "<2 MM Btu/hr" and "≥2 MM Btu/hr" only includes an Integrated Afterburner/Oil Heater type Deep Fat Fryer.

--Proposal

Staff is proposing to clarify this listing by the addition of the following Rating/Size category: "Non-Integrated Direct and In-Direct Oil Heater". The addition of this category will now address BACT for all new, modified, and relocated Deep Fat Fryers. For the "Integrated Afterburner/Oil Heater" category all existing BACT requirements are being maintained. For the proposed "Non-Integrated Direct and In-Direct Oil Heater" category, to be consistent with current rule requirements, staff is proposing a NOx BACT requirement of "Compliance with Rule 1147".

I.C. Engine, Stationary, Emergency

-- Current Language

Minor source BACT for I.C. Engine, Stationary, Emergency, subcategory "Compression-Ignition, Other, 100≤HP<175" for PM has an outdated limit of 0.22 grams/bhp-hr/0.30 grams/kW-hr.

--Proposal

Staff proposes to replace outdated PM limit with 0.15 grams/bhp-hr/0.20 grams/kW-hr to be consistent with CARB air borne toxic control (ATCM) regulation and Rule 1470.

Process Heater - Non-Refinery

-- Current Language

Minor source BACT for Process Heater-Non-Refinery, subcategory "Natural Gas or Propane Fired, ≥20 MM Btu/hr" for NOx has an incorrect reference to Rule 1146.1.

--Proposal

Staff is proposing a correction by deleting the above-stated reference to Rule 1146.1.

Printing (Graphic Arts)

--Current Language

Minor source BACT for Printing (Graphic Arts), subcategory "Lithographic or Offset, Heatset" for PM10 originally included the requirement of "Venting to an afterburner (≥0.3 sec. Retention Time at ≥1400°F; 95% Overall Efficiency", which was inadvertently removed during the publishing and most recent update of the BACT Guidelines in February 2018. The subcategory "Lithographic or Offset, Non-Heatset" for VOC incorrectly references "Same As Above" for BACT requirement.

--Proposal

Staff is proposing a correction to the subcategory "Lithographic or Offset, Heatset" for PM10 by including the revised original language of "Venting to an afterburner (≥0.3 sec. Retention Time at ≥1400°F. Staff is also proposing a correction to the subcategory "Lithographic or Offset, Non-Heatset" for VOC by replacing the language "Same As Above" with "Low VOC Fountain Solution (≤8% by Vol. VOC); Low VOC (≤100 g/l) Blanket and Roller Washes; Oil-Based or UV-Curable Inks; and Compliance with SCAQMD Rules 1130 and 1171".

Spray Booth

-- Current Language

Minor source BACT for Spray Booth, subcategory "Automotive, Down-Draft Type, <660 lbs/Month of VOC Emissions) incorrectly lists the limit of 660 lbs/Month.

--Proposal

Staff proposes to replace the 660 lbs/Month limit with the correct limit of 667 lbs/Month to be consistent with past and currently permitted spray booths reflecting the New Source Review <4 tons/year limit not requiring offsets.

Compliance with Rule 1147- NOx Reductions from Miscellaneous Sources -- Current Language

The following minor source BACT listings have outdated NOx BACT requirements which are higher than applicable Rule 1147: Aluminum Melting Furnace; Brass Melting Furnace; Burnoff Furnace; Calciner; Coffee Roasting; Crematory; Dryer-Kiln; Dryer or Oven Tenter Frame/Carpet; Fish Reduction Cooker/Dryer; Fryer- Deep Fat, Non-Integrated; Lead Melting Furnace; Soil Vapor Extraction (Remediation) Thermal Oxidation and Zinc Melting Furnace.

--Proposal

Staff proposes to replace existing outdated NOx BACT requirement for each of the minor source BACT listings mentioned above with the following language "Compliance with Rule 1147". This proposed amendment will ensure that these minor source BACT listings will subject to the latest lower NOx emissions limits achieved in practice and consistent with Rule 1147.

Thermal/Catalytic Oxidizer- Natural Gas-Fired

-- Current Language

Part D does not currently have a minor source BACT listing for Thermal/Catalytic Oxidizer that is used as a control technology.

Proposal

Staff is proposing to add a new minor source BACT listing with Equipment/Process category for "Thermal/Catalytic Oxidizer-Natural Gas-Fired" with subcategory of "All". Staff has identified over 30 achieved in practice deployments of thermal/catalytic oxidizers which have been permitted within the SCAQMD since 2014. All these applications include a permit condition limit of 30 ppm NOx at 3% O₂, for burner only, which has been verified through source tests. This listing would exclude thermal/catalytic oxidizers used in Tank Degassing, Soil Vapor Extraction and Vapor Incinerator operations as not many have been found achieved in practice in these categories. Since this proposed new minor source BACT listing will result in more stringent requirements, it is subject to H&SC 40440.11 and further discussed in the "Compliance with Health and Safety Code" section below.

Compliance with Health and Safety Code

In amending the BACT guidelines for non-major polluting facilities to be more stringent, SCAQMD must comply with H&SC Section 40440.11. Staff is proposing a new BACT determination in Part D for Thermal/Catalytic Oxidizer - Natural Gas-Fired. The following paragraphs identify the applicable requirements in H&SC Section 40440.11 and demonstrate compliance with each requirement:

(c)(1) Identify one or more potential control alternatives that may constitute the best available control technology as defined in section 40405.

The only commercially viable and proven and achieved in practice control alternative is an oxidizer with a low NOx burner that complies with 30 ppm NOx; therefore it is considered the best available control technology.

(c)(2) Determine that the proposed emission limitation has been met by production equipment, control equipment, or a process that is commercially available for sale, and has achieved the best available control technology in practice on a comparable commercial operation for at least one year, or a period longer than one year if a longer

period is reasonably necessary to demonstrate the operating and maintenance reliability, and costs, for an operating cycle of the production or control equipment, or process.

Natural gas-fired thermal/catalytic oxidizers equipped with burners that can meet 30 ppm NOx have been commercially available for many years. Staff has included in Attachment G proposed BACT determinations citing applications of an RTO and a CatOx controlling VOC process emissions and smoke and odor, respectively. These equipment have been in commercial operation for over one year, source tested and verified compliance with 30 ppm NOx @ 3% O₂.

(c)(3) Review the information developed to assess the cost-effectiveness (annual cost of control divided by annual emission reduction potential) of each potential control alternative.

A cost-effectiveness study was implemented to assess the incremental equipment and operating cost of the low NOx equipment vs current BACT. See calculations spreadsheet in Attachment G.

(c)(4) Calculate the incremental cost-effectiveness for each potential control option (difference in cost divided by difference in emissions for each progressively more stringent control option)

The incremental cost-effectiveness study included calculations of incremental cost per ton of NOx reduced. See calculations spreadsheet in Attachment G.

(c)(5) Place the best available control technology revision proposed on the calendar of a regular meeting agenda of the SCAQMD board for its acceptance or further action as the board determines.

The proposed revisions to the BACT Guidelines were placed on the February 1, 2019 board meeting agenda.

Proposed Amendment to BACT Scientific Review Committee Charter

The current Charter for the BACT SRC details the BACT SRC's goals and objectives, the composition and selection of the BACT SRC membership, the desired qualifications of its membership and the operational guidelines for the BACT SRC. Staff is proposing clarification language under the Reporting section of the Charter regarding when staff provides a report to the Stationary Source Committee. Staff proposes that, once proposed amendments to the BACT Guidelines have been presented at a public BACT SRC meeting initiating a 30-day comment period followed by a final public BACT SRC meeting, a report will be presented by staff to the Stationary Source Committee on

proposed updates to the BACT Guidelines. The proposed amendment to the Charter is included in Attachment H.

Presentation to BACT Scientific Review Committee

The proposed amendments to the BACT Guidelines were presented to the BACT SRC at publicly noticed meetings on April 24, October 3 and December 11, 2018. A 30-day comment period was provided to the BACT SRC and general public to review and submit comments. Comments by BACT SRC members and the general public along with staff responses are included in Attachment J.

California Environmental Quality Act

Pursuant to the California Environmental Quality Act (CEQA) and SCAQMD Rule 110, the SCAQMD, as lead agency for the proposed project, has reviewed the proposed project pursuant to: 1) CEQA Guidelines Section 15002(k) – General Concepts, the three-step process for deciding which document to prepare for a project subject to CEQA; and 2) CEQA Guidelines Section 15061 – Review for Exemption, procedures for determining if a project is exempt from CEQA. Since the proposed project is comprised of updates that reflect current practices of LAER/BACT determinations in the BACT Guidelines and the most current achieved-in-practice air pollution control equipment and/or processes, and make administrative amendments to the Charter for the BACT Scientific Review Committee, SCAQMD staff has determined that it can be seen with certainty that there is no possibility that the proposed project may have a significant adverse effect on the environment. Therefore, the project is considered to be exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Activities Covered by General Rule. In addition, the proposed amendments are categorically exempt because they are considered actions to protect or enhance the environment pursuant to CEQA Guidelines Section 15308 - Actions by Regulatory Agencies for Protection of the Environment. Further, SCAQMD staff has determined that there is no substantial evidence indicating that any of the exceptions to the categorical exemptions apply to the proposed project pursuant to CEQA Guidelines Section 15300.2 – Exceptions. Therefore, the proposed project is exempt from CEQA. A Notice of Exemption has been prepared pursuant to CEQA Guidelines Section 15062 - Notice of Exemption (included in Attachment I), and if the project is approved, the Notice of Exemption will be filed with the county clerks of Los Angeles, Orange, Riverside and San Bernardino counties.

Socioeconomic Analysis

The proposed amendments of the BACT Guidelines are to maintain consistency with recent changes to SCAQMD rules and state requirements. These proposed amendments represent achieved in practice emissions control equipment and/or processes, in addition to other amendments, which are administrative in nature and will therefore not result in

more stringent requirements than would otherwise occur and would not result in significant socioeconomic impacts.

Benefits to SCAQMD

Emissions reductions realized through new, modified and relocated permitted sources that apply the latest BACT will benefit air quality, achieve emissions reductions needed to attain air quality standards and help improve public health in the SCAQMD's jurisdiction. In addition, the successful implementation of BACT for permitted stationary sources will contribute towards achieving the air quality objectives of the AQMP.

Resource Impacts

Existing SCAQMD resources will be sufficient to implement the proposed changes to the BACT Guidelines.

Recommendation

This Board letter serves as the staff report for the proposed amendments to the BACT Guidelines. Staff recommends that the Board approve the proposed amendments to the Overview and Parts A, B, C and D; and determine that the proposed amendments to the BACT Guidelines are exempt from the requirements of CEQA. In addition, staff recommends that the Board approve the proposed amendments to the BACT SRC Charter.

The updated BACT Guidelines with the proposed amendments are scheduled to be made available at SCAQMD's website at http://www.aqmd.gov/home/permits/bact, pending Board approval.

Attachments

- A. Summary of Proposed Amendments to BACT Guidelines
- B. Proposed Amended BACT Guidelines, Overview
- C: Proposed Amended BACT Guidelines, Part A
- D. Proposed Amended BACT Guidelines, Part B
- E. Proposed Amended BACT Guidelines, Part C
- F. Proposed Amended BACT Guidelines, Part D
- G. Cost Effectiveness Calculations
- H. Proposed Amended BACT SRC Charter
- I. Notice of Exemption from CEQA
- J. Comments and Responses
- K. Board Meeting Presentation

ATTACHMENT A

SUMMARY OF PROPOSED AMENDMENTS TO BACT GUIDELINES

The following summarizes the key proposed amendments to the BACT Guidelines:

Overview

Chapter 3 – When is BACT Required?

• Referencing Engineering & Permitting Policy from June 2018 preventing circumvention of BACT requirement for emission increases ≥ 1 lb/day.

Part A

Chapter 1 – How is LAER Determined for Major Polluting Facilities?

 Referencing SCAQMD Air Quality-Related Energy Policy established in September 2011 requiring new/repowered in-Basin fossil-fueled power plant to incorporate BACT (LAER) as required by District rules considering energy efficiency for the application.

Part B

New Section I Listings

- ⇒ External Floating Roof Storage Tank {Dome installation}
- ⇒ Soil Vapor Extraction {Thermal Oxidation; 30ppm NOx}

Updates to Section I

- ⇒ Gas Turbine (CC/SC) Natural Gas/Landfill/Digester/Produced Gas {2ppm NOx CC/2.5ppm NOx SC/12.5ppm NOx LFG/18.8ppm NOx DG/5ppm NOx Produced Gas}
- ⇒ I.C. Engine-Portable, 123.4 BHP, Compression Ignition {*Tier 4*}
- ⇒ I.C. Engine, Emergency Fire Pump, 183 BHP, Compression Ignition {Tier 3}

New Section II Listing, Other LAER/BACT Determinations

⇒ Gas Turbine (Combined Cycle), 1280 MW, natural gas (Virginia State APCB) {1.5ppm CO 1 hr. avg. without Duct Burner}

Proposed deletions of outdated Part B, Sections I & II LAER Determinations from the following categories*:

⇒ Aluminum Melting
 ⇒ I.C. Engine (Landfill and Digester Gas,
 ⇒ Boiler
 Emergency, Non- Emergency and Portable)

 \Rightarrow Oven \Rightarrow Dryer, Tenter Frame

⇒ Heater ⇒ Gas Turbine (Simple/Combine Cycle)

⇒ Lithographic Printer ⇒ Spray Booth

ATTACHMENT A

*A detailed listing is included in Attachment D Part C

Chapter 1 – How is MSBACT Determined for Minor Polluting Facilities?

- Updating the Maximum Cost-Effectiveness Values on Table 5 consistent with the 3rd quarter 2018 Marshall and Swift equipment index.
- Referencing SCAQMD Air Quality-Related Energy Policy established in September 2011 requiring new/repowered in-Basin fossil-fueled power plant to incorporate BACT (LAER) as required by District rules considering energy efficiency for the application.

Part D

New MSBACT Listing

⇒ Thermal Oxidizer {30 ppm NOx - RTO/CatOx/Direct Fired Afterburner)

Updated MSBACT Listings

- ⇒ Composting Green Waste Operations {Compliance with Rule 1133.3}
- \Rightarrow Boiler \ge 20MM Btu/hr and <75 {Compliance with Rule 1146; 5ppm NOx}
- ⇒ I.C. Engine, Stationary, Emergency, Compression-Ignition, Other 100≤HP<175 {Correction of PM limit from 0.22 g/bhp-hr to 0.15 g/bhp-hr to be consistent with CARB ATCM regulation and Rule 1470}
- ⇒ Process Heater Non-Refinery {Correction of Rule 1146.1 applicability}
- ⇒ Printing (Graphic Arts) Lithographic or Offset, Heatset {Correction-include venting to afterburner in PM10 column and "Same As Above" for Non-Heatset should refer to Low VOC Fountain Solution not Venting to afterburner}
- ⇒ Spray Booth {Correction of 660 lbs/month VOC limit to 667 lbs/month to be consistent with permit condition for exemption from offsets}

Compliance with Rule 1147

- \Rightarrow Aluminum Melting Furnace (60ppm NOx) \Rightarrow Brass Melting Furnace (60ppm NOx)
- \Rightarrow Burnoff Furnace (30ppm/60ppm NOx) \Rightarrow Calciner (30ppm/60ppm NOx)
- \Rightarrow Coffee Roasting (30ppm NOx) \Rightarrow Crematory (60ppm NOx)
- ⇒ Dryer-Kiln (30ppm/60ppm NOx) ⇒ Dryer or Oven- tenter frame/carpet ⇒ Fish Reduction-cooker/dryer (30ppm NOx) (30/60ppm NOx)
- ⇒ Lead Melting Furnace (60ppm NOx) ⇒ Fryer- Deep Fat Non-Integrated (60ppm NOx)
- ⇒ Zinc Melting Furnace (60ppm NOx) ⇒ Soil Vapor Extraction (Remediation 60ppm NOx)

ATTACHMENT B

OVERVIEW

Chapter 1 - Introduction

The South Coast Air Quality Management District (SCAQMD) Regulation XIII – New Source Review (NSR) and Regulation XX – RECLAIM, require applicants to use Best Available Control Technology (BACT) for new sources, relocated sources, and modifications to existing sources that may result in an emission increase of any nonattainment air contaminant, any ozone depleting compound (ODC), or ammonia. Regulation XIII requires the Executive Officer to periodically publish BACT Guidelines that establish the procedures and the BACT requirements for commonly permitted equipment. SCAQMD Regulation XIV - Toxics and Other Non-Criteria Pollutants, requires applicants to use Best Available Control Technology for Toxics (T-BACT) for new, relocated or modified permit units that result in a cumulative increase in Maximum Individual Cancer Risk (MICR) of greater than one in a million (1.0 x 10⁻⁶) at any receptor location. Additionally, Regulation XVII - Prevention of Significant Deterioration (PSD) also sets forth BACT requirements for new sources, relocated sources and modifications to existing sources that emit attainment air contaminants. PSD BACT is incorporated into these BACT Guidelines. As of the publication date of these guidelines, there is currently no requirement for SCAQMD to publish T-BACT guidelines and T-BACT must be established during the permitting process.

Historically, the BACT Guidelines were first published in May 1983, and later revised in October 1988. The Guidelines consisted of two parts: Part A – Policy and Procedures, and Part B – BACT Determinations. Part A provided an overview and general guidance while Part B contained specific BACT information by source category and pollutant. Since the October 1988 revision, Part A was amended once in 1995, and Part B was updated with six LAER determinations between 1997 and 1998.

On December 11, 1998, the Governing Board approved a new format for listing BACT determinations in Part B of the Guidelines. While the previous Part B of the BACT Guidelines specified BACT requirements and set out source category determinations which could be interpreted as definitive, the new format simply provides listings of recent BACT determinations by SCAQMD permitting staff and others as well as information on new and emerging technologies. Part B of the SCAQMD BACT Guidelines now follows the same outline as the permit listings in the California Air Resources Board State BACT Clearinghouse Database, which is managed under the direction of the California Air Pollution Control Officers Association's (CAPCOA) Engineering Managers Committee. In addition, BACT determinations made by SCAQMD are submitted to the U.S. Environmental Protection Agency (USEPA) RACT/BACT/LAER Clearinghouse by ARB staff. Further information on the format of the Guidelines, including reasons for the change in direction, may be found in Board Letters presented at the October 1998 Board Meeting, Agenda No. 41, and the December 1998 Board Meeting, Agenda No. 28.

The public participation process includes technical review and comments by a focused BACT Scientific Review Committee (BACT SRC) at periodic intervals, prior to the updates of the SCAQMD BACT Guidelines. The Board established a 30-day notice period for the BACT SRC and interested persons to review and comment on SCAQMD BACT determinations that result in BACT requirements that are more stringent than previously imposed BACT.

As a result of amendments to SCAQMD's NSR regulations in September 2000, the BACT Guidelines were separated into two sections: one for major polluting facilities and another for non-major (minor) polluting facilities. (See Chapter 2 in the Overview for how to determine if a facility is major or minor).

The BACT Guidelines for major polluting facilities include:

- Part A: Policy and Procedures for Major Polluting facilities; and
- Part B: LAER/BACT Determinations for Major Polluting Facilities.

The BACT Guidelines for non-major polluting facilities include:

- Part C: Policy and Procedures for Non-Major Polluting Facilities; and
- Part D: BACT Guidelines for Non-Major Polluting Facilities.

Both the format of the guidelines and the process for determining BACT are significantly different between major and non-major polluting facilities. Major polluting facilities that are subject to NSR are required by the Clean Air Act to have the Lowest Achievable Emission Rate (LAER). LAER is determined at the time the permit is issued, with little regard for cost, and pursuant to USEPA's LAER policy as to what is achieved in practice. The Part B BACT and LAER determinations for major polluting facilities are only examples of past determinations that help in determining LAER for new permit applications.

For non-major polluting facilities, BACT will be determined in accordance with state law at the time an application is deemed complete unless a more stringent rule requirement becomes applicable prior to permit issuance. For the most part, it will be as specified in Part D of the BACT Guidelines. Changes to Part D for minor source BACT (MSBACT) to make them more stringent will be subject to public review and SCAQMD Board approval, for consideration of cost.

For the 2016 amendment to the Guidelines, additional parts have been added to address PSD requirements for greenhouse gas (GHG) emissions established by U.S. EPA in 40 CFR 52.21 in 2011. The requirements are incorporated by reference in SCAQMD Rule 1714. The BACT Guidelines for GHG requirements include:

- Part E: Policy and Procedures for Facilities Subject to Prevention of Significant Deterioration for Greenhouse Gases; and
- Part F: BACT Determinations for Facilities Subject to Prevention of Significant Deterioration for Greenhouse Gases.

In order to distinguish between BACT for various sources, this document will use the following nomenclature for BACT:

LAER for BACT at major polluting facilities

MSBACT for BACT at non-major polluting facilities

PSD BACT for BACT at facilities subject to BACT requirements for criteria pollutants

Written comments about the BACT Guidelines are welcome at any time and will be evaluated by SCAQMD staff and included in the BACT Docket at the SCAQMD library. These comments should be addressed to:

South Coast Air Quality Management District BACT Docket Science and Technology Advancement 21865 Copley Dr. Diamond Bar, CA 91765-0934

Comments may also be submitted via email to BACTTeam@aqmd.gov, and should include BACT Docket in the subject line.

The BACT Guidelines are available without charge from SCAQMD's web site at www.aqmd.gov/home/permits/bact. A hardcopy of the BACT Guidelines may be obtained for a fee by submitting a request to Subscription Services at www.aqmd.gov/contact/subscription-services or by calling (909) 396-3720. Revisions to the Guidelines will be mailed to all persons that have purchased annual updates to the BACT Guidelines.

Chapter 2 – Applicability Determination

This chapter explains how to determine whether a facility is a major or minor polluting facility, and how a facility can become a minor polluting facility.

MAJOR POLLUTING FACILITY EMISSION THRESHOLDS

A facility is a major polluting facility (or a major stationary source as it is called in the federal Clean Air Act [CAA]) if it emits, or has the potential to emit (PTE), a criteria air pollutant at a level that equals or exceeds emission thresholds specified in the CAA¹ based on the attainment or nonattainment status. Table 1 presents those emission thresholds for each criteria air pollutant for each air basin in SCAQMD. The map in Figure 1 shows the location of the three air basins in SCAQMD. If a threshold for any one criteria pollutant is equaled or exceeded, the facility is a major polluting facility, and will be subject to LAER for all pollutants subject to NSR. Table 1 does not include emission thresholds that trigger GHG BACT for SCAQMD Rule 1714 and 40 CFR 52.21. Part E of the BACT Guidelines should be referenced for a detailed explanation of how GHG BACT emission thresholds are determined.

A facility includes all sources located within contiguous properties owned or operated by the same person, or persons under common control. Contiguous means in actual contact or separated only by a public roadway or other public right-of-way. However, on-shore crude oil and gas production facilities under the same ownership or use entitlement must be included with offshore crude oil and gas production facilities located in Southern California Coastal or Outer Continental Shelf waters.

The following mobile source emissions are also considered as part of the facility²:

- 1. Emissions from in-plant vehicles; and
- 2. All emissions from ships during the loading or unloading of cargo and while at berth where the cargo is loaded or unloaded; and
- 3. Non-propulsion ship emissions within Coastal Waters under SCAQMD jurisdiction.

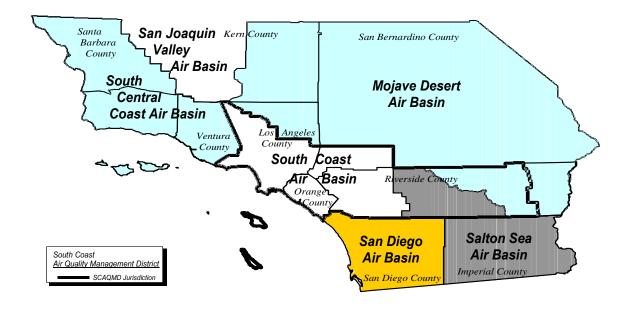
¹ The major source emission thresholds are higher for air basins that comply with the national ambient air quality standard and lower depending on how far an air basin is from compliance with the standard for a pollutant. The lowest thresholds apply to extreme non-attainment air basins, the only ones which are the South Coast Air Basin and San Joaquin Valley Air Basin for ozone (VOC and NOx).

² In accordance with Rule 1306(g).

Table 1
Actual or Potential Emission Threshold Levels (Tons per Year)
for Major Polluting Facilities

Pollutant	South Coast Air Basin	Riverside County Portion of Salton	Riverside County Portion of Mojave
		Sea Air Basin	Desert Air Basin
VOC	10	25	100
NOx	10	25	100
SOx ³	70	70	100
СО	50	100	100
PM ₁₀	70	70	100
PM _{2.5}	70		

Figure 1: Map of SCAQMD



³ The threshold for SOx, as a precursor for PM, is 70 tons per year for serious PM₁₀ areas, which the SCAB previously was, and 70 tons per year for serious PM_{2.5} areas, which the SCAB currently is. Rule 1302 previously specified 100 tons per year, which was in error, and was changed at the November 2016 Board Meeting.

POTENTIAL TO EMIT

Potential to emit is based on permit conditions that limit emissions or throughput. If there are no such permit conditions, PTE is based on:

- the maximum rated capacity; and
- the maximum daily hours of operation; and
- physical characteristics of the materials processed.

The PTE must include fugitive emissions associated with the source. RECLAIM emission allocations are not considered emission limits because RECLAIM facilities may purchase RTCs and increase their emissions without modifying their permit. For PSD purposes, as well as Rule 1325 for $PM_{2.5}$, which incorporates federal requirements, fugitive emissions are included only for major source categories specifically identified in 40 CFR 52.21.

LIMITING POTENTIAL TO EMIT

A facility's PTE can be capped by an enforceable permit condition that limits emissions. This condition will likely involve monitoring, recordkeeping and reporting to ensure that emissions remain below the permit limit.

Chapter 3 - When is BACT Required?

This chapter explains when BACT is required by identifying the air pollutants subject to BACT, the permit actions that trigger BACT review, and the calculation procedures to determine emission increases.

POLLUTANTS SUBJECT TO NSR, PSD AND BACT

The SCAQMD's New Source Review (NSR) programs include *Regulation XIII - New Source Review* and *Rule 2005 - New Source Review for RECLAIM*. Rule 2005 applies only to NOx and SOx emissions from RECLAIM facilities, while Regulation XIII applies to other non-attainment air pollutants from RECLAIM facilities, all non-attainment air pollutants from all other facilities, and ammonia and ozone-depleting compound (ODC) emissions from all facilities. ODCs are defined as Class I substances listed in 40 CFR, Part 82, Appendix A, Subpart A, and are listed in Table 2. Rule 1325 specifically applies to PM_{2.5}.

Although the SCAQMD is in attainment with the ambient air quality standards for SO_2 and NO_2 , NOx is a precursor to ozone, and both SOx and NOx are precursors to PM_{10} and $PM_{2.5}$, which are non-attainment air pollutants. Therefore, SOx and NOx are treated as non-attainment air pollutants as well. The net result is that VOC, NOx, SOx, PM_{10} and $PM_{2.5}$ are subject to NSR in all of SCAQMD.

The South Coast Air Basin has historically been designated nonattainment for CO. However, there has been considerable improvement in CO air quality in the Basin from 1976 to 2005. In 2001, the Basin met both the federal and state 8-hour CO standards for the first time at all monitoring stations. The 2003 AQMP revision to the CO plan served a dual purpose; it replaced the 1997 attainment demonstration that lapsed at the end of 2000, and it provided the basis for a CO maintenance plan in the future. The Basin was designated as attainment for CO in 2007. Therefore, CO is in attainment with state and federal ambient air quality standards.

The SCAQMD's Regulation XVII – Prevention of Significant Deterioration sets forth BACT requirements for stationary sources that emit attainment air contaminants. The BACT requirement applies to any net emission increase of a criteria pollutant from a permit unit at any source. As explained in the SCAQMD Staff Report for Regulation XVII dated September 28, 1988 for the October 7, 1988 Board meeting, the PSD BACT requirement is applicable to all permit units regardless if the source is classified as a minor or major facility.

Lead (Pb) is a criteria air pollutant and is subject to BACT in areas of non-attainment, or is subject to PSD in areas of attainment. Pb can be a component of a source's PM_{10} emissions and is therefore subject to BACT for PM_{10} . BACT for Pb will be BACT for PM_{10} or compliance with Rules 1420, 1420.1 or 1420.2, whichever is more stringent.

The applicability of the various pollutants to NSR in the various air basins is summarized in Table 3. See Figure 1 in the previous chapter for a map of SCAQMD that shows the location of the three air basins in SCAQMD.

