South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765
(909) 396-2000, www.aqmd.gov

STATIONARY SOURCE COMMITTEE MEETING

Committee Members
Council Member Ben Benoit, Chair
Senator Vanessa Delgado (Ret.)
Supervisor Janice Hahn
Mayor Judith Mitchell
Supervisor V. Manuel Perez
Supervisor Janice Rutherford

July 26, 2019 ♦ 10:30 a.m. ♦ Conference Room CC8
21865 Copley Dr., Diamond Bar, CA 91765

TELECONFERENCE LOCATIONS

302 West 5th Street
Suite 200
San Pedro, CA 90731

Rolling Hills Estates
City Hall
4045 Palos Verdes Drive North
Rolling Hills Estates, CA 90274

(The public may attend at any location listed above.)

Call-in for listening purposes only is available by dialing:
Toll Free: 866-244-8528
Listen Only Passcode: 5821432
In addition, a webcast is available for viewing and listening at:
http://www.aqmd.gov/home/library/webcasts

AGENDA

Members of the public may address this body concerning any agenda item before or during consideration of that item (Gov't. Code Section 54854.3(a)). Please provide a Request to Address the Committee card to the Committee Secretary if you wish to address the Committee on an agenda item. If no cards are available, please notify South Coast AQMD staff or a Board Member of your desire to speak. All agendas for regular meetings are posted at South Coast AQMD, 21865 Copley Drive, Diamond Bar, California, at least 72 hours in advance of the regular meeting. Speakers may be limited to three (3) minutes each.

CALL TO ORDER

INFORMATION ITEMS (Items 1-6)

1. **Community Emissions Reduction Plans for AB 617 Year 1 Communities** **(10 mins.)** Philip Fine, Deputy Executive Officer

(No Motion Required)

Assembly Bill (AB) 617 requires air districts to prepare Community Emissions Reduction Plans (CERPs) for the Year 1 communities. Community partnership and engagement have been critical throughout the development of the CERPs. The CERPs provide a blueprint for achieving air pollution emission and exposure reductions within each community, and are tailored to address the community's air quality priorities. The CERPs include actions to reduce emissions and/or exposures, an implementation schedule, an enforcement plan, a description of the process and outreach conducted to develop the CERPs.

(Written Material Attached)

2. **Recommend Communities for Year 2 Implementation for Assembly Bill 617** **(10 mins.)** Philip Fine

(No Motion Required)

Assembly Bill (AB) 617 requires CARB, in consultation with air districts, to select communities for community air monitoring and/or preparation of community emission reduction programs. AB 617 specifies that the highest priority areas shall be disadvantaged communities with a high cumulative exposure burden for criteria pollutants and/or toxic air contaminants. Staff built on the technical evaluation and public process from the prior year, and has conducted additional public outreach and gathered community input to help prioritize communities for Year 2 of this program.

(Written Material Attached)

3. **Summary of Proposed Amended Rule 1407 – Control of Emissions of Arsenic, Cadmium, and Nickel from Non-Chromium Metal Melting Operations** **(10 mins.)** Susan Nakamura, Assistant Deputy Executive Officer

(No Motion Required)

Proposed Amended Rule 1407 applies to non-chromium metal melting operations and revises emission standards. In addition, the proposed amended rule enhances monitoring provisions for pollution control equipment, adds building enclosure provisions to limit fugitive emissions, and updates housekeeping, source testing, and monitoring, recordkeeping, and reporting requirements. Staff will provide a summary of Proposed Amended Rule 1407 and any key issues.

(Written Material Attached)

4. **Update on Proposed Amended Rules 1110.2 – Emissions from Gaseous-and Liquid-Fueled Engines, and 1100 – Implementation Schedule for NOx Facilities** **(10 mins.)** Susan Nakamura

(No Motion Required)

Proposed Amended Rule 1110.2 applies to internal combustion engines greater than 50 brake horsepower and would remove exemptions allowed under the RECLAIM program for NOx. Engines at existing RECLAIM facilities would be required to comply with current Rule 1110.2 NOx emission limits, per the compliance schedule established in Proposed Amended Rule 1100. Staff will provide a briefing on both proposed amended rules and any key issues.

(Written Material Attached)

5. **Receive and File 2018 Annual Report on AB 2588 Program and Approve Updates to Facility Prioritization Procedure** **(10 mins.)** Sarah Rees, Assistant Deputy Executive Officer

(No Motion Required)

The Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) requires local air pollution control districts to prepare an annual report. The report provides the public with information regarding South Coast AQMD programs to reduce emissions of toxic air contaminants. This annual update describes the various activities in 2018 to satisfy the requirements of AB 2588 and Rule 1402, such as quadrennial emissions reporting and prioritization, the preparation and review of Air Toxics Inventory Reports, Health Risk Assessments, Voluntary Risk Reduction Plans, Risk Reduction Plans, and additional South Coast AQMD activities related to air toxics. Staff is also proposing revisions to the Facility Prioritization Procedure to correct minor typographical errors.

(Written Material Attached)

6. **Status Report on Regulation XIII – New Source Review** **(10 mins.)** Laki Tisopulos Deputy Executive Officer

(No Motion Required)

This report presents the federal Final Determination of Equivalency For January 2017 through December 2017. It provides information regarding the status of Regulation XIII – New Source Review, in meeting federal NSR requirements and shows that South Coast AQMD's NSR program is in compliance with applicable federal requirements from January 2017 through December 2017.

(Written Material Attached)

WRITTEN REPORTS (Items 7-10)

7. **Home Rule Advisory Group – Bi-Monthly Report for May 2019** Philip Fine
(No Motion Required)
This report summarizes the topics discussed at the May 2019 Home Rule Advisory Group Meeting and also includes the second quarter attendance record for 2019.
(Written Material Attached)

8. **Monthly Update of Staff's Work with U.S. EPA on New Source Review Issues for the RECLAIM Transition *(No Motion Required)*** Philip Fine
This is a summary of staff's work with U.S. EPA over the past month to resolve New Source Review issues for the transition of RECLAIM facilities to a command and control regulatory program.
(Written Material Attached)

9. **Notice of Violation Penalty Summary *(No Motion Required)*** Bayron Gilchrist, General Counsel
This report provides the total penalties settled in June of 2019 which includes Civil, Supplemental Environmental Projects, Mutual Settlement Assessment Penalty Program, Hearing Board and Miscellaneous.
(Written Material Attached)

10. **Twelve-month and Three-month Rolling Price of 2018 and 2019 Compliance Years RTCs *(No Motion Required)*** Laki Tisopulos
The attached quarterly report summarizes the twelve-month and three-month rolling average prices of NOx and SOx RTCs.
Written Material Attached

OTHER MATTERS

11. **Other Business**
Any member of the Committee, or its staff, on his or her own initiative or in response to questions posed by the public, may ask a question for clarification, may make a brief announcement or report on his or her own activities, provide a reference to staff regarding factual information, request staff to report back at a subsequent meeting concerning any matter, or may take action to direct staff to place a matter of business on a future agenda. (Gov't. Code Section 54954.2)

12. **Public Comment Period**
At the end of the regular meeting agenda, an opportunity is also provided for the public to speak on any subject within the Committee's authority that is not on the agenda. Speakers may be limited to three (3) minutes each.

13. **Next Meeting Date:** September 20, 2019 at 10:30 a.m.

ADJOURNMENT

Americans with Disabilities Act

The agenda and documents in the agenda packet will be made available, upon request, in appropriate alternative formats to assist persons with a disability (Gov't. Code Section 54954.2(a)). Disability-related accommodations will also be made available to allow participation in the Stationary Source Committee meeting. Any accommodations must be requested as soon as practicable. Requests will be accommodated to the extent feasible. Please contact Catherine Rodriguez at 909.396-2735 from 7:00 a.m. to 5:30 p.m., Tuesday through Friday, or send the request to Crodriguez@aqmd.gov.

Document Availability

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

Community Emissions Reduction Plans for AB 617 Year 1 Communities

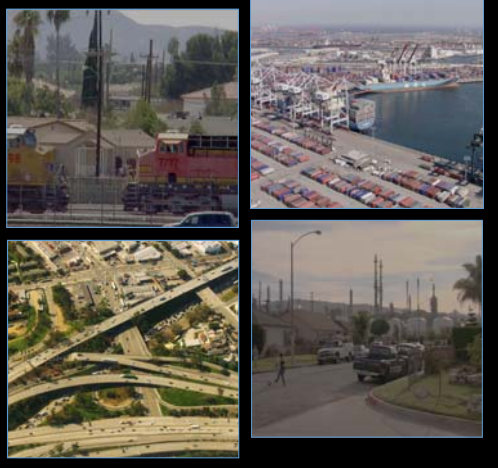
STATIONARY SOURCE COMMITTEE

JULY 26, 2019

AB 617 Year 1 Communities

September 2018, CARB approved:

- Wilmington, Carson, West Long Beach
- San Bernardino, Muscoy
- East Los Angeles, Boyle Heights, West Commerce



Community Driven Process

Community Steering Committees (CSCs)

Community Steering Committee (CSC)

- CSC for each community
- Since October 2018
  - 24 CSC meetings
  - Over 20 individual meetings
- 1 community bus tour
- 3 Technical Advisory Group meetings
- 6 community workshops

CSC members include:

- Active residents and community leaders
- Local business owners or workers, labor unions
- Community organizations
- Local agencies
- Schools
- Hospitals
- Elected officials

Public Process for Community Emissions Reduction Plans

Oct. to Dec. 2018

- Community reported air quality concerns
- Community boundary discussion

Jan. to Mar. 2018

- Prioritization of community air quality concerns
- Development of strategies and proposed actions

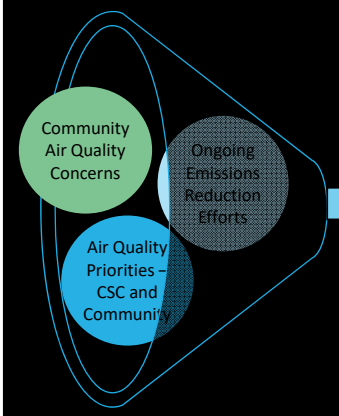
Apr. to Jun. 2019

- Completion of Draft Community Air Monitoring Plan
- Release of Discussion Draft CERP for public input

Jul. 2019

- Begin some air monitoring activities
- Revisions to Draft CERP based on public input

Overview of Community Emissions Reduction Plans (CERPs)

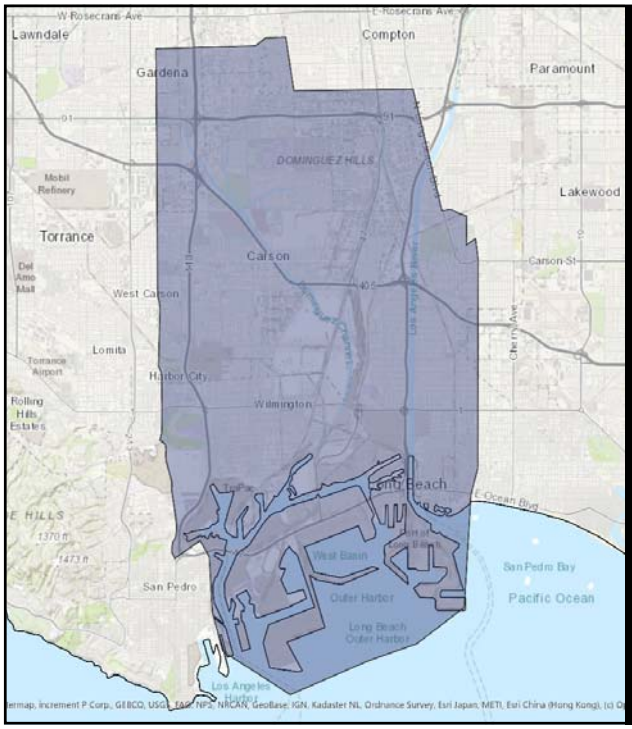


Community Emissions Reduction Plans

- 45 actions for all Year 1 communities
- Actions reduce emissions from priority sources
- Each action has a set of implementation strategies
- Plans are adaptable and flexible to reflect new information and community priorities

Implementation Strategies

- **Enforcement**
- **Monitoring (CAMP) elements**
- **Public outreach**
- **Incentives**
- **Rules & Regulations**



Wilmington, Carson, West Long Beach

WCWLB

WCWLB Priorities and Key Input Received

Refineries

- Reduce or eliminate emissions from flaring events
- Reduce leaks from refinery process equipment and storage tanks
- Additional requirements for refinery process equipment (e.g., boilers, etc.)

Ports

- Reduce emissions from ocean-going vessels, commercial harbor craft, cargo handling equipment, drayage trucks, etc.
- Expedite zero-emission technology
- Focused enforcement
- Detect leaks from oil tankers

Neighborhood Truck Traffic

- Idling near residences, schools
- Enhance enforcement of regulations and truck routes
- Expedite zero-emission technology
- Incentives for retrofits

Oil Drilling and Production

- Focused monitoring & inspections
- Reduce leaks & odors
- Improve public outreach & notifications
- Establish an emissions baseline
- Zero-emission technology on-site
- Establish buffer zones for new sensitive land uses

Railyards

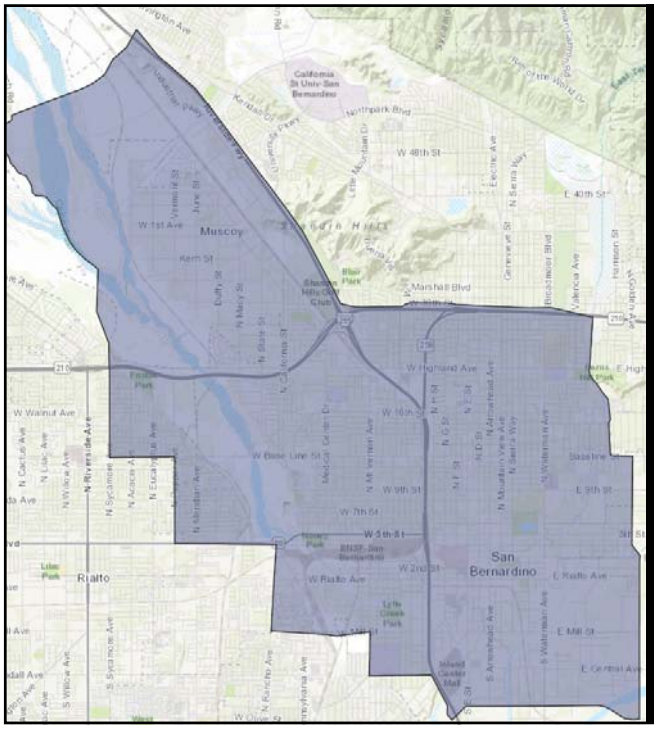
- Reduce diesel particulate emissions from trains and other diesel equipment
- Replace older technology with cleaner technology (e.g., electric yard trucks)

Schools, etc.

- Reduce exposure to emissions from sources, such as idling diesel trucks and locomotives near hospitals, senior centers and schools

WCWLB CERP Actions

Air Quality Priority	Proposed Action	Collaborators and Other Responsible Agencies
 Refineries	• Improve refinery flaring notifications • Conduct refinery monitoring to identify and address VOC leaks • Evaluate and require methods to reduce refinery flaring emissions through Amendments to Rule 1118	• Departments of Public Health • Refineries
 Ports	• Reduce leaks from oil tankers • Reduce emissions from ships and harbor craft • Reduce emissions from port equipment (cargo-handling equipment) and drayage trucks	
 Neighborhood Truck Traffic	• Reduce truck idling • Reduce emissions from heavy-duty trucks • Encourage replacement of older polluting vehicles with cleaner vehicles, including zero-emission vehicles	
 Oil Drilling and Production	• Reduce air pollution leaks from oil wells and associated activity at these facilities • Improve public information and notifications on activities at oil drilling and production sites • Evaluate feasibility to amend Rule 1148 series to reduce emissions and require additional reporting	• Community organizations
 Railyards	• Reduce emissions from railyards	• CSC members
 Schools and Community Areas	• Reduce exposure to harmful air pollutants through outreach to schools and childcare centers • Reduce exposure to harmful air pollutants at schools and homes • Increase green space in areas where people spend time	• School districts • Departments of Public Health • Community organizations



San Bernardino, Muscoy

SBM

SBM Priorities and Key Input Received

Neighborhood Truck Traffic

- Expedite zero-emission technology
- Increase enforcement of regulations
- Establish/reassess designated truck routes
- Incentives for truck replacements
- Local impacts to residents

Railyards

- Reduce diesel particulate emissions from trains and other diesel equipment
- Replace older technology with cleaner technology (e.g., electric yard trucks)

Warehouses (On-Site Emissions)

- Establish land use development standards to create buffers & orient loading docks away from residences
- Reduce exposures from heavy-duty trucks on-site
- Pursue indirect source rules

OmniTrans Bus Yard

- Zero-emissions fleet
- Identify & address fugitive emissions/ odors

Concrete Batch Plants

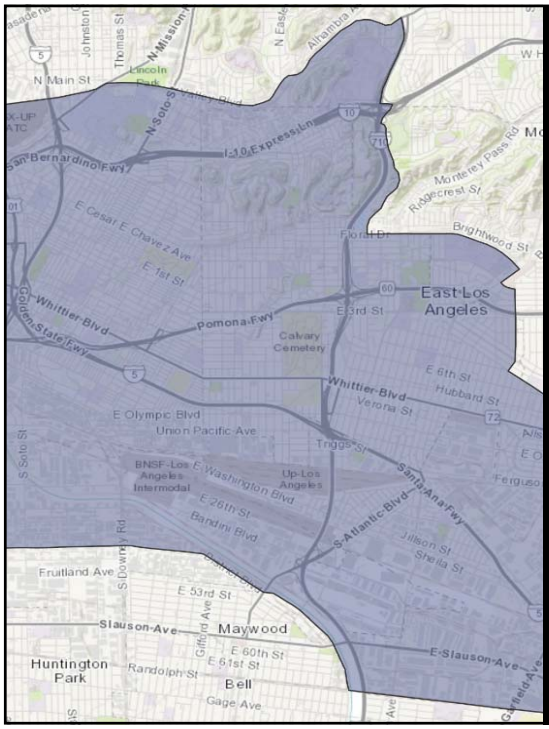
- Reduce fugitive dust, particulate matter, odors (e.g., close to schools)

Schools, etc.

- Reduce exposure to emissions from sources, such as idling diesel trucks, locomotives, batch plants near hospitals, senior centers and schools

SBM CERP Actions

Air Quality Priority	Proposed Action	Collaborators and Other Responsible Agencies
 **Neighborhood Truck Traffic**	• Reduce truck idling • Reduce emissions from heavy-duty trucks • Utilize Automated License Plate Reader to identify older trucks for incentive programs	AQMD, CARB, SCAG, San Bernardino County
 **BNSF Railyard**	• Reduce emissions from railyards	AQMD, CARB • CSC members
 **Warehousing**	• Conduct outreach to local governments to encourage avoidance of air quality impacts from new warehouse development	AQMD, SCAG, San Bernardino County
 **OmniTrans**	• Conduct air monitoring to identify the composition and level of fugitive emissions/odors near the OmniTrans bus yard • Support OmniTrans' transition to zero-emission buses	AQMD, OmniTrans
 **Concrete Batch, Asphalt Batch, and Rock and Aggregate Plants**	• Reduce fugitive dust, particulate matter (PM10), and odors from concrete batch, asphalt batch, and rock, and aggregate plants	AQMD • Applicable facilities
 **Schools and Community Areas**	• Reduce exposure to harmful air pollutants through public outreach • Reduce exposure to harmful air pollutants at schools, homes, childcare centers, and community centers • Increase green space in areas where people spend time	AQMD • School districts • Department of Public Health • Community based organizations



East Los Angeles, Boyle Heights, West Commerce

ELABHWC

ELABHWC Priorities and Key Input Received

Neighborhood and Freeway Traffic

- Reduce emissions from heavy duty trucks & passenger cars on local neighborhood streets & freeways
- Establish & improve truck routes
- New regulations to require zero-emission trucks
- Monitor warehouse on-site truck emissions

Railyards

- Reduce diesel emissions from trains and other diesel equipment at five major railyards in this community

Metal Processing Facilities

- New facilities
- Proximity to residents
- Exposure to fugitive emissions
- Pursue monitoring & enforcement
- Pursue incentives for fugitive metal emission controls

Rendering Facilities

- Address fugitive emissions and odors

Autobody Shops

- Difficult to comply with regulations, leading to increased emissions & odors
- Facilities without permits can lead to increased emissions

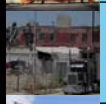
General Industrial

- Dense area of industrial facilities
- Address fugitive dust and odors
- Improved public access to information

Schools, etc.

- Reduce exposure to emissions from sources, such as idling diesel trucks and locomotives, and dust from metal processing facilities near schools, childcare centers, libraries, and parks and community centers

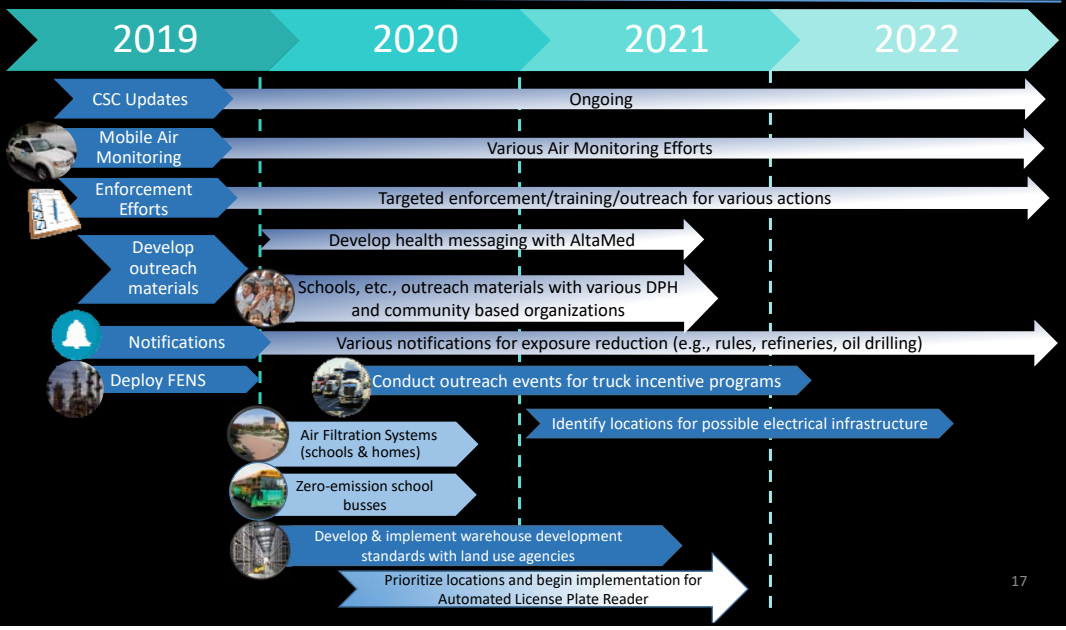
ELABHWC CERP Actions

Air Quality Priority	Proposed Action	Collaborators and Other Responsible Agencies
 **Neighborhood and Freeway Traffic from Trucks and Automobiles**	• Reduce truck idling • Reduce emissions heavy-duty trucks • Use Automated License Plate Reader to identify older trucks for incentives • Encourage replacement of older polluting vehicles with cleaner vehicles, including zero-emission vehicles	AQMD, CA Air Resources Board
 **Railyards**	• Reduce emissions from railyards	AQMD, CA Air Resources Board • CSC members
 **Metal Processing Facilities**	• Identify areas to conduct air monitoring for fugitive toxic metal emissions from metal processing facilities • Reduce emissions from metal processing facilities through outreach, best management practices and incentives	AQMD • Applicable facilities
 **Rendering Facilities**	• Reduce fugitive emissions/odors from rendering facilities	AQMD • Applicable facilities
 **Auto Body Shops**	• Reduce emissions from auto body shops	AQMD • LA City Fire Department
 **General Concerns about Industrial Facilities, including Waste Transfer Stations**	• Improve public outreach and accessibility to facility information • Improve public awareness about how to file an air quality complaint • Work with land use agencies to verify facility permits and develop enhanced permit requirements • Address fugitive emissions, odors, and dust from facilities (e.g., waste transfer stations)	AQMD • Applicable facilities • City & County of Los Angeles, City of Commerce
 **Schools and Community Areas**	• Reduce exposure to harmful air pollutants through public outreach • Reduce exposure to harmful air pollutants at schools, childcare centers, libraries, and community centers	AQMD • School Districts • Department of Public Health • Community based organizations

Implementation Timeline – Rule Development Efforts

	2019	2020	2021-2022	2024-2030
South Coast AQMD	• Consider Warehouse ISR • Rule development for Rule 1109.1 • Rule 1180 implementation	• Consider Railyard ISR • Initiate rulemaking for: – Rule 1118 – Rule 1148 series – Rule 1142	• On-going rule development efforts and implementation, for example, working group process for Rule 1118, 1148 and 1142	
CA Air Resources Board	• CARB to consider At-Berth Regulation	• CARB to consider Heavy CARB Heavy-Duty Low NOx Rule	• CARB to consider: – Drayage Truck Rule – Zero Emission Fleet Rule – Cargo Handling Equipment Rule – Potential new locomotive regulations	• Phase in CARB Regulations including: – Drayage Truck Rule – Advanced Clean Truck Rule – Zero-Emission Fleet Rule – Heavy-Duty Low NOx Rule
U.S. EPA				• Phase in U.S. EPA's Cleaner Truck Initiative

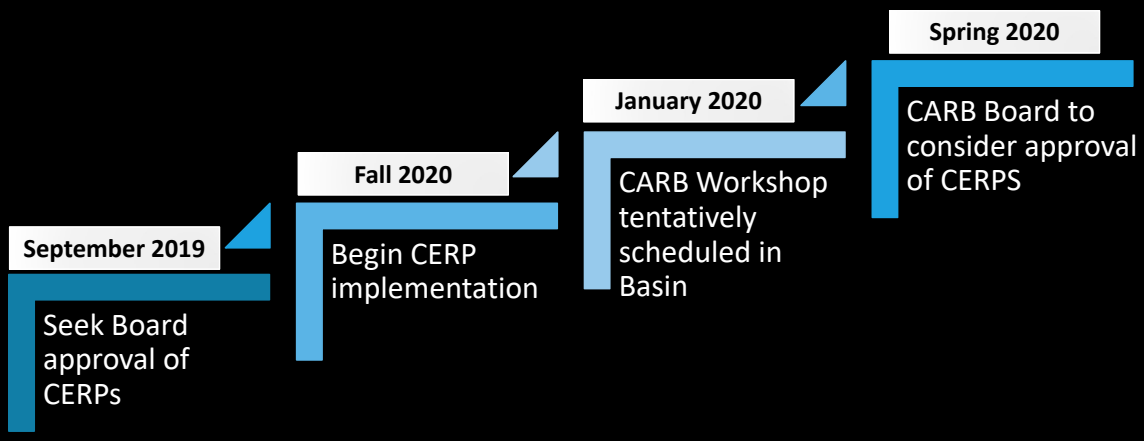
Implementation Timeline – Other CERP Actions



Key Issues

- Establish an emissions baseline and emission reduction targets
  - CERPs identify key sources of emissions for each community (Source Attribution Report)
  - Staff has quantified emission reduction targets based on CERP actions
  - Although not easily quantified, CERP actions reduce fugitive emissions
- Identify how AB 617 funds will achieve quantifiable results
  - CERP actions include updates to the CSC on projects funded by AB 617 incentives
  - Emissions reduction targets consider current and future AB 617 funding levels
- Conduct community health study (establish public health baseline) and link emission reductions to improved health outcomes
  - Primary focus of AB 617 and CERPs is to reduce emissions
  - Staff is working on identifying other metrics for air quality improvements resulting from CERP actions
  - Statewide discussion, health studies are outside scope and resources of CERP process

Next Steps for Year 1 Communities – Community Emissions Reduction Plans (CERPS)