Table 2 Class I Substances (ODCs)*

A. Group I: CFCl ₃ Trichlorofluoromethane (CFC-11) CF ₂ Cl ₂ dichlorodifluoromethane (CFC-12) C ₂ F ₃ Cl ₃ Trichlorotrifluoroethane (CFC-113) C ₂ F ₄ Cl ₂ Dichlorotetrafluoroethane (CFC-114 C ₂ F ₅ Cl Monochloropentafluoroethane (CFC-115) All isomers of the above chemicals	G. Group VII: CHFBr ₂ CHF ₂ Br (HBFC-2201) CH ₂ FBr C ₂ HFBr ₄ C ₂ HF ₂ Br ₃ C ₂ HF ₃ Br ₂ C ₂ HF ₄ Br
B. Group II: CF ₂ ClBr Bromochlorodifluoromethane (Halon-1211) CF ₃ Br Bromotrifluoromethane (Halon-1301) C ₂ F ₄ Br ₂ Dibromotetrafluoroethane (Halon-2402) All isomers of the above chemicals	$C_2H_2FBr_3$ $C_2H_2F_2Br_2$ $C_2H_2F_3Br$ $C_2H_2FBr_2$ $C_2H_3F_2Br$ C_2H_4FBr
C. Group III: CF ₃ CI Chlorotrifluoromethane (CFC-13) C ₂ FCl ₅ (CFC-111) C ₂ F ₂ Cl ₄ (CFC-112) C ₃ FCl ₇ (CFC-211) C ₃ F ₂ Cl ₆ (CFC-212) C ₃ F ₃ Cl ₅ (CFC-213) C ₃ F ₄ Cl ₄ (CFC-214) C ₃ F ₅ Cl ₃ (CFC-215) C ₃ F ₆ Cl ₂ (CFC-216) C ₃ F ₇ Cl (CFC-217) All isomers of the above chemicals	C ₃ HFBr ₆ C ₃ HF ₂ Br ₅ C ₃ HF ₃ Br ₄ C ₃ HF ₄ Br ₃ C ₃ HF ₅ Br ₂ C ₃ HF ₆ Br C ₃ H ₂ FBr ₅ C ₃ H ₂ F ₂ Br ₄ C ₃ H ₂ F ₃ Br ₃ C ₃ H ₂ F ₄ Br ₂ C ₃ H ₂ F ₅ Br C ₃ H ₃ FBr ₄ C ₃ H ₃ F ₂ Br ₃ C ₃ H ₃ F ₃ Br ₃ C ₃ H ₃ F ₃ Br ₃
D. Group IV: CCI ₄ Carbon Tetrachloride E. Group V: C ₂ H ₃ Cl ₃ 1,1,1 Trichloroethane (Methyl chloroform) All isomers of the above chemical except 1,1,2- trichloroethane	$C_3H_3F_4Br$ $C_3H_4FBr_3$ $C_3H_4F_2Br_2$ $C_3H_4F_3Br$ $C_3H_5FBr_2$ $C_3H_5F_2Br$
F. Group VI: CH₃Br Bromomethane (Methyl Bromide) H. Group VIII: CH₂BrCl (Chlorobromomethane)	C₃H₅FBr

^{* 40} CFR, Part 82, Appendix A, Subpart A

Table 3 Applicability of NSR to Various Pollutants in South Coast Air Basin (SOCAB), Salton Sea Air Basin (SSAB), and Mojave Desert Air Basin (MDAB)

Air Basin	<u>VOC</u>	<u>NOx</u>	<u>SOx</u>	<u>CO</u>	<u>PM₁₀</u>	<u>PM_{2.5}</u>	$\underline{NH_3}$	<u>Pb</u>	<u>ODC</u>
SOCAB	$\sqrt{}$	\checkmark	$\sqrt{}$		$\sqrt{}$	\checkmark	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
SSAB	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$		\checkmark		\checkmark	\checkmark	$\sqrt{}$
MDAB	$\sqrt{}$	\checkmark	$\sqrt{}$		$\sqrt{}$		$\sqrt{}$	$\sqrt{}$	$\sqrt{}$

PERMIT ACTIONS SUBJECT TO NSR, PSD AND BACT

SCAQMD's NSR and PSD regulations are preconstruction permit review programs that require the Executive Officer to deny a permit to construct unless the proposed equipment includes BACT when:

- new equipment is installed;
- · existing stationary permitted equipment is relocated; or
- existing permitted equipment is modified such that there is an emission increase.

If the new equipment is to replace the same kind of equipment, NSR⁴ still requires BACT unless it is an identical replacement, which does not require a new permit according to Rule 219 -Equipment Not Requiring a Written Permit Pursuant to Regulation II.

BACT is not required for a change of operator, provided the facility is a continuing operation at the same location, without modification or change in operating conditions.

In case of relocation of a non-major facility, the facility operator may opt out of installing MSBACT, provided that the owner/operator meets the conditions specified in Rule 1302 (ai) and Rule 1306 (d)(3).⁵

PSD applies to GHG if the source is otherwise subject to PSD for another regulated NSR pollutant and the source is new with a GHG PTE ≥ 75,000 tons per year CO₂e, or an existing source with a modification resulting in a similar GHG emissions increase.

It is SCAQMD policy that BACT is required only for emission increases greater than or equal to one (1.0) pound per day.

In accordance with policy established by SCAQMD's Engineering and Permitting division in June 2018, for the purpose of preventing circumvention of triggering a BACT requirement, a period of 5 years prior to the date of application submittal shall be used to accumulate all previous permitting actions allowing emission increases for that specific permit unit to determine if emission increases exceed or equal 1.0 pound per

_

⁴ See Rules 1303(a) and 1304(a).

⁵ USEPA has expressed concerns with this provision of the NSR Rules for minor polluting facilities as of September 2000. Staff will continue to work with USEPA to resolve this issue.

day for any nonattainment air contaminant, any ozone depleting compound, or ammonia.

CALCULATION PROCEDURES FOR EMISSION INCREASES

The calculation procedures for determining whether there is an increase in emissions from an equipment modification that triggers BACT are different for NOx and SOx pollutants from RECLAIM facilities than for all other cases. In general, the calculation procedures for RECLAIM facilities are less likely to result in an emission increase that requires BACT.

For NOx and SOx emissions from a source at a RECLAIM facility, there is an emission increase if the maximum hourly potential to emit is greater after the modification than it was before the modification.6

For modifications subject to Regulation XIII, there are two possible cases⁷:

- 1. If the equipment was previously subject to NSR, an emission increase occurs if the new potential to emit in one day is greater than the previous potential to emit in one day.
- 2. If the equipment was never previously subject to NSR, an emission increase occurs if the new potential to emit in one day exceeds the actual average daily emissions over the two-year period, or other appropriate period, prior to the permit application date. However, for the installation of air pollution controls on any source constructed prior to the adoption of the NSR on October 8, 1976 for the sole purpose of reducing emissions, Rule 1306(f) allows the emission change to be calculated as the postmodification potential to emit minus the pre-modification potential to emit.

The potential to emit is based on permit conditions that directly limit the emissions, or, if there are none, then the potential to emit is based on:

- maximum rated capacity; and
- the maximum daily hours of operation; and
- the physical characteristics of the materials processed.

⁶ See Rule 2005(d).

⁷ See Rule 1306(d)(2).

Chapter 4 - What is BACT?

This chapter explains the definitions of BACT found in SCAQMD rules, state law and federal law.

NSR RULES (REGULATION XIII)

New sources, relocations, and modifications of existing sources that increase nonattainment air contaminant emissions are subject to New Source Review (NSR) regulations which require BACT, among other requirements. Both federal and state laws require this strategy. The federal Clean Air Act (CAA) requirement for Lowest Achievable Emission Rate (LAER) is implemented through BACT in the SCAQMD. Federal LAER applies to major sources only. Although federal LAER applies to any emissions increase at a major stationary source of ozone precursors, SCAQMD has interpreted this provision as a 1.0 lb/day increase in emissions from all sources subject to NSR. According to SCAQMD's rules, BACT requirements may not be less stringent than federal LAER for major polluting facilities. The California Health & Safety Code (H&SC) Section 40405 defines state BACT similar to federal LAER and requires the application of BACT for all new and modified permitted sources subject to NSR.

PSD RULES (REGULATION XVII)

New sources, relocations, and modifications of existing sources that emit attainment air contaminant emissions and certain other specified pollutants are subject to Prevention of Significant Deterioration (PSD) regulations, which require BACT. Pursuant to Rule 1701, the BACT requirement applies to a net emission increase from a permit unit located at minor and major stationary sources. The intention of the PSD requirement is to implement a similar requirement as Regulation XIII to maintain national ambient air quality standards for attainment air contaminants.

DEFINITION OF BACT

Definitions of BACT are found in: Rule 1302 -Definitions of Regulation XIII - New Source Review, which applies to all cases in general, except for Rule 1702 - Definitions, which applies only to attainment air contaminants, and Rule 2000 - General, which applies to NOx and SOx emissions from RECLAIM facilities. While the definitions are not identical, they are essentially the same. Section (h) of Rule 1302 - Definitions defines BACT as:

BEST AVAILABLE CONTROL TECHNOLOGY (BACT) means the most stringent emission limitation or control technique which:

- (1) has been achieved in practice for such category or class of source; or
- (2) is contained in any state implementation plan (SIP) approved by the United States Environmental Protection Agency (EPA) for such category or class of source. A specific limitation or control technique shall not apply if the owner or operator of the proposed source demonstrates to the satisfaction of the Executive Officer or designee that such limitation or control technique is not presently achievable; or

(3) is any other emission limitation or control technique, found by the Executive Officer or designee to be technologically feasible for such class or category of sources or for a specific source, and cost-effective as compared to measures as listed in the Air Quality Management Plan (AQMP) or rules adopted by the District Governing Board.

The first two requirements in the BACT definition are required by federal law, as LAER for major sources. The third part of the definition is unique to SCAQMD and some other areas in California, and allows for more stringent controls than LAER.

Rule 1303(a)(2) requires that economic and technical feasibility be considered in establishing the class or category of sources and the BACT requirements for non-major polluting facilities.

REQUIREMENTS OF HEALTH & SAFETY CODE SECTION 40440.11

Senate Bill 456 (Kelley) was chaptered into state law in 1995 and became effective in 1996. H&SC Section 40440.11 specifies the criteria and process that must be followed by the SCAQMD to update its BACT Guidelines to establish more stringent BACT limits for listed source categories. After consultation with the affected industry, the CARB, and the U.S. EPA, and considerable legal review and analysis, staff concluded that the process specified in SB 456 to update the BACT Guidelines should be interpreted to apply only if the SCAQMD proposes to make BACT more stringent than LAER or to establish BACT for non-major sources. This is because the CAA requires the SCAQMD staff to apply current LAER for major polluting facilities, even if the proposed LAER determination has not gone through the SB456 process. Therefore, the SB 456 requirements do apply to BACT requirements for non-major polluting facilities, but do not apply to federal LAER determinations for major polluting facilities.

CLEAN FUEL GUIDELINES

In January 1988, the SCAQMD Governing Board adopted a Clean Fuels Policy that included a requirement to use clean fuels as part of BACT. The implementation of this policy is further described in Parts A and C of these guidelines.

Chapter 5 - Review of Staff BACT Determinations

New BACT determinations and guideline updates proposed by SCAQMD staff are subject to public notification requirements. In addition to allowing the public to comment on these items, the SCAQMD has established a BACT Scientific Review Committee (BACT SRC) to review and comment on technical matters of the proposals.

The SCAQMD has included provisions for an applicant to request a review of particular circumstances regarding a permit application and reconsideration of the BACT determination. Additional avenues are available to permit applicants for further review of staff BACT determinations through SCAQMD management, BACT Review Committee, Hearing Board, and the Governing Board.

BACT SCIENTIFIC REVIEW COMMITTEE (BACT SRC)

The BACT SRC was established as a standing committee by action of the SCAQMD Governing Board on September 8, 1995 to enhance the public participation process and include technical review and comments by a focused committee at periodic intervals, prior to the updates of the SCAQMD BACT Guidelines. A 30-day notice period applies for the BACT SRC and interested persons to review and comment on SCAQMD BACT determinations that result in BACT requirements that are more stringent than previously imposed. BACT SRC members, include but are not limited to, representatives from CARB, U.S. EPA, neighboring Air Pollution Control Districts (APCD), with the balance of the committee created by invitation of recognized experts from industry, public utilities, suppliers of air pollution control equipment and advocacy groups. Whenever a committee member resigns or is no longer able to serve, SCAQMD seeks out an appropriate replacement to join the committee. A list of current BACT SRC members can be accessed at

www.aqmd.gov/home/permits/bact/scientific-review-committee/src-members.

The overall purpose of the BACT Scientific Review Committee is to:

- Comment on proposed new and more stringent BACT determinations in permit applications under 30-day public review.
- Comment on proposed BACT listings for all parts of the BACT Guidelines.

Except for the above, the BACT SRC's purpose is not to comment on past permitting decisions or change them. Specifically, the role of the BACT SRC is to review and comment in writing on the appropriateness of new BACT determinations under 30-Day public review. During this comment period, SCAQMD, State, and Federal required permit issuance timelines are still in effect. SCAQMD BACT staff will commit to sending the BACT SRC newly proposed BACT listings at least seven days prior to the next scheduled BACT SRC meeting. Meetings will typically consist of a presentation by BACT Team (BACTTeam@aqmd.gov) staff of new BACT forms and technical data and a general discussion of the proposed BACT listings, as well as addressing any

preliminary written comments received from the public and BACT SRC prior to the meeting. SCAQMD staff will respond in writing to preliminary comments about new BACT proposals within thirty days of the subject BACT SRC meeting. New issues raised during the BACT SRC meetings regarding newly proposed BACT listings will be addressed at the subsequent BACT SRC meeting to allow time for SCAQMD staff to research the comments. SCAQMD Engineering staff may also respond to specific issues raised at the following BACT SRC meeting.

In addition to newly proposed BACT listings, the BACT SRC will be tasked with reviewing and commenting on updates to the policy and procedure sections of the BACT Guidelines prior to the guidelines being presented to the SCAQMD Governing Board for approval.

MEETING WITH SCAQMD MANAGEMENT

SCAQMD management, starting with the Senior Engineering Manager of the permitting team, can consider unique and site-specific characteristics of an individual permit. The allowance for site-specific characteristics has been designed into the guidelines and can be reviewed with the manager of the section processing the permit. It is also possible to request review at the next level, with the Assistant Deputy Executive Officer of Engineering and Compliance. The Senior Engineering Managers and the Assistant Deputy Executive Officers are empowered to make case-by-case decisions on an individual permit. Further review can be obtained through a meeting with the Deputy Executive Officer (DEO) of Engineering and Compliance. Ultimately, all permitting decisions are the responsibility of the Executive Officer.

THE BACT REVIEW COMMITTEE

Beyond meetings with AQMD management, an applicant may also request, prior to permit issuance or denial, that the proposed BACT for an individual permit be reviewed by the BACT Review Committee (BRC). The BRC is composed of five senior-level SCAQMD officials - the DEO of Public Affairs; the DEO of Science and Technology Advancement; the DEO of Engineering; the DEO of Planning, Rule Development and Area Sources; and General Counsel. This committee can review pending individual applications and decide if the BACT determination is appropriate. The BRC can be accessed without any fee or legal representation, and will meet upon demand.

THE SCAQMD HEARING BOARD

After the permit is issued or denied, the applicant can seek further independent review of an individual BACT determination through the SCAQMD Hearing Board. In order to access this venue, the permit applicant would need to submit a petition and fee to appeal the final BACT determination by SCAQMD (once the permit is denied or issued)⁸. The Hearing Board is an independent, quasi-judicial body composed of five members, who can review a permitting decision by the Executive Officer. In this venue, legal counsel represents the SCAQMD. Although not required, many petitioners choose to have legal counsel to represent their position.

Applicants must file an appeal petition with the Hearing Board within thirty days of the receipt of the permit or the notification of permit denial. See Rule 216 - Appeals, Regulation V - Procedure Before the Hearing Board, and Rule 303 - Hearing Board Fees for more information.

THE SCAQMD GOVERNING BOARD

Any applicant may petition the SCAQMD Governing Board to review a pending application pursuant to SCAQMD Regulation XII and Health and Safety Code Section 40509. While the Governing Board has the authority to hear and consider any pending permit application, it has rarely done so. It is important to note that this action must be taken while the permit application is pending with staff. Once staff reaches its decision, the only avenue of appeal is through the Hearing Board and ultimately to court.

ATTACHMENT C

PART A - POLICY AND PROCEDURES FOR MAJOR POLLUTING FACILITIES

Chapter 1 - How is LAER Determined for Major Polluting Facilities?

This chapter explains the criteria used for determining LAER¹ and the process for updating Part B of the BACT Guidelines for major polluting facilities.

CRITERIA FOR DETERMINING LAER FOR MAJOR POLLUTING FACILITIES

SCAQMD staff determines LAER requirements on a permit-by-permit basis based on the definition of LAER. In essence, LAER is the most stringent emission limit or control technology that is:

- found in a state implementation plan (SIP), or
- achieved in practice (AIP), or
- is technologically feasible and cost effective.

For practical purposes, at this time, nearly all SCAQMD LAER determinations will be based on AIP LAER because it is generally more stringent than LAER based on SIP, and because state law constrains SCAQMD in using the third approach, as such a determination must go through the SB456 process, which may take more time than allowed for the permit decision.

Based on Governing Board policy, LAER also includes a requirement for the use of clean fuels. Terms such as "achieved in practice" and "technologically feasible" have not been defined in the rule, so the purpose of this section is to explain the criteria SCAQMD permitting staff uses to make a LAER determination.

LAER Based on a SIP

The most stringent emission limit found in an approved state implementation plan (SIP) might be the basis for LAER. This means that the most stringent emission limit adopted by any state as a rule, regulation or permit², and approved by USEPA, is eligible as a LAER requirement. No other parameters are required to be evaluated when this category is chosen. This does not include future emission limits that have not yet been implemented.

In order to distinguish between BACT for major polluting facilities and BACT for minor polluting facilities, this document uses the term LAER when referring to BACT for major polluting facilities.

² Some states incorporate individual permits into their SIP as case-by-case Reasonably Available Control Technology requirements.

Achieved in Practice LAER

Regulatory Documents

An emission limit or control technology may be considered achieved in practice (AIP) for a category or class of source if it exists in any of the following regulatory documents or programs:

- SCAQMD BACT Guidelines
- CAPCOA BACT Clearinghouse
- USEPA RACT/BACT/LAER Clearinghouse
- Other districts' and states' BACT Guidelines
- BACT/LAER requirements in New Source Review permits issued by SCAQMD or other agencies

However, staff will check with the permitting authority (other than SCAQMD) on the status of the BACT or LAER requirement. If it is found that an emission limit is not being achieved or a control technology is not performing as expected in the equipment referenced in any of the above sources or in other equipment used as the basis for the BACT or LAER determination, then it will not be considered as AIP.

New Technologies/Emission Levels

New technologies and innovations of existing technologies occasionally evolve without a regulatory requirement, but still deserve consideration. They may have been voluntarily installed to reduce emissions, and may or may not be subject to an air quality permit or an emission limit. Therefore, in addition to the above means of being determined as AIP, a control technology or emission limit may also be considered as AIP if it meets all of the following criteria:

Commercial Availability

At least one vendor must offer this equipment for regular or full-scale operation in the United States. A performance warranty or guaranty must be available with the purchase of the control technology, as well as parts and service.

Reliability

All control technologies must have been installed and operated reliably for at least six months. If the operator did not require the basic equipment to operate daily, then the equipment must have at least 183 cumulative days of operation. During this period, the basic and/or control equipment must have operated: 1) at a minimum of 50% design capacity; or 2) in a manner that is typical of the equipment in order to provide an expectation of continued reliability of the control technology.

Effectiveness

The control technology must be verified to perform effectively over the range of operation expected for that type of equipment. If the control technology will be allowed to operate at lesser effectiveness during certain modes of operation, then those modes of operation must be identified. The verification shall be based on a performance test or tests deemed to be acceptable by SCAQMD, when possible, or other performance data. LOMT

Technology Transfer

LAER is based on what is AIP for a category or class of source. However, USEPA guidelines require that technology that is determined to be AIP for one category of source be considered for transfer to other source categories. There are two types of potentially transferable control technologies: 1) exhaust stream controls, and 2) process controls and modifications. For the first type, technology transfer must be considered between source categories that produce similar exhaust streams. For the second type, technology transfer must be considered between source categories with similar processes.

Federal PM_{2.5} New Source Review and SCAQMD Rule 1325

PM_{2.5} NSR applies to a new major polluting facility, major modifications to a major polluting facility, and any modification to an existing facility that would constitute a major polluting facility. A major polluting facility would be a facility located in areas federally designated pursuant to 40 CFR 81.305 as non-attainment for PM_{2.5} for the South Coast Air Basin (SOCAB) which has actual emissions of, or the potential to emit, 70 tons or more per year of PM_{2.5}, or its precursors for serious areas. For major modifications, LAER applies on a pollutant-specific basis to emissions of PM_{2.5} and its precursors, for which (1) the source is major, (2) the modification results in a significant increase, and (3) the modification results in a significant net emissions increase.

Significant means in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates³:

Nitrogen oxides: 40 tons per year Sulfur dioxide: 40 tons per year PM_{2.5}: 10 tons per year Ammonia: 40 tons per year

A facility subject to the Federal PM_{2.5} NSR will be required to comply with the following:

- Lowest Achievable Emission Rate (LAER)
- Emission increases offset
- Certification of compliance with Clean Air Act; and
- Analysis conducted of benefits of the proposed project outweigh the environmental and social costs associated with that project.

Please refer to SCAQMD Rule 1325 for specific requirements.

³ SCAQMD Rule 1325(b)(12), as amended on December 5, 2014

⁴ Ammonia is being added to Rule 1325 as a precursor to PM_{2.5} pursuant to EPA's 2016 PM_{2.5} SIP implementation Rule. PAR 1325, scheduled for hearing in November 2016, would set a significance threshold of 40 tons per year for ammonia.

Cost in LAER Determinations

USEPA guidelines do not allow for routine consideration of the cost of control in LAER determinations. However, USEPA guidelines say that LAER is not considered achievable if the cost of control is so great that a new source could not be built or operated with a particular control technology. If a facility in the same or comparable industry already uses the control technology, then such use constitutes evidence that the cost to the industry is not prohibitive.

State law (H&SC 40405) also defines BACT as the lowest achievable emission rate, which is the more stringent of either (i) the most stringent emission limitation contained in the SIP, or (ii) the most stringent emission limitation that is achieved in practice. There is no explicit reference or prohibition to cost considerations, and the applicability extends to all permitted sources. SCAQMD rules implement both state BACT and federal LAER requirements simultaneously, and furthermore specify that SCAQMD BACT must meet federal LAER requirements for major polluting facilities.

If a proposed LAER determination results in extraordinary costs to a facility, the applicant may bring the matter to SCAQMD management for consideration as described in Overview, Chapter 6.

Special Permitting Considerations

Although the most stringent, AIP LAER for a source category will most likely be the required LAER, SCAQMD staff may consider special technical circumstances that apply to the proposed equipment which may allow deviation from that LAER. The permit applicant should bring any pertinent facts to the attention of the SCAQMD permitting engineer for consideration.

Case-Specific Situations

SCAQMD staff may consider unusual equipment-specific and site-specific characteristics of the proposed project that would warrant a reconsideration of the LAER requirement for new equipment. Here are some examples of what may be considered.

Technical infeasibility of the control technology

A particular control technology may not be required as LAER if the applicant demonstrates that it is not technically feasible to install and operate it to meet a specific LAER emission limitation in a specific permitting situation.

Operating schedule and project length

If the equipment will operate much fewer hours per year than what is typical, or for a much shorter project length, it can affect what is considered AIP.

Availability of fuel or electricity

Some LAER determinations may not be feasible if a project will be located in an area where natural gas or electricity is not available.

Process requirements

Some LAER determinations specify a particular type of process equipment. SCAQMD staff may consider requirements of the proposed process equipment that would make the LAER determination not technically feasible.

Equivalency

The permit applicant may propose alternative means to achieve the same emission reduction as required by LAER. For example, if LAER requires a certain emission limit or control efficiency to be achieved, the applicant may choose any control technology, process modification, or combination thereof that can meet the same emission limit or control efficiency.

Super Compliant Materials

SCAQMD will accept the use of super compliant materials in lieu of an add-on control device controlling volatile organic compound (VOC) emissions from coating operations. For example, if a permit applicant uses only surface coatings that meet the super compliant material definition in SCAQMD Rule 109, an add-on control device would not be required for VOC LAER. This policy does not preclude any other LAER requirements for other contaminants.

Equipment Modifications

As a general rule, it is more difficult to retrofit existing equipment with LAER as a result of NSR modification when compared to a new source. The equipment being modified may not be compatible with some past LAER determinations that specify a particular process type. There may also be space restrictions that prevent installation of some add-on control technology.

Other Considerations

Although multiple process and control options may be available during the LAER determination process, considerations should be made for options that reduce the formation of air contaminants from the process, as well as ensuring that emissions are properly handled. In addition to evaluating the efficiency of the control stage, these additional considerations are needed to ensure that the system is capable of reducing or eliminating emissions from the facility on a consistent basis during the operational life of the equipment.

Pollution Prevention

The Pollution Prevention Act of 1990 (42 U.S.C. §§13101-13109) established a national policy that pollution should be prevented or reduced at the source whenever feasible. In many cases, air pollution control is a process that evaluates contaminants at the exhaust of the system. Pollution prevention is the reduction or elimination of waste at the source by the modification of the production process. Pollution prevention measures may consist of the use of alternate or reformulated materials, a modification of technology or equipment, or improvement of energy efficiency changes that result in an emissions reduction. These measures should be considered as part of the LAER determination process if the measures will result in the elimination or reduction of

emissions, but are not required to include projects which are considered to fundamentally redefine the source. New and different emissions created by a process or material change will also need to be considered as part of the LAER determination process, in contrast to the overall emissions reductions from the implementation of pollution prevention measures. U.S. EPA policy defined pollution prevention as source reduction and other practices that reduce or eliminate the creation of pollutants through increased efficiency in the use of raw materials, energy, water, or other resources, and protection of natural resources by conservation⁵. U.S. EPA further specifies that pollution prevention does not include recycling (except in-process recycling), energy recovery, treatment or disposal. For purposes of these BACT Guidelines, and to be consistent with federal definitions, source reduction and pollution prevention may include, but not be limited to, a consideration of the feasibility of:

- equipment or technology modifications,
- process or procedure modifications,
- reformulation or redesign of products,
- substitution of raw materials, or
- improvements in housekeeping, maintenance or inventory control,

that reduce the amount of air contaminants entering any waste stream or otherwise released into the environment, including fugitive emissions.

Monitoring and Testing

In order to ensure that LAER determinations continue to meet their initial emission and efficiency standards, periodic or continuous parameter monitoring and testing requirements may be required during the permitting process. Equipment and processes may experience some change over time, due to aging or operational methods of the equipment, which may affect emission rates or control efficiencies. In addition to other rule requirements, additional monitoring and testing requirements may need to focus on aspects directly related to the BACT determination, and may be made enforceable by permit conditions. Monitoring and testing requirements should be specific to characterize operating conditions (e.g. temperatures, pressures, flows, production rates) and measurement techniques when LAER is established to ensure clarity and consistency with the standard.

Capture Efficiency

An integral part of controlling air pollutants emitted from a process with add-on air pollution control equipment is capturing those emissions and directing them to the air pollution control device. Emissions which are designed to be collected by an exhaust system but are vented uncontrolled into the atmosphere can have a much greater impact than controlled emissions. When applicable, the evaluation of a process and its associated control equipment should address the qualification and quantification of capture efficiency. By addressing capture efficiency during LAER determinations, a standard can be established to evaluate the capture efficiency of other systems, as well as ensure that the capture efficiency is maintained consistently over time.

_

⁵ U.S. EPA Pollution Prevention Law and Policies (www.epa.gov/p2/pollution-prevention-law-and-policies#define)

If applicable, LAER determinations may include the percentage capture efficiency and the methods and measurements (e.g. EPA Method 204, capture velocity measurements, design using ACGIH's Industrial Ventilation, static pressures) used to determine and verify it. For various circumstances, several SCAQMD rules (Table 4) already require an assessment of collection efficiency of an emission control system following EPA Method 204, EPA's "Guidelines for Determining Capture Efficiency", SCAQMD's "Protocol for Determination of Volatile Organic Compounds (VOC) Capture Efficiency," or other methods approved by the Executive Officer, and are appropriate to include as LAER requirements. The capture efficiency for any LAER Determination shall be no less stringent than any applicable rule requirement. Other considerations that may affect capture, such as cross-drafts, thermal drafts and the volume of combustion products, should also be addressed during this process.

Table 4

SCAQMD Regulation XI and XIV Rules with Capture Efficiency Requirements or Considerations

• 1103	• 1125	• 1136	• 1162	• 1420.1
• 1104	1126	• 1141	• 1164	• 1420.2
1106	1128	• 1141.2	• 1171	 1425
1107	• 1130	• 1144	• 1175	• 1469
1115	• 1130.1	l • 1145	• 1178	• 1469.1
1122	• 1131	1155	• 1407	
• 1124	• 1132	• 1156	• 1420	1

LAER APPLICATION CUT-OFF DATES

For applications submitted by major polluting facilities, LAER requirements will be determined based on information available up to the date the permit to construct is issued. This requirement allows interested parties to comment on possible technologies that could provide lower emissions.

Applications for a Registration Permit for equipment issued a valid Certified Equipment Permit (CEP), which is valid for one year, will only be required to comply with LAER as determined at the time the CEP was issued. However, SCAQMD staff will reevaluate the LAER requirements for the CEP upon renewal of the Title V permit.