Recommend Communities for Assembly Bill 617 Year 2 Implementation

Stationary Source Committee
July 26, 2019

South Coast AQMD

1

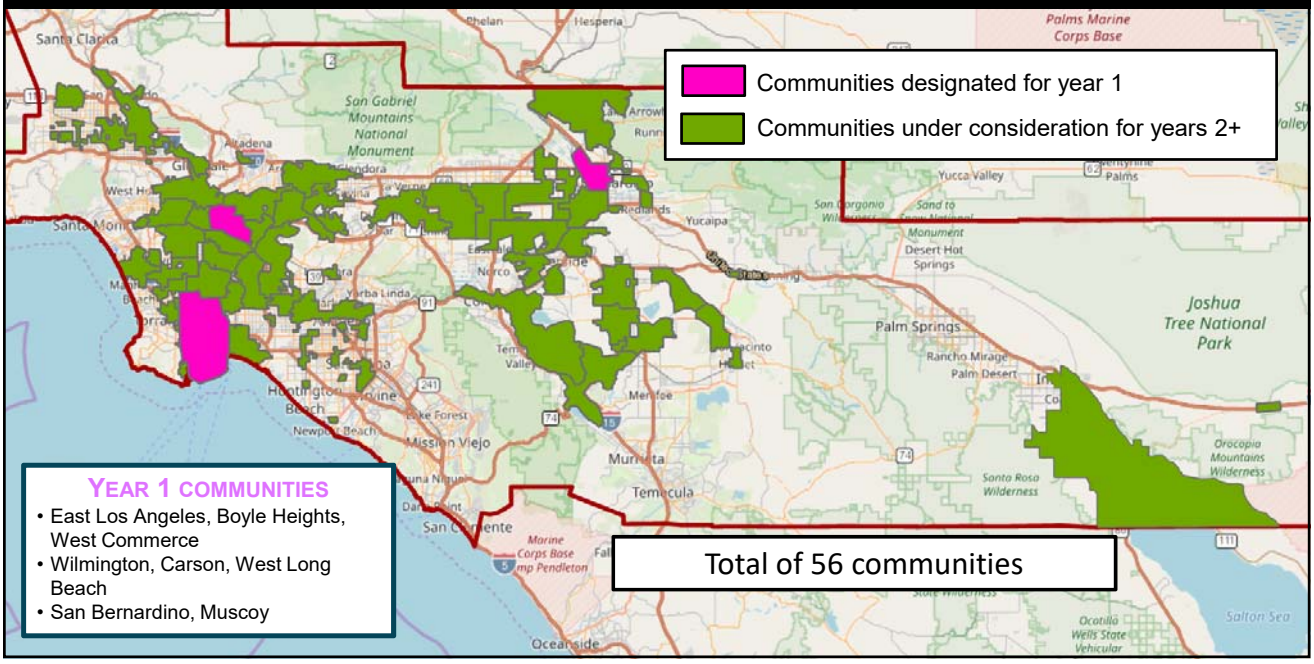
Year 2 Community Selection

Building Upon Prior Year's Efforts:

- Followed existing community identification and prioritization process from Year 1
  - Air pollution data
  - School proximity to sources
  - Community input and nominations
  - Past community plans and programs
- Held additional community meetings and conducted outreach
- Invited additional public input and nominations
- Evaluated new air pollution information

2

Communities Under Consideration



Year 2 Community Outreach

Date and Time	Location
February 22, 2019 5:30 – 7:30 pm	North Shore Beach and Yacht Club Mecca, CA
May 22, 2019 6:00 – 8:00 pm	Heritage Hall at the Ehlers Event Center Buena Park, CA
May 29, 2019 6:00 – 8:00 pm	Hutton Community Center Colton, CA
June 5, 2019 6:00 – 8:00 pm	Huntington Park Dept. of Parks & Recreation Social Hall Huntington Park, CA
June 19, 2019 6:00 – 8:00 pm	Crestmore Manor Jurupa Valley, CA

Additional Year 2 selection outreach was conducted during community meetings hosted by community organizations, school districts, and other organizations

Nominations Received during 2019 Outreach

- 77 nominations received (as of June 30, 2019)
- We requested information on **community readiness** for AB 617 program

Los Angeles County:
- Bell
- Bell Gardens
- Cudahy
- El Camino Village
- Florence-Firestone/Florence-Graham
- Gardena
- Historic West Adams District
- Huntington Park
- Lynwood
- Maywood
- Paramount
- South Central LA
- South East LA
- South LA
- Torrance
- Vernon
- Walnut Park
- Watts

Riverside County:
- Eastern Coachella Valley: Coachella, Mecca, North Shore, Thermal, Oasis, Indio, and Chiriaco Summit
- Jurupa Valley: Sunnyslope, Sky Country, Mira Loma, Rubidoux, Belltown, Jurupa, Jurupa Hills, Glen Avon, Pedley

San Bernardino County:
- Colton

Orange County:
- Anaheim
- Buena Park
- South Fullerton

Approach for Community Prioritization – Building on 2018 Efforts

STEP 1: All communities in consideration for AB 617 (including Years 1 and 2)
- Technical Data
- Community Nominations

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STEP 2: Separate by air basin

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STEP 3: Apply screening criteria
- SCAB screening criteria: MATES, CalEnviroScreen
- Apply considerations for SSAB communities

↓

STEP 4: Evaluate additional factors (updated for Year 2)
- Community nominations
- Air monitoring findings
- Community plans
- School proximity metric

↓

STEP 5: Consider community readiness for Year 2 communities

- In 2018, CARB designated 3 out of 4 communities recommended by South Coast AQMD.
- Proposing to recommend 4th community to CARB again for 2019, with some adjustments

Additional Considerations

Communities where existing or past community air monitoring or community plans pave the way for rapid AB 617 plan implementation

Communities demonstrate experience and willingness to work with government agencies, organizations, business or business organizations, schools, hospitals, etc.

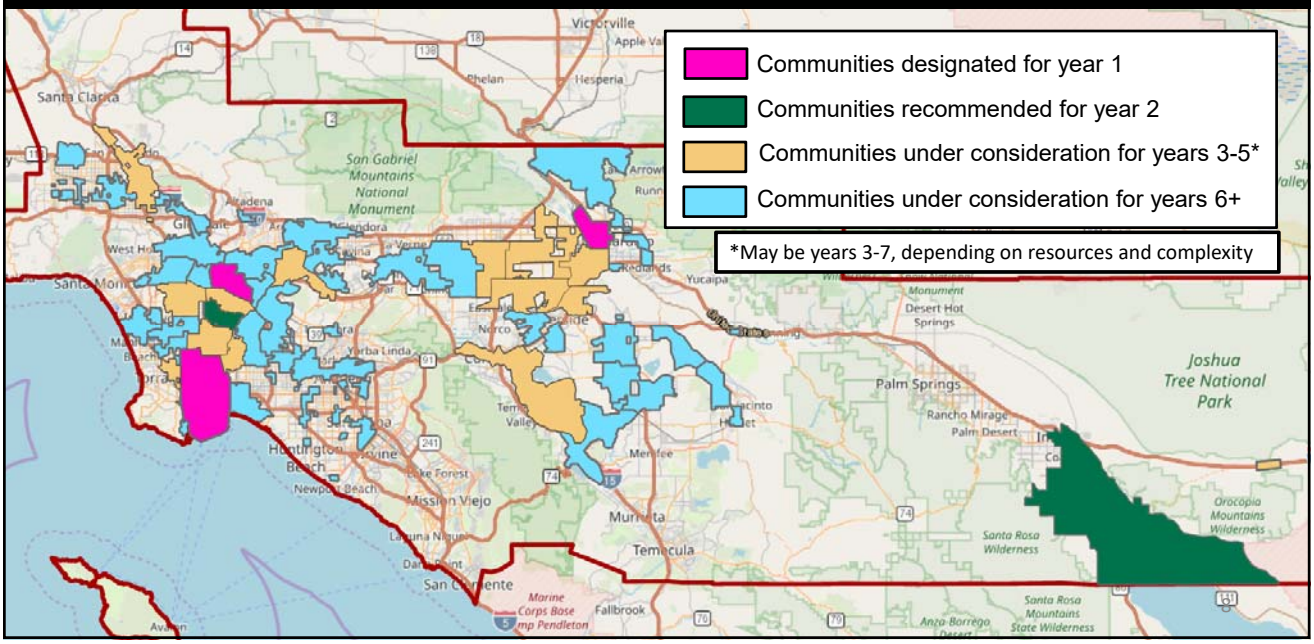
Community is organized and engaged around air pollution issues

Resources from local agencies and organizations that would contribute to the rapid implementation of this program

Consider geographic diversity and diverse air pollution issues

Communities demonstrate progress with science-based community air pollution projects, such as community air sensors projects or community plan development

Recommended Implementation Schedule



Propose for Year 2: Eastern Coachella Valley

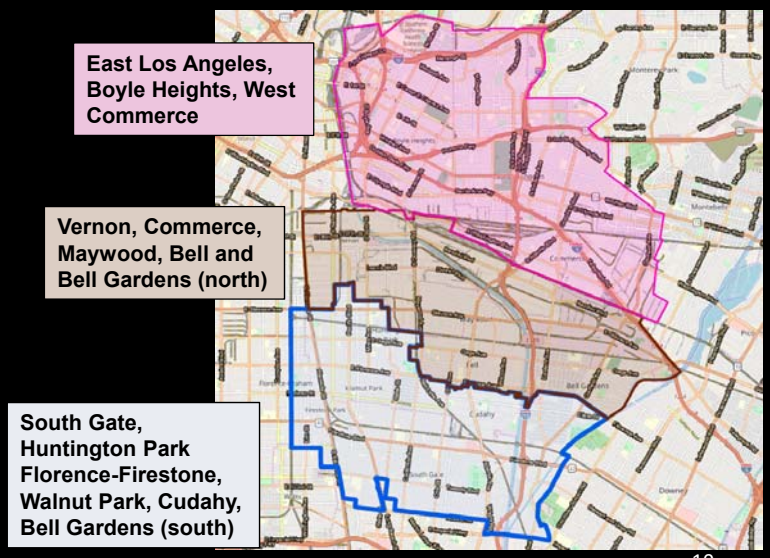
Technical Data:
- CalEnviroScreen 3.0: 90.8th percentile

Rationale

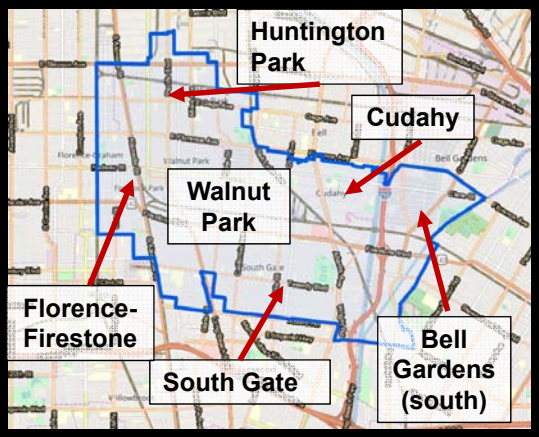
- Rural area affected by emissions from agricultural operations (e.g., burning), construction activities, unpaved roads, and the exposure of the Salton Sea playa
- Community Efforts include:
  - Air sensors program organized by Comite Civico del Valle (CCV) Identifying Violations Affecting Neighborhoods (IVAN)
  - California Institute for Rural Studies (CIRS), Loma Linda University (LLU), and California Endowment implemented a regional health survey
  - Building Healthy Communities Neighborhood Action Team is preparing a science program focusing on mapping and deploying community air and water sensors

2019 Updates to Community Groupings

- Year 1 East LA, Boyle Heights, West Commerce community includes much of Vernon and Commerce already
- Suggest regrouping adjacent communities:
  - Vernon, Commerce, Maywood, Bell and Bell Gardens (north)
  - South Gate, Huntington Park, Florence-Firestone, Walnut Park, Cudahy, Bell Gardens (south)



Propose for Year 2: South Gate, Florence-Firestone, Walnut Park, Huntington Park, Cudahy, Bell Gardens (south)



Technical Data:

- MATES IV: 98.2nd percentile
- CalEnviroScreen 3.0: 100th percentile

Rationale

- Recommended by Governing Board for Year 1, but not approved by CARB
- Densely populated community, with rail and truck traffic, and industrial facilities along Alameda Corridor and I-710
- Community efforts include:
  - South Coast AQMD participation in LA County Public Health's Community Risk Reduction Initiative
  - South Gate Community Environmental Health Action Team (CEHAT) partnered with South Coast AQMD for low-cost sensor project
  - CEHAT collaborated with several agencies to complete an Environmental Health needs assessment
  - U.S. EPA Flag program implemented in local schools

Timeline for Year 2 AB 617 Communities

- **February - June 2019** – Outreach Meetings
- **June 30, 2019** – Deadline for communities to submit nominations
- **September 2019** –Governing Board considers Year 2 community recommendations
- **Sept – Dec 2019**: Begin community engagement
- **December 2019** – CARB considers Year 2 communities
- **2020** – Year 2 Community Steering Committees form and begin to meet

Next Steps

- September 2019 – Governing Board considers Year 2 community recommendations
- October 2019 – Staff submits Year 2 recommendations report to CARB staff
- December 2019 – CARB considers Year 2 community designations

Proposed Amended Rule 1407
Control of Emissions of Arsenic, Cadmium, and Nickel from Non-Chromium Metal Melting Operations

Stationary Source Committee

July 26, 2019

Background

- Rule 1407 was adopted in 1994
  - Implements the state Airborne Toxic Control Measure (ATCM) for Emissions of Toxic Metals from Non-Ferrous Metal Melting
- Objective is to reduce arsenic, cadmium, and nickel emissions from metal melting operations
- Rule 1407 currently addresses non-ferrous metals which generally includes aluminum alloys, copper alloys, and super alloys
- PAR 1407 was developed through a Public Process starting in 2016
  - 30 site visits, 9 working group meetings, and a Public Workshop

General Approach

- Revise applicability from non-ferrous metals to non-chromium metals
  - Develop new rule to address chromium metal melting (Proposed Rule 1407.1)
- Proposed Amended Rule 1407 will reduce exemptions and be more health protective
- Provisions are based on lead melting rules (Rule 1420 series)

Alloy Type							
Al & Al Alloys (PAR 1407)	Carbon Steel (PAR 1407)	Brass (Rule 1420 or PAR 1407)	Bronze (Rule 1420 or PAR 1407)	Lead (Rule 1420)	Stainless Steel (PR 1407.1)	Alloy Steel (PR 1407.1)	Super Alloys (PR 1407.1)

Emission Control Requirements

- For each toxic air contaminant individually:
  - Meet a control efficiency per furnace; or
  - Meet facility-wide mass emission limit
- Source Testing
  - Initial source testing
  - Periodic source testing every 60 months
- Emission Control Device Monitoring

Emission Limits

Arsenic	AND	Cadmium	AND	Nickel
99% (per furnace)		99% (per furnace)		99% (per furnace)
OR		OR		OR
0.000066 lbs/hour (facility-wide)		0.000514 lbs/hour (facility-wide)		0.00848 lbs/hour (facility-wide)

Facilities with a Health Risk Assessment or Air Toxics Inventory Report below a maximum individual cancer risk of ten in one million exempt from emission control requirements

Fugitive Emission Controls

Enhanced Housekeeping

Cleaning	Material Storage	Other
•Weekly cleaning •Prohibition of dry sweeping and use of compressed air	•Enclosed storage area •Building enclosure •Covered container	•Remove weather caps •Quarterly inspection of emission control devices

Building Enclosures

- Addresses cross drafts in areas where metal melting operations occur, including metal grinding and cutting

Exemptions

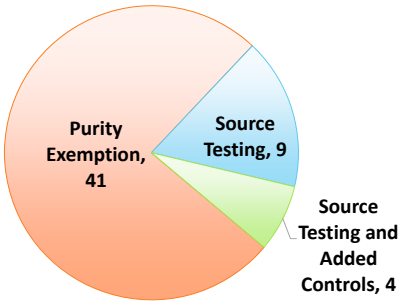
Metal or Alloy Purity Exemption

- Current Rule 1407 has no throughput limitation for using the metal or alloy purity exemption
  - Despite the metals having relatively low concentrations of contaminants, facilities melting very large quantities can have significant arsenic, cadmium, and/or nickel emissions
- PAR 1407 includes a throughput limit for using the metal or alloy purity exemption

Clean Aluminum Scrap Exemption

- Current Rule 1407 does not include concentration limits for arsenic, cadmium, or nickel when using clean aluminum scrap exemption
  - Clean aluminum scrap is free of contaminants (oil, paint, grease, etc.), but still may contain arsenic, cadmium, and nickel, which may result in emissions
- PAR 1407 phases out clean aluminum scrap exemption

Impacted Facilities and Estimated Total Costs



	Purity Exemption	Purity Exemption with Minor Building Upgrade	Purity Exemption with Existing Control Device	Source Testing	Source Testing and Added Controls
Estimated Number of Facilities	26	13	2	9	4
Total Cost (10 years)	$0	$272,000	$443,000	$292,000	$1,312,000
Annualized Cost	**$0**	**$33,000**	**$54,000**	**$36,000**	**$161,000**

Key Issues

Comment	Response
• Some furnaces may not be able to demonstrate compliance with the mass emission limits with a non-detect source test result	• Incorporated provisions to account for non-detect source test results
• Purity exemption should include a table of distances which correspond to a threshold instead of one threshold for all facilities	• Added a provision that allows a facility to be exempt from point source requirements if they have an approved Health Risk Assessment or Air Toxics Inventory Report
• The costs to facilities should not be amortized; all costs are incurred in the first year	• Total costs are also included for reference • Annualized costs are used for rule development efforts

Schedule

Public Hearing
September 6, 2019

Proposed Amended Rule 1110.2
Emissions From Gaseous- and Liquid-Fueled Engines

Proposed Amended Rule 1100
Implementation Schedule for NOx Facilities

Stationary Source Committee

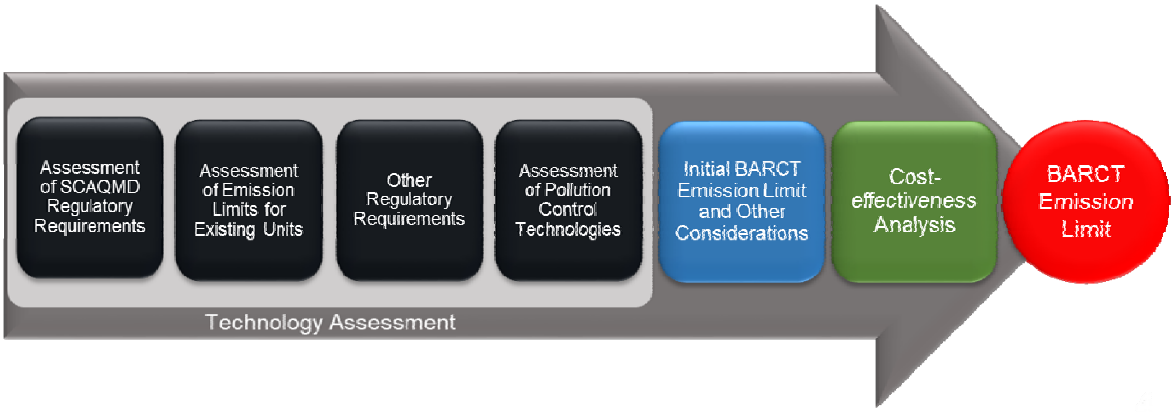
July 26, 2019

Background and Objective

- Part of 2016 AQMD CMB-05 and AB617 BARCT requirements
- PARs 1110.2/1100
  - Transition internal combustions engines rated greater than 50 bhp currently in RECLAIM to command-and-control

BARCT Assessment

BARCT analysis is conducted for each equipment category and fuel type



Proposed Amendments to Rules 1110.2 and 1100

- Based on BARCT technology assessment
  - Retaining Rule 1110.2 NOx emission limit of 11 ppm (15 minute averaging)
  - Adding a one-hour NOx averaging time for 2-stroke engines
  - Adding 5 ppm ammonia slip limit for new SCR installations
  - No changes to VOC and CO limits - RECLAIM already subject to limits
- Implementation schedule (Proposed Amended Rule 1100)
  - December 31, 2023
  - Additional time provided for compressor gas 2-stroke and 4-stroke lean-burn engines

Other Proposed Amendments

- RECLAIM facilities required to meet more stringent Continuous Emissions Monitoring System (CEMS) provisions under Rule 1110.2
  - Rule 1110.2 requires CEMS if facility has engines in aggregate >1,500 bhp
  - RECLAIM requires CEMS for any engine >1,000 bhp
- Reporting and Recordkeeping
  - Non-Title V Facilities: Rule 1110.2 reporting and recordkeeping requirements
  - Title-V Facilities: RECLAIM reporting and recordkeeping requirements
- Additional clarifications
  - Remove RECLAIM exemption language
  - Harmonize remote radio transmission tower exemptions with existing rules
  - Clarification of CEMS provisions for biogas engines

PAR 1110.2 Impacts to RECLAIM Facilities

- 21 facilities with 76 engines
  - 11 facilities with 47 engines would need to comply with 11 ppm NOx emission limit
  - 6 facilities with 23 engines will require CEMS

Emission Reductions and Cost Effectiveness

Category	NOx Emission Reductions (tons per day)	Cost Effectiveness ($/ton)
Lean-burn 2-stroke	0.11	28,100
Lean-burn 4-stroke	0.17	35,500
Rich-burn	0.01	71,400
TOTAL	**0.29**	**33,800**

- Overall average cost-effectiveness is $33,800 per ton of NOx reduced
  - Some engines will be required to install CEMS with minimal emission reductions
- NOx emission reductions: 0.29 ton per day (~ 80% reduction)

Remaining Key Issues

- Continuing to work with stakeholders
  - SoCalGas has expressed concern with emission limits and implementation schedule for compressor gas engines
  - A hospital has requested a one-hour averaging time instead of 15-minutes to address transient emissions
  - Achievability of emission limits for larger, remote diesel engines
  - Extension of startup and overhaul provisions
  - Addressing CEMS aggregate applicability for RECLAIM engines

Next Steps

- ❑ Public Workshop — July 31, 2019
- ❑ Set Hearing — September 6, 2019
- ❑ Public Hearing — October 4, 2019

AB 2588 Toxic Hot Spots 2018 Annual Report

Stationary Source Committee
July 26, 2019

South Coast AQMD

Introduction

- AB 2588 Program Annual Report summarizes
  - Activities implemented under AB 2588 "Hot Spots Act" consistent with state law
  - South Coast AQMD activities to reduce toxic air contaminants
  - Future activities relating to AB 2588
- H&S Code §44363 requirement of a public hearing to present results of Annual Report

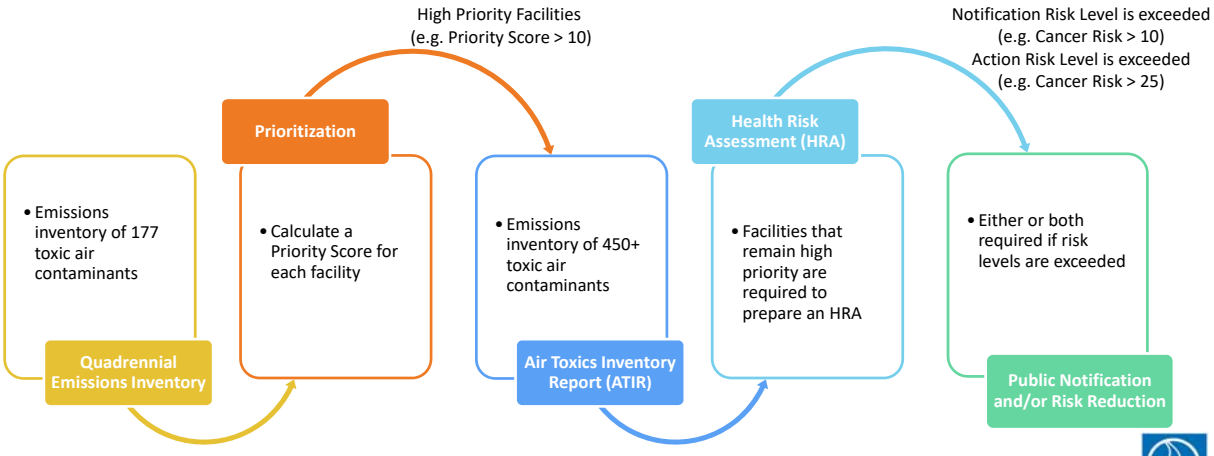
South Coast AQMD

Goals and Objectives of AB 2588

- Collect emissions data for air toxics
- Identify facilities with localized impacts
- Determine potential health risks
- Provide public notification
- Reduce significant risks

AB 2588 is one piece of South Coast AQMD's overall approach to air toxics

AB 2588 Traditional Process for 'Core' Facilities



Pathways for Facilities in Rule 1402

Traditional Approach

Facilities with cancer risks <100 per million

- Air Toxic Inventory Report
- Health Risk Assessment
- Public Notification (if cancer risks > 10 per million)
- Risk Reduction Plan (if cancer risks > 25 per million)

Voluntary Risk Reduction Program

Facilities with cancer risks <100 per million and approved Health Risk Assessment

- Air Toxic Inventory Report
- Voluntary Risk Reduction Plan committing to reduce cancer risks below 10 per million
- Modified Public Notification

Potentially High Risk Level

Facilities with cancer risks >100 per million

- Early Action Reduction Plan
- Air Toxic Inventory Report
- Health Risk Assessment
- Public Notification (if cancer risks > 10 per million)
- Risk Reduction Plan (if cancer risks > 25 per million)

South Coast AQMD

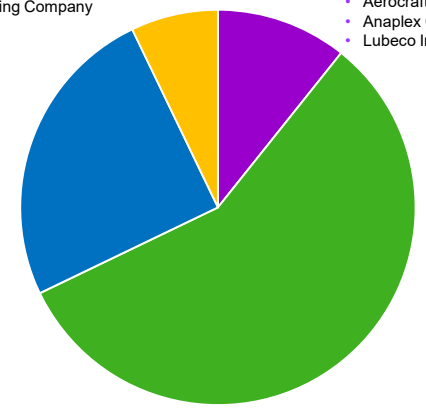
Summary of Rule 1402 Pathways for Facilities in 2018

Revised Priority Score <10

- Triumph Processing, Inc.
- The Boeing Company

Potentially High Risk Level

- Aerocraft Heat Treating Co Inc
- Anaplex Corp
- Lubeco Inc



Voluntary Risk Reduction Program

- Elite Comfort Solutions
- LA City, Sanitation Bureau (HTP)
- OCSD, Fountain Valley
- OCSD, Huntington Beach
- Tesoro Calciner
- Tesoro Sulfur Recovery Plant
- Ultramar Valero Refinery

Traditional AB 2588 Program

- Arconic Global Fasteners & Rings
- Boral Roofing, LLC
- Eisenhower Medical Center
- Equilon Enterprises, LLC, Shell
- Fontana Paper Mills Inc
- Glendale City Water & Power
- GS II, Inc.
- Kirkhill Inc
- MM West Covina LLC
- Quemetco
- So Cal Edison Co Pebbly Beach
- So Cal Gas, Playa del Rey Storage Facility
- So Cal Holding, LLC
- Southern California Edison
- TST, Inc.
- Univ Cal, Riverside

South Coast AQMD

Reviews In 2018

196 Reviews

2 — **Revised Priority Score**
- 2 Revised Priority Score < 10 (No further action)

168 — **Traditional AB 2588**
- 140 Quadrennial Emission Reports
- 17 Air Toxics Inventory Reports
- 10 Health Risk Assessments
- 1 Risk Reduction Plan

7 — **Voluntary Risk Reduction Program**
- 7 Voluntary Risk Reduction Plans

19 — **Potentially High Risk Level Facilities**
- 1 Early Action Reduction Plan
- 7 Air Toxics Inventory Reports
- 7 Health Risk Assessments
- 4 Risk Reduction Plans

South Coast AQMD

Other Key Toxics-Related Activities in 2018

Rulemaking

Amended Rule 1469

Amendments further reduce hexavalent chromium emissions by establishing new requirements for certain hexavalent chromium-containing tanks that were not regulated.