LAER UPDATE PROCESS

SCAQMD will update Section I – SCAQMD LAER/BACT Determinations of Part B of the BACT Guidelines on an ongoing basis with actual LAER determinations for SCAQMD permits issued to major polluting facilities. The process will depend on whether or not the LAER requirement is more stringent than previous SCAQMD LAER determinations for the same equipment category.

When SCAQMD permitting staff makes a LAER determination that is no more stringent than previous SCAQMD LAER determinations, the permitting team will issue the permit and forward information regarding this LAER determination to the BACT Team.⁶

⁶ To reduce the burden on SCAQMD of preparing hundreds of LAER Determination Forms each month, forms will not be prepared for routine LAER determinations after Part B, Section I of the guidelines has sufficient entries to demonstrate typical LAER requirements.

The BACT Team will review this LAER determination with the BACT SRC prior to listing in the BACT Guidelines.

Whenever permitting staff makes a LAER determination that is more stringent than what SCAQMD has previously required as LAER, the permit to construct may be subject to a public review. In any event depending on Rule 212, the permitting team will forward the preliminary LAER determination to the BACT Team, who will prepare and send a public notice of the preliminary determination to the BACT SRC, potentially interested persons, and anyone else requesting the information. Staff will consider all comments filed during the 30-day review period before making a permit decision. Staff will make every effort to conduct the public review consistent with the requirements of state law. However, if the 30-day review period conflicts with the deadline of the Permit Streamlining Act⁷ for issuing the permit, the permit will be issued in accordance with state law. The 30-day public review may also be done in parallel with other public reviews mandated by *Rule 212 - Standards for Approving Permits and Issuing Public Notice* or *Regulation XXX - Title V Permits* in applicable cases.

On a periodic basis, the SCAQMD BACT Team will provide standing status reports to the SCAQMD Governing Board's Stationary Source Committee and to the Governing Board.

In summary, as technology advances, many categories in the SCAQMD's BACT Guidelines will be updated with new listings. This on-going process will reflect new lower emitting technologies not previously identified in the Guidelines.

CLEAN FUEL GUIDELINES

In January 1988, the SCAQMD Governing Board adopted a Clean Fuels Policy that included a requirement to use clean fuels as part of BACT/LAER. A clean fuel is one that produces air emissions equivalent to or lower than natural gas for NO_x , SO_x , ROG, and fine respirable particulate matter (PM_{10}). Besides natural gas, other clean fuels are liquid petroleum gas (LPG), hydrogen and electricity. Utilization of zero and near-zero emission technologies are also integrated into the Clean Fuels Policy. The burning of landfill, digester, refinery and other by-product gases is not subject to the clean fuels requirement. However, the combustion of these fuels must comply with other SCAQMD rules, including the sulfur content of the fuel.

The requirement of a clean fuel is based on engineering feasibility. Engineering feasibility considers the availability of a clean fuel and safety concerns associated with that fuel. Some state and local safety requirements limit the types of fuel, which can be used for emergency standby purposes. Some fire departments or fire marshals do not allow the storage of LPG near occupied buildings. Fire officials have, in some cases, vetoed the use of methanol in hospitals. If special handling or safety considerations preclude the use of the clean fuel, the SCAQMD has allowed the use of fuel oil as a standby fuel in boilers and heaters, fire suppressant pump engines and for emergency standby generators. The use of these fuels must meet the requirements of SCAQMD rules limiting NO_x and sulfur emissions.

AIR QUALITY-RELATED ENERGY POLICY

In September 2011, the SCAQMD Governing Board adopted the Air Quality-Related Energy Policy to help guide a unified approach to reducing air pollution while

⁷ The requirements of the Permit Streamlining Act are also found in SCAQMD's Rule 210.

addressing other key environmental concerns including environmental justice, climate change and energy independence. The air quality-related energy policy outlines 10 policies and 10 action steps to help meet federal health-based standards for air quality in the South Coast Air Basin while also promoting the development of zero- and near-zero emission technologies.

Policy 7 is to require any new/repowered in-Basin fossil-fueled generation power plant to incorporate BACT/LAER as required by District rules, considering energy efficiency for the application. These power plants will need to comply with any requirements adopted by the California Air Resources Board, California Energy Commission, Public Utilities Commission, California Independent System Operator, or the governing board of a publicly-owned electric utility, as well as state law under the California Environmental Quality Act. In recognizing that fossil fuel electric generation will still be needed in the Basin to complement projected increased use of renewable energy sources, this policy ensures that all fossil-fueled plants will meet existing BACT/LAER requirements and SCAQMD's BACT/LAER determinations will also take into consideration generating efficiency in setting the emission limits. Parts E and F of the BACT Guidelines complement and support this policy.

Chapter 2 - How to Use Part B of the BACT Guidelines

This chapter explains the LAER information found in Part B - LAER/BACT Determinations for Major Polluting Facilities. Part B is a listing of LAER/BACT determinations for major polluting facilities contained in SCAQMD and other air pollution control agencies' permits, and data on new and emerging technologies. These LAER/BACT determinations and data are guides and will be used, along with other information, to determine LAER as outlined in Chapter 1. For a listing of equipment types, refer to the List of Equipment Categories. LAER determination for equipment not found in Part B of the BACT Guidelines is done according to the process outlined in Chapter 1.

GENERAL

Part B is divided into three sections. Section I – SCAQMD LAER/BACT Determinations, contains information on LAER/BACT determinations contained in permits issued by SCAQMD, with permit limits based on achieved in practice technology. Section II – Non-AQMD LAER/BACT Determinations, lists LAER/BACT determinations contained in other air pollution control agencies' permits or BACT Guidelines, with permit limits based on achieved in practice technology. Section III – Other Technologies, consists of information on technologies which have been achieved in practice but are not reflected in a permit limit, and information on emerging technologies or emission limits which have not yet been achieved in practice. All three sections are subdivided based on the attached List of Equipment Categories. Within each category, the LAER/BACT determinations will be listed in order of stringency.

Each listing includes the following information, in addition to other information detailing the description and operation of the equipment:

Basic Equipment⁸

This provides information on the type, model, style, manufacturer, function, and cost of the basic equipment. It also lists applicable SCAQMD Regulation XI rules. Cost data are generally obtained from the SCAQMD application forms, manufacturer or owner/operator, and are not verified.

Basic Equipment Rating/Size

This identifies the size, dimensions, capacity, or rating of the basic equipment. It also provides additional information such as fuel type for combustion equipment, weight of parts cleaned per load for degreasers, and the number and size of blowers for spray booths.

Company Information

This identifies the contact person and owner/operator of the equipment, along with telephone numbers.

⁸ Basic equipment is the process or equipment, which emits the air contaminant for which BACT is being determined.

Permit Information

This identifies the permitting agency and the name and telephone number of the agency's contact person. It also provides information on Permits to Construct/Operate. The SCAQMD is always the issuing agency for LAER determinations listed in Section I.

Emission Information

This identifies the actual permit limits and LAER/BACT requirements set forth by the issuing agency for the equipment being evaluated. It provides technical, performance, and cost data on the control technology used to achieve the permit limit and the LAER/BACT requirements.

Comment

This provides additional information relevant to basic equipment and control technology assessment, or further explains or clarifies the LAER/BACT determination.

The above information will enable permit applicants to assess the applicability of each LAER/BACT determination to their particular equipment.

The LAER requirements usually found in the LAER Determination listings are in the form of:

- an emission limit;
- a control technology;
- · equipment requirements; or
- a combination of the last two

If the requirement is an emission limit, the applicant may choose any control technology to achieve the emission limit. The SCAQMD prefers to set an emission limit as LAER because it allows an applicant the most flexibility in reducing emissions. If control technology and/or equipment requirements are the only specified LAER, then either emissions from the equipment are difficult to measure or it was not possible to specify an emission limit that applies to all equipment within the category. Where possible, an emission limit or control efficiency condition will be specified on the permit along with the control technology or equipment requirements to ensure that the equipment is properly operated with the lowest emissions achievable.

HOW TO DETERMINE LAER

The Part B LAER determinations are only examples of LAER determinations for equipment that have been issued permits or that have been demonstrated in practice. As described in Chapter 1, LAER is determined on a case-by-case basis. To find out what LAER is likely to be for a particular equipment, the applicant should review the Part LAER determinations found the SCAQMD at www.aqmd.gov/home/permits/bact. The CAPCOA Clearinghouse maintained by the California Air Resources Board and the USEPA RACT/BACT/LAER Clearinghouse should also be reviewed. These compendiums contain information from other districts, local agencies, and states that may not be included in the SCAQMD BACT Guidelines. Finally, the SCAQMD permitting staff may be contacted to discuss LAER prior to submitting a permit application.

As described in Chapter 1, the permit applicant should bring to the attention of the SCAQMD permitting engineer any special permitting considerations that may affect the LAER determination.

ATTACHMENT D - PART B



Section 1, SCAQMD BACT Determination

Source Type: Major/LAER

Application No.: 535483, 535485, 544857 & 544859

Equipment Category: Storage Tank

Equipment Subcategory: External Floating Roof

Date: **February 1, 2019**

1.	EOUIPM	MENT I	INFORM	IATION
1.				1111111

A. MANUFACTURER: Custom B. MODEL: Custom

C. DESCRIPTION: Domed external floating roof, welded shell, Nos. 15, 2625, 2640 & 2643

D. FUNCTION: Phillips 66 Company is a refinery which owns and operates external floating roof storage tanks for crude oil, gas oil, mixed naphtha and wastewater storage.

E. SIZE/DIMENSIONS/CAPACITY:

A/N 535483: 117' Dia. x 40' H., 79,000 BBL (3,318,000 Gal.) Mixed Naphtha

A/N 535485: 165' Dia. x 48' H., 165,252 BBL (6,940,584 Gal.) Gas Oil

A/N 544857: 260' Dia. x 65' H., 615,000 BBL (25,830,000 Gal.) Crude Oil

A/N 544859: 44' Dia. x 51' H., 14,000 BBL (588,000 Gal.) Wastewater

COMBUSTION SOURCES

- F. MAXIMUM HEAT INPUT: N/A
- G. BURNER INFORMATION

ТҮРЕ	INDIVIDUAL HEAT INPUT	NUMBER
N/A		Number of burners

H. PRIMARY FUEL: N/A

J. OPERATING SCHEDULE: Hours 24 Days 7 Weeks 52

K. EQUIPMENT COST:

L. EQUIPMENT INFORMATION COMMENTS: Storage tanks are equipped with geodesic dome cover, double-deck floating roof, category A metallic shoe primary seal, category A rim-mounted secondary seal and guide pole gasketed sliding cover with wiper unslotted.

2. COMPANY INFORMATION

A.	. COMPANY: Phillips 66 Company			B. FAC ID: 171109
C.	C. ADDRESS: 1520 E. Sepulveda Blvd. CITY: Carson STATE: CA ZIP: 90745			D. NAICS CODE: 324110
E.	E. CONTACT PERSON: Marshall Waller			F. TITLE: Env. Engineer
G.	PHONE NO.: (310) 522-8039	H.	EMAIL:	

ATTACHMENT D - PART B

3.	PERMIT INFORMATION							
A.	B. APPLICATION TYPE: NEW CONSTRUCTION							
C.	. SCAQMD ENGINEER: Thomas Truppi							
D.	PERMIT INFORMATION: PC ISSUANCE DATE: 8/30/13 P/O NO.: G17750, G17751, G51127 & G51128 PO ISSUANCE DATE: 3/15/2018							
E.	START-UP DATE: 4/4/2016							
F.	F. OPERATIONAL TIME: 2+ years							
4.	EMISSION INFORMATION							
A.	BACT EMISSION LIMITS AND AVER	AGING TIMES:						
	VOC	NOx	SOX	СО	PM or PM ₁₀	Inorganic		
	BACT Limit							
	reraging Time							

Correction

B. OTHER BACT REQUIREMENTS:

EMISSION INFORMATION COMMENTS:

C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology

5. CONTROL TECHNOLOGY

- A. MANUFACTURER: Custom B. MODEL: Custom
- C. DESCRIPTION: Use of Geodesic Dome Cover, Floating Roof Pontoon (Double Deck), Primary Seal with Category A Metallic Shoe, Secondary Seal with Category A wiper type, and Guidepole with gasketed sliding cover with wiper unslotted.
- D. SIZE/DIMENSIONS/CAPACITY: N/A
- E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. same PC ISSUANCE DATE: same PO NO.:same PO ISSUANCE DATE: same

F. REQUIRED CONTROL EFFICIENCIES: .

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	%	%	%
NOx	%	%	%
SOx	%	%	%
CO	%	%	%
PM	%	%	%
PM_{10}	%	%	%
INORGANIC	%	%	%

G. CONTROL TECHNOLOGY COMMENTS

6. DEMONSTRATION OF COMPLIANCE

- A. COMPLIANCE DEMONSTRATED BY: Maintenance, Inspection and Recordkeeping
- B. DATE(S) OF SOURCE TEST: An appropriate size parameter such as rated product throughput, usable volume, and/or one more characteristic dimensions.
- C. COLLECTION EFFICIENCY METHOD: N/A
- D. COLLECTION EFFICIENCY PARAMETERS: N/A
- E. SOURCE TEST/PERFORMANCE DATA:N/A
- F. TEST OPERATING PARAMETERS AND CONDITIONS: N/A
- G. TEST METHODS (SPECIFY AGENCY): N/A
- H. MONITORING AND TESTING REQUIREMENTS: Monitoring monthly throughput permitted limit. This requirement is included for information only; it is not related to the dome cover BACT requirement.
- I. DEMONSTRATION OF COMPLIANCE COMMENTS: Enter comments for additional information for Demonstration of Compliance.

7. ADDITIONAL SCAQMD REFERENCE DATA

A.	BCAT: 248919 B. CCAT: Click here to enter text.			C. APPLICATION TYPE CODE: 60		
D.	RECLAIM FAC?	E. TITLE V FAC:		F. SOURCE TES	ST ID(S): N/A	
	YES ⊠ NO □	YES ⊠ NO				
G.	G. SCAQMD SOURCE SPECIFIC RULES: Click here to enter text.					
H.	HEALTH RISK FOR	PERMIT UNIT				
H1.				CER BURDEN: k here to enter text.	H4. CB DATE: Click here to enter a date.	
Н5	: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: text.	Click here to enter	H8. HIC DATE: Click here to enter a date.	



Section 1, SCAQMD BACT Determination

Source Type: Major/LAER

Application No.: 573110

Equipment Category: Soil Vapor Extraction

Equipment Subcategory: Thermal/Catalytic Oxidizer

Date: February 1, 2019

1.	EQUIPMENT INFORMATION

A. MANUFACTURER: Catalytic Combustion, Inc. B. MODEL: Model 2 Flame-Ox

- C. DESCRIPTION: In situ soil vapor extraction system for non-halogenated hydrocarbon vapors consisting of extraction wells, extraction blower (575 scfm), knockout tank, Flame Oxidizer and exhaust stack.
- D. FUNCTION: The SVE system will be used for the remediation of non-halogenated hydrocarbon contaminated soil.
- E. SIZE/DIMENSIONS/CAPACITY: Exhaust stack 22" I.D. x 25' H., without rain cap, 1400 scfm

COMBUSTION SOURCES

- F. MAXIMUM HEAT INPUT: 4,000,000 Btu/hr, North American, Model 6514-8A burner
- G. BURNER INFORMATION

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
Make and model of burner	Rated heat input of single burner, in btu/hr	Number of burners
Enter additional burner types, as needed, add extra rows		

H. PRIMARY FUEL: NATURAL GAS

I. OTHER FUEL: non-halogenated hydrocarbon vapors

J. OPERATING SCHEDULE: Hours 24 Days 7 Weeks 52

K. EQUIPMENT COST:

L. EQUIPMENT INFORMATION COMMENTS:

2. COMPANY INFORMATION

A.	COMPANY: Tesoro Refining and Marketing Co., LLC	B. FAC ID: 174727		
C.	ADDRESS: 8601 S. Garfield Ave. CITY: South Gate STATE: CA ZIP: 90280	D. NAICS CODE: 324110		
E.	CONTACT PERSON: Darrel Fah	F. TITLE: Managing Director		
G.	PHONE NO.: (562) 495-6876 H. EMAIL: -			

2	DEDIATE	INFORMATION	т
J.	PERMIT	INFURIVIATION	ı

A. AGENCY: SCAQMD B. APPLICATION TYPE: NEW CONSTRUCTION

C. SCAQMD ENGINEER: Gregory Brian Speaks

D. PERMIT INFORMATION: PC ISSUANCE DATE: 3/3/16

P/O NO.: G51297 PO ISSUANCE DATE: 3/28/2018

E. START-UP DATE: 11/17/2016

F. OPERATIONAL TIME: 1.5 years

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections (%O₂, %CO₂, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOX	SOX	СО	PM OR PM ₁₀	Inorganic
BACT Limit		30 PPMV				
Averaging Time						
Correction		@ 3% O ₂				

B. OTHER BACT REQUIREMENTS: The limit is for burner only emissions.

C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology

_	CONTROL	TECHNICI	OCT
J.	CONTROL	TECHNOL	JUGI

A. MANUFACTURER: Catalytic Combustion, Inc.(Thermal Oxidation)

B. MODEL: Model 2 Flame-Ox

C. DESCRIPTION: 3-in-1 Flame Oxidizer

D. SIZE/DIMENSIONS/CAPACITY: 4,000,000 Btu/hr, North American, Model 6514-8A burner.

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. Click here to enter text. PC ISSUANCE DATE: Click here to enter a date.

PO NO.:

PO ISSUANCE DATE: Click here to enter a date.

F. REQUIRED CONTROL EFFICIENCIES: See Emission Information in Section 4.

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	%	%	%
NOx	%	%	%
SOx	%	%	%
СО	%	%	%
PM	%	%	%
PM_{10}	%	%	%
INORGANIC	%	%	%

G. CONTROL TECHNOLOGY COMMENTS Enter comments for additional information regarding Control Technology.

- A. COMPLIANCE DEMONSTRATED BY: Source Test
- B. DATE(S) OF SOURCE TEST: November 17, 2016
- C. COLLECTION EFFICIENCY METHOD: N/A
- D. COLLECTION EFFICIENCY PARAMETERS: N/A
- E. SOURCE TEST/PERFORMANCE DATA: 27.3 PPMV NOx @3% O2; <186 PPMV CO @3% O2; <16 PPMV VOC @3% O2
- F. TEST OPERATING PARAMETERS AND CONDITIONS: SVE system was operated at normal operating conditions for test
- G. TEST METHODS (SPECIFY AGENCY): SCAQMD Methods 100.1, 25.3 and 1.1-4.1.
- H. MONITORING AND TESTING REQUIREMENTS: Include any monitoring or testing requirements and their frequency that will be enforced to maintain emission levels reported for the BACT Determination.

I.	DEMONSTRATION OF COMPLIANCE COMMENTS:							
7.	ADDITIONAL	L SC	AQMD REFEREN	CE DAT	Ά			
A.	BCAT: 028000		B. CCAT: Click here text.	e to enter	C.	APPLICATIO	N TY	PE CODE: 20
D.	D. RECLAIM FAC? E.		E. TITLE V FAC:		F. SOURCE TEST ID(S): PR1624		(S): PR16244	
	YES ⊠ NO □		YES ⊠ NO [
G.	G. SCAQMD SOURCE SPECIFIC RULES: Click here to enter text.							
H.	H. HEALTH RISK FOR PERMIT UNIT							
H1.	MICR: Click here to enter text.	H2.	MICR DATE: Click here to enter a date.			BURDEN: e to enter text.	H4.	CB DATE: Click here to enter a date.
H5:	: HIA: Click here to enter text.	Н6.	HIA DATE: Click here to enter a date.	H7. HIC: text.	Clic	k here to enter	Н8.	HIC DATE: Click here to enter a date.



Section I - SCAQMD BACT Determination

Source Type: Major/LAER

Application No.: 581392

Equipment Category: Gas Turbine

Equipment Subcategory: Simple Cycle, Natural Gas

	Date:		rebru	ary 1, 201	.9		
1.	EQUIPMENT INFORM	MATION	,				
A.	MANUFACTURER: Gener	al Electric	В.	MODEL:	LMS100PA		
C.	DESCRIPTION: Simple Cyc	cle natural gas fir	ed turbine	with Inte	rcooler and water injection.		
D.	FUNCTION: The equipment is at a "Peaker" plant to support California Independent System Operator (CAISO) during periods of high electricity demand. It's one of five identical turbines at this location.						
E.	SIZE/DIMENSIONS/CAPACITY: Net Power Output 100.1 MW						
CO	MBUSTION SOURCES						
F.	MAXIMUM HEAT INPUT: 891.7 MMBTU/hr						
G.	BURNER INFORMATION:)		
	ТҮРЕ	INDIVIDI	UAL HEAT	INPUT	NUMBER		
	N/A	Rated heat input of	single burne	er, in btu/hr	Number of burners		
H.	PRIMARY FUEL: Natural Ga	s I.	OTHER FU	EL: Supple	mentary or standby fuels		
J.	OPERATING SCHEDULE:	Hours 24 HRS//D	0AY 7 E	DAYS/WEE	K 52 WKS/YR		
K.	EQUIPMENT COST: N/A						
L.	EQUIPMENT INFORMATION	COMMENTS:					

2. **COMPANY INFORMATION**

A.	COMPANY: Walnut Creek Energy	, LLC	B. FAC ID: 146536
C.	ADDRESS: 911 Bixby Drive CITY: City of Industry STATE: CA	ZIP: 91745	D. NAICS CODE: 221112
E.	CONTACT PERSON: Heather MacLeod		F. TITLE: Environmental Specialist
G.	PHONE NO.: -	H. EMAIL:	-

A. AGENCY: SCAQMD B. APPLICATION TYPE: NEW CONSTRUCTION

C. SCAQMD ENGINEER: Christian Aviles

D. PERMIT INFORMATION: PC ISSUANCE DATE: 9/28/12

P/O NO.: G53017 PO ISSUANCE DATE: 1/2/2018

E. START-UP DATE: 12/21/2012

F. OPERATIONAL TIME: 6 years

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections (%O₂, %CO₂, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOx	SOX	co	PM or PM ₁₀	Inorganic
BACT Limit	2 PPMV	2.5 PPMV		4 PPMV		5 PPMV NH ₃
Averaging Time	1 HOUR	1 HOUR		1 HOUR		1 HOUR
Correction	15 % O ₂	15 % O ₂		15 % O ₂		15 % O ₂

- B. OTHER BACT REQUIREMENTS: The emission limit shall not apply during turbine commissioning, start-up, shutdown, and equipment tuning.
- C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology
- D. EMISSION INFORMATION COMMENTS: Enter any additional comments regarding Emissions Information.

_	CONTROL	TECHNOL	OCX
5.	CONTROL	TECHNOL	UUT Y

A.	MANUFACTURER:	SCR - Haldor-Topsoe, CO	B.	MODEL:	SCR - DNX-629, CO
	OxyCat - BASF			OxyCat -	- Comet

- C. DESCRIPTION: Ammonia Injection Grid with aqueous ammonia stored in a 16,000 gallon tank
- D. SIZE/DIMENSIONS/CAPACITY: SCR 1272 cu ft: Width 19 ft 6 in, Height 33 ft, Length 2 ft 6 in. CO Oxycat 420 cu ft of total catalyst volume
- E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. 581387 PC ISSUANCE DATE: 9/18/12 PO NO.: G53016 PO ISSUANCE DATE: 12/29/2017

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY				
VOC	%	%	%				
NOx	%	%	%				
SOx	%	%	%				
СО	%	%	%				
PM	%	%	%				
PM_{10}	%	%	%				
INORGANIC	%	%	%				

G. CONTROL TECHNOLOGY COMMENTS Enter comments for additional information regarding Control Technology.

A.	COMPLIANCE D	EMONSTRATED BY:	CEMS DATA and SOURCE	ΓEST

- B. DATE(S) OF SOURCE TEST: January 22, 2013
- C. COLLECTION EFFICIENCY METHOD: N/A
- D. COLLECTION EFFICIENCY PARAMETERS: N/A
- E. SOURCE TEST/PERFORMANCE DATA: NOx average over 3 loads was 2.24 ppm @ 15% O2. NH3 average over 3 loads was 1.53 ppm@15% O2. VOC results below detection limit.
- F. TEST OPERATING PARAMETERS AND CONDITIONS: 50%, 75% and 100% loads.
- G. TEST METHODS (SPECIFY AGENCY): SCAQMD 100.1 for NOx, CO. SCAQMD 25.3 for VOC. SCAQMD 5.1 and EPA 201A/202 for PM and PM2.5
- H. MONITORING AND TESTING REQUIREMENTS: Continuous Emissions Monitoring System and Compliance test every three years.
- I. DEMONSTRATION OF COMPLIANCE COMMENTS: Unit has shown compliance from source test and CEMS data.

A.	. всат: 013709 в. ссат: 81				C.	APPLICATIO		PE CODE: Click
D.	RECLAIM FAC?		E. TITLE V FAC:		F.	SOURCE TES	ST ID((S): PR12581A
	YES ⊠ NO □		YES ⊠ NO					
G.	G. SCAQMD SOURCE SPECIFIC RULES: Rule 2012, 409, 475, 1303(a)(1), 1703(a)(2)							
H.	HEALTH RISK FOR	R PERM	AIT UNIT					
H1.	MICR: Click here to enter text.		MICR DATE: Click here to enter a date.			R BURDEN: re to enter text.	H4.	CB DATE: Click here to enter a date.
H5:	: HIA: Click here to enter text.		HIA DATE: Click here to enter a date.	H7. HI		ck here to enter	Н8.	HIC DATE: Click here to enter a date.



Section I, SCAQMD BACT Determination

Source Type: Major/LAER

Application No.: 589228

Equipment Category: Gas Turbine

Equipment Subcategory: Simple Cycle, Active Landfill Gas

Date: February 1, 2019

1. EQUIPMENT INFORMAT	ΓΙΟΝ
-----------------------	------

A. MANUFACTURER: Solar Turbines

B. MODEL: Mercury 50

- C. DESCRIPTION: Unit #4, Simple Cycle Turbine with recuperation, fueled on treated 100% LFG from Sunshine Canyon Landfill
- D. FUNCTION: Sunshine Gas Producers utilizes this LFG fired turbine to generate electricity to sell back to electric company. The unit does not recover exhaust waste heat. This is one of five identical units at this location. There are no add-on controls.
- E. SIZE/DIMENSIONS/CAPACITY: Generator serving gas turbine is 4.9MW

COMBUSTION SOURCES

- F. MAXIMUM HEAT INPUT: 61.0 MMBtu/hr (as listed on permit but may vary)
- G. BURNER INFORMATION

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
Make and model of burner	Rated heat input of single burner, in btu/hr	Number of burners

H. PRIMARY FUEL: LANDFILL GAS I. OTHER FUEL: N/A

J. OPERATING SCHEDULE: Hours 24 Days 7 Weeks 52

K. EQUIPMENT COST:

I. L. EQUIPMENT INFORMATION COMMENTS: The landfill gas must be within the manufacturer's recommended heat content range to achieve the low emissions. The gas turbines are equipped with a landfill gas clean-up system for removal of siloxanes, sulfur and moisture.

2. COMPANY INFORMATION

A.	COMPANY: Sunshine Gas Producers, LL	B. FAC ID: 139938	
C.	ADDRESS: 14747 San Fernando Road CITY: Sylmar STATE: CA ZIP: 9134	D. NAICS CODE: 22111	
E.	CONTACT PERSON: Nicholas Diedrich		F. TITLE: Env. Engineer
G.	PHONE NO.: (734) 302-5392	H. EMAIL: d	liedrichn@dteenergy.com

A. AGENCY: SCAQMD B. APPLICATION TYPE: NEW CONSTRUCTION

C. SCAQMD ENGINEER: Gaurang Rawal

D. PERMIT INFORMATION: PC ISSUANCE DATE: 4/9/15

P/O NO.: G47200 PO ISSUANCE DATE: 6/30/2017

E. START-UP DATE: 7/21/2014

F. OPERATIONAL TIME: 4 years

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections (%O₂, %CO₂, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOX	SOX	CO	PM OR PM ₁₀	INORGANIC
BACT Limit	10.5 PPMV	12.5 PPMV		21.5 PPMV		
Averaging Time						
Correction	@ 15% O ₂	@ 15% O ₂		@ 15% O ₂		

B. OTHER BACT REQUIREMENTS: The emission limits shall not apply during gas turbine start-up and shutdown periods.

C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology

4. EMISSION INFORMATION

D. EMISSION INFORMATION COMMENTS: Although the following mass emission limits may be specific to this project they were also included in the

Criteria pollutants from gas turbine shall not exceed the following limits per day:

NOx: 72.40 lbs.

VOC: 21.90 lbs as methane

CO: 70.27 lbs. SOx: 74.60 lbs. PM10: 17.30 lbs.

	TECHNOL	

A.	MANUFACTURER:	N/A	B.	MODEL:	N/A

C. DESCRIPTION: N/A

D. SIZE/DIMENSIONS/CAPACITY: An appropriate size parameter such as rated heat input, usable volume, rated filter efficiency, and/or one more characteristic dimensions.

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. Click here to enter text. PC ISSUANCE DATE: Click here to enter a date. PO NO.: Click here to enter text. PO ISSUANCE DATE: Click here to enter a date.

F. REQUIRED CONTROL EFFICIENCIES:

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	%	%	%
NOx	%	%	%
SOx	%	%	%
СО	%	%	%
PM	%	%	%
PM_{10}	%	%	%
INORGANIC	%	%	%
C CONTED OF THE	TINIOI OON CON OR TINIO		

G. CONTROL TECHNOLOGY COMMENTS

IA. COMPLIANCE DEMONSTRATED BY: Source	CON	COMPLIANCE DEMONSTRATED BY: S	Source Test
--	-----	-------------------------------	-------------

- B. DATE(S) OF SOURCE TEST: November 30, 2015
- C. COLLECTION EFFICIENCY METHOD: N/A
- D. COLLECTION EFFICIENCY PARAMETERS: N/A
- E. SOURCE TEST/PERFORMANCE DATA: 4.3 PPMV NOx @15% O_2 ; 11.3 PPMV CO @15% O_2 ; 3.6 PPMV VOC @15% O_2 as methane; 0.00826 gr/dscf @ 12% CO_2 PM10
- F. TEST OPERATING PARAMETERS AND CONDITIONS: All test performed at highest achievable load.
- G. TEST METHODS (SPECIFY AGENCY): SCAQMD Methods 100.1, 207.1 5.1, 25.3 and 307.91.
- H. MONITORING AND TESTING REQUIREMENTS: Install, maintain and operate CEMS and source test once per year.
- I. DEMONSTRATION OF COMPLIANCE COMMENTS: Enter comments for additional information for Demonstration of Compliance.

A. BCAT: 053738	B. CCAT: Click here text.	e to enter C.	APPLICATIO	ON TYPE CODE: 60		
D. RECLAIM FAC?	E. TITLE V FAC:	F.	F. SOURCE TEST ID(S): PR14466A			
YES □ NO ☒	YES ⊠ NO					
G. SCAQMD SOURCE	G. SCAQMD SOURCE SPECIFIC RULES: Click here to enter text.					
H. HEALTH RISK FOR	R PERMIT UNIT					
H1. MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER Click her	BURDEN: e to enter text.	H4. CB DATE: Click here to enter a date.		
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Clic text.	k here to enter	H8. HIC DATE: Click here to enter a date.		





Section 1, SCAQMD BACT Determination

Source Type: Major/LAER

Application No.: 595485

Equipment Category: Gas Turbine

Equipment Subcategory: Combined Cycle, Digester Gas

Date: February 1, 2019

1. EQUIPMENT INFORMATION

A. MANUFACTURER: Solar Turbines B. MODEL: Mars 100

- C. DESCRIPTION: Combined Cycle (No. 2) with SCR, Oxidation catalyst and Steam Turbine, equipped with a digester gas clean-up system
- D. FUNCTION: The City of Los Angeles, Department of Public Works, Bureau of Sanitation owns and operates the Hyperion Treatment Plant (HTP) wastewater facility which produces digester gas. This gas turbine is fired on HTP digester gas and generates electrical power for the facility.
- E. SIZE/DIMENSIONS/CAPACITY: Generator serving turbine is 11.35MW with two (2) common shared steam turbine generators 7.8MW and 1MW. Three Duct Burners each 14MMBtu/hr.

COMBUSTION SOURCES

- F. MAXIMUM HEAT INPUT: 137.5 MMBtu/hr (ISO conditions) Gas Turbine
- G. BURNER INFORMATION

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
Make and model of burner	Rated heat input of single burner, in btu/hr	Number of burners

H. PRIMARY FUEL: DIGESTER GAS I. OTHER FUEL: NATURAL GAS

J. OPERATING SCHEDULE: Hours 24 Days 7 Weeks 52

K. EQUIPMENT COST:

L. EQUIPMENT INFORMATION COMMENTS: The gas turbine is equipped with a digester gas clean-up system for removal of siloxanes, sulfur and moisture.

2. COMPANY INFORMATION

A.	COMPANY: LA City, Sanitation Bureau (HTP)	B. FAC ID: 800214
C.	ADDRESS: 12000 Vista Del Mar CITY: Playa Del Rey STATE: CA ZIP: 90293	D. NAICS CODE: 221112
E.	CONTACT PERSON: Jim Marchese	F. TITLE: Asst. Div. Manager
G.	PHONE NO.: (213) 847-5174 H. EMAIL: j	im.marchese@lacity.org

A. AGENCY: SCAQMD B. APPLICATION TYPE: NEW CONSTRUCTION

C. SCAQMD ENGINEER: Ray Ronquillo

D. PERMIT INFORMATION: PC ISSUANCE DATE: 12/31/14

P/O NO.: G48571 PO ISSUANCE DATE: 10/4/2017

E. START-UP DATE: 1/7/2017

F. OPERATIONAL TIME: 1.5 years (Original Permit to Construct was issued on 12/31/14. Current applications Permit to Construct (A/N: 575376-8) were issued on 9/28/16.

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections (%O₂, %CO₂, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOX	SOX	со	PM OR PM ₁₀	INORGANIC
BACT Limit	25 PPMV	18.8 PPMV		60 PPMV		10 PPMV NH ₃
Averaging Time	1 HOUR	1 HOUR		1 HOUR		1 hour
Correction	@ 15% O ₂	@ 15% O ₂		@ 15% O ₂		@ 15% O ₂

- B. OTHER BACT REQUIREMENTS: The emission limits shall not apply during turbine commissioning, start-up, shutdown and Ammonia Injection Grid Tuning (AIGT) periods.
- C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology

4. EMISSION INFORMATION

D. EMISSION INFORMATION COMMENTS: Although the following mass emission limits may be specific to this project they were also included in the permit:

Criteria pollutants from gas turbine/duct burners/HRSG train shall not exceed the following limits, except during start-up, shutdown and commissioning conditions: NOx: 18.8ppm (12.60 lbs/hr) @ 15%O₂ 24 hr. avg. and 25ppm (16.76 lbs/hr) @ 15%O₂ 1 hr. avg. {For period not to exceed 18 consecutive months starting from completion of commissioning}

NOx: 18.8ppm (12.60 lbs/hr) @ 15%O₂ 1 hr. avg. {After 18 month demonstration period}

VOC: 5.85 lbs/hr. CO: 24.55 lbs/hr. SOx: 1.28 lbs/hr PM10: 4.05 lbs/hr.

Fuel Sulfur content: 40 ppm

5. CONTROL TECHNOLOGY

- A. MANUFACTURER: Cormetech (SCR) & Johnson Matthey (Oxidation Catalyst)
- B. MODEL: Unit 2 (SCR) & SC09 (Oxidation Catalyst)
- C. DESCRIPTION: Aqueous ammonia injection grid
- D. SIZE/DIMENSIONS/CAPACITY: SCR catalyst with three modules of homogeneous honeycomb-type mixed metal catalyst each 11'-8"L x 6'-10"W x 3'-11"H / Oxidation Catalyst with 30 metal foil monoliths of platinum group metals, total layer 12'-3"L x 0'-4"W x 13'-4"H with total weight of 3060 lbs..
- E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. 586746 PC ISSUANCE DATE: 12/31/14 PO NO.: R-G42940 PO ISSUANCE DATE: 10/4/2017

F. REQUIRED CONTROL EFFICIENCIES: NH₃ concentration at the outlet of the SCR shall not exceed 10ppm, 60 min. avg. @ 15% O₂ when SCR inlet temperature is above 525 degrees F except when NH₃ feed control system is being tuned.

system is seing	111111111111111111111111111111111111111		
CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	%	%	%
NOx	%	%	%
SOx	%	%	%
СО	%	%	%
PM	%	%	%
PM ₁₀	%	%	%
INORGANIC	%	%	%

G. CONTROL TECHNOLOGY COMMENTS Minimum gas turbine exhaust gas temperature at inlet to SCR, post commissioning, shall be 525 degrees F. During start-up and shutdown temperatures less than 525 degrees F shall not exceed 60 minutes. Original P/C issuance date is 12/31/14. Current applications (A/N: 586745-7) P/C issuance date 9/28/16.

- A. COMPLIANCE DEMONSTRATED BY: Source Test
- B. DATE(S) OF SOURCE TEST: May 9, 2017
- C. COLLECTION EFFICIENCY METHOD: N/A
- D. COLLECTION EFFICIENCY PARAMETERS: N/A
- E. SOURCE TEST/PERFORMANCE DATA: 13.0PPMV (NG/DG) and 15.9PPM (DG) NOx @15% O_2 ; 8.9PPMV (NG/DG) and 15.8PPM (DG) ROG @15% O_2 ; <18.6 PPMV (NG/DG & DG) CO @15% O_2 ; 1.8PPMV (NG/DG) and 1.1PPM (DG) NH3 @15% O_2 ; 0.08 ppm Fuel Sulfur content as H_2S
- F. TEST OPERATING PARAMETERS AND CONDITIONS: All test performed at greater than 90% load.
- G. TEST METHODS (SPECIFY AGENCY): SCAOMD Methods 100.1, 207.1 5.1, 25.3 and 307.91.
- H. MONITORING AND TESTING REQUIREMENTS: Ammonia slip test once per year.

I. DEMONSTRATION OF COMPLIANCE COMMENTS: Enter comments for additional information for Demonstration of Compliance.

A.	BCAT: 053058	B. CCAT: 81	C.	APPLICATIO	ON TYPE CODE: 60		
D.	RECLAIM FAC?	E. TITLE V FAC:	F.	SOURCE TEST ID(S): PR16384			
	YES □ NO ☒ YES ☒ NO □						
G.	G. SCAQMD SOURCE SPECIFIC RULES: Click here to enter text.						
Н.	HEALTH RISK FOR	DEDMIT UNIT					
11.	TILALTII KISK FOR	CI EKWIII ONII					
H1.	MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER BURDEN: Click here to enter text.		H4. CB DATE: Click here to enter a date.		
Н5	: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Cli	ck here to enter	H8. HIC DATE: Click here to enter a date.		



Section I - SCAQMD BACT Determination

Source Type: Major/LAER

Application No.: 492565

Equipment Category: Gas Turbine

Equipment Subcategory: Simple Cycle, Produced Gas

Date: February 1, 2019

1.	EOUIPN	MENT INF	ORMATIO	N

A. MANUFACTURER: Solar Turbines B. MODEL: Taurus 60-T7301S

- C. DESCRIPTION: Simple Cycle with SCR and Oxidation catalyst
- D. FUNCTION: Signal Hill Petroleum operates a crude oil/gas/water separation and gas production facility in Long Beach. Produced gas mixed with natural gas is used to power a gas turbine to generate cost-effective reliable electrical power for the facility.
- E. SIZE/DIMENSIONS/CAPACITY: Generator serving gas turbine is 5.651 MW

COMBUSTION SOURCES

- F. MAXIMUM HEAT INPUT: 76.20 MMBtu/hr (as listed on permit but may vary)
- G. BURNER INFORMATION

ТҮРЕ	INDIVIDUAL HEAT INPUT	NUMBER
Make and model of burner	Rated heat input of single burner, in btu/hr	Number of burners
Enter additional burner types, as needed, add extra rows		

H. PRIMARY FUEL: PRODUCED GAS I. OTHER FUEL: N/A

J. OPERATING SCHEDULE: Hours 24 Days 7 Weeks 52

K. EQUIPMENT COST:

L. EQUIPMENT INFORMATION COMMENTS: The gas turbine is equipped with oxidation catalyst and SCR.

2. COMPANY INFORMATION

A.	COMPANY: Signal Hill Petroleum, Inc.	B. FAC ID: 101977	
C.	ADDRESS: 2901 Orange Ave. CITY: Long Beach STATE: CA ZIP:	90806	D. NAICS CODE: 211111
E.	CONTACT PERSON: Jim Lee		F. TITLE: Regulatory Specialist
G.	PHONE NO.: (562) 426-4695	H. EMAIL: is	slee@shpi.net

A. AGENCY: SCAQMD B. APPLICATION TYPE: NEW CONSTRUCTION

C. SCAQMD ENGINEER: C.S. Bhatt

D. PERMIT INFORMATION: PC ISSUANCE DATE: 10/21/03

P/O NO.: G2023 PO ISSUANCE DATE: 3/27/2009

E. START-UP DATE: 12/31/2004

F. OPERATIONAL TIME: 9 years

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections (%O₂, %CO₂, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOX	SOX	СО	PM OR PM ₁₀	INORGANIC
BACT Limit	2 PPMV	5 PPMV		6 PPMV		5 PPMV NH ₃
Averaging Time	1 HOUR	1 hour	150ррм	3 hour		1 hour
Correction	@ 15% O ₂	@ 15% O ₂	FUEL SAMPLE	@ 15% O ₂		@ 15% O ₂

B. OTHER BACT REQUIREMENTS: The emission limits shall not apply during gas turbine start-up and shutdown periods.

C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology

4. EMISSION INFORMATION

D. EMISSION INFORMATION COMMENTS: Although the following mass emission limits may be specific to this project they were also included in the

Criteria pollutants from gas turbine shall not exceed the following limits per month:

VOC: 125 lbs. CO: 660 lbs. SOx: 87 lbs. PM10: 298 lbs.

_	CONTROL	TECHNICI	OCI
J.	CONTROL	IECHNUL	JUGI

A. MANUFACTURER: BASF (SCR & OxiCat)

B. MODEL: NOxCat ZMX & Camet Catco

C. DESCRIPTION: High temperature zeolite SCR with ammonia injection

D. SIZE/DIMENSIONS/CAPACITY: SCR: 400 cu.ft., 16'W x 12'H x 34'L and OxiCat: 28 cu.ft. of catalyst volume.

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. 463796 PC ISSUANCE DATE: 10/21/03 PO NO.: F87575 PO ISSUANCE DATE: 2/9/2007

F. REQUIRED CONTROL EFFICIENCIES: .

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	%	%	%
NOx	%	%	%
SOx	%	%	%
СО	%	%	%
PM	%	%	%
PM_{10}	%	%	%
INORGANIC	%	%	%

G. CONTROL TECHNOLOGY COMMENTS 5ppm NH3, 5ppm NOx, 6ppm CO and 2ppm VOC.

- A. COMPLIANCE DEMONSTRATED BY: Source Test and CEMS data
- B. DATE(S) OF SOURCE TEST: October 20, 2016, October 23, 2014.
- C. COLLECTION EFFICIENCY METHOD: N/A
- D. COLLECTION EFFICIENCY PARAMETERS: N/A
- E. SOURCE TEST/PERFORMANCE DATA: 3.45PPM NOx @15% O_2 ; 00.0PPM CO @15% O_2 ; 0.020PPM NH3 @15% O_2 ; 0.0020 gr/dscf @ 12% CO_2 PM $_{10}$; 0.08ppm SO $_2$ @ 15% O_2 at turbine exhaust
- F. TEST OPERATING PARAMETERS AND CONDITIONS: All test performed at highest achievable load.
- G. TEST METHODS (SPECIFY AGENCY): SCAQMD Methods 100.1, 207.1 5.1, 25.3 and 307.91.
- H. MONITORING AND TESTING REQUIREMENTS: Install, maintain and operate CEMS and source test once per year.
- I. **DEMONSTRATION OF COMPLIANCE COMMENTS:** Enter comments for additional information for Demonstration of Compliance.

A. BCAT	A. BCAT: 053738			CCAT: Click here to enter text. C. APPLICATION		N TY	TPE CODE: 60		
D. RECL	AIM FAC?		E. TITLE V F	AC:		F.	F. SOURCE TEST ID(S): PR14466A		(S): PR14466A
YES	YES □ NO □		YES ⊠ NO □						
G. SCAC	G. SCAQMD SOURCE SPECIFIC RULES: Click here to enter text.								
H. HEAI	TH RISK FO	R PERN	MIT UNIT						
			MICR DATE: Cl here to enter a d		H3. CANCER BURDEN: Click here to enter text.		H4.	CB DATE: Click here to enter a date.	
H5: HIA: enter	Click here to text.		HIA DATE: Clic to enter a date.	ck here		HIC: Clic text.	k here to enter	H8.	HIC DATE: Click here to enter a date.



Section 1, SCAQMD BACT Determination

Source Type: Major/LAER

Application No.: 504556

Equipment Category: I.C. Engine

Equipment Subcategory: **Emergency Fire Pump, Compression Ignition**

February 1, 2019 Date:

4	INFORMATION
1.	

1.	EQUIPMENT INFOR	MATION					
A.	MANUFACTURER: Clarke	2	B. MODEL: JU6	5H-UFAD58			
C.							
	internal combustion engine	e.					
D.	FUNCTION: Fire pump wil	l be used to provide en	nergency water su	pply for fire suppression			
	at this site which operates	a gasoline, diesel, and	jet fuel storage fac	cility.			
E.	SIZE/DIMENSIONS/CAPACIT	ΓY: 183 BHP, four cy	cle, lean burn, 6 c	ylinders			
CO	MBUSTION SOURCES						
F.	MAXIMUM HEAT INPUT:						
G.	BURNER INFORMATION:						
	TYPE	INDIVIDUAL H	EAT INPUT	NUMBER			
	Enter additional burner types, as needed, add extra rows	Rated heat input of single	burner, in btu/hr	Number of burners			
H.	PRIMARY FUEL: DIESEL	I. OTHE	R FUEL: Supplemer	ntary or standby fuels			
J.	OPERATING SCHEDULE:	Hours 24 HRS//DAY	7 DAYS/WEEK	52 WKS/YR			
K.	EQUIPMENT COST: Enter sum	n of all Cost Factors in Tab	e 6 of SCAQMD BA	CT Guidelines			
L.	. EQUIPMENT INFORMATION COMMENTS:						

COMPANY INFORMATION

A.	COMPANY: SFPP. LP		B. FAC ID: 800278
C.	ADDRESS: 20410 S. Wilmington Ave CITY: Carson STATE: CA ZIP:		D. NAICS CODE: 424710
E.	CONTACT PERSON: Marty Vice		F. TITLE: Area Manager
G.	PHONE NO.: 310-635-1011	H. EMAIL: VI	CEM@KINDERMORGAN.COM

A. AGENCY: SCAQMD B. APPLICATION TYPE: NEW CONSTRUCTION

C. SCAQMD ENGINEER: Linda Dejbakhsh

D. PERMIT INFORMATION: PC ISSUANCE DATE: Click here to enter a date.

P/O NO.: G10138 PO ISSUANCE DATE: 9/29/2010

E. START-UP DATE: 5/25/2010

F. OPERATIONAL TIME: 8 years

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections (%O₂, %CO₂, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOX	SOX	СО	PM OR PM ₁₀	INORGANIC
BACT Limit		3.0 G/BHP-HR		2.6 G/ВНР-нк	0.15 g/ВНР-нг	
Averaging Time						
Correction		15 % O ₂		15 % O ₂	15% O ₂	

- B. OTHER BACT REQUIREMENTS: Tier 3 emission limits. NOx limit is actually NOx + ROG
- C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology
- D. EMISSION INFORMATION COMMENTS: Enter any additional comments regarding Emissions Information.

	TECHNOL	

A.	MANUFACTURER:	Manufacturer of the equipment	B.	MODEL:

C. DESCRIPTION

D. SIZE/DIMENSIONS/CAPACITY: An appropriate size parameter such as rated heat input, usable volume, rated filter efficiency, and/or one more characteristic dimensions.

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. PC ISSUANCE DATE: Click here to enter a date. PO NO.: PO ISSUANCE DATE: Click here to enter a date.

F. REQUIRED CONTROL EFFICIENCIES: Tier 4 Final standards

CONTAMINANT OVERALL CONTROL EFFICIENCY		CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY			
VOC	%	%	%			
NOx	%	%	%			
SOx	%	%	%			
СО	%	%	%			
PM	%	%	%			
PM_{10}	%	_%	%			
INORGANIC	%	%	%			

G. CONTROL TECHNOLOGY COMMENTS)

- A. COMPLIANCE DEMONSTRATED BY: Manufacturer's certification to Tier 3 emission standards.
- B. DATE(S) OF SOURCE TEST: 11/4/09
- C. COLLECTION EFFICIENCY METHOD: N/A
- D. COLLECTION EFFICIENCY PARAMETERS: N/A
- E. SOURCE TEST/PERFORMANCE DATA: Enter source test results for each criteria contaminant or precursor (mass emissions, concentrations or efficiencies) if they differ from the requirements previously listed. As previously requested in Section 4, identify any corrections or averaging times
- F. TEST OPERATING PARAMETERS AND CONDITIONS: List any important operating conditions maintained during the source test or normal operations. Examples include, but may not be limited to, pressure differentials across control devices, feed rates, firing rates, temperatures, flow rates, or other parameters used to evaluate the level of operation of the equipment during the test or operations that may affect emissions from the equipment.
- **G. TEST METHODS (SPECIFY AGENCY):** Identify the primary source test methods used and identify the agency (e.g., CARB Method 425).

_	ADDITIONAL COLOMB DEFEDENCE DATE
I.	DEMONSTRATION OF COMPLIANCE COMMENTS: Enter comments for additional information for Demonstration of Compliance.
H.	MONITORING AND TESTING REQUIREMENTS:

. •	112211101111	S S S S S S S S S S S S S S S S S S S				
A.	BCAT: 044000	B. CCAT: Click her text.	re to enter	C. APPLICATIO	ON TYPE CODE: 10	
D.	RECLAIM FAC?	E. TITLE V FAC:		F. SOURCE TES	ST ID(S):	
	YES ⊠ NO □	YES ⊠ NO				
G.	G. SCAQMD SOURCE SPECIFIC RULES: Click here to enter text.					
H.	H. HEALTH RISK FOR PERMIT UNIT					
H1.	MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.		CER BURDEN: k here to enter text.	H4. CB DATE: Click here to enter a date.	
H5:	HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: text.	Click here to enter	H8. HIC DATE: Click here to enter a date.	



Section 1, SCAQMD BACT Determination

Source Type: Major/LAER Application No.: 594294 Equipment Category: I.C. Engine

Equipment Subcategory: **Portable, Compression Ignition**

	Date:		February 1, 201	9	
1.	EQUIPMENT INFORM	MATION			
A.	MANUFACTURER: Caterp	illar	B. MODEL:	C4.4	
C.	DESCRIPTION: Portable, co catalyst, and ammonia oxid		• •	d with SCR, oxidation	
D.	D. FUNCTION: Engine drives landfill refuse truck tipper which powers a hydraulic pump that raises and lowers two hydraulic cylinders and tipper platform.				
E.	E. SIZE/DIMENSIONS/CAPACITY: 123.4 BHP, four cycle, rich burn, 8 cylinders				
CO	MBUSTION SOURCES				
F.	MAXIMUM HEAT INPUT:				
G.	BURNER INFORMATION:				
	TYPE	INDIV	TDUAL HEAT INPUT	NUMBER	
	Enter additional burner types, as needed, add extra rows	Rated heat inpu	t of single burner, in btu/hr	Number of burners	
H.	PRIMARY FUEL: DIESEL		I. OTHER FUEL: Suppler	mentary or standby fuels	
J.	OPERATING SCHEDULE:	310 HOURS/N	MONTH & 3,720 HOURS/Y	EAR	
K.	EQUIPMENT COST: Enter sum	of all Cost Facto	ors in Table 6 of SCAQMD l	BACT Guidelines	
L.	EQUIPMENT INFORMATION LANDFILL TO ACCOMMODA				
_					

COMPANY INFORMATION

A.	COMPANY: Sunshine Canyon Landfill	B. FAC ID: 49111	
C.	ADDRESS: 14747 San Fernando Ros CITY: Sylmar STATE: CA ZIP:	D. NAICS CODE: 562212	
E.	CONTACT PERSON: The company's contact most familiar with the equipment	F. TITLE:	
G.	PHONE NO.:	H. EMAIL:	

A. AGENCY: SCAQMD B. APPLICATION TYPE: NEW CONSTRUCTION

C. SCAQMD ENGINEER: Christopher Gill

D. PERMIT INFORMATION: PC ISSUANCE DATE: Click here to enter a date.

P/O NO.: G48118 PO ISSUANCE DATE: 8/31/2017

E. START-UP DATE: 9/1/2017

F. OPERATIONAL TIME: 1 year

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections (%O₂, %CO₂, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOX	SOX	CO	PM OR PM ₁₀	INORGANIC
BACT Limit	0.14 G/ВНР-нг	2.5 g/BHP-HR		3.7 G/BHP-HR	0.01 g/ВНР-нг	
Averaging Time						
Correction						

B. OTHER BACT REQUIREMENTS: Tier 4 Final limits

C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology

D. EMISSION INFORMATION COMMENTS: Enter any additional comments regarding Emissions Information.

_	CONTRDOL	TECHNOL	OCT
J.	CONTROL	TECHNOL	JUGI

- A. MANUFACTURER: Manufacturer of the equipment B. MODEL: C4.4
- C. DESCRIPTION: equipped with SCR catalyst, oxidation catalyst and ammonia oxidation catalyst.
- D. SIZE/DIMENSIONS/CAPACITY: An appropriate size parameter such as rated heat input, usable volume, rated filter efficiency, and/or one more characteristic dimensions.
- E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. PC ISSUANCE DATE: Click here to enter a date.
PO NO.: PO ISSUANCE DATE: Click here to enter a date.

F. REQUIRED CONTROL EFFICIENCIES: Tier 4 Final standards

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	%	%	%
NOx	%	%	%
SOx	%	%	%
СО	%	%	%
PM	%	%	%
PM_{10}	%	_%	%
INORGANIC	%	%	%

G. CONTROL TECHNOLOGY COMMENTS)

- A. COMPLIANCE DEMONSTRATED BY: Manufacturer's certification to Tier 4 emission standards.
- B. DATE(S) OF SOURCE TEST: 2/10/15
- C. COLLECTION EFFICIENCY METHOD: N/A
- D. COLLECTION EFFICIENCY PARAMETERS: N/A
- E. SOURCE TEST/PERFORMANCE DATA: Enter source test results for each criteria contaminant or precursor (mass emissions, concentrations or efficiencies) if they differ from the requirements previously listed. As previously requested in Section 4, identify any corrections or averaging times
- F. TEST OPERATING PARAMETERS AND CONDITIONS: List any important operating conditions maintained during the source test or normal operations. Examples include, but may not be limited to, pressure differentials across control devices, feed rates, firing rates, temperatures, flow rates, or other parameters used to evaluate the level of operation of the equipment during the test or operations that may affect emissions from the equipment.

- **G. TEST METHODS (SPECIFY AGENCY):** Identify the primary source test methods used and identify the agency (e.g., CARB Method 425).
- H. MONITORING AND TESTING REQUIREMENTS: Include any monitoring or testing requirements and their frequency that will be enforced to maintain emission levels reported for the BACT Determination.
- I. DEMONSTRATION OF COMPLIANCE COMMENTS: Enter comments for additional information for Demonstration of Compliance.

A.	BCAT: 036906 B. CCAT: Click here to er text.				C. APPLICATION TYPE CODE: 10			PE CODE: 10
D.	O. RECLAIM FAC?		E. TITLE V FAC:	F. SOURCE TEST ID(S):		(S):		
	YES □ NO ☒		YES ⊠ NO					
G.	G. SCAQMD SOURCE SPECIFIC RULES: Click here to enter text.							
H.	H. HEALTH RISK FOR PERMIT UNIT							
H1.	H1. MICR: Click here to enter text. H2. MICR DATE: Click here to enter a date. H3. CANCER BU				BURDEN: e to enter text.	H4.	CB DATE: Click here to enter a date.	
Н5	: HIA: Click here to enter text.	Н6.	HIA DATE: Click here to enter a date.	re H7. HIC: text.		k here to enter	Н8.	HIC DATE: Click here to enter a date.



Section II, Other LAER/BACT Determination

Source Type: Major/LAER

Application No.: **81391**

Equipment Category: Gas Turbine

Equipment Subcategory: Combined Cycle

Date: February 1, 2019

1. EQUIPMENT INFORMAT	ΓΙΟΝ
-----------------------	------

A. MANUFACTURER: Mitsubishi B. MODEL: M501 GAC

- C. DESCRIPTION: Combined Cycle with Duct Burner HRSG, SCR, Oxidation catalyst and common Steam Turbine
- D. FUNCTION: In the state of Virginia, the Virginia Electric Power Company owns and operates the Warren County Power Plant. This project consists of three similar gas turbines with a common steam turbine generator.
- E. SIZE/DIMENSIONS/CAPACITY: Nominal 1,280MW electrical power generating facility consisting of three gas turbine generators each 299.6MW serving common steam turbine with 539MW generator.