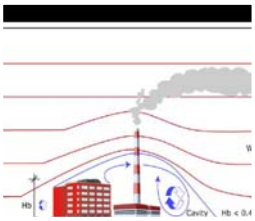
Special Monitoring

Continued air monitoring in Paramount

Continued air monitoring in Compton

Conducted a five week mobile monitoring campaign in the Greater Los Angeles Area

1420.2 & 1466



Reviewed air dispersion modeling for lead emissions from four facilities under Rule 1420.2

Reviewed requests for alternative PM10 limits for two facilities under 1466 to ensure toxics in PM10 pose no adverse health effects

South Coast AQMD

Projected 2019 Toxics-Related Activities

- Audit quadrennial emissions inventories for approximately 70 facilities
- Develop Proposed Rules 1407.1, 1410, and 1480
- Develop proposed amendments to Rules 1403 and 1407
- Track development of potential additions or revisions to health values by OEHHA
- Track draft list of chemicals to be added to the Emission Inventory Criteria and Guidelines for AB 2588

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

DRAFT
Annual Report on AB 2588 Air Toxics "Hot Spots" Program

September 2019

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Speaker of the Assembly Appointee

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Governor's Appointee

EXECUTIVE OFFICER:

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Executive Summary

The California Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) was enacted in 1987. It is a key statewide program implemented by local air districts to address health risks from air emissions associated with existing permitted facilities. One of the main goals of AB 2588 is to provide the public with information regarding potential health effects from toxic air contaminants emitted from existing permitted facilities, and to develop plans to reduce associated risks. The South Coast Air Quality Management District (South Coast AQMD) implements AB 2588 requirements through Rule 1402, which includes additional requirements beyond the state law, including a program to encourage facilities to voluntarily reduce risk, and to compel high risk facilities to reduce toxic emissions much more quickly than previously required.

The AB 2588 Program as implemented under Rule 1402 is only one part of South Coast AQMD's comprehensive program in regulating air toxics. Other elements include South Coast AQMD's permitting program and Rule 1401 requirements, enforcement efforts to ensure facilities comply with all applicable air quality requirements, and the Multiple Air Toxics Emissions Study, a study measuring the amount of regional toxic air contaminants and their risks throughout the air basin. Additionally, within the past five years, South Coast AQMD has performed ambient air monitoring in many neighborhoods and found high levels of air toxic contaminants. This monitoring has helped to identify high risk facilities, thereby requiring them to implement risk reduction measures under Rule 1402. Monitoring will also be an important component for implementation of the AB 617 program that targets air pollution reductions in environmental justice communities.

Under state law, the South Coast AQMD is required to prepare an Annual Report of activities. This report fulfills that requirement and describes the South Coast AQMD's ongoing efforts to regulate and reduce air toxic emissions.

The following summaries key AB 2588 activities in 2018:

AB 2588 and Rule 1402 Implementation Activities	Prioritized 259 facilities based on their quadrennial toxic emission inventory updates
	Initiated 140 audits based on prioritization scores
	Reviewed 19 ATIRs, 12 HRAs, 3 RRPs, and 11 VRRPs from 37 facilities
Streamlining and Program Improvement Activities	Updated AB 2588 Facility Prioritization Procedures
	Updated AB 2588 Supplemental Guidelines
	Updated AB 2588 Voluntary Risk Reduction Plan Guidelines
	Provided support to rulemaking and AB 617 staff

California's Air Toxics "Hot Spots" Program

Background

In 1987, the California legislature adopted the Air Toxics "Hot Spots" Information and Assessment Act. The "Hot Spots Act" was proposed under Assembly Bill 2588 and therefore is commonly referred to as AB 2588. Since exposure to toxic air contaminants may produce various adverse health impacts, AB 2588 incorporated certain goals such as to collect emissions data of toxic air contaminants from stationary sources, identify facilities having localized impacts, determine health risks, and notify affected individuals. The California Air Resources Board (CARB) has developed the AB 2588 Program requirements of the "Hot Spots" Act; however local air districts are required to implement and enforce the requirements. This chapter describes the state requirements of the AB 2588 Program.

Emissions Reporting

Facilities are subject to AB 2588 reporting requirements if they emit any toxic air contaminants listed by CARB in the *Emission Inventory Criteria and Guidelines for the Air Toxics "Hot Spots" Program* (CARB Emission Inventory Guidelines).[1] Under the AB 2588 Program, larger facilities (core facilities) are subject to individual reporting requirements while facilities that are generally small businesses are in the industrywide source (IWS) categories, which are described later in this chapter. CARB Emission Inventory Guidelines provides both criteria and direction for facilities to compile and submit air toxic emission data. The requirements within the CARB Emission Inventory Guidelines have been incorporated by reference into title 17 of the California Code of Regulations and thus are enforceable.

Prioritization

Core facilities in the AB 2588 Program submit an air toxics inventory once every four years. The AB 2588 Program requires air districts to categorize each facility using the reported emissions as either high, intermediate, or low priority to determine if a facility needs to conduct a Health Risk Assessment (HRA) and to determine appropriate program fees. Guidance to prioritize facilities was provided at the state level in the *Facility Prioritization Guidelines*, August 2016, Air Toxics and Risk Managers Committee of the California Air Pollution Control Officers Association (CAPCOA Prioritization Guidelines).[2]

The CAPCOA Prioritization Guidelines presents two procedures for prioritizing facilities. The emission and potency procedure relies on three parameters to prioritize facilities: emissions, potency or toxicity, and the proximity of potential receptors; the dispersion adjustment procedure relies on four parameters: emissions, potency or toxicity, dispersion, and receptor proximity. While there are two procedures, both are similar in nature and involve calculating scores for separate

[1] *Emission Inventory Criteria and Guidelines for the Air Toxics "Hot Spots" Program*, September 26, 2017, California Air Resources Board https://www.arb.ca.gov/ab2588/final/reg.pdf

[2] http://www.capcoa.org/wp-content/uploads/2016/08/CAPCOA%20Prioritization%20Guidelines%20-%20August%202016%20FINAL.pdf

health effects in order to derive a final score.

Using the procedures, a facility first receives separate scores for carcinogenic (cancer) effects and non-cancer chronic and acute effects. The facility is then given a Total Facility Score (TS) which is the higher of these scores. The Total Facility Scores are separated into three categories: high priority are those with TS greater than 10, intermediate priority for less than or equal to 10 but greater than one, and low priority for TS less than or equal to one. Once a facility is designated as high priority, they may be required to submit a Health Risk Assessment to assess the risk to their surrounding community. Facilities ranked with intermediate priority are considered to be District Tracking facilities and must continue to submit toxics emissions reports on a quadrennial basis. Facilities ranked with low priority may be eligible to be exempted from the AB 2588 Program altogether.

Health Risk Assessments

AB 2588 requires that the Office of Environmental Health Hazard Assessment (OEHHA) develop risk assessment guidelines for the program. The most recent version of these guidelines is the February 2015 version of *The Guidance Manual for Preparation of Health Risk Assessments*[3] (OEHHA HRA Guidelines). The 2015 OEHHA HRA Guidelines incorporated age sensitivity factors which resulted in increased cancer risk estimates by approximately three times. The OEHHA HRA Guidelines contains a description of the algorithms, recommended exposure variates, cancer and non-cancer health values, and the air modeling protocols needed to perform a HRA in accordance with the state AB 2588 Program. The entire risk assessment process can be characterized in four steps described below:

Hazard Identification

Hazard Identification involves identifying all toxic air contaminants emitted from a facility and whether these pollutants are potential human carcinogens or non-carcinogens containing other types of adverse health effects. A facility must identify all substances that are listed in the CARB Emissions Inventory Guidelines.

Exposure Assessment

The purpose of the exposure assessment is to estimate extent of public exposure of emitted toxic air contaminants, and estimating exposures for which potential health effects will be evaluated. Evaluating exposure involves emission quantification, air dispersion modeling, and identifying exposure routes and exposure durations.

Dose Response

Dose-response assessment is the process of characterizing the relationship between exposure to a toxic air contaminant and the incidence of an adverse health effect in exposed populations. For dose-response, OEHHA has compiled cancer potency factors and non-cancer reference exposure levels (RELs) for certain toxic air contaminants. By using these factors along with the estimated exposure information for the toxic air contaminants identified during the hazard identification

[3] https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf

process, potential cancer and non-cancer risks can be evaluated during risk characterization.

Risk Characterization

Risk characterization is the final step of the risk assessment process. Modeled concentrations and exposure information determined through the exposure assessment process are used with cancer potency factors and non-cancer RELs to assess total cancer risk and noncarcinogenic health effects. An HRA shows the combined cancer risk and non-cancer risk for all toxic air contaminants emitted from a specific facility.

Public Notification

Public notification is a core element of the AB 2588 Program requirements. California Health and Safety Code (H&S Code), Section 44362(b) requires the operator of the facility to provide notice to all exposed persons regarding the results of the HRA if the local air district finds there is significant health risk from the facility. The public notification procedures are specified by the local air districts.

Risk Reduction Plans

In 1992, the California legislature added a risk reduction component, the Facility Air Toxic Contaminant Risk Audit and Reduction Plan (SB 1731), which required each air district to specify the significant risk level, above which risk reduction would be required. The requirements of SB 1731 are found in California H&S Code, Sections 44390 through 44394. The requirements are for facilities to audit and identify the source of toxic emissions and risk, then develop and carry out a plan to reduce the emissions and risk. This state law also presents an implementation timeline for risk reduction plans; however, local air districts may create more stringent timelines in their respective programs.

Industrywide Sources

Under the AB 2588 Program individual air districts may designate separate IWS categories. Facilities falling into this category are generally small businesses where individual compliance would impose economic hardship. The advantage to industrywide categories is that compliance may be handled collectively for each category rather than each individual facility. For each IWS category, a district may prepare an industrywide emission inventory and HRA. The California Air Pollution Control Officers Association (CAPCOA), in cooperation with OEHHA and CARB develop IWS risk assessment guidelines.[4] These guidelines provide a cost-effective and uniform method for calculating facility emissions and estimating toxic risks for these facilities under each air district's jurisdiction.

The requirements for designating individual IWS categories are:

- facilities must emit less than 10 tons per year of criteria pollutants;
- facilities share a common Standard Industrial Classification (SIC) code;

[4] Three IWS risk assessment guidelines have been published: autobody shops, dry cleaners, and retail gasoline stations https://ww3.arb.ca.gov/ab2588/riskassess.htm

- the majority of the class are small businesses;
- individual compliance would impose severe economic hardships; and
- emissions are easily and generically characterized.

South Coast AQMD's Air Toxics AB 2588 "Hot Spots" Program

Background

The South Coast AQMD's AB 2588 Program incorporates the requirements of the state AB 2588 program, as well as additional and/or more stringent requirements. Despite being one of the smoggiest urban areas in the U.S., South Coast AQMD has achieved significant reductions in air toxics in the Basin. For example, monitoring studies have shown that cancer risks have decreased by more than 50 percent in the past decade alone.[5] While these reductions were primarily attributable to reductions in diesel particulate matter, there have also been a significant reduction in risks from stationary source facilities. The AB 2588 Program as implemented by South Coast AQMD has played a significant role in achieving those reductions, by improving public awareness thereby leading many businesses to voluntarily reduce their toxic emissions, and through mandatory risk reductions triggered by facilities exceeding health risk thresholds. Figure 1 below demonstrates the reductions in risk that have been achieved despite the substantial number of facilities located within our district.

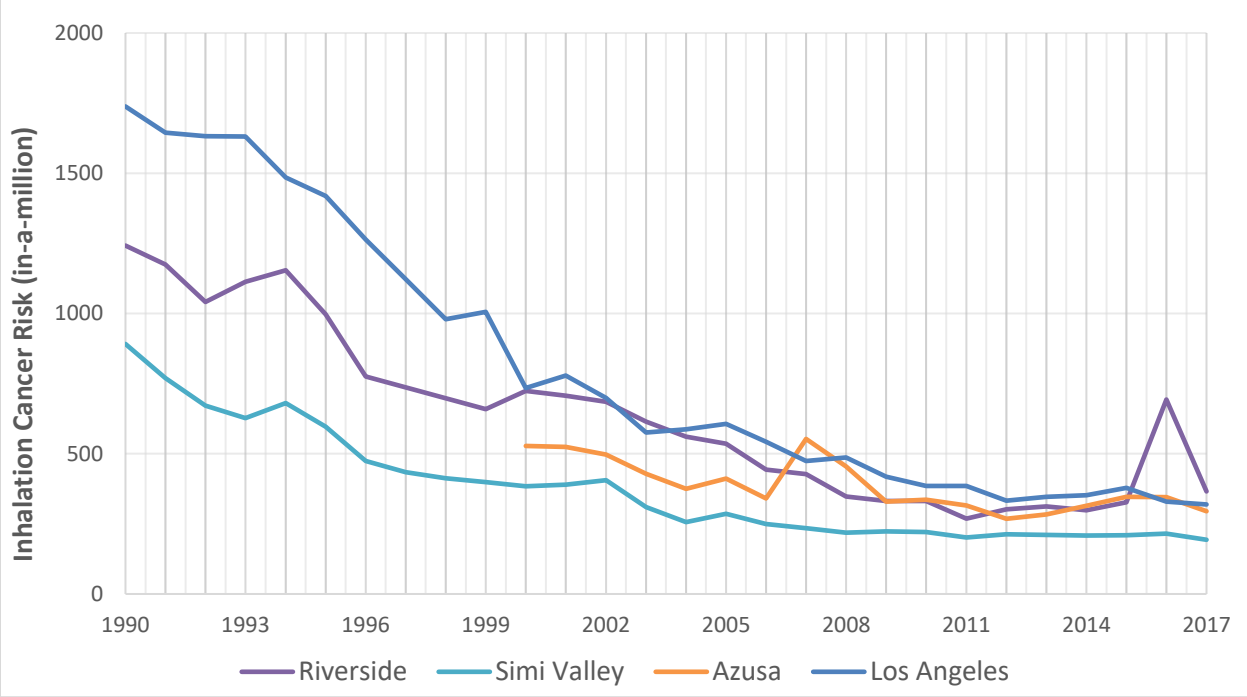


Figure 1 — Trends in Inhalation Cancer Risks[6] in the Basin (1990-2017)

South Coast AQMD *Rule 1402 - Control of Toxic Air Contaminants from Existing Sources* implements various aspects of AB 2588 and SB 1731 including public notification and risk reduction requirements for facilities. Rule 1402 adopts health risk thresholds and implementation

[5] Reductions measured between the Multiple Air Toxics Exposure Studies (MATES) versions III and IV: https://www.aqmd.gov/docs/default-source/default-document-library/mates-v-admin-comm-presentation-060917final_jg.pdf

[6] Calculated with 2015 OEHHA Risk Assessment Guidelines, excluding cancer risks from DPM.

schedules that are above what are specified in AB 2588 and SB 1731. Rule 1402 was most recently amended in October 2016. This most recent amendment included a new provision beyond what is required under state law. This provision created a Voluntary Risk Reduction Program that allows facilities to implement early risk reduction measures that go beyond the normal risk reduction thresholds in exchange for an alternative public notification process. At the same time, a Potential High Risk Level facility category was also created. Facilities designated under the Potential High Risk Level category must comply with an expedited schedules for submittal of Air Toxics Inventory Report (ATIR) and HRA reports and for reducing risk. Both the Voluntary Risk Reduction Program and the new Potential High Risk Level category result in facilities evaluating and reducing their associated air toxics risks faster than would occur under the state AB 2588 program alone.

Program Implementation Elements

Under South Coast AQMD's AB 2588 Program, core facilities are categorized into four groups, or phases. Phases are assigned to discrete reporting years with each phase reporting once every four years. Currently, there are over 400 core facilities that are subject to the main components of the South Coast AQMD's AB 2588 Program as shown in Table 2. These are:

- **Emissions Reporting** – Since the FY 2000-01 reporting cycle, toxics emissions reporting for the AB 2588 Program was incorporated into South Coast AQMD's Annual Emissions Reporting (AER) Program. Core facilities must report emissions for 23 toxic air contaminants through the AER Program. Since there are four phases, each core facility is required to submit reporting 177 toxic air contaminants during the quadrennial reporting year. This more detailed inventory serves as a foundation for an ATIR, if required.

- **Prioritization** – South Coast AQMD uses a refined method for prioritizing facilities based on CAPCOA Guidelines. The current South Coast AQMD Procedure incorporates the revised risk calculation methodologies from the 2015 OEHHA HRA Guidelines. The South Coast Prioritization Procedure is described in more detail in *Streamlining Activities* chapter on page 16.

  In 2018, 259 facilities were required to report their quadrennial toxic emission inventory updates. Based on emissions inventory submittals, South Coast AQMD staff calculated priority scores for these facilities.

- **Health Risk Assessment** – High priority facilities (those with priority scores greater than ten), including those that qualify for the Voluntary Risk Reduction Program, are subject to preparing a complete and detailed inventory of approximately 450 toxic air contaminants, along with detailed information about the processes and release points using the Emissions Inventory Module from the latest CARB Hotspots Analysis and Reporting Program (HARP). For facilities participating in the traditional pathway, if the ATIR indicates that the facility is still considered a high priority, the facility must prepare an HRA that conforms to the OEHHA HRA Guidelines. Specific instructions for the South Coast AQMD are also available in the *AB 2588 and Rule 1402 Supplemental Guidelines, (Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics "Hot Spots"*

Information and Assessment Act).[7] This document is commonly referred to as the AB 2588 Supplemental Guidelines.

- **Public Notification** – If the health risk reported in the HRA exceeds the Notification Risk Levels of Rule 1402, then the facility is required to provide public notice to the affected community. The Notification Risk Levels of Rule 1402 are triggered when cancer risk from the facility exceeds 10 in one million, or when the acute or chronic hazard indices are greater than 1. The requirements for public notification are described in the *South Coast AQMD Public Notification Procedures for Facilities Under the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) and Rule 1402*, October 2016 (South Coast AQMD Public Notification Procedure).[8] These requirements emphasize transparency in communicating risk to the affected community in the following ways:

    - The notice must clearly identify the area above the notification thresholds
    - The notice must be distributed to all addresses (individual residences and workplaces), and to parents of children attending school in the area of impact.
    - The approved HRA must also be provided to all schools in the area of impact.
    - South Coast AQMD conducts a public meeting to describe the HRA results to the affected community and to answer questions from community members.

- Risk Reduction – Rule 1402 adopts stringent health risk thresholds and aggressive implementation schedules that are beyond the traditional AB 2588 and SB 1731 state requirements (see Table 1 below). Under state requirements, facilities exceeding a significant risk threshold must reduce risk within five years. Under Rule 1402, Potential High Risk Level facilities must submit an Early Action Reduction Plan to immediately reduce risk, followed by a detailed Risk Reduction Plan designed to comprehensively reduce risk. The Risk Reduction Plan under Rule 1402 must be implemented as quickly as feasible, but no later than two years after approval. Facilities exceeding the Action Risk Level under Rule 1402 must also implement risk reduction no later than two and a half years after risk reduction plan approval.[9] Rule 1402 also includes a Voluntary Risk Reduction Program provision that is designed to achieve risk reductions that are not otherwise required under state program requirements. In order to qualify for the Voluntary Risk Reduction Program, a facility must have a previously approved HRA and must not be designated as a Potentially High Risk Level facility.

[7] *AB 2588 and Rule 1402 Supplemental Guidelines, (Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics "Hot Spots" Information and Assessment Act)*, September 2018, South Coast AQMD

[8] http://www.aqmd.gov/docs/default-source/planning/risk-assessment/pn_procedures.pdf

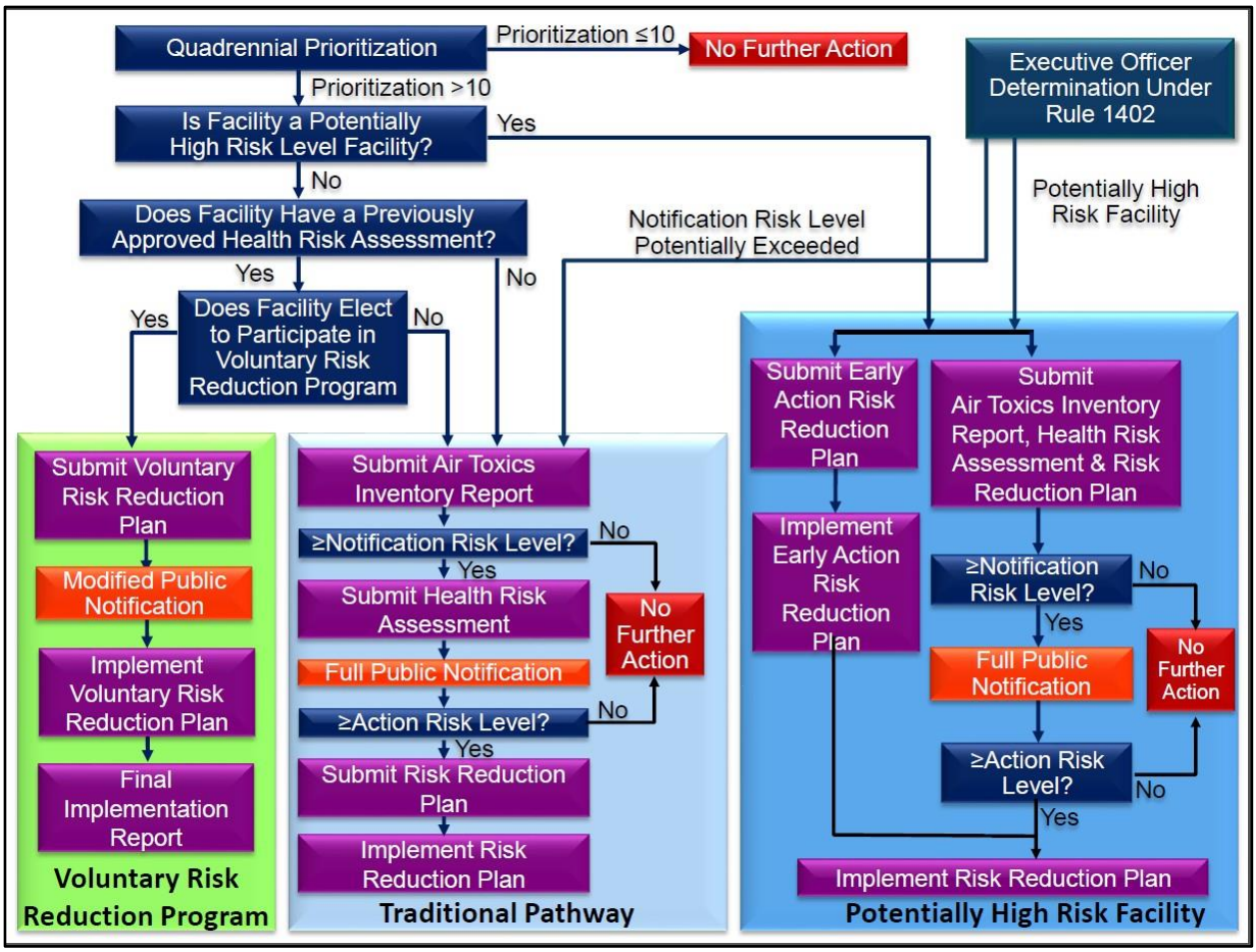
[9] Rule 1402 allows extensions but only for those facilities that meet certain requirements. Extensions are not allowed if for any facilities exceeding the Significant Risk Level. Even with extensions, the implementation timelines are shorter than state requirements.

Table 1 — Rule 1402 Risk Reduction Categories

Rule 1402 Levels	Thresholds	Implementation Timeline
Notification Risk or Voluntary Risk Level	Cancer risk of 10 in million or greater Acute or chronic HI of 1.0 or greater Exceeding lead National Ambient Air Quality Standard (NAAQS)	No later than 2.5 years after approval of plan (no reduction required for Notification Risk Level)
Action Risk Level	Cancer risk greater than 25 in million Cancer burden of 0.5 or more Acute or chronic HI of 3.0 or more Exceeding lead NAAQS	
Significant Risk Level	Cancer risk of 100 in million or greater Cancer burden of 0.5 or more Acute or chronic HI of 5.0 or more	No later than 2 years after approval of plan for facilities designated as Potentially High Risk Facilities

- Fees – State and local costs of implementing the Act are recovered through annual fees. As described previously, AB 2588 requires each district to recover state and district program costs. These fees are specified in South Coast AQMD Rules 307.1.

Figure 2 below shows the process used by South Coast AQMD to implement AB 2588 under Rule 1402.



Progress in Implementing the AB 2588 Program

From the beginning of the AB 2588 Program in 1987 through the end of 2018, staff has reviewed and approved 344 HRAs from 315 facilities. There are more approved HRAs than facilities as some facilities have prepared more than one HRA. Of these 315 facilities, 29 were required to implement risk reduction measures, 59 were required to perform public notification activities, while the remaining facilities were below the public notification threshold. As a result of the AB 2588 Program, about 95 percent of facilities that have been in the Program historically have HRAs demonstrating cancer risks below ten in-a-million and a hazard index (HI) of less than 1.0 for both non-cancer acute and non-cancer chronic, or their emissions have been low enough to not require an HRA. The summary of risks from approved HRAs illustrated in Figure 3 is based on the information in Appendix C, which lists the core facilities and the health risks from their approved HRAs. Table C-1 in Appendix C lists the facilities in order of their cancer risks and Table C-2 in Appendix C is ordered by facility ID. Table D-1 in Appendix D lists facilities which have prepared a Risk Reduction Plan (RRP) for the AB 2588 Program and their corresponding health risks [H&S Code 44363(a) (2) and (3)] and Table D-2 in Appendix D lists facilities which have successfully participated in the voluntary risk reduction program. Appendix E contains a list of acronyms and abbreviations used in this report.