COMBUSTION SOURCES

- F. MAXIMUM HEAT INPUT: 2,996 MMBtu/hr Gas Turbine and 500 MMBtu/hr Duct Burner
- G. BURNER INFORMATION

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
Make and model of burner	Rated heat input of single burner, in btu/hr	Number of burners
Enter additional burner types, as needed, add extra rows		

H. PRIMARY FUEL: NATURAL GAS I. OTHER FUEL: N/A

J. OPERATING SCHEDULE: Hours 24 Days 7 Weeks 52

K. EQUIPMENT COST:

L. EQUIPMENT INFORMATION COMMENTS:

2. COMPANY INFORMATION

A.	A. COMPANY: Virginia Electric and Power Company			B. FAC ID: 51-187-0041		
C. ADDRESS: Lots 3,5,6,7,8,9 and 10 CITY: Warren Industrial Park STATE: VA ZIP: 22630			D. NAICS CODE: 221112			
E.	CONTACT PERSON: Jeffrey Zehner			F. TITLE: Env. Project Advisor		
G.	G. PHONE NO.: (804) 273-3145 H. EMAIL: Jeffrey.r.zehner@dom.com					

A. AGENCY: Virginia State Air Polluting Control Board

B. APPLICATION TYPE: NEW CONSTRUCTION

C. SCAQMD ENGINEER: Janardan R. Pandey, P.E., Air Permit Manager

D. PERMIT INFORMATION: PC ISSUANCE DATE: 6/17/14

P/O NO.: 81391

PO ISSUANCE DATE: 6/17/2014

E. START-UP DATE: 12/1/2014

F. OPERATIONAL TIME: 4 years

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections (%O₂, %CO₂, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOx	SOX	СО	PM or PM ₁₀	INORGANIC
BACT Limit		2 PPMV (with & w/o Duct Burner)		1.5 PPMV (without Duct Burner)		
Averaging Time		1 HOUR		1 hour		
Correction		@ 15% O ₂		@ 15% O ₂		

- B. OTHER BACT REQUIREMENTS: The emission limits shall not apply during turbine commissioning, start-up, shutdown and malfunction.
- C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology

4. EMISSION INFORMATION

D. EMISSION INFORMATION COMMENTS: Although the following annual mass emission limits from the operation of all three combined cycle power generating units including duct burners may be specific to this project they were also included in the permit:

NOx: 317.7 tons CO: 348.6 tons VOC: 181.0 tons

PM-10: 195.1 tons (includes condensable PM)

_	CONTRDO	TECHNICI OC	1 T 7
5.	CONTROL	TECHNOLOG	÷Υ

- A. MANUFACTURER: -- B. MODEL: --
- C. DESCRIPTION: SCR with aqueous ammonia injection grid for NOx control and Oxidation Catalyst for CO and VOC control.
- D. SIZE/DIMENSIONS/CAPACITY: --
- E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. Click here to enter text. PC ISSUANCE DATE: Click here to enter a date. PO NO.: Click here to enter text. PO ISSUANCE DATE: Click here to enter a date.

F. REQUIRED CONTROL EFFICIENCIES: See Emission Information in Section 4.

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY		
VOC	%	%	%		
NOx	%	%	%		
SOx	%	%	%		
СО	%	%	%		
PM	%	%	%		
PM_{10}	%	%	%		
INORGANIC	%	%	%		

G. CONTROL TECHNOLOGY COMMENTS Enter comments for additional information regarding Control Technology.

- A. COMPLIANCE DEMONSTRATED BY: CEMS data collected from 12/6/14 to 9/30/2016. Source Test
- **B. DATE(S) OF SOURCE TEST:** An appropriate size parameter such as rated product throughput, usable volume, and/or one more characteristic dimensions.
- C. COLLECTION EFFICIENCY METHOD: N/A
- D. COLLECTION EFFICIENCY PARAMETERS: N/A
- E. SOURCE TEST/PERFORMANCE DATA: 1.84 PPMV NOx @15% O2. 1.02 PPMV CO @15% O2. 2.8 PPMV NH3 @15% O2
- F. TEST OPERATING PARAMETERS AND CONDITIONS: At any load condition within plus or minus 25% of 100% of peak load.
- G. TEST METHODS (SPECIFY AGENCY): 40 CFR 60, Appendix A, Methods 7E or 20 (NOx); 40 CFR 60, Appendix A, Method 10 (CO); 40 CFR 60, Appendix A, Method 25A (VOC); 40 CFR 60, Appendix A, Methods 5 or 17 and 19, and 40 CFR 51, Appendix M, Method 202 (PM10); 40 CFR 60, Appendix A, Methods 6, 6C, 8 or 20 (SO₂).
- H. MONITORING AND TESTING REQUIREMENTS: CEMS for NOx and CO. Initial performance test for NOx, CO, VOC, PM10 and SO₂. Annual performance test for SO₂ pursuant to Permit Condition 67.
- I. DEMONSTRATION OF COMPLIANCE COMMENTS: Enter comments for additional information for Demonstration of Compliance.

A.	BCAT: Click here to text.	enter B. CCAT: Click her text.	e to enter C.	APPLICATIO to enter text.	ON TYPE CODE: Click here	
D.	RECLAIM FAC?	E. TITLE V FAC:	F.	SOURCE TEST ID(S): Click here to enter text.		
	YES \square NO \square	YES ⊠ NO	Ш	011001 001101		
G.	S. SCAQMD SOURCE SPECIFIC RULES: Click here to enter text.					
H.	I. HEALTH RISK FOR PERMIT UNIT					
H1.	MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCE Click he	R BURDEN: re to enter text.	H4. CB DATE: Click here to enter a date.	
H5:	HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Cli	ck here to enter	H8. HIC DATE: Click here to enter a date.	

SUMMARY OF PROPOSED DELETIONS OF OUTDATED LAER DETERMINATIONS IN PART B SECTIONS I AND II

Part B, Section I

Aluminum Melting Furnace, A/N 368982, Superior Ind. 9/6/02

Aluminum Melting Furnace, A/N 385864, Custom Alloy 9/6/02

Aluminum Melting Furnace, with Air Preheat, A/N 361714, Commonwealth Aluminum 7/11/03

Boiler, A/N 181183, Kal Kan, 78.6 MMBtu/hr 10/29/99

Boiler, A/N 186624, Darling Intl, 110 MMBtu/hr 10/29/99

Boiler, A/N 248532, UCI Med Ctr, 48.6 MMBtu/hr 9/7/99

Boiler, A/N 352348, Coca Cola, 31.5 MMBtu/hr (2) 12/22/99

Boiler, A/N 362566, Hi-Country, 20.9 MMBtu/hr 5/11/00

Boiler, A/N 360389, Disneyland, 8.5 MMBtu/hr (4) 12/22/99

Boiler, A/N 362396, Santa Monica Beach Hotel, 4.3 MMBtu/hr 12/22/99

Boiler, A/N 362486, Pacific Life, 3.0 MMBtu/hr 3/21/00

Boiler, A/N 363025, UCLA Med Ctr, 16.3 MMBtu/hr 3/21/00

Boiler, A/N 364142, San Bernardino Co. Medical Center, 6.0 MMBtu/hr 6/9/00

Boiler, A/N 367150, L&N Uniform Supply, 6.3 MMBtu/hr 6/9/00

Boiler, A/N 365228, Bumble Bee Seafoods, 16.8 MMBtu/hr 6/9/00

Boiler, A/N 365228, Bumble Bee Seafoods, 16.8 MMBtu/hr 6/9/00

Boiler, A/N 364504, Liberty Container, 16.3 MMBtu/hr 9/26/00

Boiler, A/N 366569, La Corr Packaging, 21 MMBtu/hr 9/26/00

Boiler, A/N 366879, RRR Real Estate, 7.5 MMBtu/hr 9/26/00

Boiler, A/N 358116, Maruchan, Inc., 8.18 MMBtu/hr 6/9/00

Oven, Powder Coating, A/N 360365 12/22/99

Oven, Homogenizing, A/N 383426 12/19/01

Dryer, Tenter Frame, A/N 364658 12/9/03

Flare, Landfill Gas Fired, A/N 245157, City of L.A. 8/17/01

Gas Turbine, Combined Cycle, A/N 386305, Magnolia Power Project, 2/17/04

Gas Turbine, Combined Cycle, A/N 366147, Mountainview, 9/18/01

Gas Turbine, Simple Cycle, A/N 406064, E.I. Colton, 2/17/04

Gas Turbine, Simple Cycle, A/N 383044, Indigo, 9/18/01

Gas Turbine, A/N 374502, LADWP Valley 9/18/01

Heater - Other Process, A/N 347641, So Cal Gas Co., 6 MM Btu/hr 12/22/99

IC Engine, Digester Gas Fired, A/N 388050, 1408 HP 1/23/03

IC Engine, Landfill Gas Fired, A/N 391009, 1850 HP 1/23/03

IC Engine, A/N 392542, 764 HP 3/13/02

IC Engine, A/N 392543, 685 HP 3/13/02

IC Engine, A/N 392544, 610 HP 3/13/02

IC Engine, A/N 392545, 536 HP 3/13/02

IC Engine, A/N 392546, 471 HP 3/13/02

IC Engine, A/N 390213, 470 HP 3/13/02

IC Engine, A/N 390214, 395 HP 3/13/02

IC Engine, A/N 393278, 295 HP 3/13/02

IC Engine, A/N 392676, 267 HP 3/13/02

IC Engine, A/N 387480, 550 HP w/ PM Trap 9/12/03

IC Engine, A/N 356816, Cummins 10/5/99

```
IC Engine, A/N 359076, Coachella Valley Water Dist. 9/24/99
```

IC Engine, A/N 359619, Santa Clarita Valley School Dist. 10/14/99

IC Engine, A/N 360224, Running Springs Water Dist 11/12/99

IC Engine, A/N 361707, Ingram Book Co. 11/6/99

IC Engine, A/N 366730, Disneyland 8/25/00

IC Engine, A/N 364327, Home Grocer 8/25/00

IC Engine, A/N 363918, Home Grocer 8/25/00

IC Engine, A/N 363589, 2155 hp, City of Corona 8/25/00

IC Engine, A/N 365785, Cucamong Water District 8/25/00

IC Engine, A/N 360419, Disneyland Resort, 1334 HP 5/11/00

IC Engine, A/N 417691, 160 HP, East LA College 12/9/03

IC Engine, A/N 418342, 240 HP, LA County 12/9/03

IC Engine, A/N 395874, Ultramar 6/6/02

IC Engine, A/N 372822, Pharmavite 12/13/00

IC Engine, A/N 353428, 755 HP 9/24/99

Metal Heating Furnace, Aluminum, A/N 379746, International Extrusion, 4/24/03

Printing, Lithographic - Non-Heatset, A/N 356664, Brothers Printing

Spray Booth, A/N 347744, Arbek Mfg, Wood, Super Low VOC

Spray Booth, A/N 230731, Sierra Aluminum, Metal, with Control

Spray Booth, A/N 183205, Frontier Aluminum, Metal with Control

Spray Booth, A/N 228182, Northrop, Aerospace, with Control

Spray Booth, A/N 369278, Lippert Components, RV Chassis, with Control 9/6/02

Spray Booth, A/N 176076, Kaiser Marquardt, Metal, with Control

Spray Booth, A/N 249798, Crown City Plating, Metal with Control

Spray Booth, A/N 280817, Intl Extrusion, Metal, with Control

Spray Booth, A/N 273236, US Ordnance, Metal, with Control

Spray Booth, A/N 287160, Douglas Prod Div, Aerospace, with Control

Spray Booth, A/N 298582, Huck Intl., Aerospace, with Control

Spray Booth, A/N 272587, Barry Controls, Aerospace Adhesives, with Control

Spray Booth, A/N 324505, Bristol Fiberlite, Polyester Resin, with Control

Spray Booth, A/N 354640, Wondries Collision, Auto Refinish, with Control

Spray Booth, A/N 352925, Wondries Collision, Auto Refinish, No Control

Spray Booth, A/N 352922, Wondries Collision, Auto Refinish, No Control

Spray Booth, A/N 352660, Cannon Safe, Metal, No Control

Spray Booth, A/N 352478, MacDonald Mfg, Metal, No Control

Spray Booth, A/N 352716, Artisan Resources, Plastics, No Control

Spray Booth, A/N 353357, Time Aviation, Aerospace, No Control

Spray Booth, A/N 356063, DA/PRO Rubber, Rubber, No Control

Part B, Section II – Other Technologies

Boiler, Corcoran State Prison, 8.1 MMBtu/hr 9/15/99

Boiler, La Paloma Generating Co., 6.2 MMBtu/hr 5/11/00

Flare, Landfill Gas Fired, NEO Tajiguas, A/N 9788 11/24/04

Gas Turbine, Los Medanos (CA) 9/6/02

Gas Turbine, 153 MW, Elk Hills (CA) 9/18/01

IC Engine, A/N 359675. US Navy 10/6/99

Gas Turbine, 170 MW, 97-AFC-2, Calpine (CA)

Gas Turbine, 98-AFC-2, La Paloma (CA) 2/11/00

Gas Turbine, 1.5 MW, 1219, Genxon, (CA) 12/6/02

Gas Turbine, 12.9 MW, UC San Diego (CA) 4/23/03

ICE, Landfill Gas Fired, MM Tajiguas Energy, 4231 HP, A/N 9788 11/24/04

ICE, Stationary Non-Emergency, NEO Calif. Power, 3870 HP, A/N 220 10/14/03

ICE, Stationary Non-Emergency, S.B. Linden, 3130 HP, A/N 1-96-4371 5/25/99

ATTACHMENT E

PART C - POLICY AND PROCEDURES FOR NON-MAJOR POLLUTING FACILITIES

Chapter 1 - How Is MSBACT Determined for Minor Polluting Facilities?

This chapter explains the definitions of BACT for non-major polluting facilities (minor source BACT or MSBACT) found in SCAQMD rules and state law and how they are interpreted. It also explains the criteria used for initializing the Part D MSBACT Guidelines and the process for updating the MSBACT Guidelines.

PART D OF THE MSBACT GUIDELINES

Part D of the MSBACT Guidelines specifies the MSBACT requirements for all of the commonly permitted categories of equipment. (See Chapter 2 for a full explanation of Part D).

The initial listings in Part D of the MSBACT Guidelines reflected the current BACT determinations at the time for sources at non-major polluting facilities as of April 2000. These did not represent new requirements but rather memorialized BACT determinations and emission levels at that time. This initialization was necessary to benchmark the transition from federal LAER to MSBACT for non-major polluting facilities. The control technologies and emission levels identified applied to any non-major source subject to NSR until the Guideline was updated or became out of date. The dates listed on the BACT determinations in Part D refer to the date of adoption of the determination. The dates listed do not grandfather the equipment from complying with any new requirements or limits that are implemented after the approval of a BACT determination¹⁷.

CRITERIA FOR NEW MSBACT AND UPDATING PART D

MSBACT requirements are determined for each source category based on the definition of MSBACT. In essence, MSBACT is the most stringent emission limit or control technology that is:

- found in a state implementation plan (SIP), or
- achieved in practice (AIP), or
- is technologically feasible and cost effective.

For practical purposes, nearly all SCAQMD MSBACT determinations will be based on AIP BACT because it is generally more stringent than MSBACT based on SIP, and because state law contains some constraints on SCAQMD from using the third approach. For minor polluting facilities, MSBACT will also take economic feasibility into account.

Based on Governing Board policy, MSBACT also includes a requirement for the use of clean fuels.

Terms such as "achieved in practice" and "technologically feasible" (including technology transfer) have not been defined in the rule, so one of the purposes of _this

. . .

¹⁷ SCAQMD Rule 1303(a)(3)

section is to explain the criteria SCAQMD permitting staff uses to make a MSBACT determination.

MSBACT Based on a SIP

The most stringent emission limit found in an approved state implementation plan (SIP) might be the basis for MSBACT. This means that the most stringent emission limit adopted by any state as a rule, regulation or permit¹⁸ and approved by USEPA is eligible as a MSBACT requirement. This does not include future emission limits that have not yet been implemented.

Achieved in Practice MSBACT

MSBACT may also be based on the most stringent control technology or emission limit that has been achieved in practice (AIP) for a category or class of source. AIP control technology may be in operation in the United States or any other part of the world. SCAQMD permitting engineers will review the following sources to determine the most stringent AIP MSBACT:

- LAER/BACT determinations in Part B of the BACT Guidelines
- CAPCOA BACT Clearinghouse
- USEPA RACT/BACT/LAER Clearinghouse
- Other districts' and states' BACT Guidelines
- Permits to operate issued by SCAQMD or other agencies
- Any other source for which the requirements of AIP can be demonstrated

Achieved in Practice Criteria

A control technology or emission limit found in any of the references above may be considered as AIP if it meets all of the following criteria:

Commercial Availability

At least one vendor must offer this equipment for regular or full-scale operation in the United States. A performance warranty or guaranty must be available with the purchase of the control technology, as well as parts and service.

Reliability

The control technology must have been installed and operated reliably for at least twelve months on a comparable commercial operation. If the operator did not require the basic equipment to operate continuously, such as only eight hours per day and 5 days per week, then the control technology must have operated whenever the basic equipment was in operation during the twelve months.

Effectiveness

The control technology must be verified to perform effectively over the range of operation expected for that type of equipment. If the control technology will be allowed to operate at lesser effectiveness during certain modes of operation, then those modes must be identified. The verification shall be based on a District-approved performance test or tests, when possible, or other performance data.

¹⁸ Some states incorporate individual permits into their SIP as case-by-case Reasonably Available Control Technology requirements.

Cost Effectiveness

The control technology or emission rate must be cost effective for a substantial number of sources within the class or category. Cost effectiveness criteria are described in detail in a later section. Cost criteria are not applicable to an individual permit but rather to a class or category of source.

Technology Transfer

MSBACT is based on what is AIP for a category or class of source. However, technology transfer must also be considered across source categories, in view of the other AIP criteria. There are two types of potentially transferable control technologies: 1) exhaust stream controls, and 2) process controls and modifications. For the first type, technology transfer must be considered between source categories that produce similar exhaust streams. For the second type, process similarity governs the technology.

Requirements of Health & Safety Code Section 40440.11

Senate Bill 456 (Kelley) was chartered into state law in 1995 and became effective in 1996. H&SC Section 40440.11 specifies the criteria and process that must be followed by the SCAQMD to establish new MSBACT limits for source categories listed in the MSBACT Guidelines. In general, the provisions require:

- Considering only control options or emission limits to be applied to the basic production or process equipment;
- Evaluating cost to control secondary pollutants;
- Determining the control technology is commercially available;
- Determining the control technology has been demonstrated for at least one year on a comparable commercial operation;
- Calculating total and incremental cost-effectiveness;
- Determining that the incremental cost-effectiveness is less than SCAQMD's established cost-effectiveness criteria;
- Putting BACT Guideline revisions on a regular meeting agenda of the SCAQMD Governing Board;
- Holding a Board public hearing prior to revising maximum incremental costeffectiveness values:
- Keeping a BACT determination made for a particular application unchanged for at least one year from the application deemed complete date; and
- Considering a longer period for a major capital project (> \$10,000,000)

After consultation with the affected industry, the CARB, and the U.S. EPA, and considerable legal review and analysis, staff concluded that the process specified in SB 456 to update the BACT Guidelines should be interpreted to apply only if the SCAQMD proposes to make BACT more stringent than LAER or where LAER is inapplicable (e.g. in establishing minor source BACT). Staff intends to incorporate the spirit and intent of the SB 456 provisions into the MSBACT update process, as explained below, because non-major polluting facilities are no longer subject to federal LAER, according to Regulation XIII. Therefore, MSBACT may consider cost as specified herein.

COST EFFECTIVENESS METHODOLOGY

Cost effectiveness is measured in terms of control costs (dollars) per air emissions reduced (tons). If the cost per ton of emissions reduced is less than the maximum required cost effectiveness, then the control method is considered to be cost effective. This section also discusses the updated maximum cost effectiveness values, and those costs, which can be included in the cost effectiveness evaluation.

There are two types of cost effectiveness: average and incremental. Average cost effectiveness considers the difference in cost and emissions between a proposed MSBACT and an uncontrolled case. On the other hand, incremental cost effectiveness looks at the difference in cost and emissions between the proposed MSBACT and alternative control options.

Applicants may also conduct a cost effectiveness evaluation to support their case for the special permit considerations discussed in Chapter 2.

Discounted Cash Flow Method

The discounted cash flow method (DCF) is used in the MSBACT Guidelines. This is also the method used in SCAQMD Air Quality Management Plan. The DCF method calculates the present value of the control costs over the life of the equipment by adding the capital cost to the present value of all annual costs and other periodic costs over the life of the equipment. A real interest rate¹⁹ of four percent, and a 10-year equipment life is used. The cost effectiveness is determined by dividing the total present value of the control costs by the total emission reductions in tons over the same 10-year equipment life.

Maximum Cost Effectiveness Values

The MSBACT maximum cost effectiveness values, shown in Table 5, are based on a DCF analysis with a 4% real interest rate.

Table 5: Maximum Cost Effectiveness Criteria (3rd2nd Quarter 20168)

Pollutant	Average (Maximum \$ per Ton)	Incremental (Maximum \$ per Ton)
ROG	<u>30,765</u> 28,460	<u>92,296</u> 8 5,380
NOx	<u>29,090</u> 26,910	<u>87,117</u> 80,590
SOx	<u>15,383</u> 14,230	<u>46,148</u> 4 2,690
PM ₁₀	<u>6,854</u> 6,340	<u>20,409</u> 18,880
CO	<u>609</u> 560	<u>1,751</u> 1,620

The cost criteria are based on those adopted by the SCAQMD Governing Board in the 1995 BACT Guidelines, adjusted to second quarter 2016 dollars using the Marshall and Swift Equipment Cost Index. Cost effectiveness analyses should use these figures adjusted to the latest Marshall and Swift Equipment Cost Index. Contact the BACT Team for current figures.

¹⁹ The real interest rate is the difference between market interest rates and inflation, which typically remains constant at four percent.

Top-Down Cost Methodology

The SCAQMD uses the top-down approach for evaluating BACT and cost effectiveness. This means that the best control method, with the highest emission reduction, is first analyzed. If it is not cost effective, then the second-best control method is evaluated for cost effectiveness. The process continues until a control method is found to be cost-effective. This process provides a mechanism for all practical and potential control technologies to be evaluated. As part of the permitting process, the applicant is responsible for preparing the BACT analysis, and submitting it to the District for review and approval.

The top-down process consists of five steps:

1. Identify all control technologies

Identify all possible air pollution control options for the emissions unit. In addition to add-on control, control options may include production process methods and techniques. Innovative, transferable technologies, and LAER technologies should also be identified.

2. Eliminate technically infeasible options

The technologies identified in Step 1 should be evaluated for technical feasibility. Elimination of any of the technologies identified in Step 1 should be well-documented and based on physical, chemical and engineering principles.

3. Rank remaining control technologies

Based on overall control effectiveness, all remaining technically feasible control options should be ranked for the pollutants under review. A list should be generated for each pollutant subject to the BACT analysis. This list should include control efficiencies, emission rates, emission reductions, environmental impacts and energy impacts. Environmental impacts may include multimedia impacts and the impacts of the control option on toxic emissions.

4. Evaluation

Evaluate the most effective controls and document the results. For each option, the applicant is responsible for objectively discussing each of the beneficial and adverse impacts. Typically, the analysis should focus on the direct impacts. Calculations for both incremental and average cost effectiveness should be completed during this step. The MSBACT option must be cost effective for both analyses. In the event that the top option from Step 4 is ruled out after the impacts and cost effectiveness are evaluated, the decision and reasoning should be fully documented. The next most stringent alternative from Step 4, should then be evaluated.

5. Select BACT

The most effective control option not eliminated in Step 4 is proposed as BACT for the pollutant and permit unit and presented to the District for review and approval.

Costs to Include in a Cost Effectiveness Analysis

Cost effectiveness evaluations consider both capital and operating costs. Capital cost includes not only the price of the equipment, but the cost for shipping, engineering and installation. Operating or annual costs include expenditures associated with utilities, labor and replacement costs. Finally, costs are reduced if any of the materials or

energy created by the process result in cost savings. These cost items are shown in Table 6. Methodologies for determining these values are given in documents prepared by USEPA through their Office of Air Quality Planning and Standards (EPA Air Pollution Control Cost Manual, Sixth Edition, 2002, EPA 452/B-02-001).

The cost of land will not be considered because 1) add-on control equipment usually takes up very little space, 2) add-on control equipment does not usually require the purchase of additional land, and 3) land is non-depreciable and has value at the end of the project. In addition, the cost of controlling secondary emissions and cross-media pollutants caused by the primary MSBACT requirement should be included in any required cost effectiveness evaluation of the primary MSBACT requirement.

Table 6: Cost Factors

Total Capital Investment

Purchased Equipment Cost

Control Device

Ancillary (including duct work)

Instrumentation

Taxes Freight

Direct Installation Cost

Foundations and Supports Handling and Erection

Electrical Piping Insulation Painting **Indirect Installation Costs**

Engineering

Construction and Field Expenses

Start-Up

Performance Tests Contingencies

Total Annual Cost

Direct Costs

Raw Materials

Utilities

- Electricity
- Fuel
- Steam
- Water
- Compressed Air

Waste Treatment/Disposal

Labor

- Operating
- Supervisory
- Maintenance

Maintenance Materials

Replacement Parts

Indirect Costs
Overhead

Property Taxes Insurance

Administrative Charges

Recovery Credits

Materials Energy

CLEAN FUEL GUIDELINES

In January 1988, the SCAQMD Governing Board adopted a Clean Fuels Policy that included a requirement to use clean fuels as part of BACT. A clean fuel is one that produces air emissions equivalent to or lower than natural gas for NO_X , SO_X , ROG, and fine respirable particulate matter (PM_{10}). Besides natural gas, other clean fuels are liquid petroleum gas (LPG), hydrogen and electricity. Utilization of zero and near-zero emission technologies are also integrated into the Clean Fuels Policy. The burning of landfill, digester, refinery and other by-product gases is not subject to the clean fuels requirement. However, the combustion of these fuels must comply with other SCAQMD rules, including the sulfur content of the fuel.

The requirement of a clean fuel is based on engineering feasibility. Engineering feasibility considers the availability of a clean fuel and safety concerns associated with

that fuel. Some state and local safety requirements limit the types of fuel, which can be used for emergency standby purposes. Some fire departments or fire marshals do not allow the storage of LPG near occupied buildings. Fire officials have, in some cases, vetoed the use of methanol in hospitals. If special handling or safety considerations preclude the use of the clean fuel, the SCAQMD has allowed the use of fuel oil as a standby fuel in boilers and heaters, fire suppressant pump engines and for emergency standby generators. The use of these fuels must meet the requirements of SCAQMD rules limiting NO_X and sulfur emissions. In addition, the Clean Fuel requirements for MSBACT are subject to the provisions of California Health and Safety Code Section 40440.11.

AIR QUALITY-RELATED ENERGY POLICY

In September 2011, the SCAQMD Governing Board adopted the Air Quality-Related Energy Policy to help guide a unified approach to reducing air pollution while addressing other key environmental concerns including environmental justice, climate change and energy independence. The air quality-related energy policy outlines 10 policies and 10 action steps to help meet federal health-based standards for air quality in the South Coast Air Basin while also promoting the development of zero- and near-zero emission technologies.

Policy 7 is to require any new/repowered in-Basin fossil-fueled generation power plant to incorporate BACT/LAER as required by District rules, considering energy efficiency for the application. These power plants will need to comply with any requirements adopted by the California Air Resources Board, California Energy Commission, Public Utilities Commission, California Independent System Operator, or the governing board of a publicly-owned electric utility, as well as state law under the California Environmental Quality Act. In recognizing that fossil fuel electric generation will still be needed in the Basin to complement projected increased use of renewable energy sources, this policy ensures that all fossil-fueled plants will meet existing BACT/LAER requirements and SCAQMD's BACT/LAER determinations will also take into consideration generating efficiency in setting the emission limits. Parts E and F of the BACT Guidelines complement and support this policy.

BACT UPDATE PROCESS

As technology advances, the SCAQMD's MSBACT Part D Guidelines will be updated. Updates will include revisions to the guidelines for existing equipment categories, as well as new guidelines for new categories.

The MSBACT Guidelines will be revised based on the criteria outlined in the previous sections. Once a more stringent emission limit or control technology has been reviewed by staff and is determined to meet the criteria for MSBACT, it will be reviewed through a public process. The process is shown schematically in Figure 2. The public will be notified and the BACT Scientific Review Committee will have an opportunity to comment. Following the public process and comment period, the guidelines will be presented to the Governing Board for approval at a public hearing, prior to updates of the MSBACT Guidelines, Part D.

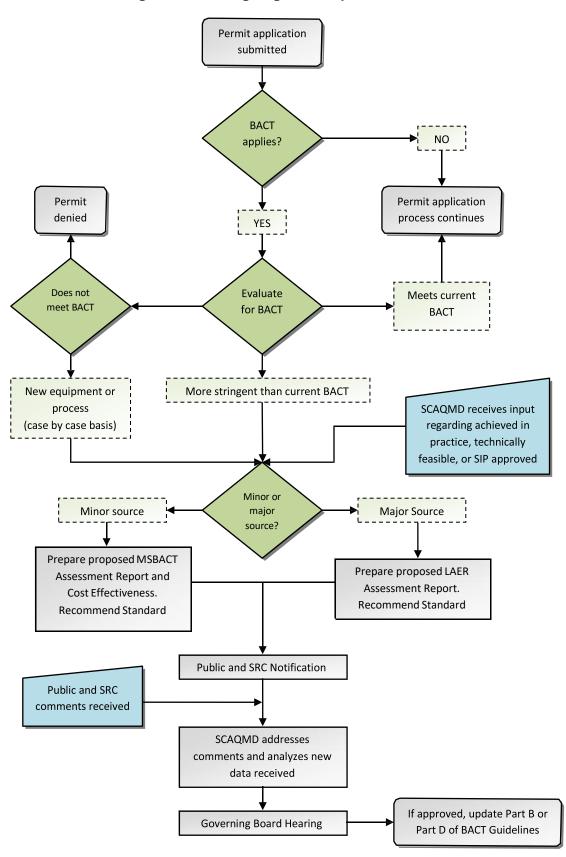


Figure 2: The Ongoing BACT Update Process

Chapter 2 - How to Use Part D of the MSBACT Guidelines

This chapter explains the MSBACT information found in Part D - MSBACT Guidelines. The Guidelines in Part D should be used to determine MSBACT for non-major polluting facilities. For a listing of equipment, refer to the Part D Table of Contents. Determination of MSBACT for equipment not found in Part D of the MSBACT Guidelines is also explained.