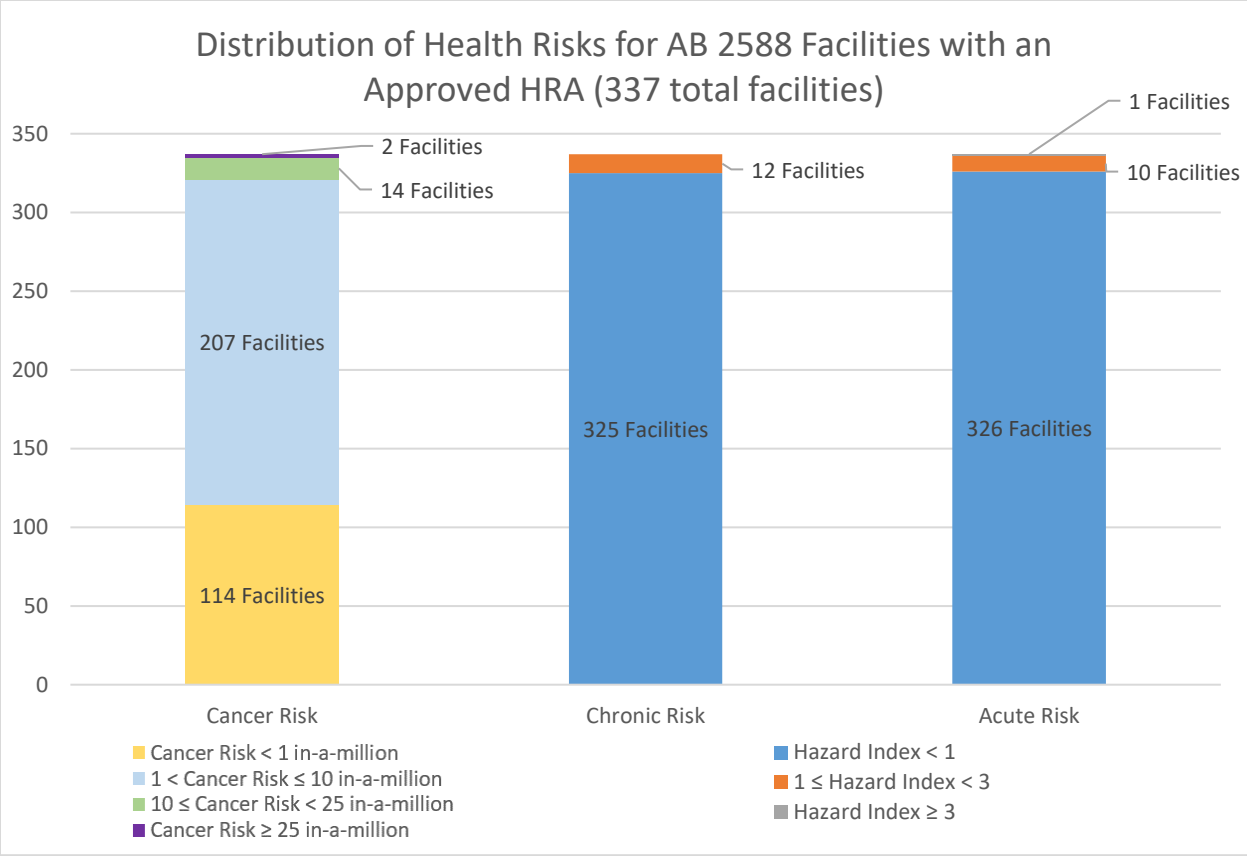


Figure 2 — Distribution of Risks for AB 2588 Facilities with an Approved HRA

Table 2 — AB 2588 Facilities by Source Category

Facility Categories	Number of Facilities
Airports	1
Amusement Parks	2
Entertainment	5
Harbors	1
Hospitals and Health-Related	30
Military Base	4
Office Buildings	1
Schools and Educational Institutions	16
Other Institutional/Commercial	20
Other Service/Commercial	5
Dairy/Poultry Farms	9
Other Agricultural Processing	2
Fermentation and Brewing (Breweries/Distilleries/Wineries)	1
Food flavoring manufacturing	1
Pharmaceuticals	4

Facility Categories	Number of Facilities
Other Food Processing Facility	1
Bulk Plants	19
Terminal Depots	13
Electricity Generation	34
Petroleum Refinery	11
Crude Oil Production	35
Aerospace	42
Building/Construction/Mineral Products	43
Cement Production	1
Chemical Plants	11
Electronic	4
Furniture/Household Products	2
Glass Production	1
Hydrogen Production	3
Iron and Steel Production	6
Metal and Alloys Products	28
Printing/Publishing	2
Pulp and Paper Manufacturing	5
Other Industrial/Manufacturing	61
Landfill - Industrial Waste	1
Landfill - Municipal Solid Waste	20
Wastewater Treatment - Industrial	1
Wastewater Treatment - Municipal	21
Other Waste Disposal	2
Total Facilities	**469**

Summary of South Coast AQMD Staff Activities for AB 2588 Facilities in 2018

In 2018, staff addressed facilities in various stages of the AB 2588 process and initiated audit activities on 140 facilities with priority scores greater than 10. Key activities conducted include review of 19 ATIRs, 12 HRAs, three RRPs, and 11 Voluntary Risk Reduction Plans (VRRPs). Many of these key activities were for facilities that are in Group I, which are facilities that tend to have more sources and are more complex such as refineries and other industrial facilities. In 2018, facilities that met the eligibility criteria were notified of the option for either submitting a traditional ATIR and HRA or a VRRP. Of the nine facilities that were offered the option to prepare either an ATIR or Voluntary Risk Reduction Program in 2018, one facility selected the VRRP option, six facilities selected to prepare an ATIR through the traditional AB 2588 process, one facility was no longer in business, and one facility submitted emissions inventory corrections which resulted in revised priority scores of less than 10. Overall, a total of 197 documents were reviewed in 2018 from 37 facilities, with some facilities having multiple documents submitted for South Coast AQMD staff review. Table 3 presents a summary of key activities for facilities participating in the traditional AB 2588 Program and Table 4 presents a summary of key activities

for facilities participating in the Rule 1402 Voluntary Risk Reduction Program.

Table 3 — Actions Taken in 2018 for Facilities in the Traditional AB 2588 Program

Facility Name	ID #	ATIR			HRA			RRP			Public Notification	Status
		R	C	A	R	C	A	R	C	A		
Aerocraft Heat Treating Co Inc [a]	23752		X	X	X	X	X	X	X		X	Public meeting held on 12/1/2018
Anaplex Corp [a]	16951	X	X	X	X	X	X	X	X		X	Public meeting held on 12/1/2018
Arconic Global Fasteners & Rings, Inc.	134931				X							
The Boeing Company [b]	16660											Revised Priority Score < 10
Boral Roofing LLC	1073			X	X		X				X	
Eisenhower Medical Center	3671	X										
Equilon Enter. LLC, Shell Oil Prod. US [b]	800372	X		X	X							
Fontana Paper Mills Inc	11716			X								
Garrett Aviation Services LLC dba Standard Aero	155828											Facility is no longer in business
Gerdau/TAMCO	18931											See Appendix A.12
Glendale City, Glendale Water & Power [b]	800327			X	X							
GS II, Inc. [b]	183567						X				X	
Hixson Metal Finishing	11818											See Appendix A.15
Holliday Rock Co., Inc.	41580											Notified to submit ATIR, due in 2019
Kirkhill Inc [b]	187823	X		X								HRA submittal due in 2019
Lubeco Inc [a]	41229	X		X	X							
MM West Covina LLC [b]	113873			X	X							
Phillips 66 Co/LA Refinery Wilmington Plant [b]	171107											See Appendix A.23
Quemetco Inc	8547									X		
So Cal Edison Co Pebbly Beach [b]	4477	X										
So Cal Gas Co./Playa del Rey Storage Facility	8582			X	X							
SoCal Holding, LLC [b]	169754	X		X	X							
Southern California Edison [b]	160437	X										
Triumph Processing, Inc. [b]	800267	X		X								Revised Priority Score < 10
TST, Inc. [b]	43436	X										
Univ Cal, Riverside	49387						X					

Notes:

For ATIRs, HRAs, and RRPs: R=Report Received; C=Comment letter sent to facility; A=Report Approved.

[a] Classified as Potentially High Risk Level Facility and under an Order for Abatement during 2018.

[b] Indicates facility notified to prepare either an ATIR or a VRRP. Facilities listed in this table elected to prepare an ATIR.

Table 4 — Actions Taken in 2018 for Facilities in the Voluntary Risk Reduction Program

Facility Name	ID #	VRRP			Status
		R	C	A	
Chevron Products Co.	800030				VRRP approved early 2019
Elite Comfort Solutions	182610	X			
LA City, Sanitation Bureau (HTP)	800214		X		
Orange County Sanitation District, Fountain Valley	17301			X	
Orange County Sanitation District, Huntington Beach	29110			X	
Phillips 66 Company/Los Angeles Refinery	171109				VRRP approved early 2019
Tesoro Refining & Marketing Co LLC, Calciner	174591		X		
Tesoro Refining And Marketing Co, LLC	800436				See Appendix A.31
	174655				
	174694				
	174703				
Tesoro Refining And Marketing Co, LLC (Sulfur Recovery Plant)	151798		X		
Torrance Refining Company LLC	181667				See Appendix A.33
Ultramar Inc	800026		X		

Notes:

For VRRPs: R=Report Received; C=Comment letter sent to facility; A=Report Approved.

A description of these activities for each facility in Tables 3 and 4 is listed in Appendix A

Streamlining Activities

Background

South Coast AQMD has undertaken several efforts to help affected facilities comply with rule requirements and to interact with the public regarding general air quality-related issues. This chapter describes these efforts along with the services created to advance these efforts.

South Coast AQMD Guidelines and Procedures for AB 2588

Consolidated Emissions Reporting

As described earlier, core AB 2588 facilities are required to provide an update of their toxics emissions inventory to South Coast AQMD on a quadrennial basis. Beginning with the fiscal year 2000-01 reporting cycle, toxics emission reporting was incorporated into South Coast AQMD's Annual Emissions Reporting (AER) Program. This was the first step towards streamlining emissions reporting between criteria pollutants and toxics. Then in 2008, South Coast AQMD created a web-based reporting system for facilities. The reporting tool automatically identifies if a facility is in the AB 2588 Program and also informs a facility if a particular year is subject to a quadrennial update. These upgrades and consolidation efforts have made for a much more efficient system that benefits both facilities and South Coast AQMD staff.

Prioritization Procedures

South Coast AQMD has taken various steps in streamlining prioritization procedures for the AB 2588 Program while maintaining consistency with the CAPCOA guidelines. Several refinements have been made over the history of South Coast AQMD's AB 2588 Program. In 2016, South Coast AQMD adopted the use of local meteorological stations and evaluated risks at actual closest receptor locations in addition to evaluating receptors in the worst case wind direction. Most recently in July 2018, the procedures were updated to incorporate the most recent meteorological data set and to simplify the calculation of a facility's non-cancer acute priority score. By using the South Coast AQMD Prioritization Procedure, fewer facilities are incorrectly categorized as high priority. [10] This streamlining is highly effective since less facilities are immediately notified each year.

The AB 2588 group also conducts a detailed audit of those facilities that are initially categorized as high priority to ensure proper designation. Certain steps may include confirming the correct use of emission factors, control efficiencies, source test methods, and relative proportions of toxic air contaminants. Additionally, staff confirms the correct distances to residential and worker receptors as well as any modifications to any equipment for the given quadrennial year and contacts the facility as needed for additional clarification. This additional information obtained through priority score auditing will often negate the need to require an ATIR and HRA. This process and use of this refined priority scoring methodology serves to reduce the number of facilities that are required to be notified and overall reduces unnecessary workload for the facilities and for staff.

[10] http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab-2588-facility-prioritization-procedure-201809.pdf

Hotspots Analysis and Reporting Program (HARP)

The Hotspots Analysis and Reporting Program, commonly known as HARP, is a software suite developed by CARB that assists with the technical requirements of the AB 2588 Program. HARP consists of three independent modules: the Emissions Inventory Module, Air Dispersion Modeling and Risk Tool, and Risk Assessment Standalone Tool. South Coast AQMD requires the use of HARP for Rule 1402 related work such as ATIRs, VRRPs, and HRAs. The use of HARP by facility operators, and other individuals promotes consistency and a more efficient and cost-effective way to develop inventories and conduct HRAs.

General Supplemental Guidelines

The OEHHA HRA Guidance defers to local air districts for specific or additional requirements. The AB 2588 Supplemental Guidelines lists the specific instructions for preparing AB 2588-related documents in South Coast AQMD. By clearly indicating what is required from facilities and by periodically updating the document as needed, South Coast AQMD ensures that facilities have a clear and up to date understanding of all requirements. This will also minimize the amount of general inquiries and preliminary discussions, provided for a more efficient process.

Voluntary Risk Reduction Program

Another element streamlining the South Coast AB 2588 Program is the provision for the Voluntary Risk Reduction Program. Rule 1402 was amended to provide an option for a VRRP in response to industry interest in voluntarily reducing health risks from their facilities in return for modified public notification requirements. A facility may participate in the Voluntary Risk Reduction Program only if it has a previously approved HRA that is below the Action Risk Level and is not a Potentially High Risk Level facility, as defined by Rule 1402. This program provides a more expeditious risk reduction program than the traditional pathway under state requirements, and also reduces notification requirements and other process for participating facilities. Under the traditional program, facilities are not required to reduce cancer risk below 25 in a million. To successfully participate in the Voluntary Risk Reduction Program, risks from the participating facility must be reduced below 10 in a million, which is up to 60% reduction in cancer risk. To further expand the use of the Voluntary Risk Reduction Program and assist facilities, the AB 2588 staff developed guidelines that describe requirements of a VRRP in September 2018.[11]

Air Dispersion Modeling

Modeling Guidance

The United States Environmental Protection Agency's (U.S EPA) air quality dispersion model AERMOD is required for use to estimate concentrations of toxic air contaminants for risk assessments conducted pursuant to Rules 1401 and 1402. The AERMOD model is a steady-state Gaussian plume model capable of estimating pollutant concentrations from a wide variety of

[11] *South Coast AQMD Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program*, September 2018 http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab-2588-vrrp-guidelines-201809.pdf

sources that are typically present at a facility. It is a stand-alone application, but has also been incorporated to the CARB-developed HARP program as well as other programs from third party developers. South Coast AQMD has developed guidance regarding the use of AERMOD to assist modelers. For example, general guidance is provided for the use of AERMOD modeling such as use of regulatory defaults, averaging times, receptor grids and elevation data.[12] The AB 2588 Program staff has provided specific guidance regarding the required parameters in the HARP program. These guidance not only increases the quality of submissions but also decreases the amount of time spent by staff to answer basic questions.

Meteorological Data

South Coast AQMD has prepared meteorological data from 24 stations throughout the South Coast Air Basin for download. The South Coast AQMD website includes a map showing the locations of each of these meteorological stations along with the corresponding most recent five years of meteorological data for each station. The meteorological station that best represents the facility's meteorological conditions (such as prevailing winds), terrain, and surrounding land use should be used in all modeling analyses. In many cases, this would be the nearest located station. South Coast AQMD staff are available to provide assistance to modelers to ensure the most representative station is used.

Other Streamlining Activities

Rule 1401 Guidance

Rule 1401 requires any new, modified, or relocated permit units which emit toxic air contaminants to comply with certain allowable limits as specified by the rule. South Coast AQMD has developed the Rule 1401 Risk Assessment Procedures[13] to assist applicants as well as staff to evaluate Rule 1401 and 1401.1 compliance. The guidance document provides four tiers to determine health risk for Rule 1401 risk assessment, ranging from a quick look up table that uses very conservative health-protective values, to instructions to conduct detailed risk assessments involving air quality dispersion modeling analysis. By allowing permit applicants to utilize this tiered option to demonstrate compliance with risk limits, this often times leads to an expedited analysis since detailed risk assessments often are not necessary for most permit applications. The document also provides detailed sample calculations and instructions for each tier, allowing facilities to have a more thorough understanding of the risk assessment process associated with Rule 1401.

In addition to the guidance document that establishes procedures for Rule 1401, South Coast AQMD has also developed a customized spreadsheet that incorporates both Tiers 1 and 2 analysis, which apply to a majority of permit evaluations. Using this spreadsheet not only simplifies and streamlines the application process, but helps to reduce errors in calculation.

Web tools

[12] South Coast AQMD modeling guidance is available at: http://www.aqmd.gov/home/air-quality/meteorological-data/modeling-guidance

[13] *Risk Assessment Procedures for Rules 1401, 1401.1 and 212, Version 8.1*, September 1, 2017, South Coast AQMD http://www.aqmd.gov/docs/default-source/permitting/rule-1401-risk-assessment/riskassessproc-v8-1.pdf http://www.aqmd.gov/docs/default-source/permitting/rule-1401-risk-assessment/attachmentn-v8-1.pdf

South Coast AQMD has developed web tools such as the Facility Information Detail (F.I.N.D) tool that allows a user to search for public information about South Coast AQMD-regulated facilities. Some of the facility information that can be found using F.I.N.D include: general facility details, equipment lists, compliance history, emissions inventory (including toxic pollutants), and hearing board information. There are several existing web-based applications on South Coast AQMD's website that provide similar information, however, F.I.N.D makes the data available in a much more consolidated and user friendly way. Updates to the database are made at least once per week and the tool also includes a very useful interactive map with aerial imagery from the U.S Geological Service. [14]

Small Business Assistance

South Coast AQMD has a team of engineers and inspectors that are specifically designated to help small businesses (100 or fewer employees or an annual gross revenue up to $5 million) understand and comply with air quality rules and regulations. Whether it is assistance in understanding regulations that may apply to a facility, identifying equipment that may need a permit, assistance with permit applications, or even scheduling a no fault on-site inspection, the small business assistance unit act as advocates for these small businesses. Offering these services to smaller businesses serves to streamlines efforts to regulate air quality while also creating a positive open working relationship with small local businesses.

Public Assistance

The South Coast AQMD's AB 2588 Program provides public assistance services that includes both a hotline at (909) 396-3610 and email address (ab2588@aqmd.gov) to answer any program-related questions. The South Coast AQMD website also includes a section specifically dedicated to the AB 2588 Program that provides up to date activities, including approved HRAs, RRPs, and public notices, and information on air toxics monitoring in local communities, such as in Paramount.

South Coast AQMD also provides several other services, such as a telephone number to answer fee-related questions, an online complaint system and telephone number where members of the public can notify staff of air quality problems, such as odor and visible emissions.[15] These services help to maintain good working relationships with facilities and to protect air quality and public health.

[14] http://www.aqmd.gov/nav/FIND/facility-information-detail

[15] http://www3.aqmd.gov/webappl/complaintsystemonline/NewComplaint.aspx;
Telephone hotline: 1-800-CUT SMOG® (1-800-288-7664)

Paramount - Air Monitoring Activities

In 2013, South Coast AQMD staff began conducting an investigation into local sources of emissions, including initiating a local air sampling study after receiving a series of metallic odor complaints from local community members in the City of Paramount (Paramount) and surrounding areas. The purpose of these activities was to determine the source of emissions and potential air pollution control strategies. This investigation focused on two toxic metals of concern: nickel and hexavalent chromium. In July 2016, a larger number of samplers were deployed to allow South Coast AQMD to better measure spatial and temporal variations of hexavalent chromium in the area and identify its potential sources. In October 2016, South Coast AQMD initiated an extensive air monitoring campaign to assess levels of hexavalent chromium in the industrialized sections of Paramount. Highly elevated levels were found initially and additional efforts were conducted to identify and address sources of hexavalent chromium that were impacting nearby communities. Once potential sources were identified, the sampling strategy was adjusted to focus on specific facilities and on characterizing hexavalent chromium levels in the adjacent communities. As a result, several facilities made a range of improvements, some voluntary and some through rule changes and enforcement actions. These changes have substantially reduced ambient hexavalent chromium levels in Paramount and surrounding areas. South Coast AQMD's ongoing air monitoring results indicate a substantial progress in reducing ambient levels of hexavalent chromium. As a result, South Coast AQMD is updating its air monitoring efforts in Paramount to focus on conducting studies to evaluate other potential sources of hexavalent chromium and also monitoring other areas of the Basin that may have higher potential for air toxics exposure.

Throughout this period, air monitoring in Paramount has occurred at a total of 38 locations as shown in Figure 6, and 12 schools. School sampling has been supported by CARB. Currently, South Coast AQMD collects air samples for hexavalent chromium analysis at 16 locations in the City of Paramount. Among these active monitoring locations, six are adjacent to facilities that are operated under an Order of Abatement during 2018 with South Coast AQMD's independent Hearing Board ("Compliance" sites; see Figure 6). The remaining monitoring sites are close to other potential sources or near residential areas and sensitive receptors of Paramount. Because hexavalent chromium levels in Paramount have been declining steadily and are now within the typical levels, the size of this monitoring network can be reduced to focus on other areas that have higher potential for air toxics exposure.

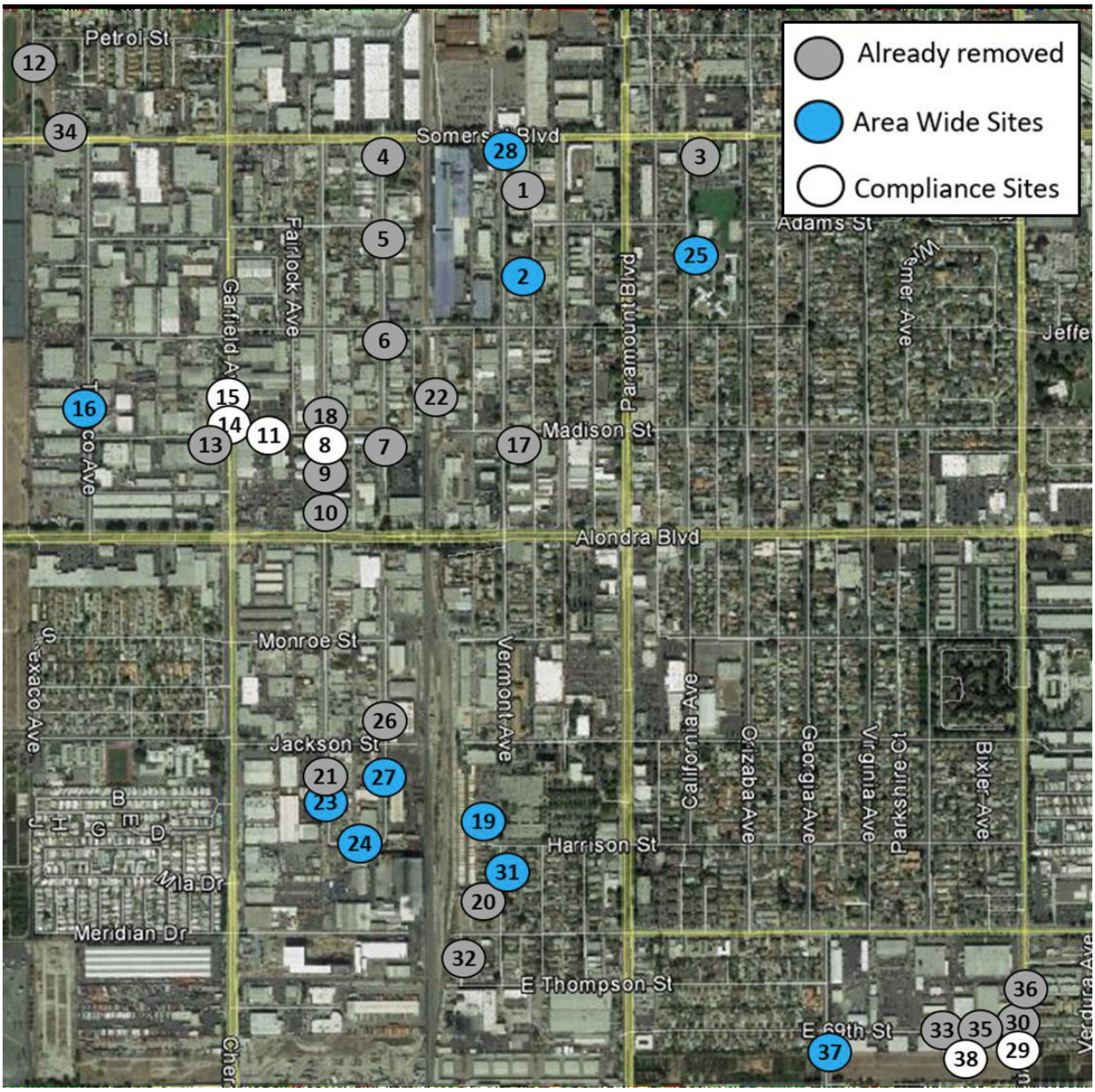


Figure 3 — Location of the monitoring sites in the City of Paramount

Community Air Toxics Initiative

As a result of lessons learned during South Coast AQMD's investigation into air monitoring for sources of toxic metal emissions in Paramount and other areas, staff has been implementing a far-reaching Community Air Toxics Initiative to investigate, identify and remediate any additional sources across our four-county region that may emit high levels of toxic air contaminants. Under this initiative, South Coast AQMD will systematically identify and prioritize high-risk facilities, then use the latest air monitoring technology to confirm specific sources causing high emissions associated with metal-processing facilities. If identified, South Coast AQMD will seek Orders for Abatement from the independent South Coast AQMD Hearing Board to require these facilities to

reduce their emissions to a level that does not pose an immediate threat to public health quickly.

The goal of this initiative is to eliminate or minimize the release of hexavalent chrome into the environment associated with metal-processing facilities. This program is expected to be a seven-year, labor-intensive effort with the air monitoring portion costing approximately $6 million to $7 million annually. It will focus on the approximately 1,100 metal processing facilities across South Coast AQMD's four-county jurisdiction with the potential to emit toxic metal contaminants including hexavalent chromium, lead, arsenic, cadmium and nickel.

As with the process in Paramount, South Coast AQMD staff will engage and communicate regularly about its work with residents, community groups, local governments and their elected officials, partner regulatory agencies, affected facilities and industry groups. South Coast AQMD will seek to leverage the regulatory authorities of other agencies to assist in swiftly curtailing emissions from high-emitting facilities.

Assembly Bill 617 (AB 617)

AB 617 was passed by the California legislature in 2017 and focuses on improving air quality and public health in environmental justice communities. This law first allows local residents to provide provides recommendations for the selection of the environmental justice communities. South Coast AQMD will use updated data to assess the communities most affected, to identify key sources of pollution and develop targeted emissions reduction plans to reduce community exposures to air pollution. A small number of communities have been selected for the first year and other communities will be added over time.

For each selected community, South Coast AQMD will work with local stakeholders to evaluate their greatest air pollution concerns. Depending on the needs of each community, South Coast AQMD may conduct targeted community air monitoring and develop a tailored community air plan. South Coast AQMD will work with CARB, other agencies, and all stakeholders to implement these community air plans to reduce local air pollution emissions and benefit public health. In September 2018, CARB approved three communities in our region for the first year of this program:

- Wilmington, Carson, West Long Beach
- East Los Angeles, Boyle Heights, West Commerce
- San Bernardino, Muscoy

South Coast AQMD has convened a Community Steering Committee in each of the three communities with the purpose of identifying specific community air quality concerns, discussing resolutions, and developing recommendations for improving the local air quality. These committees work closely with South Coast AQMD and CARB to discuss emissions reductions targets and strategies to inform a tailored community air plan that addresses the community's highest priority concerns. South Coast AQMD will deploy systems to monitor air quality in selected communities where this information is most needed. The analysis of the data collected will inform future community emissions reduction plans and will be used to track progress. This information will also be shared with the public and CARB.

State Level

OEHHA Updates

Toxic Program Impacts with New or Revised Toxic Air Contaminants

As described previously, OEHHA is required to develop guidelines for conducting HRAs under the AB 2588 Program. In implementing this requirement, OEHHA develops new or revises risk factors for many toxic air pollutants. South Coast AQMD staff monitor the progress for these changes closely. For any finalized changes in risk factors, staff performs a preliminary estimate of potential Rule 1402 program impacts. Notice is provided to the Governing Board and affected industries annually through this and other AB 2588 annual reports.

Toxic Air Contaminants With New or Revised Health Values

OEHHA adopted risk values for two toxic air contaminants in 2018. In May, OEHHA adopted both new and revised RELs for ethylene glycol mono-n-butyl ether (EGBE).[16] RELs are airborne concentrations of a chemical that are not anticipated to result in adverse non-cancer health effects for specified exposure durations in the general population, including sensitive subpopulations. EGBE is a solvent that is used as a component in cleaning products, cosmetics, lacquers, latex paint, firefighting foam, and hydraulic fluid. Because of its properties as a solvent, it has gained widespread use in industrial and consumer applications.

In August, OEHHA adopted new cancer slope factors and a unit risk factor for tert-butyl acetate (TBAc).[17] Cancer Potency Factors represent the 95th percent upper confidence limit of the slope of the dose response curve estimated assuming continuous lifetime exposure to a substance. TBAc is a solvent that is used in the production of lacquers, enamels, inks, adhesives, thinners, and industrial cleaners.

The revised and adopted values are summarized in Table 5.

Table 5 — New or Revised Health Values in 2018 from OEHHA

CAS #	Name	Inhalation Slope Factor $(mg/kg\text{-}day)^{-1}$	Oral Slope Factor $(mg/kg\text{-}day)^{-1}$	Chronic REL $\mu g/m^3$	8-Hour Chronic REL $\mu g/m^3$	Acute REL $\mu g/m^3$
111-76-2	EGBE	N/A	N/A	82 (N/A)	164 (N/A)	4700 (14000)
540-88-5	TBAc	4.7×10^{-3} (N/A)	5.0×10^{-3} (N/A)	N/A	N/A	N/A

Assessment of Impacts to Existing Facilities

[16] https://oehha.ca.gov/media/downloads/crnr/finalegberel050418.pdf
[17] https://oehha.ca.gov/media/downloads/crnr/tbaciur081618.pdf

Since TBAc is a newly added pollutant with no prior reporting requirements, staff was unable to conduct a preliminary estimate of Rule 1402 impacts. However, facilities required to submit an ATIR under Rule 1402 will be required to report TBAc emissions beginning in 2019. TBAc is potentially emitted during coating operations such as autobody shop operations. Autobody repair facilities are included as an industrywide category. Additionally, staff will review any facilities that are required to submit a HRA to ensure TBAc emissions are included in inventories when necessary.