GENERAL

Part D includes MSBACT Guidelines for more than 100 categories of equipment commonly processed by SCAQMD. Some guidelines are further subdivided by equipment size, rating, type or the material used, as appropriate.

The MSBACT requirements are in the form of:

- 1) an emission limit;
- 2) a control technology;
- 3) equipment requirements; or
- 4) a combination of the last two.

If the requirement is an emission limit, the applicant may choose any control technology to achieve the emission limit. The SCAQMD prefers to set an emission limit as MSBACT because it allows an applicant the most flexibility in reducing emissions.

If a control technology and/or equipment requirements are the only specified MSBACT, then either emissions from the equipment are difficult to measure or it was not possible to specify an emission limit that applies to all equipment within the category. Where possible, an emission limit or control efficiency condition will be specified in the permit along with the control technology or equipment requirements to ensure that the equipment is properly operated with the lowest emissions achievable. An applicant may still propose to use other ways to achieve the same or better emission reduction than the specified MSBACT.

MSBACT is the control technology or emission limit given in Part D for the basic equipment or process being evaluated, unless the guideline is out of date, or there are special permitting conditions, or the equipment is not identified in Part D. In those cases, the procedures described in the following sections will be used to determine MSBACT. Applicants or other interested parties are encouraged to contact the SCAQMD permitting staff if there are any questions about MSBACT.

SPECIAL PERMITTING CONSIDERATIONS

Although the most stringent, AIP BACT for a source category will most likely be the required MSBACT, SCAQMD staff may consider special technical circumstances that apply to the proposed equipment which may allow deviation

from that MSBACT. The permit applicant should bring any pertinent facts to the attention of the SCAQMD permitting engineer for consideration.

Case-Specific Situations

SCAQMD staff may consider unusual equipment-specific and site-specific characteristics of the proposed project that would warrant a reconsideration of the MSBACT requirement for new equipment.

Technical infeasibility of the control technology

A particular control technology may not be required as MSBACT if the applicant demonstrates that it is not technically feasible to install and operate it to meet a specific MSBACT emission limitation in a specific permitting situation.

Operating schedule and project length

If the equipment will operate much fewer hours per year than what is typical, or for a much shorter project length, it can affect what is considered AIP.

Availability of fuel or electricity

Some MSBACT determinations may not be feasible if a project will be located in an area where natural gas or electricity is not available.

Process requirements

Some MSBACT determinations specify a particular type of process equipment. SCAQMD staff may consider requirements of the proposed process equipment that would make the MSBACT determination not technically feasible.

Equivalency

The permit applicant may propose alternative means to achieve the same emission reduction as required by BACT. For example, if BACT requires a certain emission limit or control efficiency to be achieved, the applicant may choose any control technology, process modification, or combination thereof that can meet the same emission limit or control efficiency.

Super Compliant Materials

SCAQMD will accept the use of super compliant materials in lieu of an add-on control device controlling volatile organic compound (VOC) emissions from coating operations. For example, if a permit applicant uses only surface coatings that meet the super compliant material definition in SCAQMD Rule 109, it may qualify as VOC MSBACT. This policy does not preclude any other MSBACT requirement for other contaminants.

Equipment Modifications

As a general rule, it is more difficult to retrofit existing equipment with MSBACT as a result of NSR modification when compared to a new source. The equipment being modified may not be compatible with some past MSBACT determinations that specify a particular process type. There may also be space restrictions that prevent installation of some add-on control technology.

Other Considerations

Although multiple process and control options may be available during the MSBACT determination process, considerations should be made for options that reduce the formation of air contaminants from the process, as well as ensuring that emissions are properly handled. In addition to evaluating the efficiency of the control stage, these additional considerations are needed to ensure that the system is capable of reducing or eliminating emissions from the facility on a consistent basis during the operational life of the equipment. Measures listed in this section for MSBACT are subject to the requirements of California Health and Safety Code Section 40440.11.

Pollution Prevention

The Pollution Prevention Act of 1990 (42 U.S.C. §§13101-13109) established a national policy that pollution should be prevented or reduced at the source whenever feasible. In many cases, air pollution control is a process that evaluates contaminants at the exhaust of the system. Pollution prevention is the reduction or elimination of waste at the source by the modification of the production process. Pollution prevention measures may consist of the use of alternate or reformulated materials, a modification of technology or equipment, or improvement of energy efficiency changes that result in an emissions reduction. These measures should be considered as part of the MSBACT determination process if the measures will result in the elimination or reduction of emissions, but are not required to include projects which are considered to fundamentally redefine the source. New and different emissions created by a process or material change will also need to be considered as part of the MSBACT determination process, in contrast to the overall emissions reductions from the implementation of pollution prevention measures. U.S. EPA policy defined pollution prevention as source reduction and other practices that reduce or eliminate the creation of pollutants through increased efficiency in the use of raw materials, energy, water, or other resources, and protection of natural resources by conservation²⁰. U.S. EPA further specifies that pollution prevention does not include recycling (except in-process recycling), energy recovery, treatment or disposal. For purposes of these BACT Guidelines, and to be consistent with federal definitions, source reduction and pollution prevention shall may include, but not be limited to, consideration of the feasibility of:

- equipment or technology modifications,
- process or procedure modifications,
- reformulation or redesign of products,
- substitution of raw materials, or
- improvements in housekeeping, maintenance or inventory control,

that reduce the amount of air contaminants entering any waste stream or otherwise released into the environment, including fugitive emissions.

²⁰ U.S. EPA Pollution Prevention Law and Policies (www.epa.gov/p2/pollution-prevention-law-and-policies#define)

Monitoring and Testing

In order to ensure that MSBACT determinations continue to meet their initial emission and efficiency standards, periodic or continuous parameter monitoring and testing requirements may be required during the permitting process. Equipment and processes may experience some change over time, due to aging or operational methods of the equipment, which may affect emission rates or control efficiencies. In addition to other rule requirements, additional monitoring and testing requirements may need to focus on aspects directly related to the MSBACT determination, and may be made enforceable by permit conditions. Monitoring and testing requirements should be specific to characterize operating conditions (e.g. temperatures, pressures, flows, production rates) and measurement techniques when MSBACT is established to ensure clarity and consistency with the standard.

Capture Efficiency

An integral part of controlling air pollutants emitted from a process with add-on air pollution control equipment is capturing those emissions and directing them to the air pollution control device. Emissions which are designed to be collected by an exhaust system but are vented uncontrolled into the atmosphere can have a much greater impact than controlled emissions. When applicable, the evaluation of a process and its associated control equipment should address the qualification and quantification of capture efficiency. By addressing capture efficiency during MSBACT determinations, a standard can be established to evaluate the capture efficiency of other systems, as well as ensure that the capture efficiency is maintained consistently over time.

If applicable, MSBACT determinations may include the percentage capture efficiency and the methods and measurements (e.g. EPA Method 204, capture velocity measurements, design using ACGIH's Industrial Ventilation, static pressures) used to determine and verify it. For various circumstances, several SCAQMD rules (see Table 5, Part A, Chapter 1) already require an assessment of collection efficiency of an emission control system following EPA Method 204, EPA's "Guidelines for Determining Capture Efficiency", SCAQMD's "Protocol for Determination of Volatile Organic Compounds (VOC) Capture Efficiency," or other methods approved by the Executive Officer, and are appropriate to include as BACT requirements. The capture efficiency for any MSBACT Determination shall be no less stringent than any applicable rule requirement. Other considerations that may affect capture, such as cross-drafts, thermal drafts and the volume of combustion products, should also be addressed during this process.

Equipment Not Identified in the MSBACT Guidelines

Although the BACT Guidelines contains an extensive listing of practically everything the SCAQMD permits, occasionally applications will be received for equipment not identified in the Guidelines. As required by Rule 1303, MSBACT for equipment category not listed in the MSBACT Guidelines must be determined on a case-by-case basis using the definition of BACT in Rule 1302 and the general procedures in these MSBACT Guidelines, as shown in Chapter 1 and the previous sections of this chapter.

Applicants whose equipment is not listed in Part D of the MSBACT Guidelines should contact the SCAQMD and arrange a pre-application conference. MSBACT issues can be discussed in the conference for leading to a MSBACT determination. Applicants are not required to conduct the MSBACT evaluation but the application may be processed more quickly if the applicant provides a MSBACT evaluation with the application for a permit to construct.

MSBACT Determinations Should the Guidelines Become Out of Date

Should the MSBACT Guideline Part D become out of date with state BACT requirements or permits issued for similar equipment in other parts of the state, staff will evaluate permits consistent with the definition of BACT considering technical and economic criteria as required by Rule 1303 (a) and Health & Safety Code Section 40405. The technical and economic factors to be considered are those identified in Chapter 1.

BACT APPLICATION CUT-OFF DATES

These guidelines apply to all non-major polluting facility applications deemed complete subsequent to SCAQMD Governing Board adoption of the Regulation XIII amendments in 2000.

Applications for a Registration Permit for equipment issued a valid Certified Equipment Permit (CEP), which is valid for one year, will only be required to comply with MSBACT as determined at the time the CEP was issued. However, SCAQMD staff will reevaluate the MSBACT requirements for the CEP upon annual renewal of the CEP by the equipment manufacturer.

Attachment F - PART D

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

2-1-2019

Equipment or Process: Thermal Oxidizer (Afterburner), Catalytic Oxidizer – Natural Gas Fired **

	Criteria Pollutants							
Rating/Size	VOC	NOx	SOx	СО	PM10	Inorganic		
All		30 ppmvd @ 3%						
		<u>O2</u>						
		(2-1-2019)						
		Burner emissions						
		only.						

^{*} Means those facilities that are not major polluting facilities as defined by Rule 1302 – Definitions

BACT Guidelines - Part D

Thermal/Catalytic Oxidizer

^{**} Does not include tank degassing, soil vapor extraction, and vapor incinerators where vapors are directed into the burner or into a combustion chamber.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

12-5-2003 Rev. 0 2-1-2019 Rev. 1

Equipment or Process: Composting

	Criteria Pol	llutants				
Subcategory/	VOC	NOx	SOx	CO	PM10	Inorganic
Rating/Size						(Ammonia)
Co-composting ^{a)}	Compliance with SCAQMD Rule					Compliance with SCAQMD Rule 1133.2 ^{b)}
	(12-5-2003)					(12-5-2003)
Greenwaste	Compliance with SCAQMD Rule					Compliance with SCAQMD Rule
composting	1133.3					1133.3
	(2-1-2019)					(2-1-2019)

a) Co-composting is composting where biosolids and/or manure are mixed with bulking agents to produce compost.

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

BACT Guidelines - Part D

Composting

b) Not required for design capacity <1,000 tons per year.

10-20-2000 Rev. 0 10-03-2008 Rev. 1 12-02-2016 Rev. 2 2-1-2019 Rev. 3

Equipment or Process: B

Boiler

			Criteria Pollu	tants		
Subcategory/Rating/ Size	VOC	NOx ¹	SOx	СО	PM10	Inorganic
Natural Gas Fired, > 2 and < 20 MMBtu/HR		Compliance with SCAQMD Rules 1146 or 1146.1 ² (12-02-2016)	Natural Gas (10-20- 2000)	≤50 ppmvd for firetube type, ≤ 100 ppmvd for watertube type, corrected to 3% O2 (04-10-98)	Natural Gas (04-10-98)	
Propane Fired, > 2 and < 20 MMBtu/HR		≤ 12 ppmvd corrected to 3% O ₂ ² (10-20-2000)		≤50 ppmvd for firetube type, ≤ 100 ppmvd for watertube type, corrected to 3% O ₂ (04-10-98)		
Natural Gas or Propane Fired, ≥ 20 and < 75 MM Btu/HR		Compliance with SCAQMD Rule 1146 (2-1-2019) With Low NOx Burner: ≤ 9 ppmv dry corrected to 3% O2 With Add On Controls: ≤ 7 ppmv dry corrected to 3% O2 (10 20 2000)	Natural Gas (10-20- 2000)	Same as above. (04-10-98)	Natural Gas (04-10-98)	With Add-On Controls: ≤ 5 ppmvd NH3, corrected to 3% O ₂ ≤ 1 ppmvd ozone, corrected to 3% O ₂ (10-20-2000)
Natural Gas or Propane Fired, ≥ 75 MM Btu/HR		Compliance with SCAQMD Rule 1146 (12-02-2016)	Natural Gas (10-20- 2000)	Same as above. (04-10-98)	Natural Gas (04-10-98)	With Add-On Controls: ≤ 5 ppmvd NH3, corrected to 3% O ₂

			Criteria Pollu	itants		
Subcategory/Rating/ Size	VOC	NOx1	SOx	СО	PM10	Inorganic
						\leq 1 ppmvd ozone, corrected to 3% O ₂ (10-20-2000)
Oil Fired ³		Compliance with SCAQMD Rule 1146 or 1146.1 (10-20-2000)	Fuel Sulfur Content ≤0.0015% by weight	≤ 50 ppmvd for firetube type ≤ 100 ppmvd for watertube type, corrected to 3% O ₂ (04-10-98)		
Atmospheric Unit, ≥ 2 and ≤ 10 MMBtu/HR		Compliance with SCAQMD Rules 1146 and 1146.1 (12-02-2016)		Compliance with SCAQMD Rules 1146 and 1146.1 (12-02-2016)		
Landfill Gas Fired, < 75 MMBTU/Hr		Compliance with SCAQMD Rules 1146 and 1146.1 (12-02-2016)		≤ 100 ppmvd at 3% O2 dry. (04-10-98)	≤ 0.1 gr/scf at 12% CO ₂ (Rule 409) (04-10-98)	
Digester Gas Fired, < 75 MMBTU/Hr		Compliance with SCAQMD Rules 1146 and 1146.1 (12-02-2016)		≤ 100 ppmvd at 3% O2 dry. (04-10-98)	≤ 0.1 gr/scf at 12% CO ₂ (Rule 409) (04-10-98)	

- 1) Electric utility boilers, refinery boilers rated >40 MMBtu/hr and sulfur plant reaction boilers rated ≥5 MMBtu/hr are excluded; and there are exceptions for low-use boilers and boilers that met a 12-ppm limit prior to 9/5/08. Applicants are advised to review these rules for further details.
- 2) A higher NOx limit may be allowed for facilities required to have a standby fuel, where use of a clean standby fuel is not possible and an ultra low-NOx burner is not available.
- 3) See Clean Fuels Policy in Part C of the BACT Guidelines. Oil firing is only allowed as a standby fuel, and where use of a clean standby fuel is not possible.

10-20-2000 Rev. 0 10-03-2008 Rev. 1 12-02-2016 Rev. 2 2-1-2019 Rev. 3

Equipment or Process: Process Heater – Non-Refinery

Subcategory/Rating/	VOC	NOx ⁴⁾	SOx	CO	PM10	Inorganic
Size Natural Gas or Propane		Compliance with	Natural Gas	(50 namy for firstube type	Natural Gas	
Fired, >2 and < 20 MM Btu/hr		SCAQMD Rules 1146	(10-20- 2000)	≤50 ppmv for firetube type, ≤ 100 ppmv for watertube type, dry corrected to 3% O2 (10-20-2000)	(10-20-2000)	
Natural Gas or Propane Fired, ≥ 20 MM Btu/hr		Compliance with SCAQMD Rules 1146 or 1146.1 (12 02-2016) (2-1-2019)	Natural Gas (10-20- 2000)	Same as above. (10-20-2000)	Natural Gas (10-20-2000)	With SCR: ≤ 5 ppmvd NH3, corrected to 3% O2 With LTO: ≤ 1 ppmvd ozone, corrected to 3% O2 (10-20-2000)

Rules 1146 and 1146.1 require that boilers rated >2 and <75 MMBtu/hr meet 9 ppm NOx beginning 1/1/2012 for some categories, that natural gas fired boilers rated at ≥75 MMBtu/hr meet 5 ppm by 1/1/2015 (except boilers at schools and universities), that natural draft boilers rated >2 and ≤10 MMBtu/hr with unsealed combustion chambers meet 12 ppm by 1/1/2014, and that boilers firing landfill or digester gas meet 25 or 15 ppm, respectively, by 1/1/15 (all ppm are dry, corrected to 3% O2). Electric utility boilers, refinery boilers rated >40 MMBtu/hr and sulfur plant reaction boilers rated ≥ 5 MMBtu/hr are excluded; and there are exceptions for low use boilers and boilers that met a 12 ppm limit prior to 9/5/08. Applicants are advised to review these rules for further details.

²⁾ A higher NOx limit may be allowed for facilities required to have a standby fuel, where use of a clean standby fuel is not possible and an ultra-low NOx burner is not available.

10-20-2000 Rev. 0

6-6-2003 Rev. 1

12-3-2004 Rev. 2

7-14-2006 Rev. 3

10-3-2008 Rev. 4

12-02-2016 Rev. 5

2-1-2019 Rev. 6

Equipment or Process: I.C. Engine, Stationary, Emergency ¹

		Criteria Pollutants						
Subcategory	Rating/Size	NMHC or	NOx	$NOx + NMHC^2$	SOx	CO	PM	
		VOC						
Compression Ignition, Fire Pump ^{3,4}	50 ≤ HP < 100			Compliance with SCAQMD Rule 1470 (12-02-2016) Tier 3: 4.7 grams/kW-hr (3.5 grams/bhp-hr) (10-03-2008)	Diesel fuel with a sulfur content no greater than 0.0015% by weight (SCAQMD Rule 431.2). (6-6-2003)	Compliance with SCAQMD Rule 1470 (12-02-2016) Tier 3: 5.0 grams/kW-hr (3.7 grams/bhp-hr) (10-03-2008)	Compliance with SCAQMD Rule 1470 (12-3-2004) Tier 3: 0.40 grams/kW-hr (0.30 grams/bhp-hr) (10-03-2008)	
	100 ≤ HP < 175			Compliance with SCAQMD Rule 1470 (12-02-2016) Tier 3: 4.0 grams/kW-hr (3.0 grams/bhp-hr) (10-03-2008)		Compliance with SCAQMD Rule 1470 (12-02-2016) Tier 3: 5.0 grams/kW-hr (3.7 grams/bhp-hr) (10-03-2008)	Compliance with SCAQMD Rule 1470 (12-3-2004) Tier 3: 0.30 grams/kW-hr (0.22 grams/bhp-hr) (10-03-2008)	

(Continued on next page)

				Crite	eria Pollutants		
Subcategory	Rating/Size	NMHC or VOC	NOx	NOx + NMHC ²	SOx	СО	PM
Compression Ignition, Fire Pump ^{3,4} (continued)	175 ≤ HP < 750			Compliance with SCAQMD Rule 1470 (12-02-2016) Tier 3: 4.0 grams/kW-hr (3.0 grams/bhp-hr): (10-03-2008)	Diesel fuel with a sulfur content no greater than 0.0015% by weight (SCAQMD Rule 431.2). (6-6-2003)	Compliance with SCAQMD Rule 1470 (12-02-2016) Tier 3: 3.5 grams/kW-hr (2.6 grams/bhp-hr) (10-03-2008)	Compliance with SCAQMD Rule 1470 (12-3-2004) Tier 3: 0.20 grams/kW-hr (0.15 grams/bhp-hr) (10-03-2008)
	≥750 HP			Compliance with SCAQMD Rule 1470 (12-02-2016) Tier 2: 6.4 grams/kW-hr (4.8 grams/bhp-hr) (10-03-2008)		Compliance with SCAQMD Rule 1470 (12-02-2016) Tier 2: 3.5 grams/kW-hr (2.6 grams/bhp-hr) (10-03-2008)	Compliance with SCAQMD Rule 1470 (12-02-2016) Tier 2: 0.20 grams/kW-hr (0.15 grams/bhp-hr) (10-03-2008)
Compression- Ignition, Other ^{3, 4}	50 ≤ HP < 100			Compliance with SCAQMD Rule 1470 (12-02-2016) Tier 3: 4.7 grams/kW-hr (3.5 grams/bhp-hr) (10-03-2008)		Compliance with SCAQMD Rule 1470 (12-02-2016) Tier 3: 5.0 grams/kW-hr (3.7 grams/bhp-	Compliance with SCAQMD Rule 1470 (12-3-2004) Tier 3: 0.20 grams/kW-hr (0.15 grams/bhp-hr) (10-03-2008)

(Continued on next page)

				Crite	eria Pollutants		
Subcategory	Rating/Size	NMHC or VOC	NOx	NOx + NMHC ²	SOx	СО	PM
Compression- Ignition, Other ^{3, 4} (continued)	100 ≤ HP < 175			Compliance with SCAQMD Rule 1470 (12-02-2016) Tier 3: 4.0 grams/kW-hr (3.0 grams/bhp-hr) (10-03-2008)	Diesel fuel with a sulfur content no greater than 0.0015% by weight (Rule 431.2). (6-6-2003)	Compliance with SCAQMD Rule 1470 (12-02-2016) Tier 3: 5.0 grams/kW-hr (3.7 grams/bhp-hr) (10-03-2008)	Compliance with SCAQMD Rule 1470 (12-3-2004) Tier 3: 0.230 grams/kW-hr (0.1522-grams/bhp-hr) (10-03-2008) (2-1-2019)
	175≤ HP < 300			Compliance with SCAQMD Rule 1470 (12-02-2016) Tier 3: 4.0 grams/kW-hr (3.0 grams/bhp-hr) (10-03-2008)		Compliance with SCAQMD Rule 1470 (12-02-2016) Tier 3: 3.5 grams/kW-hr (2.6 grams/bhp-hr) (10-03-2008)	Compliance with SCAQMD Rule 1470 (12-3-2004) Tier 3: 0.20 grams/kW-hr (0.15 grams/bhp-hr) (10-03-2008)
	300≤ HP < 750			Compliance with SCAQMD Rule 1470 (12-02-2016) Tier 3: 4.0 grams/kW-hr (3.0 grams/bhp-hr) (7-14-2006)		Compliance with SCAQMD Rule 1470 (12-02-2016) Tier 3: 3.5 grams/kW-hr (2.6 grams/bhp-hr) (7-14-2006)	Compliance with SCAQMD Rule 1470 (12-3-2004) Tier 3: 0.20 grams/kW-hr (0.15 grams/bhp-hr) (7-14-2006)

(Continued on next page)

				Crite	eria Pollutants		
Subcategory	Rating/Size	NMHC or VOC	NOx	NOx + NMHC ²	SOx	СО	PM
Compression- Ignition, Other ^{3, 4} (continued)	≥750 HP			Compliance with SCAQMD Rule 1470 (12-02-2016) Tier 2:	Diesel fuel with a sulfur content no greater than 0.0015% by weight (Rule	Compliance with SCAQMD Rule 1470 (12-02-2016)	Compliance with SCAQMD Rule 1470 (12-3-2004)
				6.4 grams/kW-hr (4.8 grams/bhp-hr) (10-03-2008)	431.2). (6-6-2003)	Tier 2: 3.5 grams/kW-hr (2.6 grams/bhp- hr) (10-03-2008)	Tier 2: 0.20 grams/kW-hr (0.15 grams/bhp-hr) (10-03-2008)
Spark Ignition ⁵	< 130 HP	VOC: 1.5 grams/bhp- hr (10-20-2000)	1.5 grams/bhp-hr (10-20-2000)		See Clean Fuels Policy in Part C of the BACT Guidelines (10-20-2000)	2.0 grams/bhp-hr (10-20-2000)	See Clean Fuels Policy in Part C of the BACT Guidelines (10-20-2000)
	≥ 130 HP	VOC: 1.0 grams/bhp- hr ⁶ (12-02-2016)	1.5 grams/bhp- hr (10-20-2000)		See Clean Fuels Policy in Part C of the BACT Guidelines (10-20-2000)	2.0 grams/bhp-hr (10-20-2000)	See Clean Fuels Policy in Part C of the BACT Guidelines (10-20-2000)

- 1) An emergency engine is an engine which operates as a temporary replacement for primary mechanical or electrical power sources during periods of fuel or energy shortage or while a primary power source is under repair. This includes fire pumps, emergency electrical generation and other emergency uses.
- 2) NMHC + NOx means the sum of non-methane hydrocarbons and oxides of nitrogen emissions.
- 3) SCAQMD restricts operation of emergency compression-ignition engines to 50 hours per year, or less if required by Rule 1470, for maintenance and testing and a maximum of 200 hours per year total operation. For engines used to drive standby generators, operation beyond 50 hours per year for maintenance and testing is allowed only in the event of a loss of grid power or up to 30 minutes prior to a rotating outage provided that the electrical grid operator or electric utility has ordered rotating outages in the control area where the engine is located or has indicated that it expects to issue such an order at a certain time, and the engine is located in a control area that is subject to the rotating outage.

- 4) The engine must be certified by U.S. EPA or CARB to meet the Tier 1, 2 or 3 emission requirements of 40 CFR Part 89 Control of Emissions from New and In-use Nonroad Compression-Ignition Engines shown in the table– or otherwise demonstrate that it meets the Tier 1, 2 or 3 emission limits. If, because of the averaging, banking, and trading program, there is no new engine from any manufacturer that meets the above standards, then the engine must meet the family emission limits established by the manufacturer and approved by U.S. EPA. The PM limits apply only to filterable PM.
- 5) SCAQMD restricts operation of emergency spark-ignition engines to 50 hours per year for maintenance and testing and a maximum of 200 hours per year total operation. Emergency spark-ignition engines may be used in a Demand Response Program, however the engine will require additional evaluation and may be subject to more stringent regulatory requirements. Since some requirements are based upon the California Airborne Toxic Control Measure for Stationary Compression Ignition Engines, applicants are referred to Title 17, Section 93115.3 of the California Code of Regulations for possible exemptions.
- 6) VOC limit is based on the requirement listed in Table 1 of 40 CFR 60 Subpart JJJJ Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

10-20-2000 Rev. 0 12-5-2003 Rev. 1 7-14-2006 Rev 2 2-2-2018 Rev 3 2-1-2019 Rev 4

Equipment or Process: Printing (Graphic Arts)

	Criteria I	Pollutants				
Subcategory	VOC	NOx	SOx	CO	PM10	Inorganic
Flexographic	Inks with ≤ 1.5 Lbs VOC/Gal, Less Water and Less Exempt Compounds (1990); or use of UV/EB or water-based inks/coatings ≤ 180 g VOC/L. Compliance with SCAQMD Rules 1130 and 1171 (2-2-2018)					
Control	For add-on control required by SCAQMD Rule 1130(c)(5) or other District requirement: EPA M. 204 Permanent Total Enclosure (100% collection) vented to <u>afterburner</u> RTO with 95% overall control efficiency; Combustion Chamber: Temp ≥ 1500°F¹, Retention Time > 0.3 seconds (2-2-2018)	Compliance with SCAQMD Rule 1147 at time of applicability (2- 2-2018)				
Letterpress	Compliance with SCAQMD Rules 1130 and 1171 (12-5-2003)					
Lithographic or Offset, Heatset	Low VOC Fountain Solution (≤ 8% by Vol. VOC); Low VOC (≤ 100 g/l) Blanket and Roller Washes; Oil-Based or UV-Curable Inks; and Compliance with SCAQMD Rules 1130 and 1171 (7-14-2006) (2-2-18)				Venting to an afterburner (\geq 0.3 sec. Retention Time at \geq 1400 °F) (10-20-2000) (2-1-2019)	
Control	Oven Venting to an Afterburner (≥ 0.3 Sec.	Compliance				

	Criteria Pollutants							
Subcategory	VOC	NOx	SOx	CO	PM10	Inorganic		
	Retention Time at ≥ 1400 °F; 95% Overall Efficiency) (10-20-2000)	with SCAQMD Rule 1147						
Lithographic or Offset, Non- Heatset	Same As Above Low VOC Fountain Solution (≤ 8% by Vol. VOC); Low VOC (≤ 100 g/l) Blanket and Roller Washes; Oil-Based or UV-Curable Inks; and Compliance with SCAQMD Rules 1130 and 1171. (2-1-2019)							
Rotogravure or Gravure—	Compliance with SCAQMD Rules 1130 and 1171 (10-20-2000)							

Compliance with SCAQMD Rules 1130.1 and 1171; or use of Rule 1130.1 and 1171 compliant

UV/EB or water-based inks/coatings. (2-2-2018).

Publication and Packaging
Screen Printing

and Drying

¹⁾ or temperature demonstrating equivalent overall control efficiency in a District-approved source test.