EGBE is a previously listed pollutant and is subject to reporting by AB 2588 facilities every four years. Data for the 2017 reporting year was used because it is the most current data available. For the 2017 reporting period only, 13 facilities reported annual emissions of EGBE. A breakdown of the types of facilities and the number of those types of facilities that reported EGBE emissions are presented in Table 6.

Table 6 — 2017 Summary of EGBE Emitting Facilities

Facility Description	Number of Facilities
Printing/Publishing	2
Building/Construction/Mineral Products	1
Harbors	1
Aerospace	2
Other Industrial/Manufacturing	3
Metal and Alloys Products	1
Military Base	1
Chemical Plants	1
Other Institutional/Commercial	1
Total:	13

Two of the 13 facilities have previously approved HRAs. The HRAs for both of these facilities were approved in 2002. At that time, EGBE was not reported for either HRA. EGBE is required to be reported on a quadrennial cycle and therefore is examined when screening and prioritization occurs in accordance with program requirements.

Future Activities

AB 2588 Activities

In 2019, staff will prioritize approximately 70 facilities, and notify those with high priority scores to prepare ATIRs or VRRPs, if eligible, and HRAs and RRPs, if necessary. There are a substantial number of ATIRs and VRRPs that are expected to be reviewed in 2019. Public notification, and public meetings as necessary, will also occur for multiple facilities including City of Glendale Water & Power (ID 800327), Lubeco, Inc. (ID 41229), Phillips 66 Company, Los Angeles Refinery – Wilmington Plant (ID 171107), Southern California Gas Company, Playa del Rey Storage Facility (ID 8582), and Kirkhill Inc (ID 187823).

In addition to the AB 2588 Program implementation activities, staff will be working on:

- Notification of seven asphalt aggregate plants to prepare and submit a HRA
- Continue to provide support to rulemaking staff
- work with CARB and through the CAPCOA Toxics and Risk Managers Committee (TARMAC) to update CARB Emission Inventory Guidelines, including review of draft list of chemicals
- Continue to work with CARB and through the CAPCOA-TARMAC to develop HRA guidelines for the industry-wide categories of gasoline dispensing facilities, diesel internal combustion engines, providing training to South Coast AQMD personnel and the regulated community
- Train new staff on the expanded emissions reporting under amended Rule 301 and AB 617

Model-Monitor Reconciliation

In response to community concerns regarding fugitive emissions and difficulties quantifying those emissions, the South Coast AQMD Governing Board, at its June 3, 2016 meeting, approved a contract for Protocol Development for Reconciling Air Quality Monitoring Data with Dispersion Modeling Results to provide support in developing a consistent methodology for facilities to use when preparing AB 2588 HRAs. On June 30, 2017, work on this contract was suspended due to a potential conflict of interest issue which was brought to staff's attention. In August 2018, this contract was terminated due to potential conflict of interest issues with the consultant.

Appendix A – Description of Facilities/Projects

A.1. Aerocraft Heat Treating Co. Inc. (ID 23752) – Paramount

Aerocraft Heat Treating Company (Aerocraft) operates a facility in the City of Paramount that processes forgings, castings, bar, plate and rough-machined parts. The facility uses various heat treating furnaces, quench tanks, and metal grinding equipment, as well as plasma cutting operations. Based on ambient monitoring conducted near Aerocraft which showed elevated levels of hexavalent chromium, Aerocraft was officially designated as a Potentially High Risk Level Facility on December 14, 2016. As part of this designation, Aerocraft was required to submit an Early Action Reduction Plan by March 14, 2017, an ATIR by May 16, 2017, a HRA and a RRP by June 13, 2017. Additional details regarding the ambient monitoring in Paramount and near Aerocraft and events that led up to the designation of Aerocraft as a Potentially High Risk Facility are discussed in the 2016 AB 2588 Annual Report and on South Coast AQMD's website[18].

The Early Action Reduction Plan was received on March 13, 2017 and after South Coast AQMD's staff review, a comment letter was sent on April 26, 2017 requesting revisions and resubmittal. Subsequently, on May 4, 2017, a revised Early Action Reduction Plan was received.

On May 16, 2017, Aerocraft submitted an ATIR, and the HRA and RRP were submitted on June 13, 2017, in accordance with the required deadlines. Conditional approval of the revised Early Action Reduction Plan was granted on May 31, 2017. On February 9, 2018, South Coast AQMD staff provided Aerocraft with comments and recommendations on the submitted ATIR, HRA, and RRP, and requested revision and resubmittal of those respective documents. After technical conference calls with Aerocraft representatives, South Coast AQMD staff received the Revised ATIR on March 29, 2018. The Revised ATIR was approved on May 9, 2018.

The Revised HRA and Revised RRP were received on May 17, 2018. The Revised HRA was approved by South Coast AQMD staff and OEHHA on October 9, 2018. The revised HRA representing the 2016 inventory year indicated that Aerocraft posed a maximum cancer risk of 1,900 in one million for a residential receptor located at the corner of Madison Street and Illinois Avenue, based on a 30-yr exposure, and 350 in a million for the worker receptor located immediately south of Aerocraft, based on a 25-yr exposure. The cancer risk was mainly due to hexavalent chromium emissions from furnaces and rack welding operations. A cancer burden of 11 was estimated, based on a 70-yr exposure.

The maximum non-cancer chronic hazard indices of 0.10 and 0.15 were projected for residential and non-residential receptors, respectively. The maximum non-cancer 8-hour chronic hazard index is less than 0.01 and the maximum non-cancer acute hazard index was 2.9 at Aerocraft's property boundary.

Since the HRA results were above the Significant Risk Level in Rule 1402, Aerocraft was required to notify the public about the health risk in addition to conducting annual public notification

[18] Information regarding Aerocraft and compliance-related activities in Paramount can be found at the following link: https://www.aqmd.gov/home/news-events/community-investigations/air-monitoring-activities/facilities---order-for-abatement/aerocraft

meetings until the Rule 1402 Action Risk Level was achieved pursuant to Rule 1402(p). Notices of the public notification meeting were sent out to over 35,000 people in the area of impact. South Coast AQMD staff held a public notification meeting at the Progress Park Community Center on December 1, 2018 to explain the impact of Aerocraft's emissions on public health and to discuss next steps. South Coast AQMD staff is currently reviewing the Revised RRP.

A.2. ***Anaplex Corp (ID 16951) - Paramount***

Anaplex Corporation (Anaplex) operates a metal processing and finishing company in the City of Paramount. The facility processes parts for commercial and defense aerospace applications. The processes include anodizing and plating process lines which use hexavalent chromium, nickel, and cadmium. Additional details regarding the ambient monitoring in Paramount and near Anaplex and events that led up to the designation of Anaplex as a Potentially High Risk Facility are discussed in the 2016 AB 2588 Annual Report and on South Coast AQMD's website.[19]

Based on ambient monitoring in December 14, 2016, South Coast AQMD staff designated Anaplex as a Potentially High Risk Level Facility specifically based on high levels of hexavalent chromium found at monitors adjacent to Anaplex. As part of this designation, Anaplex was required to submit an Early Action Reduction Plan by March 14, 2017, an ATIR by May 16, 2017, a HRA and a RRP by June 13, 2017. Following litigation in Superior Court, the Hearing Board granted a Stipulated Order for Abatement on January 18, 2017.

Anaplex submitted an Early Action Reduction Plan on March 13, 2017. South Coast AQMD staff provided comments on April 26, 2017 and requested revisions and resubmittal of the Early Action Reduction Plan. Anaplex submitted a revised Early Action Reduction Plan on May 11, 2017 which was conditionally approved on May 31, 2017.

On May 15, 2017, Anaplex submitted an ATIR and a HRA and RRP on June 13, 2017. South Coast AQMD staff provided written comments regarding all three documents on December 8, 2017, and requested revisions and resubmittal of each document. On December 8, 2017, South Coast AQMD staff provided Anaplex with comments and recommendations on the submitted ATIR, HRA and RRP, and requested revision and resubmittal of those respective documents. After numerous technical conference calls and meetings with Anaplex representatives, South Coast AQMD staff received the Revised ATIR on May 1, 2018 and the Revised HRA and RRP on May 17, 2018. After review, South Coast AQMD staff requested another revision and resubmittal of the HRA and RRP. Anaplex submitted the Revised HRA and Revised RRP on September 26, 2018. The revised ATIR was approved on October 9, 2018.

The Revised HRA submitted by Anaplex contained alternate HRA scenarios in the main HRA report, which was not consistent with South Coast AQMD's AB 2588 Supplemental Guidelines. In the interest of time and pursuant to Rule 1402 (e)(2)(D), South Coast AQMD staff modified the Revised HRA resubmitted on September 26, 2018 to follow Appendix B of South Coast AQMD's AB 2588 and Rule 1402 Guidelines[20]. The HRA relied upon results of one of the scenarios contained in Anaplex's resubmitted Revised HRA, and presented the information consistent with

[19] http://www.aqmd.gov/home/news-events/community-investigations/air-monitoring-activities/facilities---order-for-abatement/anaplex-corp

[20] http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab-2588-supplemental-guidelines-201809.pdf

South Coast AQMD's AB 2588 Supplemental Guidelines. Anaplex's modified HRA was conditionally approved on October 9, 2018. The HRA was submitted to OEHHA for their review. Therefore, the HRA is conditionally approved, pending any further comments or edits by OEHHA. The HRA results representing the 2016 inventory year indicated that Anaplex posed a maximum cancer risk of 931 in one million for a residential receptor located at the corner of Madison Street and Illinois Avenue, based on a 30-yr exposure, and 2,836 in a million for a worker receptor located immediately south of Anaplex, based on a 25-yr exposure. The cancer risk was mainly due to hexavalent chromium emissions from spray booth operations. A cancer burden of 9.73 was estimated, based on a 70-yr exposure.

The maximum non-cancer chronic hazard indices of 0.06 and 2.02 were projected for residential and non-residential receptors, respectively. The maximum non-cancer 8-hour chronic hazard index is 0.11 and the maximum non-cancer acute hazard index was 23.84 at Anaplex's property boundary.

Since the HRA results were above the Significant Risk Level in Rule 1402, Anaplex was required to notify the public about the health risk in addition to conducting annual public notification meetings until the Rule 1402 Action Risk Level was achieved pursuant to Rule 1402(p). Notices of the public notification meeting were sent out to over 35,000 people in the area of impact. South Coast AQMD staff held a public notification meeting at the Progress Park Community Center on December 1, 2018 to explain the impact of Anaplex's emissions on public health and to discuss next steps. South Coast AQMD staff is currently reviewing the Revised RRP.

A.3. ***Arconic Global Fasteners & Rings, Inc. (ID 134931) – Fullerton***

Arconic Global Fasteners & Rings, Inc. (Arconic) manufactures precision fastening systems and components for the aerospace industry. They operate plating lines, ovens and abrasive blasting equipment.

This facility has an HRA that was approved in November 1997 with elevated cancer risks requiring risk reduction. The RRP was submitted in February 2001 and approved March 2001. The RRP involved eliminating use of perchloroethylene as a cleaning solvent, and installing scrubbers to control emissions of various metals from plating operations. This RRP was fully implemented and approved in October 2003. However, the resulting acute hazard index was greater than 1.0 due to use of sodium hydroxide as part of the plating operations.

The facility voluntarily submitted an HRA to demonstrate that the acute hazard index is no longer greater than 1.0. This document is currently under review.

A.4. ***The Boeing Company (ID 16660) – Huntington Beach***

The Boeing Company (Boeing Huntington Beach) is part of the Boeing Defense, Space, & Security division of The Boeing Company and located in Huntington Beach. Boeing Huntington Beach manufactures aerospace parts, applies coatings and finishes, and conducts polishing and grinding activities.

On January 31, 2018, South Coast AQMD staff sent a letter requesting Boeing Huntington Beach to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10

based on its 2015 annual emissions. The main air toxic contributing to the priority score is methylene phenyl diisocyanate (MDI). On February 27, 2018, Boeing Huntington Beach sent South Coast AQMD staff modifications to their reported MDI emissions and requested the priority score to be updated. After review of the modifications, South Coast AQMD staff sent a letter on May 18, 2018, revising Boeing Huntington Beach's priority score to be less than 10.

Boeing Huntington Beach is still required to prepare annual emission reports and quadrennial emissions inventories. The next quadrennial emissions inventory year will be 2019.

A.5. ***Boral Roofing LLC (ID 1073) – Corona***

Boral Roofing, LLC (Boral Roofing) is a clay and concrete tile manufacturing plant located in the City of Corona. Boral Roofing has two production lines for manufacturing clay roof tiles. Clay is delivered by trucks and then premixed by a skip loader. The clay is then grounded into a fine powder in a mill, screened, and transported to storage silos. Clay is transferred by belt conveyor to their manufacturing process where it is mixed with water and additives in pug mills. The wet clay mixture is extruded to tile form, then dried and fired in various natural gas kilns.

On March 20, 2017, South Coast AQMD staff sent a letter requesting Boral Roofing to prepare an ATIR due to the facility having a priority score greater than 10 based on its 2015 annual emissions with hexavalent chromium and arsenic as the main air toxics contributing to the high priority score.

The ATIR was submitted on August 25, 2017. Following comments from South Coast AQMD staff regarding technical discrepancies, Boral Roofing submitted the revised ATIR on November 16, 2017 which included corrections to calculations for hexavalent chromium that resulted in lower emissions. On March 27, 2018, South Coast AQMD staff sent a letter to Boral Roofing requiring the submittal of an HRA. Boral Roofing submitted the HRA on June 26, 2018. After review by staff, the HRA was approved on September 13, 2018. The results of the HRA showed that the Notification Risk Level was exceeded by the non-cancer chronic hazard index for the maximum exposed worker receptor. The chronic health risks are mainly due to arsenic, hydrogen fluorides, and hydrogen chlorides from the kilns. The area of notification was to the north of the facility. Since the area affected only a single property owned by City of Corona, a public notification meeting was not held. However, a public notification letter detailing the health risks was sent to the City of Corona on October 19, 2018.

A.6. ***Chevron Products Co. (El Segundo Refinery) (ID 800030) – El Segundo***

Chevron Products Co. (Chevron ES) is a 1,000 acre petroleum oil refinery in the City of El Segundo with a 290,000 barrels of crude oil per day processing capacity. Chevron ES has approximately 20% of the gasoline market share in Southern California and is one of the largest refineries on the West Coast. The main products of the refinery are transportation fuels, such as gasoline, jet fuel, and diesel fuel.

On October 14, 2016, South Coast AQMD staff sent a letter requesting Chevron ES to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2015 annual emissions with furans, polycyclic aromatic hydrocarbons, arsenic, cadmium, and related compounds as the main air toxics contributing to the high priority score. Chevron elected to participate in the Voluntary Risk Reduction Program and submitted a VRRP on March 27, 2017.

Reductions of diesel particulate matter (DPM) from unpermitted internal combustion engines are an element of the VRRP. In 2018, staff have worked with the permitting teams to evaluate options for incorporating these requirements so that they are enforceable. Technical review is complete and VRRP approval is expected in early 2019.

A.7. Eisenhower Medical Center (ID 3671) – Rancho Mirage

Eisenhower Medical Center is a hospital based in Rancho Mirage, California serving the Coachella Valley region.

On June 12, 2018, South Coast AQMD staff sent a letter requesting Eisenhower Medical Center to prepare an ATIR due to the facility having a priority score greater than 10 based on its 2014 annual emissions, with formaldehyde from the cogeneration units as the main air toxics contributing to the high priority score.

On November 9, 2018, Eisenhower Medical Center submitted an ATIR. South Coast AQMD staff reviewed the submittal and worked with the facility to make some necessary revisions such as building and stack coordinates in addition to emission estimation methods. Based on results from preliminary analysis of the ATIR and discussion with the facility, Eisenhower Medical Center submitted a request to source test both cogeneration units for formaldehyde, 1-3 butadiene, and acetaldehyde. At the end of 2018, staff was awaiting the submittal of a source test protocol.

A.8. Elite Comfort Solutions (ID 182610) – Commerce

Elite Comfort Solutions (Elite Comfort) operates a facility in city of Commerce and manufactures polyurethane foam for bedding, furniture, packaging, automotive, and medical industries.

On January 31, 2018, staff sent a letter requiring Elite Comfort to either prepare an ATIR or VRRP due to the facility having a priority score greater than 10 based on 2015 annual emissions, with toluene diisocyanates as the main air toxic contributor to the high priority score.

Elite Comfort elected to participate in the Voluntary Risk Reduction Program and submitted the VRRP on June 22, 2018. Following review, staff required Elite Comfort to provide missing information and to make several revisions. Elite provided information and a revised submittal on November 7, 2018. In reviewing this submittal, however, South Coast AQMD staff found that additional risk reduction measures were necessary in order to meet the Voluntary Risk Reduction Threshold. In response, the facility submitted revisions to the VRRP on December 3, 2018, and another one on December 17, 2018. South Coast AQMD staff is currently reviewing the revised VRRP.

A.9. Equilon Enter. LLC, Shell Oil Prod. US (ID 800372) – Carson

Equilon Enterprises LLC (Equilon) operates a petrochemical product distribution terminal in the City of Carson which is comprised of loading racks, storage tanks, and product pipeline. The products are transported by pipeline, trucks, or rail.

On October 10, 2017, South Coast AQMD staff sent a letter requesting Equilon to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2015

annual emissions with benzene, ethyl benzene, and naphthalene emissions as the main air toxics contributing to the high priority score. Equilon elected to prepare an ATIR and submitted it on March 9, 2018. After review and subsequent revisions, South Coast AQMD sent a letter to Equilon on May 30, 2018 approving the ATIR and requiring the preparation of an HRA.

On August, 28, 2018, Equilon submitted an HRA. The HRA is currently under review.

A.10. ***Fontana Paper Mills Inc. (ID 11716) - Fontana***

Fontana Paper Mills Inc. (Fontana Paper Mills) is a manufacturing plant for asphalt roofing material, including shingles and saturated and coated roofing paper underlayments. The facility recycles paper products and manufactures roll stock for shingle backing or underlayments. The emissions from the asphalt mixer, heater and rollcoater are controlled by thermal oxidizer. Other emissions from the saturator process are controlled by a scrubber, followed by a high efficiency air filter. Emissions of polycyclic aromatic hydrocarbons are the main toxic pollutant of concern and can occur when asphalt is heated.

South Coast AQMD staff noted discrepancies in reported emissions from three asphalt roofing companies and determined that additional investigation was warranted. As a result, on October 14, 2016, South Coast AQMD staff requested an emissions inventory update from Fontana Paper Mills in order to get a better understanding of actual emissions and corresponding health risks. Because Fontana Paper Mills did not have a previously approved HRA, an ATIR was requested based on its 2014 annual emissions. The ATIR was submitted on March 14, 2017, and the facility proposed source testing of toxic air contaminants at the high efficiency air filter vents. However, since Fontana Paper Mills was undergoing modifications in order to be able to manufacture products using polymer asphalt, source testing was postponed until construction for the modified manufacturing line has been completed. Construction was not completed in 2018 and therefore emissions from the high efficiency air filter vents were approximated using a different methodology. Based on this methodology, an updated emissions inventory was received on June 15, 2018 and a preliminary HRA analysis was completed by South Coast AQMD staff. On June 28, 2018, an ATIR approval letter was sent to Fontana Paper Mills informing them that the preliminary HRA analysis demonstrated that an HRA would not be required.

A.11. ***Garrett Aviation Services LLC dba Standard Aero (ID 155828) – Los Angeles***

Garrett Aviation Services operated a facility in Los Angeles near the Los Angeles International Airport that performed maintenance, repair, and overhaul of business jets. The facility operated jet engine test cells, spray booths and a brush plating tank.

On April 20, 2018, South Coast AQMD staff sent a letter requiring Garrett to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2016 annual emissions with arsenic emissions from the jet engine test cell as the main air toxic contributing to the high priority score.

On April 25, 2018, South Coast AQMD staff were notified by the facility contact that the facility had cancelled all permits and permanently shut down on March 16, 2018 and therefore no further action was required.

A.12. Gerdau/TAMCO (ID 18931) – Rancho Cucamonga[21]

Gerdau/TAMCO (Gerdau) is located in the City of Rancho Cucamonga and was acquired by TAMCO steel mini mill in October 2010. The facility produces steel reinforcing bars that are commonly used in construction. Ferrous steel scrap is recycled and delivered to the facility by trucks and rail, and then melted in an electric arc furnace to produce steel billets. The billets are reheated in a reheat furnace to form concrete reinforcing bar (rebar). The primary pollutants for this facility are hexavalent chromium, nickel, manganese, mercury, and arsenic.

Gerdau was directed to submit an ATIR and HRA based on significantly high levels of cadmium reported in its 2011 annual emissions reporting. The HRA was approved on October 8, 2015 based on the 2015 OEHAA Risk Assessment Guidelines. Several health risks in the approved HRA exceeded levels specified in Rule 1402 and Gerdau was therefore required to notify the public regarding the results of its HRA, and also submit a RRP. Notices of the public notification meeting were sent out to 1,523 people in the area where the health risks were above the levels established in Rule 1402. South Coast AQMD staff held a public notification meeting on November 30, 2015 to explain the impact of Gerdau's emissions on public health and to discuss next steps.

Gerdau submitted its first RRP on April 5, 2016. After review of the RRP and several meetings with facility representatives, South Coast AQMD staff provided comments on the RRP and on July 1, 2016, Gerdau submitted a revised RRP. However, the revised RRP did not account for hexavalent chromium emissions from ladle heaters, billet reheat furnace, and spray chamber stack. South Coast AQMD staff added these emissions which resulted in a projected potential maximum residential cancer risk of 8.7 in-a-million. The cancer burden and acute and chronic HI remain below 1, so after making these revisions, South Coast AQMD staff conditionally approved Gerdau's RRP on July 5, 2016. The RRP consisted of ten risk reduction measures to be completed by January 5, 2019.

On July 5, 2017, Gerdau submitted a progress report to update South Coast AQMD on the status of its risk reduction measures. . On January 25, 2018, Gerdau submitted an amendment to the RRP to specify plans to pave vehicle travel paths, which South Coast AQMD staff approved. On July 13, 2018, Gerdau submitted their second progress report indicating that they implemented seven of the ten risk reduction measures, while three of the measures are still in process. A public notice of risk reduction activities by Gerdau was mailed out to the notification area on September 18, 2018. South Coast AQMD staff continues to monitor the progress of the RRP and anticipates all risk reduction measures to be implemented within specified timeframes.

A.13. Glendale City, Glendale Water & Power (ID 800327) – Glendale

Glendale Water & Power (GWP) is a municipal power plant owned and operated by the City of Glendale. GWP consists of three utility boilers and eight stationary combustion turbines with a combined 238 MW generation capacity. These units combust natural gas which is supplemented by methane gas from a Class III landfill.

[21] http://www.aqmd.gov/home/rules-compliance/compliance/toxic-hot-spots-ab-2588/gerdau

On March 1, 2017, South Coast AQMD staff sent a letter requesting GWP to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2015 annual emissions with dioxins and furans, hexavalent chromium, and arsenic as the main air toxics contributing to the high priority score.

GWP elected to prepare an ATIR and submitted it on July 28, 2017. On March 22, 2018, the ATIR was approved and the facility notified to prepare an HRA. On July 18, 2018, the HRA was submitted. HRA was approved in early part of 2019.

A.14. ***GS II, Inc. (ID 183567) – Wilmington***

GS II, Inc. (GS II), located in the City of Wilmington, manufactures asphalt roof shingles. The manufacturing process at the facility includes asphalt storage tanks, asphalt heaters, roll coaters and saturators and are primary emission sources. Up until November of 2016, GS II operated under facility ID 57094.

As described previously, due to discrepancies in reported emissions from three asphalt roofing companies, on October 28, 2016, South Coast AQMD staff sent a letter requesting GS II to prepare either an ATIR or a VRRP in order to get a better understanding of actual emissions and corresponding health risk. On November 14, 2016, GS II staff informed South Coast AQMD staff of their intention to participate in the Voluntary Risk Reduction Program. However, GS II informed South Coast AQMD staff on November 1, 2017 that the company wanted to opt out of the Voluntary Risk Reduction Program. As a result, on November 1, 2017 South Coast AQMD staff terminated GS II's participation in the Voluntary Risk Reduction Program and notified GS II that an ATIR and HRA was due within 90 days of the notification letter.

On January 30, 2018, GS II submitted an ATIR and a HRA to South Coast AQMD for review. The HRA was approved on February 21, 2018. Since the HRA showed a non-cancer acute hazard index of 1.82 due to hydrogen sulfide emissions from the laminant storage tank, public notification was required. On March 28, 2018, a public notification letter was sent to Phillips 66 Wilmington Refinery, which was the sole party impacted.

A.15. ***Hixson Metal Finishing (ID 11818) - Newport Beach*** [22]

Hixson Metal Finishing (Hixson) located in the City of Newport Beach, is a metal finishing facility that conducts anodizing, testing, plating, coating, and painting operations on various parts for use in the aerospace and defense industries. Some of the potential onsite sources of emissions include the chrome anodizing line, nickel and cadmium plating, curing and drying ovens, paint spray booths, abrasive blasting equipment, wastewater treatment system and miscellaneous natural gas combustion sources. The major source of concern with Hixson's operation is fugitive dust containing hexavalent chromium. On April 3, 2014, South Coast AQMD staff required Hixson to prepare and submit a HRA and a RRP, in conjunction with a Stipulated Order for Abatement approved by South Coast AQMD's Hearing Board that limited Hixson's activities, and required shutdown of certain operations using hexavalent chromium if monitored ambient levels exceeded specified hexavalent chromium levels.

[22] http://www.aqmd.gov/home/regulations/compliance/toxic-hot-spots-ab-2588/hixson-metal-finishing

Hixson submitted their HRA to South Coast AQMD on November 13, 2014. Upon detailed review and use of the 2015 OEHHA Risk Assessment Guidelines, South Coast AQMD staff finalized the submitted HRA on May 8, 2015. The approved HRA found a maximum residential cancer risk of 1,502 in-a-million mainly from hexavalent chromium emissions. The estimated cancer risk was based on emissions occurring before the facility instituted various control measures and today's level of risk is substantially lower. Since the HRA results were above the Significant Risk Level in Rule 1402, Hixson was required to notify the public about the health risk in addition to conducting annual public notification meetings until the Rule 1402 Action Risk Level was achieved pursuant to Rule 1402(p). Notice of the public notification meeting was sent out to over 7,300 people in the area of impact. South Coast AQMD staff held a public notification meeting at the Hoag Conference Center on June 18, 2015.

Hixson submitted its first RRP on March 2, 2015. On May 8, 2015, South Coast AQMD staff rejected Hixson's first RRP and required resubmittal. Hixson subsequently submitted a second RRP on June 5, 2015. On June 26, 2015, South Coast AQMD staff rejected Hixson's second RRP due to its failure to demonstrate that the proposed controls reduce risks below Rule 1402 thresholds. Hixson resubmitted a revised RRP on July 1, 2015, and South Coast AQMD staff conditionally approved it on July 24, 2015. The associated permits to construct implementing the RRP were approved on December 11, 2015 and a second public notification meeting was held on February 11, 2016 at the Hoag Conference Center to inform interested parties regarding the key activities surrounding the RRP. In the 2016 Annual Report for the AB 2588 Program, staff incorrectly stated that the RRP was fully implemented as of December 31, 2016. The Order for Abatement expired on December 31, 2016, as Hixson had constructed all the measures contained in the RRP. However, one of the risk reduction measures requires all emissions from Building 2 to be captured and routed through a dry scrubber followed by ULPA filters. The existing chromic acid anodizing tank (Tank 70) is located in Building 2 and currently has a control system that includes an ULPA filtration system. As part of the modifications to Building 2, existing Tank 70 is being replaced with a new chromic acid anodizing tank (also designated Tank 70) vented to the new Building 2 control system, which also includes ULPA filtration. However, there was an issue with the temperature controls for the new Tank 70, which has delayed its operation. Since the existing Tank 70 is already being controlled by an ULPA filtration system, there are no additional emissions expected from the continued operation of existing Tank 70 compared to new Tank 70, as proposed in the RRP. Ambient monitoring for hexavalent chromium continues in the vicinity of Hixson. As of the end of 2018, the new Tank 70 is constructed but source testing on the unit is still being evaluated in order to determine compliance with the RRP.