Equipment or Process: Spray Booth

	Criteria Pollutants						
Subcategory/	VOC	NOx	SOx	CO	PM10	Inorganic	
Rating/Size							
Automotive,	Compliance with Applicable				Dry Filters or		
Down-Draft Type,	SCAQMD Regulation XI Rules				Waterwash		
< 66 <u>7</u> 0-Lbs/Month	(10-20-2000)				(1990)		
of VOC Emissions							
(2-1-2019)	C 1' '-1 A 1' 11				G A1		
Other Types,	Compliance with Applicable				Same as Above		
< 1170 Lbs/Month of VOC Emissions	SCAQMD Regulation XI Rules				(1990)		
Automotive,	- Compliance with Applicable				Same as Above		
Down-Draft Type,	SCAQMD Regulation XI Rules,				(1990)		
\geq 22 Lbs/Day of	and VOC Control System with ≥				(1))))		
VOC Emissions	90% Collection Efficiency and ≥						
	95% Destruction Efficiency, or						
	- Use of Super Compliant Materials						
	(< 5% VOC by weight): or						
	- Use of Low-VOC Materials						
	Resulting in an Equivalent						
	Emission Reduction						
	(10-20-2000)				~		
Other Types,	Same as Above				Same as Above		
≥ 1170 Lbs/Month	(10-20-2000)				(1990)		
of VOC Emissions							

Note: The sum of all VOC emissions from all spray booths within the same subcategory applied for in the previous two years at the same facility are considered toward the emission threshold.

Equipment or Process: Aluminum Melting Furnace

		Criteria Pollutants						
Subcategory/ Rating/Size	VOC	NOx	SOx	СО	PM10	Inorganic		
Crucible or Pot		≤60ppm Compliance with Rule 1147 (2-1-2019) Natural Gas (07-11-97)	Natural Gas (07-11-97)		Natural Gas with Ingots or Non-contaminated Scrap Charge, or Baghouse (10-20-2000)			
Reverberatory, Non-Sweating < 5 MM BTU/HR		<pre> <ahref="#"> <ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></ahref="#"></pre>	Natural Gas (1990)		Same as above. (10-20-2000)			
Reverberatory, Non-Sweating ≥ 5 MM BTU/HR		Natural Gas with Low NOx Burner ≤ 60 ppmvd @ 3% O ₂ (10-20-2000)	Natural Gas (1990)		Same as above. (10-20-2000)			
Reverberatory or Rotary, Sweating < 5 MM BTU/HR	Afterburner (≥ 0.3 sec. Retention Time at ≥ 1400° F) or Secondary Combustion Chamber (1990)	Section 2018 Section 2018 Section 2018 Compliance with Rule 1147 (2-1-2019) Natural Gas (1990)	Natural Gas (1990)		Natural Gas with Baghouse and: - Afterburner (≥ 0.3 sec. Retention Time at ≥ 1400° F); or - Secondary Combustion Chamber (1990)			
Reverberatory or	Same as Above	Natural Gas with	Natural Gas		Same as above.			

Equipment or Process: Brass Melting Furnace

		Criteria Pollutants					
Subcategory/ Rating/Size	VOC	NOx	SOx	СО	PM10	Inorganic	
Crucible, ≤ 300 Lbs/Hr Process Rate		60ppm Compliance with Rule 1147 (2-1-2019) Natural Gas (1990)	Natural Gas (1990)		Natural Gas, Charge Clean Metal Only and Maintain Slag Cover Over Entire Melt Surface (1990)		
Crucible, > 300 Lbs/Hr Process Rate		60ppm Compliance with Rule 1147 (2-1-2019) Low NOx Burner (10-20-2000)	Natural Gas (1990)		Natural Gas, with Baghouse (1990)		
Reverberatory or Rotary, Non- Sweating		60ppm Compliance with Rule 1147 (2-1-2019) Natural Gas and Low NOx Burner (10-20-2000)	Natural Gas (1990)		Natural Gas with Baghouse (1990)		
Reverberatory or Rotary, Sweating	Afterburner (≥ 0.3 Second Retention Time at ≥ 1400 °F) (1990)	60ppm Compliance with Rule 1147 (2-1-2019) Natural Gas with Low NOx Burner	Natural Gas (1990)	Afterburner (≥ 0.3 Second Retention Time at ≥ 1400 °F)	Natural Gas with Baghouse (1990)		

Equipment or Process: Burnoff or Burnout Furnace (Excluding Wax Furnace)

Criteria Pollutants							
Rating/Size	VOC	NOx	SOx	CO	PM10	Inorganic	
All	Afterburner or Secondary Combustion Chamber with ≥0.3 Second Retention Time at ≥1,400°F Achieved within 15 Minutes of Primary Burner Ignition (07-11-97)	Compliance with Rule 1147 (2-1-2019) Natural Gas (07-11-97)	Natural Gas (07-11-97)		Natural Gas (07-11-97)		

Equipment or Process: Calciner

	Criteria Pollutants					
Rating/Size	VOC	NOx	SOx	CO	PM ₁₀	Inorganic
Petroleum	Afterburner	Compliance with Rule	Natural Gas with	Afterburner	0.005 gr/dscf	
Coke	(≥ 0.3 Second	<u>1147</u>	Flue Gas	(≥ 0.3 Second	Corrected to 3% 02	
	Retention Time	<u>(2-1-2019)</u>	Desulfurization	Retention Time at \geq	(1988)	
	at ≥ 1400 °F)	44 ppmv, Dry, Corrected	(>90% Removal	1400 °F)		
	(1988)	to 3% 02	Efficiency)	(1988)		
		(1988)	(1988)			
		Compliance with Rule	Natural Gas		Natural Gas with	
Other		<u>1147</u>	(1988)		Baghouse (1988)	
		(2-1-2019)				
		45 ppmv, Dry, Corrected				
		to 3% 02				
		(1988)				

Equipment or Process: Coffee Roasting

	Criteria Pollutants					
Subcategory/ Rating/Size	VOC	NOx	SOx	CO	PM10	Inorganic
Roaster, < 110,000 BTU/Hr		Compliance with Rule 1147 (2-1-2019) Natural Gas (1988)	Natural Gas (1988)		Natural Gas (1988)	
Roaster, ≥ 110,000 BTU/Hr	Afterburner (0.3 Sec Retention Time at 1200 °F) (1990)	Compliance with Rule 1147 (2-1-2019) Natural Gas, with Heat Recovery on Afterburner Exhaust to Reduce Fuel Consumption (10-20-2000)	Natural Gas (1990)		Natural Gas with Cyclone and Afterburner (≥ 0.3 Second Retention Time at ≥ 1200 °F) (1990)	
Handling Equipment, < 1,590 Lbs/Hr All ¹						
Handling Equipment, ≥ 1,590 Lbs/Hr All					Cyclone (1990)	

¹⁾ At the date of the last revision for this category, there was no Achieved In Practice BACT Determination for this subcategory. Technologically Feasible options listed in historic SCAQMD BACT Guidelines for this subcategory require cost effective analyses before they can be listed in these current Guidelines.

Equipment or Process: Crematory

	Criteria Pollutants					
Rating/Size	VOC	NOx	SOx	CO	PM10	Inorganic
	Secondary Combustion	<u>60ppm</u>	Natural Gas		Natural Gas with Secondary	
All	Chamber, ≥ 1500 °F	Compliance	(1990)		Combustion Chamber,	
	(1990)	with Rule 1147			≥ 1500 °F	
		(2-1-2019)			(1990)	
		Natural Gas				
		(1990)				

Equipment or Process: Dryer – Kiln

	Criteria Pollutants								
Rating/Size	VOC	NOx	SOx	CO	PM10	Inorganic			
		Compliance with	Natural Gas		Natural Gas				
$All^{\underline{1}}$		Rule 1147	(1988)		(1988)				
		(2-1-2019)							
		Natural Gas with							
		Low NOx Burner							
		(10-20-2000)							

¹Does not include digester gas or landfill gas fired units

Equipment or Process: Dryer or Oven

Subcategory/	VOC	NOx	SOx	CO	PM10	Inorganic
Rating/Size						
		<u>30ppm</u>	Natural Gas		Natural Gas	
Carpet Oven		Compliance with	(1990)		(1990)	
		<u>Rule 1147</u>				
		(2-1-2019)				
		80 ppmvd,				
		corrected to 3% O ₂				
		(10-20-2000)				
Rotary, Spray and		Compliance with	Natural Gas		Natural Gas with	
Flash Dryers ¹⁾		<u>Rule 1147</u>	(1990)		Baghouse (1990)	
		(2-1-2019)				
		Natural Gas with				
		Low NOx Burner				
		(10-20-2000)				
Tray, Agitated		Compliance with	Natural Gas		Natural Gas	
Pan, and Rotary		Rule 1147	(1990)		(1990)	
Vacuum Dryers		(2-1-2019)				
		Natural Gas with				
		Low NOx Burner				
		(10-20-2000)				
Tenter Frame		<u>30ppm</u>	Natural Gas		Natural Gas	
Fabric Dryer		Compliance with	(10-20-		(10-20-	

	Rule 1147 (2-1-2019) 60 ppmvd Corrected to 3% O ₂			
	(10-20-2000)			
Other Dryers and	30 ppmvd	Natural Gas	Natural Gas	
Ovens – Direct &	corrected to 3% O ₂	(10-20-	(10-20-	
Indirect Fired ^{2,3} -	(04-10-98)	2000)	2000)	

- Dryers for foodstuff, pharmaceuticals, aggregate & chemicals.
 Does not include food or bakery ovens. See listing for "Food Oven".
 Does not include digester gas or landfill gas units.

Equipment or Process: Fish Reduction

	Criteria Pollutants						
Rating/Size	VOC	NOx	SOx	СО	PM10	Inorganic	
Cooker	Scrubber with Chlorinated	Compliance					
	Solution (≤ 20 ppmv Cl ⁻	with Rule 1147					
	Outlet Conc., ≥ 0.6 Sec.	(2-1-2019)					
	Retention Time and						
	≤ 200 °F Outlet Temp.)						
	(1988)						
Digestor, Evaporator	Afterburner (≥ 0.3 Sec.	<u>Compliance</u>			Natural Gas with		
and Acidulation Tank	Retention Time at $\geq 1200 ^{\circ}\text{F}$)	with Rule 1147			Afterburner (≥ 0.3 Sec.		
	(1990)	(2-1-2019)			Retention Time at		
					≥ 1200 °F)		
					(1990)		
Dryer	Scrubber with Chlorinated	Compliance			Natural Gas and Scrubber		
	Solution (≤ 20 ppmv Cl ⁻	with Rule 1147			with Chlorinated Solution		
	Outlet Conc., ≥ 0.6 Sec.	(2-1-2019)			(≤ 20 ppmv Cl ⁻ Outlet		
	Retention Time and $\leq 200 ^{\circ}\text{F}$				Conc., ≥ 0.6 Sec. Retention		
	Outlet Temp.)				Time and		
	(1990)				≤ 200 °F Outlet Temp.)		
					(1990)		
Meal Handling ¹							
Rendering – Presses,	Water Condenser and Vent to						
Centrifuges,	Dryer Firebox						
Separators, Tanks,	(1988)						
Etc.							

¹⁾ At the date of the last revision for this category, there was no Achieved In Practice BACT Determination for this subcategory. Technologically Feasible options listed in historic SCAQMD BACT Guidelines for this subcategory require cost effective analyses before they can be listed in these current Guidelines.

Equipment or Process: Fryer – Deep Fat

Rating/Size	VOC	NOx	SOx	CO	PM ₁₀	Inorganic
Integrated Afterburner/Oil Heater < 2 MM Btu/hr	Integrated Afterburner/Oil Heater (≥ 0.3 Sec. Retention Time at ≥ 1400 °F) (10-20-2000)(2-1- 2019)	Natural Gas (1990)	Natural Gas (1990)		Integrated Afterburner/Oil Heater (≥ 0.3 Sec. Retention Time at ≥ 1400 °F) (10 20 2000) (2-1-2019)	
Integrated Afterburner/Oil Heater ≥ 2 MM Btu/hr	Integrated Afterburner/ Oil Heater (≥ 0.3 Sec. Retention Time at ≥ 1400 °F) (10-20-2000) (2-1-2019)	Natural Gas (1990)	Natural Gas (1990)		Integrated Afterburner/Oil Heater (≥ 0.3 Sec. Retention Time at ≥ 1400 °F), and Electrostatic Precipitator or High Efficiency Mist Eliminator (10-20-2000) (2-1-2019)	

<u>burner exhaust</u>	Non-Integrated Direct and In- Direct Oil Heater (Steam, Thermal Fluid Heater and burner exhaust		60ppm Compliance with SCAQMD Rule 1147 (2-1-2019)				
-----------------------	---	--	---	--	--	--	--



Equipment or Process: Lead Melting Furnace

Subcategory/ Rating/Size	VOC	NOx	SOx	СО	PM10	Inorganic
Pot or Crucible, Non-Refining Operations		60ppm Compliance with Rule 1147 (2-1-2019) Natural Gas (1990)	Natural Gas (1990)		Natural Gas and Melt only Sows, Pigs, Ingots or Clean Scrap (1990)	
Pot or Crucible, Refining Operations		60ppm Compliance with Rule 1147 (2-1-2019) Natural Gas (1990)	Natural Gas with Scrubber; or Natural Gas with Sulfur Free Refining Agents (1990)		Natural Gas with Baghouse (1990)	
Reverberatory, Secondary Melting Operations		60ppm Compliance with Rule 1147 (2-1-2019) Natural Gas with Low NOx Burner (10-20-2000)	Natural Gas with Scrubber (1990)		Natural Gas with Baghouse (1990)	

Note: Some secondary lead smelting operations must also comply with the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 63, Subpart X.

Equipment or Process: Soil Vapor Extraction – Thermal/Catalytic Oxidization (Natural Gas – burner only)

	Criteria Pollutants							
Rating/Size	VOC	NOx	SOx	CO	PM10	Inorganic		
		Compliance with						
All		Rule 1147						

Equipment or Process: Zinc Melting Furnace

Subcategory/ Rating/Size	VOC	NOx	SOx	СО	PM10	Inorganic
Crucible or Pot		60ppm Compliance with Rule 1147 (2-1-2019) Natural Gas (1990)	Natural Gas (1990)		Natural Gas with Ingot and/or Clean Scrap Charge Only, or Baghouse (1988/2000)	
Reverberatory, Non-Sweating Operations		60ppm Compliance with Rule 1147 (2-1-2019) Natural Gas (1990)	Natural Gas (1990)		Same as Above (10-20-2000)	
Reverberatory, Sweating Operations		60ppm Compliance with Rule 1147 (2-1-2019) Natural Gas (1990)	Natural Gas (1990)		Natural Gas with Baghouse and: - Afterburner (≥ 0.3 sec. Retention Time at ≥ 1400° F); or Secondary Combustion (≥ 0.3 sec. Retention Time at ≥ 1400° F); (1990)	
Rotary, Sweating Operations		60ppm Compliance with	Natural Gas (1990)		Same as Above (1990)	

1		1	1
	Rule 1147		
	(2.1.2010)		
	(2-1-2019)		
	Natural Gas		
	(1990)		ļ ,



ATTACHMENT G

THERMAL OXIDIZER COST-EFFECTIVENESS ANALYSIS

Incremental Cost-Effectiveness Analysis Oxidizer #1

This cost effectiveness study was performed on a Regenerative Thermal Oxidizer (RTO) rated at 8.67 mmBtu/hr, which serves as the start- up burner to bring the ceramic media of the RTO to operating temperature. The RTO is utilized to control process emissions from the lens coating and drying processes from a sunglass manufacturing plant.

Health and Safety Code 40440.11 requires an incremental cost-effectiveness study if a more stringent emission limit is proposed over an existing lowest achievable limit. The existing NOx BACT limit of 60 ppm is from Rule 1147. The proposed new BACT limit is 30 pm NOx at 3% O₂. Both limits apply to the burner only. Only new or replacement costs are analyzed as retrofit costs are considered part of a BARCT analysis and not a BACT requirement.

Average cost-effectiveness per SCAQMD BACT Guidelines Part C analyzes the cost of applying BACT to an uncontrolled case. This BACT update is only targeting the secondary emissions from a control device, therefore average cost effectiveness does not apply.

A Low NOx burner equipped oxidizer was implemented as the control technology in this specific case. The incremental equipment cost is the cost differential between an oxidizer that achieves 30 ppm NOx and one that can only achieve 60 ppm NOx. Installation costs do not differ as the units are identical except for the burner.

Incremental operating cost consists of two components. Additional fuel use is needed from the less efficient Low NOx equipment. Also, incremental electricity cost was examined for the fan to bring extra combustion air for the Low NOx burner. Both were calculated and included as part of the annual operating cost.

The incremental cost/ton values from this analysis is below the NOx incremental threshold value from 1st quarter of 2016, the time the control equipment was implemented.

Oakley RTO Cost Effectiveness Calculations

Use R1147 limit of 60 ppm NOx @ 3% O2 as baseline, and reduction is to 30 ppm

Oxidizer Info

Manufacturer: Adwest Technologies
Model: Retox 30.0 RTO-97
Rating: 8.67 MM Btu/hr

Operation Schedule: 1.5 hr/day 300 days/yr

Life 20 years Interest rate: 4 %

Capital Cost - Incremental

Equipment (cost of 30 ppm oxidizer - cost of 60 ppm oxidizer)	\$12,111
Direct & Indirect Installation	\$0
Total Capital	\$12,111

Annual Operating Cost - Incremental

Cost per ton of NOx reduction

Additional fuel use \$1,157 (from incremental gas use sheet)

Additional electricity use \$301 (from incremental electricity use sheet)

Total Annual Operating Cost (Incremental) \$1,458

PVF	13.590	NOx Reduction Cal	culation		
Present Value of Capital Costs	\$12,111		Emission Factor	Daily heat input (mmbtu/hr) 1.5 hr @ 100%	
Present Value of Annual Costs (20 years @ 4%)	\$19,815	_	lb NOx/mmBtu		NOx lb day
Total 20-Year Capital Cost	\$31,926	For 60 ppm@3%O2	0.073	13.005	0.95
		For 30 ppm@3%O2	0.036	13.005	0.47
Emissions reduction (lbs/day)	0.48		lb/d	day Reduction:	0.48
Emissions reduction (tons/Life)	1.44				

\$22,116

MSBACT maximum cost effectiveness NOx (\$/ton) \$80,321 INCREMENTAL 1st Qtr 2016

Notes:

- > Calculations were based on equipment cost info provided by the facility and by the manufacturer
- >Annual operating costs calculated using information from the facility and the enginnering permit file
- Maximum allowed cost effectiveness was based on 1st quarter 2016 Marshall & Swift index, during the time of the project.
- >Incremental cost effectiveness uses the difference in cost and emissions between the proposed MSBACT and current BACT
- >In accordance with H&SC 40440(c) the proposed MSBACT must be less than the District's established Incremental cost-effectiveness value

Incremental Gas use and cost analysis for Oakley Inc RTO

Assumptions: Ambient temp = 70 degrees F and the burner needs to reach a temp. of 1500 F (per permit condition)

		60 ppm burner	30 ppm Low NOx burner	
			ppm Low Nox burner	
8.67 mmbtu/hr burner at	amount of air for	30% excess air for 60	(e.g. MAXON	
100% load	stochiometry	ppm burner	KINNEDIZER LE)	
DIVIDE heat input rate by				
1000 scf/btu and by				
1hr/60 min to get cfm of	Multiply by 9.6 to get	air needed for 60	air needed for low nox	
nat gas	cfm of air	ppm burner (cfm)	burner (cfm)	
144.50	1,387.20	1,803.36	2,219.52	
	0	416.16	832.32	Actual excess air (cfm)
		30.00%	60.00%	Excess air Percent

Extra Energy Needed for Lo NOx burner

_	o mon builler			
	energy needed to	energy needed to	energy needed to heat	
	heat above amount of	heat above amount	above amount of air	
	air flow	of air flow	flow	
	cfm x 1.08 x delta T	cfm x 1.08 x delta T	cfm x 1.08 x delta T	
	0	642718	1285435	
	btu/hr needed	btu/hr needed	btu/hr needed	

Subtract 60 ppm unit energy from 30 ppm unit

642718 btu/hr more energy needed
Divide by 1000 to convert to scf/hr

642.72 scf/hr more gas needed

Combusiton efficiency	100.00%	93.57%	87.15%
-----------------------	---------	--------	--------

RTO Startup burner operates 1.5 hr/day, 300 days/yr 289222.88 scf more nat gas a year convert to therms

2892.23 more therms per year

at cost of 40cents/therm

\$1,156.89 more gas cost per year

Incremental Cost Analysis - Thermal Oxidizer (RTO) Oakley Inc.

Additional Electrical cost from using Lo NOx oxidizer

Power Consumption by fan (bhp) = $Q(cfm) \times Pressure(inch WC) / (6356(constant for unit conversions) \times Fan efficiency Coeff)$

- use 0.8 as fan efficiency coefficient
- Pressure values (in Water Column) are taken from burner specification sheets

cfm figures based on incremental gas use analysis worksheet results

Bhp needed for 60 ppm equipment = 1803 cfm x 28 in WC / 6356 x 0.8

Bhp needed for 60 ppm equipment = 9.93 bhp

Bhp needed for 30 ppm equipment = 2219 cfm x 32 in WC / 6356 x 0.8

Bhp needed for 30 ppm equipment = 13.96 bhp

Difference of 13.96 - 9.93 = 4.036 bhp Multiply bhp by .7457 = 3.01 Kw Divide by 0.9 motor efficiency 3.344 kw

usage is 1.5 hours a day and 300 days a year 1504.951 kwh per year incremental electricity cost

Use 20 cents/kWh - 1504.95 kWh* 20 cents/kWh \$300.99 incremental electricity cost of fan use

Incremental Cost-Effectiveness Analysis Oxidizer #2

This cost effectiveness study was performed on a catalytic oxidizer rated at 1.35 mmBtu/hr. The oxidizer is utilized to control smoke and odor from a commercial coffee roaster. After initial startup, the oxidizer runs for only 2-3 minutes during each roast. The average operation is 40 roasts a day.

Health and Safety Code 40440.11 requires an incremental cost-effectiveness study if a more stringent emission limit is proposed over an existing lowest achievable limit. The existing NOx BACT limit of 60 ppm is from Rule 1147. The proposed new BACT limit is 30 pm NOx at 3% O₂. Both limits apply to the burner only. Only new or replacement costs are analyzed as retrofit costs are considered part of a BARCT analysis and not a BACT requirement.

Average cost-effectiveness per SCAQMD BACT Guidelines Part C analyzes the cost of applying BACT to an uncontrolled case. This BACT update is only targeting the secondary emissions from a control device, therefore average cost effectiveness does not apply.

A Low NOx burner equipped oxidizer was implemented in this application to meet the 30 ppm NOx limit. The incremental equipment cost is the cost differential between the 30 ppm NOx unit and one that can only achieve 60 ppm NOx. Installation costs do not differ as the units are identical except for the burner.

Incremental operating cost consists of two components. Additional fuel use is needed from the less efficient Low NOx equipment. Also, incremental electricity cost was examined for the fan to bring extra combustion air for the Low NOx burner. Both were calculated and included as part of the annual operating cost.

The incremental cost/ton of NOx reduction from this case is below the NOx incremental threshold value from 2st quarter of 2017, the time the equipment was being installed.

Groundworks Catalytic Oxidizer Cost Effectiveness Calculations

Use R1147 limit of 60 ppm NOx @ 3% O2 as baseline, and reduction is to 30 ppm

Oxidizer Info

Manufacturer: Western Combustion Engineering

CA70-NG-2083P-60 Model: Rating: 1.35 MM Btu/hr

Operation Schedule: 300 days/yr 1.4 hr/day

20 years Life 4 % Interest rate:

Capital Cost - Incremental

Equipment (cost of 30 ppm oxidizer - cost of 60 ppm oxidizer)	\$9,000
Direct & Indirect Installation	\$0
Total Capital	\$9,000

Annual Operating Cost - Incremental

\$156 (from incremental gas use sheet) Additional fuel use \$17 (from incremental electricity use sheet) Additional electricity use

\$173 Total Annual Operating Cost (Incremental)

PVF	13.590	NOx Reduction Cal	<u>culation</u>
Present Value of Capital Costs	\$9,000		Emission Factor
Present Value of Annual Costs (20 years @ 4%)	\$2,352	-	lb NOx/mmBtu
Total 20-Year Capital Cost	\$11,352	For 60 ppm@3%O2	0.073
		For 30 ppm@3%O2	0.036
			•

Emissions reduction (lbs/day)	0.07
Emissions reduction (tons/Life)	0.21
Cost per ton of NOx reduction	\$54,110

MSBACT maximum cost effectiveness NOx (\$/ton) \$82,665 INCREMENTAL 2nd Qtr 2017

Notes:

- > Calculations were based on equipment cost info provided by the facility and by the manufacturer
- >Annual operating costs calculated using information from the facility and the enginnering permit file
- >Maximum allowed cost effectiveness was based on 2nd quarter 2017 Marshall & Swift index when the equipment was installed
- >Incremental cost effectiveness uses the difference in cost and emissions between the proposed MSBACT and current BACT
- >In accordance with H&SC 40440(c) the proposed MSBACT must be less than the District's established Incremental cost-effectiveness value

Daily heat

1.890

1.890

NOx lb day

0.14

0.07

0.07

input(mmbtu/hr) 1.4 hr @ 100% Load

lb/day Reduction:

Incremental Gas use and cost analysis for Groundworks Coffee Catalytic Oxidizer
Assumptions: Ambient temp = 70 degrees F and the burner needs to reach a temp. of 1400 F (per permit condition)

		60 ppm burner	30 ppm Low NOx burner	
			50% excess air for 30	
1.35 mmbtu/hr burner at	amount of air for	20% excess air for 60	ppm Low Nox burner	
100% load	stochiometry	ppm burner	(MAXON Ovenpak LE)	
DIVIDE heat input rate by				
1000 scf/btu and by				
1hr/60 min to get cfm of	Multiply by 9.6 to get	air needed for 60	air needed for low nox	
nat gas	cfm of air	ppm burner (cfm)	burner (cfm)	
22.50	216.00	259.20	324.00	
	0	43.20	108.00	Actual excess air (cfm)
		20.00%	50.00%	Excess air Percent

Extra Energy Needed for Lo NOx burner

btu/hr needed	btu/hr needed	btu/hr needed	
0	62052	155131	
cfm x 1.08 x delta T	cfm x 1.08 x delta T	cfm x 1.08 x delta T	
air flow	of air flow	flow	
heat above amount of	heat above amount	above amount of air	
energy needed to	energy needed to	energy needed to heat	

Subtract 60 ppm unit energy from 30 ppm unit

93079 btu/hr more energy needed
Divide by 1000 to convert to scf/hr

93.08 scf/hr more gas needed

Combusiton efficiency	100.00%	99 38%	98 45%
combasitor emercine	100.0070	33.3070	50.1570

catox burner operates 1.4 hr/day, 300 days/yr 39093.06 scf more nat gas a year convert to therms

390.93 more therms per year

at cost of 40cents/therm

\$156.37 more gas cost per year

Incremental Cost Analysis - Catalytic Oxidizer - Groundworks Coffee Inc.

Additional Electrical cost from using Lox NOx oxidizer

Power Consumption by fan (bhp) = $Q(cfm) \times Pressure(inch WC) / (6356(constant for unit conversions) \times Fan efficiency Coeff)$

- use 0.8 as fan efficiency coefficient
- Pressure values (in Water Column) are taken from burner specification sheets

cfm figures based on incremental gas use analysis worksheet results

Bhp needed for 60 ppm equipment = 260 cfm x 5 in WC / 6356 x 0.8

Bhp needed for 60 ppm equipment = 0.26 bhp

Bhp needed for 30 ppm equipment = 324 cfm x 7.6 in WC / 6356 x 0.8

Bhp needed for 30 ppm equipment = 0.48 bhp

Difference of 0.48 and 0.26 = 0.229 bhp Multiply bhp by .7457 = 0.17 Kw Divide by 0.9 motor efficiency 0.189 kw

usage is 1.4 hours a day and 300 days a year 79.55228 kwh per year incremental electricity cost

Use 20 cents/kWh - 1504.95 kWh* 20 cents/kWh \$15.91 incremental electricity cost of fan use

ATTACHMENT H

South Coast Air Quality Management District Best Available Control Technology Scientific Review Committee Charter

(Adopted December 2016)(Amended February 1, 2019)

History

In March 1994, the SCAQMD Governing Board initiated a program to update and revise the Best Available Control Technology (BACT) Guidelines. As part of this update, the Board established requirements for public review and comment. The BACT Scientific Review Committee (BACT SRC) was created to assist SCAQMD staff with the policy issues used to develop and implement BACT procedures in the BACT Methodology Report. The BACT SRC was initially convened in July 1994 and participated in a series of public meetings. Due to their contributions to the BACT Methodology Report, the BACT SRC was officially established by the Governing Board as a standing committee on September 8, 1995 to review matters dealing with BACT.

This BACT SRC Charter has been adopted to formalize the BACT SRC membership and its role in the development of the BACT Guidelines.

Mission of the BACT Scientific Review Committee

The BACT SRC shall consist of experts in the field of air quality who shall assist and advise SCAQMD staff to ensure the BACT Guidelines are developed in a public process that is clear, consistent, and based on sound, technical information and data.

Goals

- 1. Contribute to the development of the BACT Guidelines through the public process;
- 2. Provide SCAQMD staff with technical expertise regarding issues pertinent to the proposed BACT updates; and
- 3. Advise SCAQMD staff to create a more certain and predictable BACT determination process.