A.16. ***Holliday Rock Co., Inc. (ID 41580) – Rialto***

Holliday Rock Co., Inc. (Holliday Rock) is a hot mix asphalt plant located in Rialto. There are multiple locations of Holliday Rock in the South Coast air basin. It is one of the largest independent producers of aggregate, ready mix concrete, and hot mix asphalt in the United States.

On December 20, 2018, South Coast AQMD staff sent a letter requiring Holliday Rock to prepare an ATIR due to the facility having a priority score greater than 10 based on its 2017 emissions. The main toxic air contaminants contributing to the priority score are manganese and manganese compounds, mercury and mercury compounds, and nickel and nickel compounds. The main sources of emissions are from cement silos and loadout hoppers.

Holliday Rock's ATIR is due on May 19, 2019.

A.17. ***Kirkhill Inc (ID 187823) – Brea***

Kirkhill Inc (Kirkhill) is a rubber manufacturing facility located in Brea. Kirkhill produces multiple types of rubbers for industries including aerospace and medical manufacturing. The rubber manufacturing process includes raw material mixing, milling, pressing, and various types of curing.

On January 31, 2018, South Coast AQMD staff sent a letter requesting Kirkhill to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2015 emissions. The main air toxic contributing to the priority score is hexavalent chromium from mixers, mills, presses, ovens, autoclave, and roto-curing devices.

Kirkhill elected to prepare an ATIR and submitted it on July 3, 2018. On October 19, 2018, South Coast AQMD staff sent a letter to the facility approving the ATIR and requiring the preparation of an HRA based on the approved ATIR. The HRA is due on January 17, 2019.

A.18. ***LA City, Sanitation Bureau (Hyperion Treatment Plant) (ID 800214) – Playa del Rey***

The City of Los Angeles owns and operates the Hyperion Water Reclamation Plant (Hyperion) in the Playa del Rey community. Hyperion is a publically owned wastewater treatment plant with over 275 million gallon capacity with primary and full secondary treatment processes. As part of the treatment process, more than 885,000 pounds of solid and organic materials are removed daily and treated through anaerobic digestion.

On October 28, 2016, South Coast AQMD staff sent a letter requesting Hyperion to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2015 annual emissions with perchloroethylene and arsenic as the main air toxics contributing to the high priority score.

On November 23, 2016, Hyperion elected to participate in the Voluntary Risk Reduction Program and submitted a VRRP on January 24, 2017. Throughout 2018, South Coast AQMD and Hyperion staff have been working to resolve various issues regarding electronic format of the emissions inventory, the use of unapproved source tests, the distribution of emissions, and receptor grid spacing. This information was under review at the end of 2018.

A.19. ***Lubeco Inc (ID 41229) – Long Beach***

Lubeco, Inc. (Lubeco) is a metal finishing company operating in Long Beach near the southern border of the City of Paramount. Lubeco's primary operations involve painting, surface preparation, anodizing, sealing and coating of metals for the aerospace industry. Ancillary operations include abrasive blasting, wastewater treatment, and operation of a natural gas-fired boiler and ovens.

Lubeco utilizes baking and drying ovens, spray booths, tanks for chromic acid anodizing, aqueous solutions, and acid surface preparations. These processes can potentially generate hexavalent

chromium emissions.

Beginning in October 2016, through expanded monitoring efforts in the City of Paramount, South Coast AQMD staff found high concentrations of hexavalent chromium in the vicinity of Lubeco. As a result, Lubeco was selected as a host facility for testing of hexavalent chromium emissions from a heated sodium dichromate seal tank due to elevated ambient monitoring readings in the nearby south Paramount area. On April 27, 2017, South Coast AQMD staff conducted source tests for hexavalent chromium emissions from a heated sodium dichromate seal tank at Lubeco with the main objective of determining an emission factor that can be used for calculating emissions from heated sodium dichromate seal tanks used in plating operations. The results of the source tests showed the heated sodium dichromate tank to be a source of hexavalent chromium. The second objective of this testing was to identify potential sources of hexavalent chromium emissions as measured by South Coast AQMD ambient air monitors in the nearby south Paramount area. South Coast AQMD subsequently filed a petition for Order for Abatement with the Hearing Board. Following the hearings on August 17 and August 23, 2017, the Hearing Board granted South Coast AQMD permission to install ambient monitors and a meteorological station on the facility property and permission to conduct additional source tests.

Because of the ambient measurements, South Coast AQMD staff notified Lubeco on September 8, 2017 that the facility may be designated as a Potentially High Risk Level Facility. Lubeco representatives and South Coast AQMD staff met on September 22, 2017 to discuss the monitoring results that had led to the notification. On September 28, 2017, Lubeco was officially designated as a Potentially High Risk Level Facility. As part of this designation, Lubeco was required to expeditiously reduce risks and to submit an Early Action Reduction Plan by December 27, 2017, an ATIR by February 27, 2018, a HRA and a RRP by March 27, 2018. The Early Risk Reduction Plan was submitted on December 8, 2017. On January 12, 2018, South Coast AQMD sent Lubeco an approval letter for the Early Risk Reduction Plan. On February 9, 2018, Lubeco submitted an ATIR followed by an HRA and RRP on March 27, 2018. Staff is currently reviewing all submitted documents.

A.20. MM West Covina LLC (ID 113873) – West Covina

MM West Covina is a cogeneration facility located on the BKK Landfill in the City of West Covina. Landfill gas from the inactive BKK Landfill, which received Class I and Class III waste, is combusted in the facility's steam generator. The steam powers a 7,100 kW capacity steam turbine to produce electricity.

On January 11, 2017, South Coast AQMD staff sent a letter requesting MM West Covina to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on 2014 annual emissions with dioxins and hexavalent chromium being the main air toxic contributors to the high priority score.

On February 15, 2017, MM West Covina elected to prepare an ATIR. The ATIR was submitted on June 13, 2017. South Coast AQMD staff provided comments on August 17, 2017 requiring revisions to the ATIR which was provided on August 29, 2017. South Coast AQMD staff approved the ATIR on March 27, 2018, and notified the facility to prepare and submit a HRA by June 26, 2018. MM West Covina submitted an HRA on July 2, 2018. After review, on August 1, 2018,

South Coast AQMD staff informed the facility that HRA did not include all of the emissions, specifically dioxins and furans, from the approved ATIR and therefore rejected the HRA. MM West Covina opted to conduct a source test to address the accuracy of the inventory of dioxin and furans in the ATIR. At the end of 2018, the source test result has been submitted and is under review.

A.21. ***Orange County Sanitation District, Fountain Valley (Plant No. 1) (ID 17301) – Fountain Valley***

The Orange County Sanitation District (OCSD) is a public agency that provides wastewater collection, treatment, and reclamation services in central and northwest Orange County. Plant No. 1, located in Fountain Valley, is one of the two wastewater treatment plants operated by OCSD. Plant No. 1 treats wastewater from residential, commercial and industrial sources using advanced primary and secondary treatment.

On April 28, 2017, South Coast AQMD staff sent a letter requesting OCSD Plant No. 1, to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on 2015 annual emissions with formaldehyde being the main air toxic contributor to the high priority score. Formaldehyde emissions were from three cogeneration engines combusting primarily digester and supplemental natural gas. Digester gas is produced at the facility through anaerobic digestion, which is part of the solids processing facilities.

OCSD elected to participate in the Voluntary Risk Reduction Program, and submitted the VRRP on September 25, 2017. The plan focused on installation of oxidation catalysts on the exhaust of the three engines, which serves to reduce formaldehyde emissions and emissions of nitrogen oxides. The oxidation catalyst system was previously planned and fully permitted on February 28, 2017. On April 11, 2018, South Coast AQMD staff approved the VRRP.

A.22. ***Orange County Sanitation District, Huntington Beach (Plant No. 2) (ID 29110) – Huntington Beach***

The Orange County Sanitation District (OCSD) is a public agency that provides wastewater collection, treatment, and reclamation services in central and northwest Orange County. Plant No. 2, located in Huntington Beach, is one of the two wastewater treatment plants operated by OCSD. Plant No. 2 treats wastewater from residential, commercial and industrial sources using advanced primary and secondary treatment.

On April 28, 2017, South Coast AQMD staff sent a letter requesting OCSD Plant No. 2 to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on 2015 annual emissions with formaldehyde being the main air toxic contributor to the high priority score. Formaldehyde emissions were from three cogeneration engines combusting primarily digester and supplemental natural gas. Digester gas is produced at the facility through anaerobic digestion, which is part of the solids processing facilities.

OCSD elected to participate in the Voluntary Risk Reduction Program, and submitted the VRRP on September 25, 2017. The plan focused on the installation of oxidation catalysts on the exhaust of the three engines, which serves to reduce formaldehyde emissions and emissions of nitrogen oxides. The oxidation catalyst system was previously planned and fully permitted on February 28,

2017. On April 12, 2018, South Coast AQMD staff approved the VRRP.

A.23. ***Phillips 66 Co/LA Refinery Wilmington Plant (ID 171107) – Wilmington***

The Phillips 66 Company operates two linked facilities, five miles apart, in Carson and Wilmington. The Phillips 66 Wilmington Refinery (Wilmington Refinery) was built in 1919 and is situated on approximately 424 acres. As described previously, this facility receives and processes intermediate product from the Carson facility and produces petroleum fuels as well as fuel-grade petroleum coke. Air toxic emissions are generated from fluid catalytic cracking, steam generation, electricity generation, and sulfuric acid production processes.

On March 1, 2017, South Coast AQMD staff sent a letter requesting Wilmington Refinery to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2015 annual emissions with hexavalent chromium and polycyclic aromatic hydrocarbons being the main air toxic contributors to the high priority score.

Wilmington Refinery elected to prepare an ATIR, and submitted the ATIR on August 1, 2017. Following review, South Coast AQMD staff found several deficiencies. Revisions were submitted by Wilmington Refinery staff on November 10, and December 20, 2017. Staff subsequently requested calculations and supporting data. The latest revision was submitted on December 19, 2018 and is currently under review.

A.24. ***Phillips 66 Company/Los Angeles Refinery (ID 171109) - Carson***

The Phillips 66 Company operates two facilities, five miles apart, in Carson and Wilmington. The Phillips 66 Carson Refinery (Carson Refinery) was built in 1923 and is situated on approximately 235 acres. The refinery processes mainly heavy, high-sulfur crude oil, which is received by pipeline and at a terminal in the Port of Long Beach. The Carson Refinery produces intermediate product, which is then sent to the Phillips 66 Wilmington Refinery for further processing to produce petroleum fuels and fuel-grade petroleum coke. These facilities have fluid catalytic cracking, alkylation, hydrocracking, coking and naphtha reforming units.

On March 1, 2017, South Coast AQMD staff sent a letter requesting Carson Refinery to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on 2015 annual emissions with arsenic and sulfuric acid being the main contributors to the high priority score. These emissions were mainly from crude distillation, hydro-treating, and steam generation processes at the facility.

Carson Refinery elected to participate in the Voluntary Risk Reduction Program, and submitted the VRRP on August 1, 2017. Following review, South Coast AQMD staff noted several deficiencies. Revisions and clarifications were provided by Carson Refinery staff on multiple instances in 2017 and 2018. South Coast AQMD staff is currently reviewing the latest submittal from September 11, 2018. Reductions of DPM from unpermitted internal combustion engines are an element of the VRRP. In 2018, staff have worked with the permitting teams to evaluate options for incorporating these requirements so that they are enforceable.

A.25. ***Quemetco Inc (ID 8547) – City of Industry*** [23]

Quemetco operates a battery recycling and lead recovery facility in the City of Industry. At this facility, used batteries are received, fragmented, and the lead-containing materials are recovered and purified. The primary pollutants for this facility are arsenic, lead, benzene, and 1,3-butadiene.

Multiple AB 2588 HRAs have been approved for Quemetco in the past, most recently in 2010. In October and November 2013, South Coast AQMD staff conducted source tests at Quemetco. The results of the 2013 source tests showed elevated arsenic, benzene, and 1,3-butadiene emissions compared to previous 2009, 2010, and 2012 source tests. As a result, on December 10, 2013, South Coast AQMD staff requested that Quemetco prepare and submit an HRA pursuant to Rule 1402. Quemetco submitted an HRA on May 9, 2014. South Coast AQMD staff sent a comment letter on September 23, 2014 requiring Quemetco to revise their HRA in several areas including an assessment of potential lead impacts relative to the NAAQS, and to address minor comments from the OEHHA. Quemetco provided an updated HRA in January 2015. South Coast AQMD staff requested that Quemetco prepare a new HRA to include two scenarios: 1) a baseline scenario utilizing the November 2013 South Coast AQMD source test input into the dispersion model, and 2) dispersion modeling that reconciled any potential differences between onsite fenceline monitoring data that became available in 2014 and source tests also available from 2014. Quemetco provided an updated HRA in May 2015. On September 16, 2015, South Coast AQMD sent Quemetco a tentative approval of the staff-modified revised HRA. Quemetco commented that the monitoring data collected onsite required revision before incorporating into the HRA. South Coast AQMD staff evaluated Quemetco's monitoring data in late 2015 and early 2016. Onsite fenceline monitoring data was corrected for pre-existing arsenic on blank filters and the dispersion modeling source parameters were also adjusted.

Additionally, in 2014, South Coast AQMD staff initiated a technology demonstration pilot study for in-stack continuous emissions monitoring system (CEMS) and fenceline/perimeter ambient air monitoring for multi-metals. Contracts with Cooper Environmental Services, the only manufacturer of these types of continuous monitors, were initiated to implement the study. The pilot study was conducted at Quemetco and Gerdau in 2015. Preliminary findings from 2015 for ambient multi-metal monitor showed favorable results for lead and less quantitative results for other metals, but most results were useful for trend detection. Quemetco purchased the in-stack CEMS.

South Coast AQMD staff approved the HRA on May 17, 2016 with some revisions. The approved HRA showed that the residential cancer health risk was 16 in-a-million, the worker chronic HI was 1.28, and the cancer burden was 2.0. These values exceeded the Action Risk Level of Rule 1402 and public notification and a RRP were required. Notice of the public meeting was sent to approximately 8,000 residents and businesses within the public notification area. A public notification meeting was held on June 23, 2016 at La Puente High School.

Quemetco submitted an RRP on November 16, 2016. As part of the RRP, Quemetco proposed using in-stack multi-metals CEMS to ensure that Rule 1402 risk thresholds are not exceeded. Quemetco's RRP was conditionally approved on June 22, 2017. The conditions for approval were all related to operation of the CEMS. On June 19, 2018, Quemetco submitted the final

[23] http://www.aqmd.gov/home/regulations/compliance/toxic-hot-spots-ab-2588/quemetco

implementation report for the RRP. South Coast AQMD approved this report on July 27, 2018.

In addition, Quemetco has requested a permit modification to allow a 25% increase in their daily throughput. South Coast AQMD staff is processing this permit request, and is also preparing an Environmental Impact Report (EIR) as required by the California Environmental Quality Act (CEQA). The EIR will evaluate the potential environmental impacts of this proposed permit modification and will include an analysis of the health risks associated with the throughput increase. There will be multiple opportunities for the public to provide input on the EIR. The Final EIR will include responses to all comments received and must be certified before the permit modification request can be considered for approval.

A.26. ***So Cal Edison Co (ID 4477) – Pebbly Beach***

So Cal Edison Co (SCE Pebbly Beach) is the primary producer of electric power for Santa Catalina Island and is located approximately one mile southeast of the city of Avalon. Electricity is generated using six diesel-fired engines. There is also a diesel-fired backup generator and 23 microturbines. Diesel fuel and liquefied petroleum gas (LPG) are periodically shipped in and stored at the facility. LPG is vaporized to produce a petroleum gas and air mixture to form a natural gas surrogate, where it is sent to either local residents or combusted in the microturbines.

On June 13, 2018, South Coast AQMD staff sent a letter requiring SCE Pebbly Beach to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2015 emissions. The main air toxic contributing to the priority score is DPM from the six diesel-fired internal combustion engines.

SCE Pebbly Beach elected to prepare an ATIR and submitted it on November 13, 2018. The ATIR is currently under review.

A.27. ***So Cal Gas Co./Playa del Rey Storage Facility (ID 8582) – Playa del Rey***

Southern California Gas Company (SoCal Gas) is a public utilities company that owns and operates a natural gas storage facility in the Playa del Rey community in the City of Los Angeles. Natural gas is compressed and stored in underground reservoirs. Transmission pipelines distribute natural gas to and from the facility. Primary equipment at the facility include three natural gas internal combustion engines driving air compressors to facilitate storage of natural gas.

On May 31, 2017, South Coast AQMD staff sent a letter requesting SoCal Gas to prepare an ATIR due to the facility having a priority score greater than 10 based on its 2015 annual emissions with formaldehyde, 1,3-butadiene and benzene being the main air toxic contributors to the high priority score. On October 31, 2017, the ATIR was submitted.

On March 22, 2018, the ATIR was approved and SoCal Gas was required to submit an HRA based on the approved ATIR. The HRA was submitted on June 7, 2018 and is currently under review.

A.28. ***So Cal Holding, LLC (ID 169754) – Huntington Beach***

SoCal Holding, LLC (SoCal Holding) is a subsidiary of California Resources Corporation, an oil and natural gas exploration and production company. SoCal Holding leases and operates oil

production wells, mainly in Huntington Beach with some wells located offshore on a platform approximately 1.5 miles from shore. Recovered field gas is either sold to AES Huntington Beach, combusted in microturbines or flared. The liquid product is stored in tanks linked to truck loading or pipeline.

On October 11, 2017, South Coast AQMD sent a letter requesting SoCal Holding to prepare an ATIR due to the facility having a priority score greater than 10 based on 2015 annual emissions with polycyclic aromatic hydrocarbons and benzene being the main air toxic contributors to the high priority score. The source for polycyclic aromatic hydrocarbons emissions was a flare located on a leased property northwest of the intersection of Goldenwest Street and Pacific Coast Highway. Benzene emissions were reported as fugitive leaks throughout the facility. The ATIR was received on March 13, 2018. Following review, staff found errors and requested corrections to the ATIR. The corrected ATIR was submitted on July 13, 2018. On July 25, 2018, the corrected ATIR was approved and South Coast AQMD staff directed So Cal Holding to prepare and submit an HRA. The HRA was submitted on October 23, 2018 and is currently under review.

A.29. ***Southern California Edison (ID 160437) – Redlands***

Southern California Edison owns and operates a power plant, named the Mountainview Generating Station (Mountainview), in the city of Redlands. The power plant consists of four natural gas-fired turbines, each equipped with duct burners, to generate and provide electricity for the Inland Empire area.

On April 20, 2018, South Coast AQMD staff sent a letter requiring Mountainview to either prepare an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2014 annual emissions, with polycyclic aromatic hydrocarbons being the main air toxic contributor to the high priority score. Polycyclic aromatic hydrocarbons emissions were due to natural gas combustion in the turbines.

Mountainview elected to prepare an ATIR, which was submitted on September 18, 2018. After review, South Coast AQMD staff requested revision and resubmission. The final ATIR incorporating the corrections was submitted on October 23, 2018. The ATIR was reviewed and approved on December 5, 2018.

A.30. ***Tesoro Refining & Marketing Co., LLC, Calciner (ID 174591) – Wilmington***

Tesoro Calciner produces calcined petroleum coke, or raw or "green" petroleum coke heated to high temperatures so that volatile hydrocarbon compounds and excess moisture are heated out of the coke. Equipment in Tesoro Calciner's operations include a rotary kiln, baghouses, conveyor belts, receiver and separator vessels, an afterburner, surge bins, boiler, bucket elevators, loading and unloading stations, shakers, and storage silos.

On April 28, 2017, South Coast AQMD staff sent a letter requesting Tesoro Calciner to either prepare an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2016 annual emissions with sulfuric acid, arsenic, manganese, and nickel as the main air toxic contributors to the high priority score. On May 25, 2017, Tesoro Calciner elected to participate in

the Voluntary Risk Reduction Program, and subsequently submitted the VRRP on September 21, 2017.

After review of the VRRP, South Coast AQMD staff found several deficiencies and on January 31, 2018, a letter requesting revision and resubmittal of the VRRP was sent to the facility. Tesoro Calciner submitted a revised VRRP on February 26, 2018 and again on September 7, 2018. The latest information involved welding emissions. Staff is ensuring that these calculations are consistent for the various submittals received. This most recent information was under review at the end of 2018.

A.31. Tesoro Refining & Marketing Co., LLC, Los Angeles Refinery (ID 800436, 174655, 174694, 174703) – Carson and Wilmington

The Tesoro Los Angeles Refinery (Tesoro Refinery) is located along the city border between the cities of Carson and Wilmington in south Los Angeles County. The Tesoro Refinery was originally two adjacent but not contiguous refineries but has been undergoing consolidation through the Los Angeles Refinery Integration and Compliance Project.[24] The Tesoro Refinery will be comprised of approximately 930 acres with a processing capacity of approximately 380,000 barrels per day. In 2017, the Tesoro Corporation underwent a name change to Andeavor.

On December 22, 2016, South Coast AQMD staff sent a letter requesting Tesoro Refinery to either prepare an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2015 annual emissions with polycyclic aromatic hydrocarbons, hexavalent chromium, arsenic, naphthalene, benzene, and cadmium as the main air toxic contributors to the high priority score.

Tesoro Refinery elected to participate in the Voluntary Risk Reduction Program, and submitted their VRRP on May 23, 2017. After initial review, South Coast AQMD staff required Tesoro Refinery to make several revisions. Both South Coast AQMD staff and Tesoro Refinery representatives have met several times regarding the revisions and risk reduction measures proposed. South Coast AQMD staff is currently waiting for the necessary revisions to be submitted before continuing the review of the VRRP. At the completion of 2018, South Coast AQMD staff have identified heaters located at Carson for possible source testing. The intention of source testing is to derive a representative emission profile for heaters located at Carson.

A.32. Tesoro Refining & Marketing Co., LLC (Sulfur Recovery Plant) (ID 151798) – Carson

Tesoro Sulfur Recovery Plant (Tesoro SRP) is located in Carson east of the Tesoro Los Angeles Refinery. The facility supports petroleum refinery operations by utilizing the Claus process to recover sulfur in the form of hydrogen sulfide from the byproduct gases of refining crude oil. The facility operates boilers, incinerators, condensers, absorbers, storage tanks, sumps, and sulfur pits.

On December 22, 2016, South Coast AQMD staff sent a letter requesting Tesoro SRP to either prepare an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2015 annual emissions with arsenic, polycyclic aromatic hydrocarbons, hexavalent chromium, and

[24] http://www.aqmd.gov/docs/default-source/ceqa/documents/permit-projects/2017/tesorolaric/tesoro_feir.pdf

formaldehyde as the main air toxic contributors to the high priority score.

Tesoro SRP elected to participate in the Voluntary Risk Reduction Program, and submitted the VRRP on May 23, 2017. After review, on February 15, 2018, South Coast AQMD staff sent a letter requesting revisions and resubmittal of the VRRP. Ongoing communication with Tesoro SRP has occurred to develop the most representative emission estimation methodology. On November 9, 2018, a finalized emissions inventory was submitted by Tesoro SRP for South Coast AQMD staff review. Staff are currently reviewing all documents associated with the VRRP.

A.33. ***Torrance Refining Company LLC (ID 181667) – Torrance***

Torrance Refining Company LLC (Torrance Refining) is a subsidiary of PBF Energy, an independent petroleum refiner and supplier of unbranded transportation fuels, heating oils, petrochemical feedstocks, lubricants, and other petroleum products. The Torrance Refinery sits on 750 acres in the City of Torrance and has a 155,000 barrels per day of crude oil processing capacity. The refinery produces various petroleum productions along with coke, and sulfur.

On January 11, 2017, South Coast AQMD staff sent a letter requesting Torrance Refining to either prepare an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2015 annual emissions polycyclic aromatic hydrocarbons,, arsenic, benzene, and cadmium being the main air toxic contributors to the high priority score.

Torrance Refining elected to participate in the Voluntary Risk Reduction Program and was to submit the VRRP on August 24, 2017 for the 2015 inventory year. However, due to the fact that an explosion had occurred at the facility's fluid catalytic cracking unit during 2015, the facility had limited operations during that year, and South Coast AQMD staff decided that 2016 would be more representative of facility's routine operations and, as a result, required Torrance Refining to use 2016 as the inventory year for their VRRP.

The facility submitted the VRRP on August 24, 2017. After review, South Coast AQMD staff sent a comment letter requesting revisions and resubmittal of the VRRP on October 19, 2017. The revised VRRP was received on November 2, 2017. Supplemental information to this submittal was received through May 8, 2018. On July 12, 2018, Torrance Refining requested alteration of risk reduction measures and to submit a revised VRRP. Following discussion with staff, a further revised VRRP was received on December 5, 2018. This VRRP and associated information are currently under review.

A.34. ***Triumph Processing, Inc. (ID 800267) – Lynwood***

Triumph Processing, Inc. (Triumph) owns and operates a metal treating and finishing facility in the City of Lynwood. Triumph treats aluminum and titanium parts for the aerospace industry by using anodizing, plating and painting operations.

On May 31, 2017, South Coast AQMD staff sent a letter requesting Triumph to either prepare an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2014 annual emissions with MDI being the main air toxic contributor to the high priority score. MDI emissions were due to coating operation in the spray booths.

Triumph elected to prepare an ATIR, which was submitted on October 30, 2017. As part of the ATIR submittal, Triumph staff audited the reported emissions and discovered that they had misreported the quantities of isocyanates and diisocyanates. South Coast AQMD staff evaluated this emissions revision during the review of the ATIR and evaluated research documents which show isocyanates and diisocyanates are fully transformed into epoxies and not emitted into the ambient air. As a result, staff calculated a new priority score below 10. Subsequently, on May 24, 2018, South Coast AQMD staff sent a letter informing Triumph Processing of the revised priority score and that no further action was required in response to the original notice.

A.35. ***TST, Inc. (ID 434326) – Fontana***

TST Inc. (TST) conducts secondary aluminum refining of scrap metal. The facility consists of two separate operations, the first produces aluminum ingots from scrap metal, while the second produces billets. Aluminum chips and borings are received in scrap barrels and bins and dumped into a receiving hopper. The chips and borings are crushed and, if necessary, passed through a dryer to remove any oils or coatings. The aluminum is then sent to furnaces where the dross is used to create the billets and ingots.

On April 20, 2018, South Coast AQMD staff sent a letter requesting TST to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2014 annual emissions with nickel and arsenic as the main air toxics contributing to the high priority score. On May 22, 2018, TST chose to prepare an ATIR and also submitted the initial information for the ATIR. In accordance with Rule 1402(d)(2)(A), TST was required to submit an ATIR within 150 days of the initial notification date. TST failed to meet the required deadline and was issued a Notice to Comply on October 10, 2018. In response, TST submitted an ATIR on October 24, 2018. South Coast AQMD staff reviewed the ATIR and found errors and required resubmittal. A revised ATIR was submitted on November 30, 2018 but contained additional errors. Staff is currently working with TST to ensure a correct inventory is prepared prior to the next submittal.

A.36. ***Ultramar Inc (ID 800026) – Wilmington***

Ultramar Refining Company (Ultramar) is a subsidiary of Valero Energy Corporation and operates a 135,000 barrel per day crude oil processing capacity petroleum refinery facility in Wilmington.

On March 29, 2017, South Coast AQMD staff sent a letter requesting Ultramar to either prepare an ATIR or a VRRP due to the facility having a priority score greater than 10 based on 2015 annual emissions with polycyclic aromatic hydrocarbons emissions as the main air toxic contributor to the high priority score.

Ultramar elected to participate in the Voluntary Risk Reduction Program and submitted the VRRP on August 25, 2017. After review by South Coast AQMD staff, items were found to be missing, which included throughput data, emission factors, calculation basis, and certain devices and device descriptions. Ultramar subsequently provided the missing information on September 15 and October 26, 2017. Ultramar provided information on emission factor reference sources on February 26, 2018. However, review indicated that the VRRP still had an incomplete emissions inventory, among other issues. From March 22, 2018 thru the end of the year, staff provided comments to the facility regarding unaccounted emissions and continued deficiencies in the

submitted files. Upon review of revised files received on December 13, 2018, South Coast AQMD staff determined that the facility once again failed to provide all the requested information and another resubmission was required. Staff is currently working on a final request for the facility to send complete information.

A.37. ***Univ Cal, Riverside (ID 49387) – Riverside***

The University of California, Riverside (UCR) is a public research university located in the City of Riverside. UCR submitted an HRA based on their 2013 inventory year emissions. The HRA was submitted voluntarily in order for UCR to be exempt from the requirements of South Coast AQMD Rule 1472. Specifically, Rule 1472 (j) provides an exemption for facilities that comply with all applicable requirements of Rule 1402. The emissions inventories prepared pursuant to Rule 1402 must include the emissions from all diesel engines. South Coast AQMD staff reviewed the HRA and approved it with two modifications: using AERMOD for dispersion modeling, and evaluating risk using the risk assessment methodologies from the 2015 OEHHA Guidelines.

The HRA was approved on November 16, 2018 with resulting risk below the Notification Risk Level.

Appendix B – Summary of Toxic Air Contaminants in the South Coast Air Basin

In addition to South Coast AQMD's periodic Multiple Air Toxics Exposure Studies (MATES), CARB has maintained a long-term continuous toxics monitoring network since the late 1980's.[25] In this chapter, trends in cancer risks are illustrated for sites in the South Coast Air Basin. Health risk levels for the most recent three-year period (i.e., 2015 to 2017) are also shown for the air toxics which are monitored. CARB's monitoring network does not include DPM, which contributes significantly to cancer risks in the Basin. Since this is ambient air quality data, both mobile and stationary emission sources are captured in the health risk levels provided here. Looking at this historical data set illustrates the benefits of past regulatory control efforts.

Four of the approximately 16 current active sites in CARB's statewide toxics monitoring network are in or near the Basin as shown in Figure B-1. CARB's long-term sites are located in Azusa, Los Angeles, and Riverside-Rubidoux. Simi Valley is included in this analysis since it is just outside the western edge of the Basin and represents conditions at the western end of San Fernando Valley. The measurements consist of 24-hour integrated samples collected once every 12 days. Table B-1 lists the toxic air contaminants that are monitored with the carcinogenic compounds identified with an asterisk.

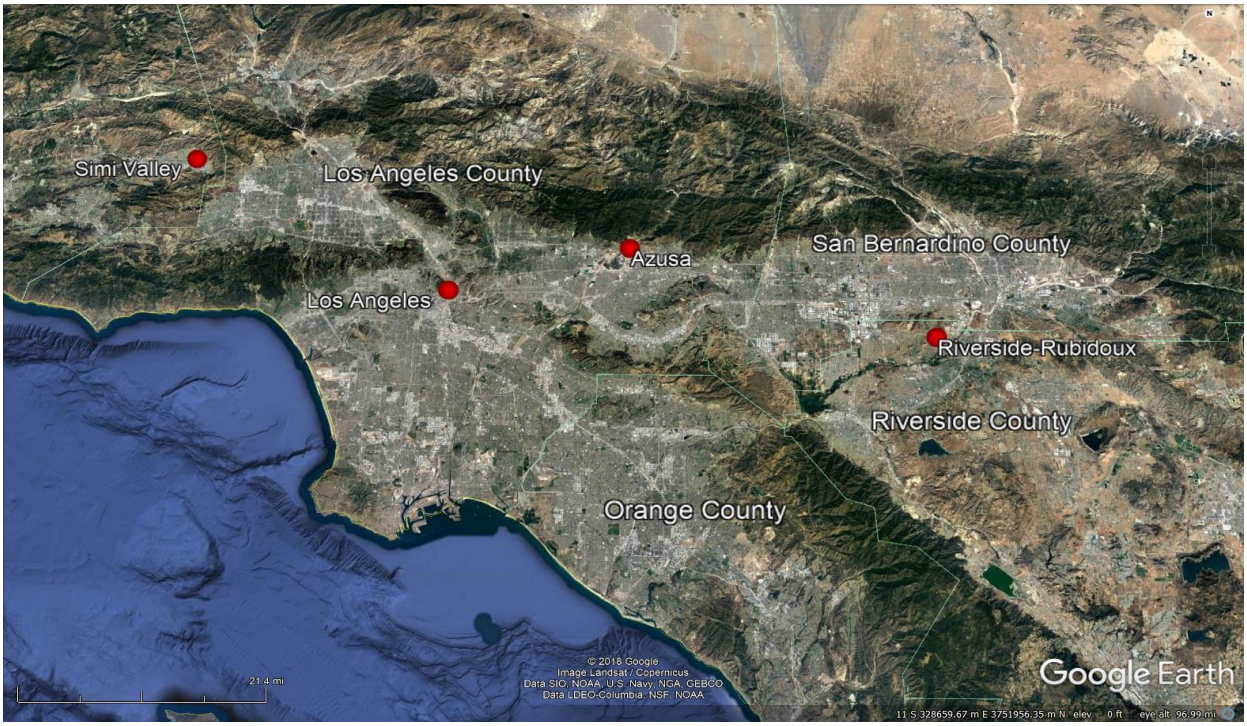


Figure B-1 — CARB toxic monitoring sites in the South Coast Air Basin

[25] Information about and data from CARB's toxic monitoring data are available at: http://www.arb.ca.gov/adam/toxics/toxics.html

Table B-1 — Toxic Air Contaminants Monitored

Toxic VOC		Toxic PM
Acetaldehyde*	**Methyl Bromide**	**Hexavalent Chromium***
Acrolein	**Methyl Chloroform**	**Lead***
Benzene*	**Methyl Ethyl Ketone**	**Manganese**
1,3-Butadiene*	**Methylene Chloride***	**Nickel***
Carbon Tetrachloride*	**Perchloroethylene***	**Selenium**
Chloroform*	**Styrene**	
Ethyl Benzene*	**Toluene**	
Formaldehyde*	**Trichloroethylene***	

* Carcinogen

The 2015 OEHHA Risk Assessment Guidelines incorporates age sensitivity and exposure factors which increase cancer health risk estimates to residential and sensitive receptors by approximately three times, and more than three times in some cases depending on whether the toxic air contaminant has multiple pathways of exposure in addition to the inhalation pathway. Under the 2015 OEHHA Risk Assessment Guidelines, even though the toxic pollutant concentrations may not have increased, the estimated cancer risk to a residential receptor will increase.

Figure B-2 presents health risk trends using the 2015 OEHHA Risk Assessment Guidelines. The inhalation cancer risk shown is estimated based on a 30-year exposure. Inhalation cancer health risks have decreased significantly at all stations since 1990. Cancer risks have decreased by 71, 82, and 78 percent at Riverside, Los Angeles, and Simi Valley, respectively[26]. Azusa station shows a decrease in cancer risk by 44 percent since 2000.

Note that the Riverside station showed an increase in cancer risk for 2016. This was solely due to higher measured concentrations of methylene chloride for 2016, which were more than 30 times higher than the previous year. The readings for 2017, however, dropped to a level that is more consistent with 2015 and earlier data. Figure B-3 shows the monitored methylene chloride concentrations at the Riverside station from 2000 to 2018, averaged by quarter.

[26] Some concentrations were not available for certain years. In order to avoid under-representing the total cancer risk from all toxic compounds, values are interpolated between years where possible. If data for a certain toxic compound is unavailable for the latest year, the available data point from the most recent prior year is used in its place.

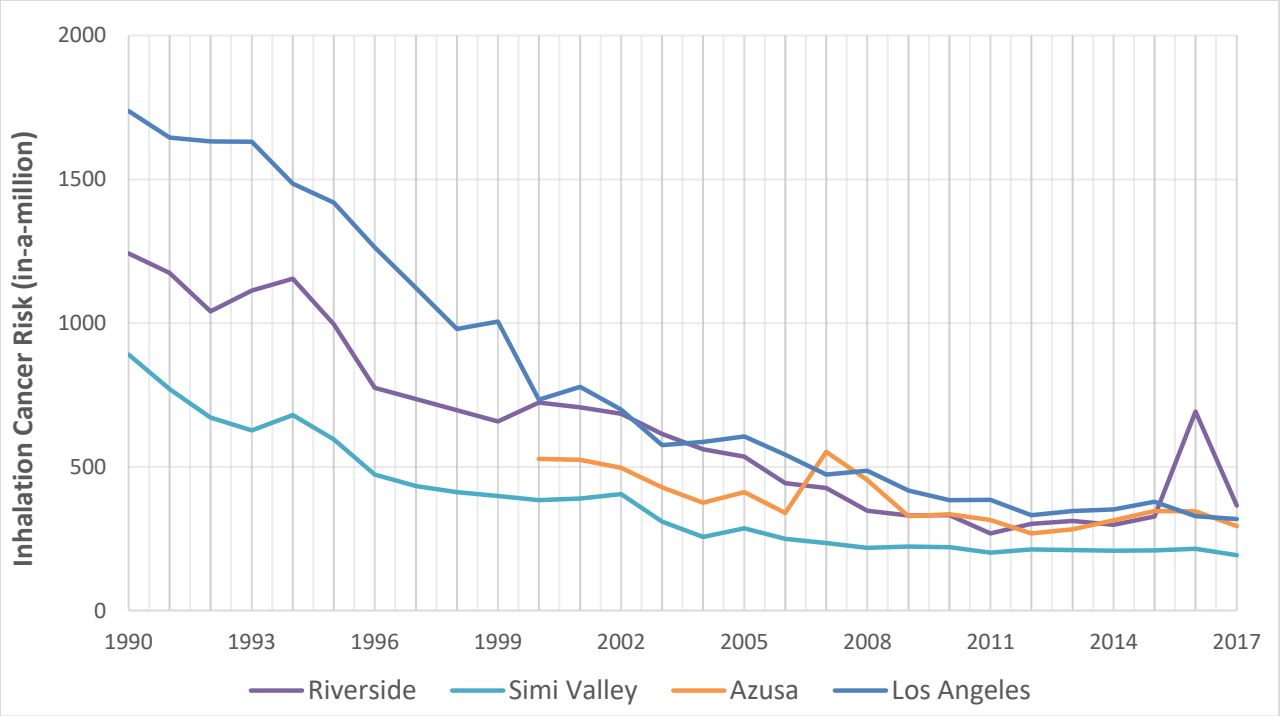


Figure B-2 — Trends in Inhalation Cancer Risks27 in the Basin (1990-2017)

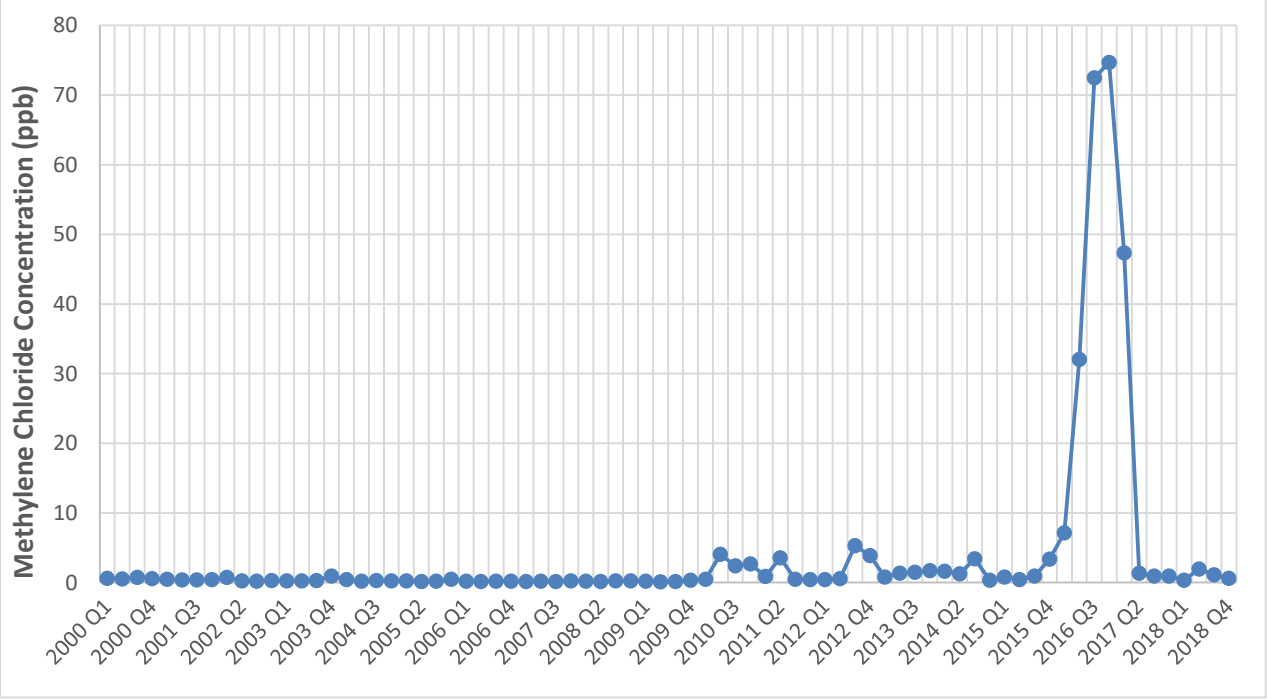


Figure B-3 — Methylene Chloride Monitored Concentrations at Riverside Station,

[27] Calculated with 2015 OEHHA HRA Guidelines, excluding cancer risks from DPM.

Averaged by Quarter (2000 to 2018)

Azusa station started in 1995 as one of the Photochemical Assessment Monitoring Stations (PAMS) network aimed at determining speciated hydrocarbon ozone precursor compounds in ambient air. On October 17, 2006, U.S. EPA issued final amendments to PAMS monitoring requirements in 40 CFR Code 58. On July 1, 2009, to address these amendments, and with site-specific observations from the PAMS network assessment project, Azusa station was reclassified from Type 3 (maximum ozone concentration site) to Type 2 (maximum ozone precursor emissions impact site or above 8-hour ozone). The proposed change addressed the National PAMS Network Assessment that Azusa has high Volatile Organic Compounds (VOC) and Oxides of Nitrogen (NOX) concentrations, with lower ozone concentrations. The site now more closely resembles a Type 2 ozone precursor site.

The reduction in cancer risk at the Azusa station is primarily from reductions in ambient concentrations of benzene and 1,3-butadiene. Benzene accounts for 41 percent of the cancer risk reduction and 1,3-butadiene accounts for 46 percent of the cancer risk reduction.

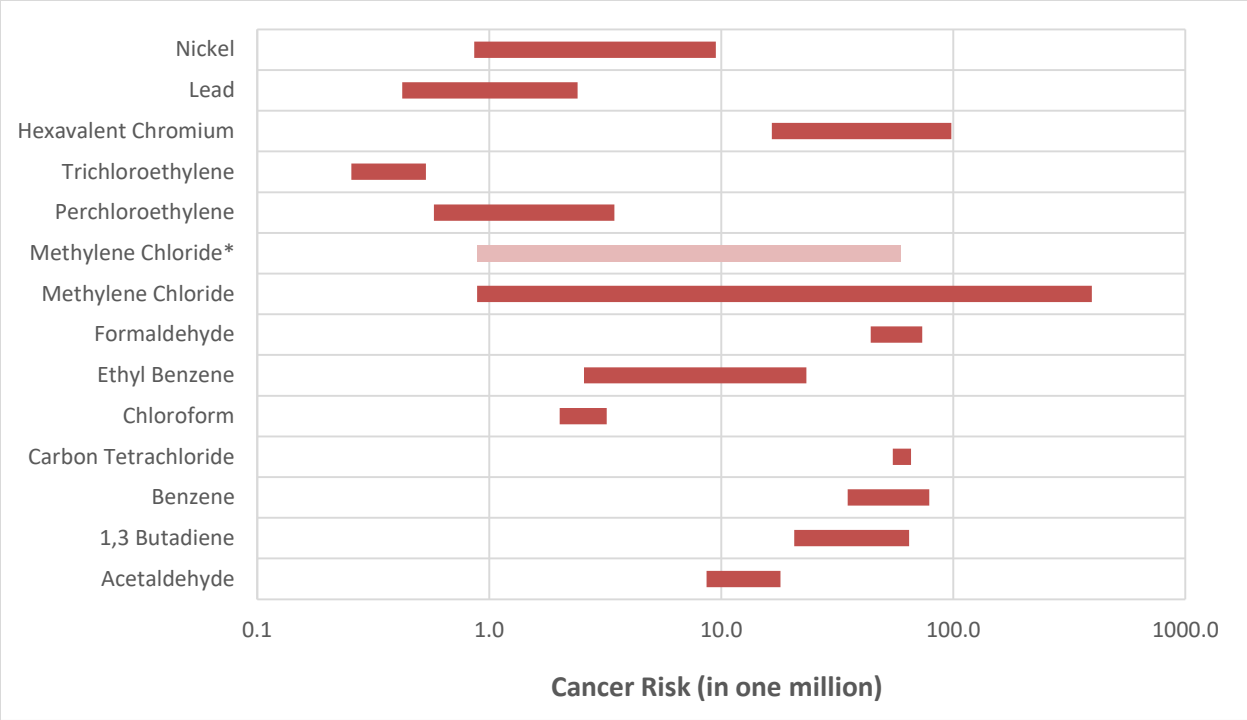
The cancer risk reductions shown in Figure B-2 occurred despite significant increases in population and vehicle activity. As shown in Table B-2, the population increased by 40 percent since 1990 and daily vehicle miles traveled), vehicle population, and daily fuel consumption increased by 44, 55, and 32 percent, respectively.

Table B-2 — Change in Population and Vehicle Activity in the Basin Since 1990

Activity Variable	1990	2018	Percentage Increase
Population	**13,083,594**	**18,278,662**	**39.7%**
Daily Vehicle Miles Traveled (1,000 mile per day)	**282,561**	**406,476**	**43.9%**
Vehicle Population	**7,547,354**	**11,707,190**	**55.1%**
Daily Fuel Consumption (1,000 gal per day)	**18,338**	**24,265**	**32.3%**

Source: http://www.arb.ca.gov/app/emsinv/trends/ems_trends.php.

The relative importance of each of the toxics at the four monitoring stations is illustrated in Figure B-4 below. These ranges do not represent all potential exposures, and some areas near facilities with toxic air contaminant emissions may have higher cancer risks. The range of cancer risks for the four sites analyzed here are shown for the most recently available three-year period (2015 to 2017). As mentioned previously, the range of inhalation cancer risk includes the high measurements for methylene chloride from 2016 at the Riverside station that are inconsistent with all other readings taken at this station. To better demonstrate the effect, methylene chloride is shown in the charts twice: inclusive of all readings, and exclusive of the high Riverside readings.



* Excludes peak readings from Riverside station in 2016

Figure B-4 — Inhalation Cancer Risks in the Basin (2015 to 2017) (excluding DPM)

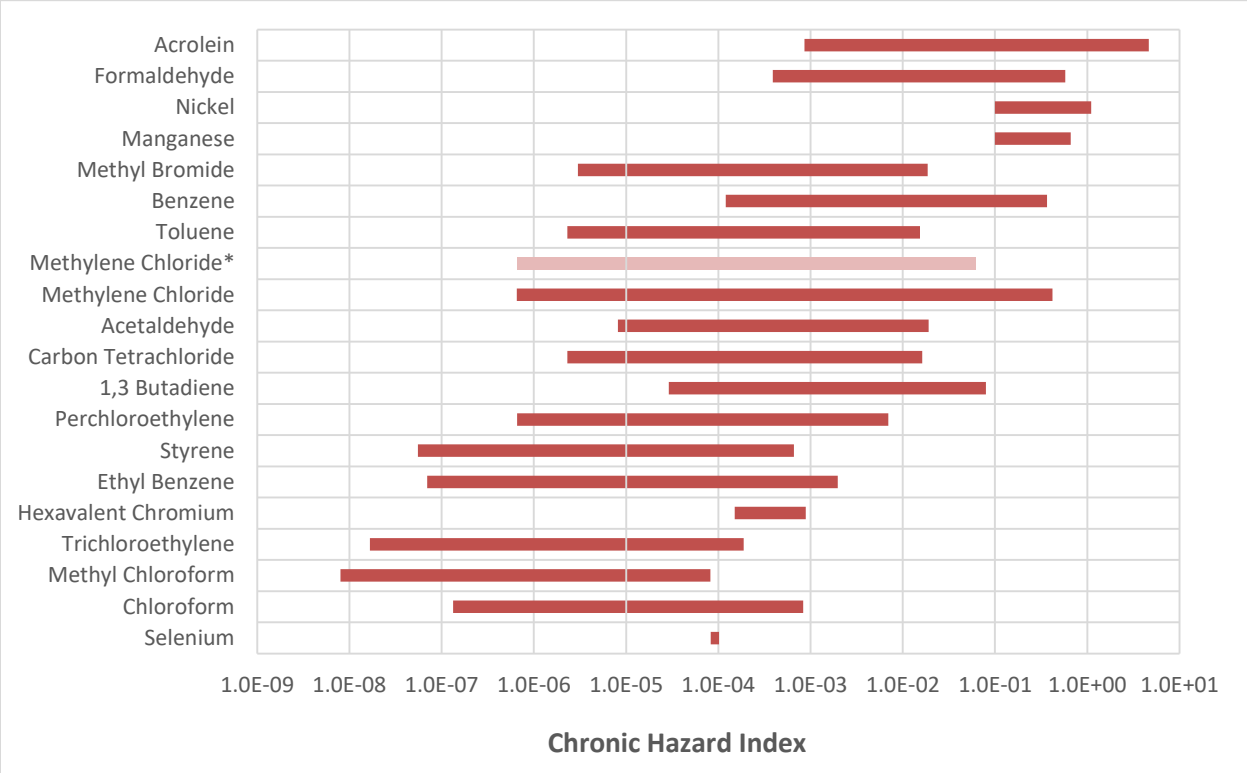
Benzene, 1,3-butadiene, formaldehyde, carbon tetrachloride, hexavalent chromium, methylene chloride, acetaldehyde, and ethyl benzene are the largest contributors to the inhalation cancer risks, contributing individually from approximately 0.9 to 396 in-a-million. The ambient carbon tetrachloride concentrations observed in the Basin are not from a local source of emissions but represent background conditions. Note that there is little variability in cancer risks attributable to carbon tetrachloride as indicated by its short bar in Figure B-4. In fact, there is little variability statewide in carbon tetrachloride concentrations, with concentrations varying by less than ten percent. Perchloroethylene, chloroform, and nickel each contribute between approximately 0.6 and 9.5 in-a-million and trichloroethylene and lead contribute on average about two in-a-million to the inhalation cancer risks.

As demonstrated in the series of MATES conducted by South Coast AQMD staff, DPM is by far the largest contributor to inhalation cancer risks observed in the Basin. The MATES IV study attributed about 68 percent of the inhalation cancer risks to DPM based on emissions from 2012,[28] compared to 84 percent in MATES III based on emissions in 2005.[29] The total cancer risks shown in Figures B-2 and B-4 therefore represent only about 32 percent of the population weighted inhalation cancer risks found in the MATES IV study.

[28] See page ES-2 of the MATES IV Executive Summary which is available at: http://www.aqmd.gov/docs/default-source/air-quality/air-toxic-studies/mates-iv/mates-iv-final-draft-report-4-1-15

[29] See page ES-3 of the MATES III Executive Summary which is available at: http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-iii/mates-iii-final-report

The range of non-cancer chronic risks for the four sites analyzed here are shown in Figure B - 5 for the most recently available three-year period (2015 to 2017). Similar to the cancer risk analysis, an additional Methylene Chloride data entry (denoted with an asterisk) was added to remove the high readings recorded at the Riverside monitor. For each toxic air contaminant, the ratio of the observed concentration to the pollutant's chronic REL is shown. Ratios less than one indicate that the observed concentrations are less than OEHHA's defined RELs, and are not anticipated to result in adverse non-cancer health effects in the general population, including sensitive subpopulations. Ratios greater than one indicate the potential for adverse health effects. This concentration to REL ratio is also referred to as the Hazard Index (HI).



* Excludes peak readings from Riverside station in 2016

Figure B-5 — Non-cancer Chronic Risks in the Basin (2015 to 2017)

Note that acrolein, a respiratory irritant, is the only toxic air contaminant in which ambient concentrations are above its REL throughout the state and thus may partially reflect general background conditions. However, it should be noted that acrolein is well known to be difficult to measure with current techniques, and therefore, there is considerable uncertainty and data quality

issues associated with these measurements.[30] At best, acrolein monitoring data should be considered as a rough indicator, not accurate enough to be compared to health benchmarks. Acrolein emissions can better be estimated using computer modeling methods.

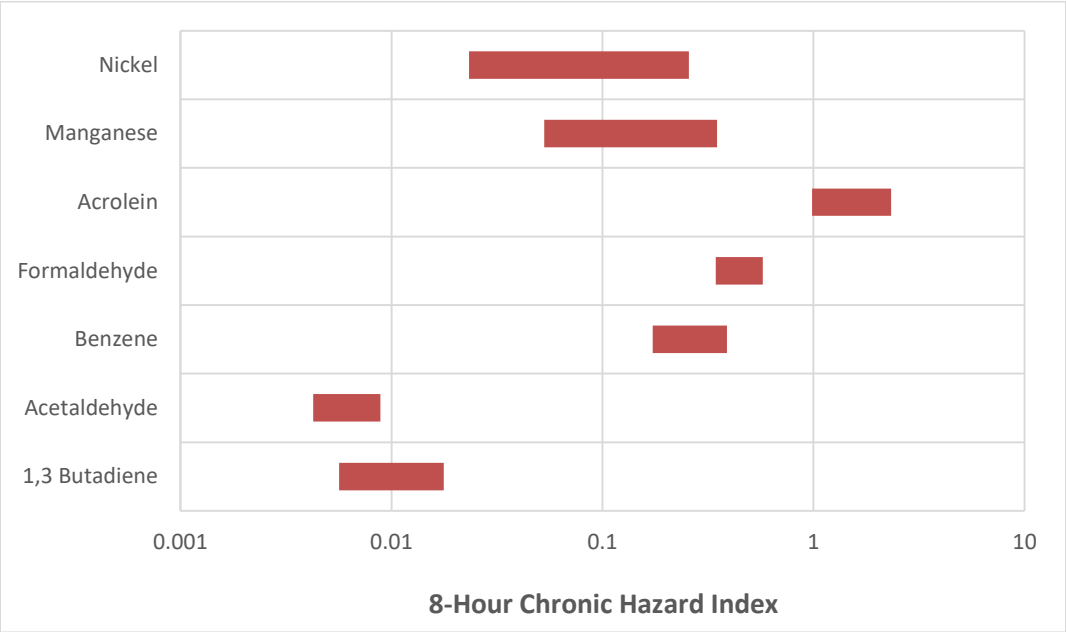


Figure B-6 — Non-cancer 8-Hour Chronic Risks in the Basin (2015 to 2017)

The 2015 OEHHA Risk Assessment Guidelines includes methodology for estimating an 8-hour chronic HI using 8-hour REL developed for this purpose. The 8-hour RELs were developed only for repeated, chronic daily 8-hour exposures (e.g. a typical worker or resident exposed to a facility that operates equal to or more than 8 hours per day and 5 days per week). The 8-hour chronic HI is based upon the daily average 8-hour exposure only for those chemicals with 8-hour chronic RELs. The range of non-cancer 8-hour chronic health risks for the four sites analyzed here are shown above in Figure B-6 for the most recently available three-year period (2015 to 2017). Methylene chloride does not have an 8-hour REL as defined by OEHHA and does not affect the 8-hour chronic hazard index.

As stated above, acrolein is the only toxic air contaminant in which ambient concentrations are above its REL. It should be noted that the ambient concentrations of acrolein are above its REL throughout the state and thus may partially reflect general background conditions.