Objectives

The BACT Scientific Review Committee shall achieve its goals by meeting periodically when BACT Guidelines updates are under development by:

- 1. Providing verbal and written comments to SCAQMD staff regarding proposed BACT Guidelines presented at the BACT SRC meetings;
- 2. Providing technical knowledge and promoting discussion regarding technologies for proposed BACT Guidelines;
- 3. Assisting SCAQMD staff to ensure proposed BACT Guidelines are clear and consistent with local, state, and federal air quality requirements; and
- 4. Advising SCAQMD staff on the development, interpretation and implementation of policies and procedures of the BACT Guidelines.

All objectives shall be achieved by members in a manner consistent with the Ethics Training pursuant to Assembly Bill 1234. In addition, the objectives shall adhere to the requirements of California Health and Safety Code 40440.11.

Membership Qualifications and Composition

The BACT SRC shall consist of up to 19 members currently or previously practicing their profession in the technical or scientific field of air quality. The original BACT SRC consisted of public and private professionals from industry, trade associations, academia, air quality practitioners, other governmental agencies, and SCAQMD Advisory personnel. The members of the BACT SRC shall consist of:

- Four members from regulated industries
- Three members from trade associations
- Five members from other governmental agencies
- Three members from academic institutions
- Four members who are air quality practitioners (industry consultants or environmental groups)

The membership will be recommended to and appointed by the Executive Officer. If a suitable member cannot be found for one of the membership categories, then that spot shall remain vacant. BACT SRC members will serve a two-year term with the possibility of being reappointed for extended two-year terms.

BACT SRC members may propose alternate members within their same organization to serve when the primary member is absent. Alternates must be approved by the Executive Officer.

SCAQMD shall post a list of BACT SRC membership on the SCAQMD website. To expedite the filling of vacancies, SCAQMD staff shall maintain a list of interested parties for the BACT SRC membership.

Operational Guidelines

Agendas for meetings will be prepared, posted and distributed to BACT SRC members and the public in accordance with legal requirements (Brown Act). Teleconference locations shall also be noticed in accordance with legal requirements. When applicable, SCAQMD staff shall provide proposed BACT Guidelines updates to the members seven days prior to the BACT SRC meeting. Proposed BACT Guidelines updates will also be made available to the attending public at the BACT SRC meeting.

During BACT SRC meetings:

 SCAQMD staff shall present proposed BACT determinations and proposed BACT Guidelines amendments, as well as address any continuing or unresolved items from the previous BACT SRC meeting,

- The BACT SRC members may comment on the proposed design, process and procedures
 of the BACT Guidelines, as well as contribute knowledge and experience to discuss related
 technical issues;
- The public will also have an opportunity to provide comments regarding the proposed BACT determinations and Guidelines updates; however,
- Past permitting decisions shall not be discussed at the BACT SRC meeting unless it is pertinent to the current proposal.

The BACT SRC meeting shall commence a 30-day public comment period for the proposed BACT Guidelines during which written comments may be submitted to SCAQMD BACT staff.

All BACT SRC members and alternates shall be required to maintain current AB 1234 biennial Ethics Training.

Reporting

The Governing Board's Stationary Source Committee shall be the BACT and BACT SRC Committee Board's liaison. SCAQMD BACT staff shall provide a report to the Stationary Source Committee once proposed amendments to the BACT Guidelines have been presented at a subsequent to each public BACT SRC meeting initiating a 30-day comment period followed by a final public BACT SRC meeting.

Brown Act

As a standing committee created by the SCAQMD Governing Board, the BACT Scientific Review Committee meetings and its membership are subject to the requirements of the Brown Act. All SCAQMD public meeting and notification protocols will be followed.

ATTACHMENT I

21865 Copley Drive, Diamond Bar, CA 91765-4178 QMD (909) 396-2000 · www.agmd.gov

NOTICE OF EXEMPTION FROM THE CALIFORNIA ENVIRONMENTAL **SUBJECT:**

QUALITY ACT (CEQA)

PROJECT TITLE: PROPOSED AMENDMENTS TO THE **BEST AVAILABLE** CONTROL

TECHNOLOGY (BACT) GUIDELINES AND CHARTER FOR BACT SCIENTIFIC

REVIEW COMMITTEE

Pursuant to the California Environmental Quality Act (CEQA) Guidelines, the South Coast Air Quality Management District (SCAQMD) is the Lead Agency and has prepared a Notice of Exemption for the project identified above.

SCAOMD staff has reviewed the proposed amendments to the Best Available Control Technologies (BACT) Guidelines and the Charter for the BACT Scientific Review Committee, pursuant to: 1) CEQA Guidelines Section 15002(k) -General Concepts, the three-step process for deciding which document to prepare for a project subject to CEQA; and 2) CEQA Guidelines Section 15061 – Review for Exemption, procedures for determining if a project is exempt from CEOA.

Periodically, SCAQMD staff proposes amendments to the BACT Guidelines to add new or update determinations and/or policy. These actions are to add new and amended listings to Part B: Lowest Achievable Emission Rate (LAER) Determinations for Major Polluting Facilities, Part D: BACT Determinations for Non-Major Polluting Facilities and update Parts A and C, Policy for Major and Non-Major Polluting Facilities, respectively. Additionally, these actions are to amend the BACT Guidelines to reflect current SCAOMD practices in permitting and approve amendments to the Charter for the BACT Scientific Review Committee.

Since the proposed project is comprised of updates that reflect current practices of LAER/BACT determinations in the BACT Guidelines and the most current achieved-in-practice air pollution control equipment and/or processes, and make administrative amendments to the Charter for the BACT Scientific Review Committee, SCAQMD staff has determined that it can be seen with certainty that there is no possibility that the proposed project may have a significant adverse effect on the environment. Therefore, the project is considered to be exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Activities Covered by General Rule. In addition, the proposed amendments are categorically exempt because they are considered actions to protect or enhance the environment pursuant to CEQA Guidelines Section 15308 - Actions by Regulatory Agencies for Protection of the Environment. Further, SCAQMD staff has determined that there is no substantial evidence indicating that any of the exceptions to the categorical exemptions apply to the proposed project pursuant to CEQA Guidelines Section 15300.2 – Exceptions. Therefore, the proposed project is exempt from CEOA. A Notice of Exemption has been prepared pursuant to CEOA Guidelines Section 15062 - Notice of Exemption. If the project is approved, the Notice of Exemption will be filed with the county clerks of Los Angeles, Orange, Riverside, and San Bernardino counties.

Any questions regarding this Notice of Exemption should be sent to Ryan Bañuelos (c/o Planning, Rule Development and Area Sources) at the above address. Mr. Bañuelos can also be reached at (909) 396-3479. Mr. Alfonso Baez is also available at (909) 396-2516 to answer any questions regarding the proposed amended guidelines.

Date: January 4, 2019 Signature:

> Barbara Radlein Program Supervisor, CEQA Section

Planning, Rules, and Area Sources

Reference: California Code of Regulations, Title 14

NOTICE OF EXEMPTION FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

To: County Clerks From: South Coast Air Quality Management District

Counties of Los Angeles, Orange, 21865 Copley Drive Riverside, and San Bernardino Diamond Bar, CA 91765

Project Title: Proposed Amendments to the Best Available Control Technology (BACT) Guidelines and Charter for the BACT Scientific Review Committee

Project Location: The SCAQMD has jurisdiction over the four-county South Coast Air Basin (all of 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). The SCAQMD's jurisdiction includes the federal nonattainment area known as the Coachella Valley Planning Area, which is a sub-region of Riverside County and the SSAB.

Description of Nature, Purpose, and Beneficiaries of Project: SCAOMD staff is proposing the following amendments to the BACT Guidelines to add new or update determinations and/or policy that reflect current SCAQMD practices in permitting and the most current achieved-in-practice air pollution control equipment and/or processes: 1) revise the Overview to add a reference to an Engineering and Permitting Division policy for the prevention of circumvention of BACT requirements for emissions increases greater than or equal to one pound per day; 2) revise Part A – Policy and Procedures for Major Polluting Facilities to add a reference to SCAQMD's Air Quality-Related Energy policy established in September 2011; and 3) revise Part B, Section I - SCAQMD Lowest Achievable Emissions Rate (LAER)/BACT Determinations for Major Polluting Facilities, to add: a) External Floating Roof Tank-Dome Installation, and b) Soil Vapor Extraction –Thermal Oxidation at 30 parts per million (ppm) oxides of nitrogen (NOx). Updates to the following major source categories are also proposed to be added to Part B, Section I - SCAQMD LAER/BACT Determinations: 1) Gas Turbines -Combined Cycle, natural gas-fired rated at 56.1 megawatt (MW) with selective catalytic reduction (SCR) and a permit limit of 2 ppm NOx, 2 ppm carbon monoxide (CO), 2 ppm volatile organic compounds (VOC) and 5 ppm ammonia slip; 2) Gas Turbines – Simple Cycle, natural gas-fired rated at 100.1 MW with SCR and a permit limit of 2.5 ppm NOx, 4 ppm CO, 2 ppm VOC and 5 ppm ammonia slip; 3) Gas Turbines – Simple Cycle, landfill gas-fired rated at 4.9 MW and a permit limit of 12.5 ppm NOx, 21.5 ppm CO and 10.5 ppm VOC; 4) Gas Turbines – Combined Cycle, digester gas-fired rated at 11.35 MW and a permit limit of 18.8 ppm NOx, 60 ppm CO, 25 ppm VOC and 10 ppm ammonia slip; 5) Gas Turbines – Simple Cycle, produced gas-fired rated at 5.6 MW and a permit limit of 5 ppm NOx, 6 ppm CO, 2 ppm VOC and 5 ppm ammonia slip; 6) Internal Combustion (I.C.) Engine – Portable, Compression Ignition rated at 123.4 horsepower (hp) with oxidation catalyst and SCR at Tier 4 Final emission standards; and 7) I.C. Engine – Emergency, Compression Ignition rated at 183 hp at Tier 3 emission standards. An update to Part B, Section II - Other LAER/BACT Determinations, is proposed for the category of Gas Turbine - Combined Cycle, natural gas-fire rated at 299.6 MW to include a listing from a permit issued by the Virginia State Air Pollution Control Board. Outdated LAER determinations are proposed for deletion from Part B, Section I - SCAQMD LAER/BACT, and Section II -Other LAER/BACT Determinations, to maintain current and up-to-date listings that reflect the latest permitted achieved in practice technologies. Part C – Policy and Procedures for Non-Major Polluting Facilities, is proposed to be revised to include a reference to SCAQMD's Air Quality-Related Energy policy established in September 2011. Also, the Maximum Cost-Effectiveness Values in Table 5 of Part C are proposed to be revised in order establish consistency with the third quarter 2018 Marshall and Swift equipment index. Updates to Part D – BACT Guidelines for Non-Major Polluting Facilities are proposed for the following categories for consistency with SCAQMD Rule 1147 - NOx Reductions from Miscellaneous Sources: 1) Boiler; 2) Fryer; 3) I.C. Emergency, Stationary, Emergency; 4) Process Heater – Non-Refinery; 5) Printing (Graphic Arts); 6) Spray Booth; 7) Aluminum Melting Furnace; 8) Brass Melting Furnace; 9) Burnoff Furnace; 10) Calciner; 11) Coffee Roasting; 12) Crematory; 13) Dryer-Kiln; 14) Dryer or Oven Tenter Frame/Carpet; 15) Fish Reduction Cooker/Dryer; 16) Fryer - Deep Fat, 17) Fryer - Non-Integrated; 18) Lead Melting Furnace; 19) Soil Vapor Extraction (Remediation) Thermal Oxidation and Zinc Melting Furnace. The following minor source categories are proposed to be added to Part D: 1) Composting subcategory: Greenwaste Composting, and 2) Thermal/Catalytic Oxidizer-Natural Gas-Fired with a subcategory of "All." Lastly, amendments are proposed to update the BACT Scientific Review Committee Charter to clarify language under the Reporting section.

Public Agency Approving Project:

Agency Carrying Out Project:

South Coast Air Quality Management District South Coast Air Quality Management District

Exempt Status:

CEQA Guidelines Section 15061(b)(3) – Activities Covered by General Rule

CEQA Guidelines Section 15308 – Actions By Regulatory Agencies For Protection Of The Environment

Reasons why project is exempt: SCAQMD staff has reviewed the proposed project pursuant to: 1) CEQA Guidelines Section 15002(k) - General Concepts, the three-step process for deciding which document to prepare for a project subject to CEQA; and 2) CEQA Guidelines Section 15061 - Review for Exemption, procedures for determining if a project is exempt from CEQA. Since the proposed project is comprised of updates that reflect current practices of LAER/BACT determinations in the BACT Guidelines and the most current achieved-in-practice air pollution control equipment and/or processes, and make administrative amendments to the Charter for the BACT Scientific Review Committee, SCAQMD staff has determined that it can be seen with certainty that there is no possibility that the proposed project may have a significant adverse effect on the environment. Therefore, the project is considered to be exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Activities Covered by General Rule. Furthermore, the proposed amendments are categorically exempt because they are considered actions to protect or enhance the environment pursuant to CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment. Further, SCAQMD staff has determined that there is no substantial evidence indicating that any of the exceptions to the categorical exemptions apply to the proposed project pursuant to CEQA Guidelines Section 15300.2 – Exceptions. Therefore, the proposed project is exempt from CEQA.

Date When Project Will Be Considered for Approval (subject to change):

SCAQMD Governing Board Hearing: February 1, 2019; SCAQMD Headquarters - Auditorium

CEQA Contact Person: Mr. Ryan Bañuelos	Phone Number: (909) 396-3479	Email: rbanuelos@aqmd.gov	Fax: (909) 396-3982
Rule Contact Person: Mr. Alfonso Baez	Phone Number: (909) 396-2516	Email: abaez@aqmd.gov	Fax: (909) 396-3253

Date Received for Filing: Signature: (Signed Upon Board Approval)

Barbara Radlein

Program Supervisor, CEQA Section

Planning, Rule Development & Area Sources

ATTACHMENT J

COMMENTS AND RESPONSES TO PROPOSED AMENDMENTS OF THE BACT GUIDELINES

Public meetings were held on April 24, October 3, and December 11, 2018 with the BACT Scientific Review Committee to present and discuss the proposed amendments to the BACT Guidelines. The following comments, questions, and staff responses, are from letters and e-mails received during the 30-day comment period starting October 3, 2018.

- A. Comment Letter A Gary Rubenstein, Consultant/ BACT SRC member
- B. Comment Letter B Wayne Miller, Associate Director CE-CERT/BACT SRC member
- C. Comment Letter C Rita Loof, RadTech/ BACT SRC member

Tom Lee

From: Gary Rubenstein <gary@foulweatherconsulting.com>

Sent: Saturday, September 29, 2018 3:19 AM

To: Tom Lee; Al Baez
Cc: Gary Rubenstein

Subject: RE: BACT guidelines proposed updates

My only comment on the additional documents are as follows:



Printing – Graphic Arts: did you really mean to add the new language to the PM10 column? While I understand that some of the VOCs will also be collected as PM10, I believe it would be extremely difficult to demonstrate (in practice) compliance with the requirement for a 95% PM10 control efficiency from an afterburner. If you mean this to be a design requirement for VOCs (as a surrogate for PM10), I think you could state the requirement as follows: "afterburner designed to achieve a 95% control efficiency for VOC".

Thanks, and please let me know if you have any questions.

Gary

From: Gary Rubenstein

Sent: Friday, September 28, 2018 17:40

To: Tom Lee <TLee@aqmd.gov>; Al Baez <abaez@aqmd.gov> **Cc:** Gary Rubenstein <gary@foulweatherconsulting.com>

Subject: RE: BACT guidelines proposed updates

Tom – my comments are very minor:



Phillips storage tank – Part 4A: the limits shown in Part 4D are throughput limits, not BACT limits. I'm not sure it's appropriate for those to be shown in a BACT determination.



Tesoro SVE unit – Part 6H – BACT is being established for NOx (see Part 4A); "daily to monthly monitoring" of VOC is not relevant to the NOx BACT determination.



Signal Hill Petroleum - Does the facility use any gas cleaning for the turbine fuel? If so, that should be listed in the determination in Section I.L.

I didn't have any other comments on the initial set of documents. I'll look through the remainder over the weekend and get back to you with any further comments I have.

Response to Comment Letter A (Gary Rubenstein)

Response A1:

Staff agrees that 95% PM_{10} control efficiency is difficult to demonstrate, since the reason for the afterburner requirement for PM control is to mitigate visible emissions associated with these types of presses. Staff has removed the 95% control efficiency requirement but retention time of > 0.3 sec and temperature of > 1400 F will remain.

Response A2:

Staff concurs with this comment and has removed the throughput limits from the determination.

Response A3:

Staff concurs with this comment and has removed the VOC monitoring reference in Section 6H.

Response A4:

The facility does not have a gas cleanup system for the produced gas fueling the gas turbine. However, any excess gas not used by the turbine passes through a cleanup system before the gas is sold. Since this gas cleanup system is not part of the gas turbine permit, the information will not be included in the BACT determination.

Tom Lee

From: Wayne Miller

Sent: Friday, October 5, 2018 2:19 AM

To: Tom Lee; Al Baez

Subject: Re: NOTICE of BACT Scientific Review Committee meeting scheduled for Wednesday, October 3, 2018, 10am - 12noon at SCAQMD

Good meeting ...thanks for sending the link as i read and then printed off each of the cases ..

was concerned about sulfur for several cases and streaming sulfuric acid from the cat oxidation of ?? that we talked about ... wayne

Wayne Miller, PhD Adjunct Professor Chem & Enviro Engr & Associate Director CE-CERT

BACT Staff edits: Mr. Miller referred in his email to a conversation during the BACT Scientific Review Committee meeting of 10/3/2018.

During the meeting he addressed concerns about the sulfur requirements for:

Comment B1: the digester gas-fired turbine at a municipal sewage plant

Comment B2: the produced gas-fired turbine at an oil and gas facility

Response to Comment Letter B (Wayne Miller)

Response B1:

For the digester gas-fired turbine, the sulfur requirement is 40 ppm fuel sulfur compounds as H₂S per SCAQMD Rule 431.1. The equipment has no additional control for sulfur other than the digester gas clean-up system. The source test showed compliance with this limit. Since this is not considered to be a BACT limit, it has not been included in the BACT determination.

Response B2:

For the produced gas-fired turbine, the only gas cleanup is moisture removal of the produced gas before it's sent to the turbine. There is no further control for SOx. The equipment needs to comply with the limit of 150 ppm SOx per 40CFR60 Subpart GG. Source test shows compliance with the limit. This is not considered a BACT limit and therefore it has not been included in the BACT determination.



November 2, 2018

Mr. Alfonso Baez South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, California 91765

Re: Public comments on Proposed BACT Guidelines

RadTech appreciates the opportunity to comment on the proposed Best Available Control Technology Guidelines. Our technology is pollution prevention technology and we appreciate the District's efforts to recognize it as an alternative to add-on control devices in the guidelines. We incorporate by reference our previous comments from 2016 and 2017, some of which are reiterated as follows:

Fiberglass Operations, Application-- Hand and Spray Lay up

On 9/27/06 BAAQMD determined (determination previously provided) that material with a monomer content of no greater than 34 percent by weight, was achieved in practice. We urge the district to update its guidelines based on the BAAQMD determination and include UV/EB technology as an equivalent method to achieve the standard.

Spray Booth, other types

On 12/16/03 BAAQMD determined (determination previously provided) that emissions controlled to overall capture/ destruction efficiency >90% was cost effective for Miscellaneous Metal Parts and Products Spray Booths with uncontrolled emissions of greater than or equal to 50 lbs/day. The determination notes that the typical technology is low VOC coatings. Furthermore, for operations with uncontrolled emissions of 50 lbs/day or greater, BAAQMD determined that 90% control was achieved in practice. We urge the district to update its guidelines to reflect the BAAQMD determinations and include UV/EB technology as an equivalent strategy to achieve 90% emissions control for the category of "Spray Booth, other types".

Spray Booth, Wood

There are current operations in the SCAQMD using UV technology that have yet to be reflected in the BACT Guidelines a couple of examples are listed below:

C1

C2

C3 ·

Excel Cabinets, Inc.	Application # 450588	11/26/05
Head West Inc.	F80114	01/12/06

Lithographic Printing



There are various UV lithographic printing operations in the SCAQMD, some of which are summarized below. We urge the district to reflect this information by including them in the guidelines.

Company Name	AQMD	
	Permit #	
Holiday Printing & Lithograph Inc.	F32751	07/25/00
Westminster Press	F15320	08/11/98
K & D Graphics, A California Corp.	F24307	02/09/00
Jaco Printing Corp, Business Forms Press	D53533	05/21/92
Jaco Printing Corp, Business Forms Press	F15651	11/24/98
Jaco Printing Corp, Business Forms Press	F15651	11/24/98
Royal Paper Box Co.	D92649	08/10/95
Creative Mailings Inc.	F31957	06/21/00

Additionally, we believe the following categories should be considered as UV/EB technology is currently available for these applications:

- C5 -
- -- Metal Parts and Products
- --Inkjet Printing
- --Semiconductor manufacturing
- -- Motor Vehicle coating, including repair
- --Flexible and Rigid disk manufacturing
- -- On site floor finishing
- -- Plastic coatings
- -- Paper/paperboard coatings
- --3d Printing
- --Adhesives

We look forward to a continued collaboration with the district. Please let me know of any additional assistance our association can provide.

Sincerely

Rita M. Loof Director, Environmental Affairs Cc: SCAQMD Board members, Mr. Wayne Nastri



Response to Comment Letter C (Rita Loof)

Response C1:

Staff appreciates brining this BACT/LAER determination to our attention. BACT staff has been in communication with BAAQMD and SCAQMD staff regarding this BACT determination for Polyester Resin Operation- Hand and Spray Layup on how the monomer content limits in BAAQMD's Reg. 8, Rule 50 compare with SCAQMD's Rule 1162. BAAQMD staff indicated that this BACT determination was based on a minor source achieved in practice however, a recent determination found that the 34% monomer content was not appropriate in all cases (e.g. fire-retardant materials). In addition, BAAQMD staff believes that SCAQMD's BACT guidelines for resin manufacturing are more stringent. Staff will continue to investigate the use of UV/EB technology for this type of application which may lead to the establishment of a LAER determination or MSBACT.

Response C2:

Staff appreciates brining this BACT/LAER determination to our attention. SCAQMD's BACT Guidelines, Part B for major sources currently lists several LAER determinations for Spray Booth—Coating of Metal parts and products with an overall capture/destruction efficiency >90%. For potential minor source (MS)BACT determination applicability staff has been in communication with BAAQMD and SCAQMD staff regarding this BACT determination. Staff is also investigating the use of UV/EB technology as a potential equivalent strategy to achieve 90% emissions control for the MSBACT category of "Spray Booth, other types".

Response C3:

These two achieved in practice permitted operations are from minor source facilities subject to Part D of the BACT Guidelines for MSBACT. Although only the Head West, Inc. permitted coating system includes a permit condition to only use UV coatings, staff will conduct research on both achieved in practice operations to determine potential for establishing MSBACT.

Response C4:

All these achieved in practice lithographic printing operations are from minor source facilities subject to Part D of the BACT Guidelines for MSBACT. These UV lithographic printing operations are in compliance with the current applicable MSBACT which was amended in 2/2/18 to allow the use of UV-curable Inks as a form of MSBACT compliance.

Response C5:

Staff will conduct research regarding the availability of UV/EB technology for these categories to identify achieved in practice permitted operations. The research will include the availability of cost data for cost-effectiveness analysis to determine compliance with state law in establishing MSBACT.





Amend BACT Guidelines and Charter for BACT Scientific Review Committee

Governing Board Meeting February 1, 2019

Background / Public Process

- BACT Guidelines updated and approved at February 2018 Board meeting
- Held three public BACT SRC meetings, April 24, October 3 and December 11, 2018, with one 30-day comment period
- Received 3 comment letters with total of 10 comments

Proposed Updates to Overview

- Referencing Engineering & Permitting policy preventing circumvention of BACT requirement for emission increases ≥ 1 lb/day.
- Cumulative emission increases that equal or exceed 1 lb/day (nonattainment air pollutant, O₃ depleting compound or ammonia) within a 5-year period will be subject to BACT.



Proposed Updates to Parts A and C – Policy for Major & Minor Facilities

- Include by reference SCAQMD air qualityrelated energy policy
- Updated maximum cost-effectiveness values in Table 5 (M&S Index 3rd quarter 2018)

Proposed Deletions of Outdated Part B Sections I & II LAER Determinations

- Aluminum melting
- Boiler
- Oven
- Dryer, Tenter Frame
- Gas Turbine
- Heater

- I.C. Engine (Landfill, Digester Gas, Emergency, Non-
 - **Emergency & Portable**
- Lithographic Printer
- Spray Booth



New Proposed Part B, Section I, SCAQMD LAER/BACT Determination



External Floating Roof Storage Tank



Soil Vapor Extraction

- Installation of Dome
- 14,000 BBL, 79,000 BBL,165,252 BBL and 615,000 BBL

- Achieved in practice Thermal Oxidation 30ppm NOx
- Applies to burner emissions only
- Gasoline Storage facility

Proposed Part B, Section I, SCAQMD LAER/BACT Determination Update



Gas Turbine Combined Cycle

2 ppm NOx/ 2 ppm CO/ 2 ppm VOC/ 5 ppm NH₃ excludes start-up & shutdown



Gas Turbine Simple Cycle

2.5 ppm NOx, 2 ppm VOC, 4 ppm CO, 5 ppm NH₃ excludes start-up & shutdown



Gas TurbineLandfill Gas

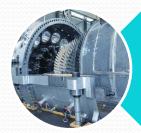
12.5 ppm NOx, 10.5 ppm VOC, 21.5 ppm CO excludes start-up & shutdown



Gas Turbine Digester Gas

18.8 ppm NOx, 25 ppm VOC,
 60 ppm CO, 10 ppm NH₃
 excludes start-up & shutdown

Proposed Part B, Section I, SCAQMD LAER/BACT Determination Update



Gas Turbine Produced Gas

5 ppm NOx, 2 ppm VOC, 6 ppm
 CO, 5 ppm NH₃ excludes start-up
 & shutdown



I.C. Engine Portable

- Tier 4 emission standards compliant
- > 123.4 BHP



I.C. Engine Emergency Fire Pump

- Tier 3 emission standards compliant
- > 183 BHP

New Proposed Part B, Section II, Other LAER/BACT Determination



Gas Turbine Combined Cycle

- Virginia State APCB
- 2ppm NOx 1 hr. avg. / 1.5ppm CO 1 hr. avg. w/o duct burner
- Three natural gas-fired gas turbines generators (3,227MM Btu/hr ea) with duct-fired heat recovery steam generator (500MM Btu/hr) providing steam to common steam turbine generator

New Proposed Part D, Minor Source, BACT Determinations



Thermal Oxidizer – various applications

- 30 ppm NOx @ 3% O2 for burner only excludes Tank Degassing/SVE/Vapor Incinerators
- Cost effectiveness studies



Fryer – Deep Fat

Added sub-category; Non-Integrated
 Direct and In-Direct Oil Heater (60
 ppm NOx) compliance with Rule 1147



Composting

 Adding new subcategory of Greenwaste Composting compliance with Rule 1133.3



Boiler

≥20 MM Btu/hr and <75 MM Btu/hr, (Group 2) -Compliance with Rule 1146 for NOx (5ppm)

Proposed Part D, Minor Source, BACT Determination Update correction



Process Heater Non-Refinery

Subcategory: Natural Gas or Propane Fired ≥20 MM Btu/hr - correction of Rule 1146.1 applicability



Printing (Graphic Arts)

Lithographic or Offset, Heatset and Non-Heatset - venting to afterburner correction



Spray Booth

<660 corrected to <667 lbs/month</p>



I.C. Engine, Stat., Emer. CI Other, 100≤HP<175

PM correction to 0.15 grams/bhp-hr/0.20 grams/kW-hr consistent with CARB ATCM and Rule 1470

New Proposed Part D, Minor Source, BACT Determination Update

COMPLIANCE WITH RULE 1147

- Aluminum melting Furnace
- Brass Melting Furnace
- Burnoff Furnace
- Calciner
- Coffee Roasting
- Crematory
- Dryer-Kiln
- Dryer or Oven tenter frame/carpet

- Fish Reduction cooker/dryer
- Fryer- Deep Fat Non-Integrated
- Lead Melting Furnace
- Soil Vapor Extraction (remediation), thermal oxidation
- Zinc Melting Furnace

30 ppm/60 ppm NOx limit depending on operating temperature

Proposed Update/Clarification to BACT SRC Charter

Once proposed amendments to the BACT Guidelines have been presented at a public BACT SRC meeting there is a 30-day comment period followed by a final public BACT SRC meeting.

Making BACT Guidelines User Friendly

New Equipment Search Links added to BACT Guidelines webpage - <u>Search by Publish Date or</u> <u>Equipment/Process Category or Subcategory</u>

Key Issues

- Transparency of BACT update process
 - > 3 BACT SRC meetings, 30-day public comment periods
- Develop more specific BACT determinations
 - ➤ Staff will review future major and minor LAER/BACT determinations for case specific applicability based on operation and cost
- Permitting policy
 - Outside scope of BACT Guidelines policy

Recommended Actions

- Determine that the proposed amendments to the BACT Guidelines and Charter for the BACT Scientific Review Committee are exempt from CEQA
- Approve Proposed Amendments to the BACT Guidelines
- Approve Proposed Amendments to BACT SRC Charter