[30] R. Schulte-Ladbeck, et al. "Characterization of chemical interferences in the determination of unsaturated aldehydes using aromatic hydrazine reagents and liquid chromatography." J. Environ. Monit., 2001, 3, 306–310.
Ho, S.S.H., et al. "Unsuitability of using the DNPH-coated solid sorbent cartridge for determination of airborne unsaturated carbonyls." Atmospheric Environment. 2011 45, 261-265.
Herrington, J.S., et al. "Concerns regarding 24-h sampling for formaldehyde, acetaldehyde, and acrolein using 2,4-dinitrophenylhydrazine (DNPH)-coated solid sorbents." Atmospheric Environment 2012, 55, 179-184.
Grosjean, D., "Ambient Levels of Formaldehyde, Acetaldehyde, and Formic Acid in Southern California: Results of a One- Year Base-Line Study," Environmental Science & Technology, Vol 25, 1991, pp. 710–715.

Appendix C – Health Risks from Facilities with an Approved HRA

The tables in Appendix C list the facilities and the health risks identified in their HRAs or RRPs as reviewed and approved by South Coast AQMD staff. Risks presented in these tables were calculated based on guidance that was available from OEHHA at the time of HRA approval. For example, the health risks presented in this appendix for facilities with HRA approval date prior to 2015 do not include the health risk calculation methodologies (2015 OEHHA Risk Assessment Guidelines) that account for the differences in children's breathing rates and place greater emphasis on their susceptibility to cancer risk in comparison to adults. The health risks in all HRAs finalized by South Coast AQMD staff in 2015 were recalculated to reflect the 2015 OEHHA Risk Assessment Guidelines. Additionally, facilities that have elected to participate in the Voluntary Risk Reduction Program and have an approved VRRP are listed in Table D-2.

Table C-1 lists the facilities in order of their cancer risks and Table C-2 lists the facilities ordered by facility ID. The listed health risks are from an approved HRA, unless an approved RRP has been fully implemented. In those instances, the listed health risks reflect the health risks after the implementation of the RRP. Appendix D lists the status of the facility's RRP and is presented by facility ID. Attention should also be given to the footnotes for this appendix which denote facilities with updated HRAs pending approval and facilities with health risks including emergency diesel internal combustion engines. It also provides the last known status of each facility as follows:

"A" – Active (note that facilities with this status may not be in operation currently)

"O" – Out of business or inactive

"Out of business or inactive" facilities have been retained for historical purposes since staff occasionally receives public inquiries regarding these facilities. Facilities may undergo change of ownership could have different name and facility ID numbers. The following thresholds are identified in South Coast AQMD Rule 1402 — Control of Toxic Air Contaminants from Existing Sources:

Thresholds	Cancer Risk in MM	Acute, Chronic HI	Cancer Burden
Significant Risk Level	≥ 100	≥ 5.0	N/A
Action Risk Level	≥ 25	≥ 3.0	≥ 0.5
Notification Risk Level	≥ 10	≥ 1.0	N/A
Voluntary Risk Threshold	≥ 10	≥ 1.0	N/A
Exemption Level	< 1	< 0.1	N/A

Table C-1

Health Risks from Facilities with an Approved HRA

(Listed in descending order by cancer risk)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
16951	A	ANAPLEX CORP	PARAMOUNT	2836.0	9.73	23.84	2.02	2018
23752	A	AEROCRAFT HEAT TREATING CO INC	PARAMOUNT	1900.0	11.00	2.90	0.15	2018
171107	A	PHILLIPS 66 CO/LA REFINERY WILMINGTON PL	WILMINGTON	23.2	0.29	0.10	0.70	2013
122822	O	CONSOLIDATED FILM INDUSTRIES, LLC	HOLLYWOOD	21.0	ND	0.10	0.40	2000
181426	A	OC WASTE & RECYCLING, COYOTE	NEWPORT COAST	20.1	0.18	0.60	0.30	2009
14495	A	VISTA METALS CORPORATION	FONTANA	19.8	0.06	0.00	0.30	2008
165192	A	TRIUMPH AEROSTRUCTURES, LLC (b)	HAWTHORNE	19.7	ND	0.64	0.24	1999
11142	A	KEYSOR-CENTURY CORP	SAUGUS	17.0	ND	0.50	0.10	2000
18989	A	BOWMAN PLATING CO INC	COMPTON	17.0	0.00	0.01	0.01	2015
22911	A	CARLTON FORGE WORKS	PARAMOUNT	15.4	ND	1.76	1.04	2016
35302	A	OWENS CORNING ROOFING AND ASPHALT, LLC (c)	COMPTON	14.0	0.02	0.10	0.10	2000
41229	A	LUBECO INC	LONG BEACH	14.0	ND	0.00	0.10	2002
180631	A	STCDARA, LLC	LA PUENTE	13.8	0.02	0.01	0.74	2001
23907	A	JOHNS MANVILLE CORP	CORONA	13.0	ND	0.40	2.70	1999
18648	O	CROWN CITY PLATING CO.	EL MONTE	12.0	ND	0.40	0.10	2000
800436	A	TESORO REFINING AND MARKETING CO, LLC	WILMINGTON	10.7	0.37	0.30	0.40	2013
106797	A	SAINT-GOBAIN CONTAINERS, INC.	LOS ANGELES	9.9	ND	0.00	0.10	2000
22128	O	AEROJET ORDNANCE CO	DOWNEY	9.8	ND	0.00	0.10	2000
148925	A	CHERRY AEROSPACE	SANTA ANA	9.7	ND	0.10	0.20	1999
800373	A	LAKELAND DEVELOPMENT COMPANY	SANTA FE SPRINGS	9.7	ND	0.30	0.10	2000
187165	A	ALTAIR PARAMOUNT, LLC	PARAMOUNT	9.6	ND	0.00	0.00	2002
15504	A	SCHLOSSER FORGE COMPANY	RANCHO CUCAMONGA	9.5	0.07	1.59	1.11	2002
800149	A	US BORAX INC	WILMINGTON	9.5	ND	0.00	0.00	2000
800318	A	GRISWOLD INDUSTRIES	COSTA MESA	9.5	0.01	0.10	0.00	2001
10510	A	GREGG INDUSTRIES INC	EL MONTE	9.4	ND	0.60	0.60	2008
62897	A	NORTHROP GRUMMAN CORP, MASD	PICO RIVERA	9.4	ND	1.00	0.50	2000

Table C-1 (cont'd)

Health Risks from Facilities with an Approved HRA

(Listed in descending order by cancer risk)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
155828	A	GARRETT AVN. SVCS. LLC DBA STANDARD AERO	LOS ANGELES	9.3	ND	0.19	0.25	2002
42922	A	CMC PRINTED BAG INC	WHITTIER	9.0	ND	0.00	0.00	1995
174710	A	TESORO LOGISTICS, VINVALE TERMINAL	SOUTH GATE	9.0	ND	0.00	0.00	1994
169990	A	SPS TECHNOLOGIES, LLC	GARDENA	8.9	ND	0.10	0.10	1999
800184	A	GOLDEN WEST REF CO	SANTA FE SPRINGS	8.8	ND	0.20	0.10	1997
187823	A	KIRKHILL INC	BREA	8.7	0.00	0.20	0.10	2007
18931	A	TAMCO	RANCHO CUCAMONGA	8.7	0.25	0.49	0.61	2015
175124	A	AEROJET ROCKETDYNE OF DE, INC.	CANOGA PARK	8.7	ND	0.00	0.00	1995
2680	A	LA CO., SANITATION DISTRICT	WHITTIER	8.6	ND	0.00	0.00	1999
44454	A	STRUCTURAL COMPOSITES IND	POMONA	8.6	0.00	0.00	0.20	2002
7203	A	HESSCO IND INC	LA HABRA	8.6	ND	0.00	0.00	1995
15736	A	HENRY CO	HUNTINGTON PARK	8.5	ND	0.00	0.00	2000
800057	A	KINDER MORGAN LIQUIDS TERMINALS, LLC	CARSON	8.5	ND	0.00	0.10	1999
800079	A	PETRO DIAMOND TERMINAL CO	LONG BEACH	8.3	ND	0.00	0.20	1998
9793	O	MODERN PLATING CO	LOS ANGELES	8.2	ND	0.10	0.00	1995
21615	O	PERKINELMER OPTOELECTRONICS SC, INC	AZUSA	8.1	ND	0.20	0.10	1998
110924	A	WESTWAY TERMINAL COMPANY, LLC	SAN PEDRO	8.0	ND	0.30	0.50	1997
3609	A	AL'S PLATING CO INC	LOS ANGELES	7.8	ND	0.30	0.20	1999
37603	A	SGL TECHNIC INC, POLYCARBON DIVISION	VALENCIA	7.8	ND	0.00	0.40	1998
800182	A	RIVERSIDE CEMENT CO (c)	RIVERSIDE	7.8	0.11	0.10	0.10	2001
13920	A	SAINT JOSEPH HOSPITAL	ORANGE	7.7	0.00	0.80	0.30	2008
181667	A	TORRANCE REFINING COMPANY LLC	TORRANCE	7.7	0.15	0.20	0.50	2013
18294	A	NORTHROP GRUMMAN SYSTEMS CORP	EL SEGUNDO	7.6	ND	0.13	0.05	1999
113170	A	SANTA MONICA - UCLA MEDICAL CENTER (b)	SANTA MONICA	7.6	0.14	0.20	0.00	1997
800214	A	LA CITY, SANITATION BUREAU (HTP) (c)	PLAYA DEL REY	7.6	ND	0.10	0.00	1999
20197	A	LAC/USC MEDICAL CENTER	LOS ANGELES	7.5	ND	0.70	0.40	2007
800032	A	CHEVRON USA INC	MONTEBELLO	7.5	0.14	0.00	0.20	1999

Table C-1 (cont'd)

Health Risks from Facilities with an Approved HRA

(Listed in descending order by cancer risk)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
800150	A	US GOVT, AF DEPT, MARCH AIR RESERVE BASE	RIVERSIDE	7.4	0.02	0.30	0.00	2008
108701	A	SAINT-GOBAIN CONTAINERS, INC.	EL MONTE	7.3	ND	0.10	0.10	2000
117560	A	EQUILON ENTER, LLC-SHELL OIL PROD. US	WILMINGTON	7.3	ND	0.00	0.10	1998
174655	A	TESORO REFINING & MARKETING CO, LLC	CARSON	7.3	ND	0.30	0.10	2000
800026	A	ULTRAMAR INC	WILMINGTON	7.2	0.18	0.70	0.20	2012
800113	A	ROHR, INC.	RIVERSIDE	7.2	0.01	0.90	0.00	2007
800236	A	LA CO. SANITATION DIST	CARSON	7.2	ND	0.20	0.10	2007
8547	A	QUEMETCO INC (c)	CITY OF INDUSTRY	7.1	0.45	0.09	0.69	2016
27343	O	CON AGRA INC, GILROY FOODS DBA	SANTA ANA	7.1	ND	0.20	0.10	1995
49387	A	UNIV CAL, RIVERSIDE	RIVERSIDE	7.1	ND	0.00	0.00	2018
183567	A	GS II, INC. (c)	WILMINGTON	7.0	ND	0.00	0.00	2000
11197	O	TRIGEN-LA ENERGY CORP	HUNTINGTON BEACH	7.0	ND	0.00	0.00	1995
800209	A	BKK CORP (EIS USE)	WEST COVINA	6.9	ND	0.00	0.10	2000
800372	A	EQUILON ENTER. LLC, SHELL OIL PROD. US	CARSON	6.9	ND	0.40	0.10	2001
20280	A	METAL SURFACES INC	BELL GARDENS	6.8	0.00	0.90	0.30	2011
5723	A	DUCOMMUN AEROSTRUCTURES INC	ORANGE	6.7	ND	0.00	0.10	1999
87908	O	STRUCTURAL POLYMER SYSTEMS, INC	CULVER CITY	6.6	ND	0.00	0.20	1997
171109	A	PHILLIPS 66 COMPANY/LOS ANGELES REFINERY	CARSON	6.6	0.11	0.00	0.30	2011
186519	A	EMBEE PROCESSING	SANTA ANA	6.6	ND	0.21	0.58	2000
6643	A	TECHNICOLOR INC	NORTH HOLLYWOOD	6.5	ND	0.00	0.10	2007
11726	A	GE ENGINE SERVICES	ONTARIO	6.5	ND	0.10	0.60	1999
34764	A	CADDOCK ELECTRONICS INC	RIVERSIDE	6.5	ND	0.00	0.10	2002
168088	A	POLYNT COMPOSITES USA INC	LYNWOOD	6.5	ND	0.10	1.60	1995
1073	A	BORAL ROOFING LLC	CORONA	6.4	0.00	0.51	2.72	2018
2852	A	THE WALT DISNEY COMPANY	BURBANK	6.4	0.03	0.00	0.00	1997
16660	A	THE BOEING COMPANY	HUNTINGTON BEACH	6.4	0.02	0.01	0.08	2015
800066	A	HITCO CARBON COMPOSITES INC	GARDENA	6.4	ND	0.30	0.00	1995

Table C-1 (cont'd)

Health Risks from Facilities with an Approved HRA

(Listed in descending order by cancer risk)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
4477	A	SO CAL EDISON CO	AVALON	6.3	0.02	0.00	0.00	2012
1226	A	HYATT DIE CAST & ENGINEERING CORP	CYPRESS	6.2	ND	0.00	0.10	1996
45262	A	LA COUNTY SANITATION DIST SCHOLL CANYON	GLENDALE	6.2	ND	0.00	0.10	1998
146570	A	ROHM AND HAAS CHEMICALS LLC	LA MIRADA	6.2	ND	0.50	0.80	1999
800067	A	THE BOEING COMPANY	EL SEGUNDO	6.2	ND	0.00	0.10	2000
140961	A	GKN AEROSPACE TRANSPARENCY SYS INC	GARDEN GROVE	6.0	ND	0.00	0.50	1996
800022	A	CALNEV PIPE LINE, LLC	BLOOMINGTON	5.9	ND	0.00	0.10	1999
800047	O	FLETCHER OIL & REF CO	CARSON	5.9	ND	0.00	0.00	1998
800198	A	ULTRAMAR INC	WILMINGTON	5.9	ND	0.00	0.10	1999
800279	A	SFPP, L.P. (NSR USE ONLY)	ORANGE	5.9	ND	0.00	0.20	1999
8578	A	ASSOCIATED CONCRETE PROD. INC	SANTA ANA	5.8	ND	0.10	0.60	1999
800129	A	SFPP, L.P.	BLOOMINGTON	5.8	ND	0.00	0.00	1996
136148	A	E/M COATING SERVICES	NORTH HOLLYWOOD	5.8	ND	0.30	0.60	1998
164864	A	ARROWHEAD BRASS & PLUMBING	LOS ANGELES	5.7	ND	0.30	0.00	1995
22410	A	PALACE PLATING	LOS ANGELES	5.6	ND	0.73	0.38	2004
38971	A	RICOH ELECTRONICS INC	IRVINE	5.6	ND	0.00	0.40	1995
800288	A	UNIV CAL IRVINE (NSR USE ONLY)	IRVINE	5.6	ND	0.00	0.10	1996
14146	A	MAC GREGOR YACHT CORP	COSTA MESA	5.5	ND	0.00	0.10	1998
185352	A	SNOW SUMMIT, LLC.	BIG BEAR LAKE	5.5	ND	0.20	0.00	2007
54424	A	L&L CUSTOM SHUTTERS INC,ALLWOOD SHUTTERS	PLACENTIA	5.5	ND	0.20	0.20	2001
800409	A	NORTHROP GRUMMAN SYSTEMS CORPORATION	REDONDO BEACH	5.5	ND	0.50	0.20	1998
800196	A	AMERICAN AIRLINES, INC,	LOS ANGELES	5.4	0.19	0.86	0.08	2002
182752	A	TORRANCE LOGISTICS COMPANY LLC	VERNON	5.3	ND	0.10	0.00	1997
134018	A	INDUSTRIAL CONTAINER SERVICES-CA LLC	MONTEBELLO	5.2	ND	0.60	0.20	2000
1836	A	UNION OIL CO OF CALIFORNIA	BREA	5.0	ND	0.00	0.00	2001
15549	O	A J INDUSTRIES INC, SARGENT-FLETCHER CO	EL MONTE	4.9	ND	0.20	0.00	1999
800037	A	DEMENNO-KERDOON DBA WORLD OIL RECYCLING	COMPTON	4.9	0.01	0.01	0.02	2009

Table C-1 (cont'd)

Health Risks from Facilities with an Approved HRA

(Listed in descending order by cancer risk)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
11192	A	HI-SHEAR CORPORATION	TORRANCE	4.8	ND	0.00	0.00	2008
800038	A	THE BOEING COMPANY - C17 PROGRAM	LONG BEACH	4.8	ND	0.20	0.10	1999
800264	A	EDGINGTON OIL COMPANY	LONG BEACH	4.8	0.00	0.00	0.00	2002
101977	A	SIGNAL HILL PETROLEUM INC	SIGNAL HILL	4.7	ND	0.60	1.00	1998
3950	A	CROWN CORK & SEAL CO INC	LA MIRADA	4.6	ND	0.00	0.10	1997
83102	A	LIGHT METALS INC	CITY OF INDUSTRY	4.5	0.01	0.00	2.70	2002
157451	A	BENDER CCP INC	VERNON	4.4	0.00	1.00	0.00	2002
800041	A	DOW CHEM U.S.A.	TORRANCE	4.4	ND	0.10	0.00	2000
93346	A	WAYMIRE DRUM CO,INC.,S EL MONTE FACILITY	SOUTH EL MONTE	4.3	ND	0.10	0.20	1997
174591	A	TESORO REF & MKTG CO LLC,CALCINER (c)	WILMINGTON	4.3	ND	0.10	0.20	1995
177042	A	SOLVAY USA, INC	LONG BEACH	4.3	ND	0.30	0.00	2001
124506	A	THE BOEING COMPANY	TORRANCE	4.2	ND	0.50	0.10	1995
6459	O	HONEYWELL INTERNATIONAL INC	VERNON	4.1	ND	0.00	0.00	1999
7533	A	SIMS HUGO NEU WEST	TERMINAL ISLAND	4.1	ND	1.30	0.10	2003
18439	O	ACE PLATING CO INC	LOS ANGELES	4.1	ND	0.60	0.20	1998
45489	A	ABBOTT CARDIOVASCULAR SYSTEMS, INC.	TEMECULA	3.8	0.01	1.30	0.00	2002
126060	A	STERIGENICS US, LLC	ONTARIO	3.8	0.00	0.00	0.00	2007
8820	A	REULAND ELECTRIC CO, H.BRITTON LEES	CITY OF INDUSTRY	3.7	ND	0.00	0.00	1996
9114	O	SOMITEX PRINTS OF CAL INC	CITY OF INDUSTRY	3.7	ND	0.10	0.00	1996
17325	A	ACE CLEARWATER ENTERPRISES	PARAMOUNT	3.7	ND	0.00	0.00	2002
106838	A	VALLEY-TODECO, INC	SYLMAR	3.7	ND	0.20	0.20	2000
7427	A	OWENS-BROCKWAY GLASS CONTAINER INC	VERNON	3.6	ND	0.01	0.06	1999
105598	A	SENIOR AEROSPACE SSP	BURBANK	3.6	ND	1.00	0.50	2001
126197	A	STERIGENICS US, INC.	LOS ANGELES	3.6	ND	0.00	0.00	1996
3420	A	HONEYWELL INTERNATIONAL INC	EL SEGUNDO	3.6	ND	0.00	0.50	2000
8015	A	ANADITE INC	SOUTH GATE	3.5	ND	0.63	0.78	1998
127568	A	ENGINEERED POLYMER SOLUTION, VALSPAR	MONTEBELLO	3.5	ND	0.10	0.50	2000

Table C-1 (cont'd)

Health Risks from Facilities with an Approved HRA

(Listed in descending order by cancer risk)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
140811	A	DUCOMMUN AEROSTRUCTURES INC	MONROVIA	3.5	0.01	0.00	0.00	2002
151899	A	CALIFORNIA RESOURCES PRODUCTION CORP	NEWHALL	3.5	ND	0.00	0.20	2000
9163	A	INLAND EMPIRE UTL AGEN, A MUN WATER DIS	ONTARIO	3.4	ND	0.30	0.00	2007
57329	O	KWIKSET CORP	ANAHEIM	3.4	ND	0.00	0.10	2000
185575	A	BRIDGE ENERGY, LLC	BREA	3.4	ND	0.00	0.00	1999
800204	O	SIMPSON PAPER CO	POMONA	3.4	ND	0.00	0.00	1996
126191	A	STERIGENICS US, INC.	LOS ANGELES	3.3	ND	0.00	0.00	1996
153546	A	HUCK INTERNATIONAL INC	CARSON	3.3	ND	0.00	0.00	1999
800063	A	GROVER PROD. CO (EIS USE)	LOS ANGELES	3.3	0.04	0.88	0.07	2001
800189	A	DISNEYLAND RESORT	ANAHEIM	3.3	0.03	0.10	0.10	2009
18396	A	SPRAYLAT CORP	LOS ANGELES	3.2	0.00	0.70	0.00	2012
6384	A	LA CO., RANCHO LOS AMIGOS NAT. REHAB CTR	DOWNEY	3.1	ND	0.00	0.10	1999
10005	A	ELECTRONIC CHROME GRINDING CO, INC	SANTA FE SPRINGS	3.0	0.01	0.20	0.10	2001
11435	A	PQ CORPORATION	SOUTH GATE	3.0	ND	0.00	0.00	1998
113676	A	VICKERS	LOS ANGELES	3.0	ND	0.00	0.00	1995
174703	A	TESORO LOGISTICS,CARSON PROD TERMINAL	CARSON	3.0	ND	0.00	0.00	1994
2613	A	U.S.GVT,NAVY,NAVAL WEAPONS STN SEAL BCH	SEAL BEACH	2.9	ND	0.10	0.00	2002
18452	A	UNIVERSITY OF CALIFORNIA, LOS ANGELES (c)	LOS ANGELES	2.9	ND	0.00	0.10	1999
52517	A	REXAM BEVERAGE CAN COMPANY	CHATSWORTH	2.9	0.01	0.70	0.10	2009
116868	A	EQUILON ENTER. LLC, SHELL OIL PROD. U S	BLOOMINGTON	2.9	ND	0.00	0.00	1999
48274	A	FENDER MUSICAL INST	CORONA	2.8	ND	0.00	0.40	1997
151798	A	TESORO REFINING AND MARKETING CO, LLC	CARSON	2.8	ND	0.10	0.00	1999
167981	A	TESORO LOGISTICS, WILMINGTON TERMINAL	WILMINGTON	2.8	ND	0.00	0.00	2000
800035	A	CONTINENTAL AIRLINES INC (NSR USE ONLY)	LOS ANGELES	2.8	ND	0.00	0.10	1995
5887	A	NEXGEN PHARMA INC	IRVINE	2.7	ND	0.00	0.00	1997
16642	A	ANHEUSER-BUSCH LLC., (LA BREWERY)	VAN NUYS	2.7	ND	0.00	0.10	1999
25440	A	INVENSYS CLIMATE CONTROLS	LONG BEACH	2.7	ND	0.00	1.00	1998

Table C-1 (cont'd)

Health Risks from Facilities with an Approved HRA

(Listed in descending order by cancer risk)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
27701	O	CADDOCK ELECTRONIC	RIVERSIDE	2.7	ND	0.00	0.10	2002
46268	A	CALIFORNIA STEEL INDUSTRIES INC	FONTANA	2.7	0.02	0.20	0.00	1995
115315	A	NRG CALIFORNIA SOUTH LP, ETIWANDA GEN ST	ETIWANDA	2.7	ND	0.00	0.20	2000
184301	A	SENTINEL PEAK RESOURCES CALIFORNIA, LLC	LOS ANGELES	2.7	ND	0.00	0.10	1997
800030	A	CHEVRON PRODUCTS CO.	EL SEGUNDO	2.7	0.28	0.30	0.10	2001
35483	A	WARNER BROTHERS STUDIO FACILITIES	BURBANK	2.6	ND	0.10	0.30	1997
37507	A	TROJAN BATTERY COMPANY, LLC	SANTA FE SPRINGS	2.6	0.00	1.10	1.30	2012
134943	A	ARCONIC GLOBAL FASTENERS & RINGS INC	TORRANCE	2.6	ND	0.60	0.00	2008
185059	A	CUSTOM FIBREGLASS MFG. CO DBA SNUGTOP	LONG BEACH	2.5	ND	0.00	0.00	1995
183926	A	EVONIK CORPORATION	LOS ANGELES	2.4	ND	0.10	0.80	1999
800278	A	SFPP, L.P. (NSR USE)	CARSON	2.4	ND	0.00	0.10	1999
79682	A	RAMCAR BATTERIES INC	COMMERCE	2.4	1.00	0.00	0.20	1998
133405	A	BODYCOTE THERMAL PROCESSING	LOS ANGELES	2.4	ND	0.00	0.20	1999
172878	A	TESORO LOGISTICS LONG BEACH TERMINAL	LONG BEACH	2.4	ND	0.00	0.00	1999
800039	O	DOUGLAS PRODUCTS DIVISION	TORRANCE	2.4	ND	0.00	0.00	1996
800202	A	UNIVERSAL CITY STUDIOS, LLC.	UNIVERSAL CITY	2.4	ND	0.00	0.00	1996
800387	A	CAL INST OF TECH	PASADENA	2.4	ND	0.10	0.00	2007
1208	A	MICROSEMI CORP	SANTA ANA	2.3	ND	0.00	0.00	2001
14140	O	SHILEY INC.	IRVINE	2.3	ND	0.00	0.00	1996
160437	A	SOUTHERN CALIFORNIA EDISON	REDLANDS	2.3	0.00	0.00	0.00	2013
800056	A	KINDER MORGAN LIQUIDS TERMINALS, LLC	WILMINGTON	2.3	0.01	0.00	0.00	1997
800111	O	THE BOEING COMPANY	DOWNEY	2.3	ND	0.00	0.10	1996
99773	A	CYTEC ENGINEERED MATERIALS INC	ANAHEIM	2.2	0.00	0.00	0.20	2000
103659	A	ASCENT MEDIA MANAGEMENT SERVICES INC	BURBANK	2.2	ND	0.60	0.00	2004
9668	A	DELUXE LABORATORIES	HOLLYWOOD	2.1	ND	0.00	0.00	2000
40829	A	HAWKER PACIFIC AEROSPACE	SUN VALLEY	2.1	0.00	0.00	0.10	2009
2605	A	3M DRUG DELIVERY SYSTEMS	NORTHRIDGE	2.0	ND	0.40	0.40	1996

Table C-1 (cont'd)

Health Risks from Facilities with an Approved HRA

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Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
14502	A	CITY OF VERNON, VERNON GAS & ELECTRIC	VERNON	2.0	0.00	0.00	0.00	2007
182610	A	ELITE COMFORT SOLUTIONS	COMMERCE	2.0	ND	0.00	0.50	1998
142267	A	FS PRECISION TECH LLC	COMPTON	2.0	ND	0.10	0.20	2001
800181	A	CALIFORNIA PORTLAND CEMENT CO (c)	COLTON	2.0	ND	0.00	0.40	1996
800325	A	TIDELANDS OIL PRODUCTION CO	LONG BEACH	1.9	ND	0.10	0.60	1999
10245	A	LA CITY, TERMINAL ISLAND TREATMENT PLANT	SAN PEDRO	1.8	ND	0.00	0.00	2000
23559	A	JOHNSON CONTROLS BATTERY GROUP INC	FULLERTON	1.8	ND	0.00	0.10	2001
800003	A	HONEYWELL INTERNATIONAL INC	TORRANCE	1.8	ND	0.00	0.00	1999
8309	A	CAMBRO MANUFACTURING CO	HUNTINGTON BEACH	1.7	ND	0.00	0.10	2000
22467	A	LEFIELL MFG CO	SANTA FE SPRINGS	1.7	ND	0.70	0.20	2000
82512	A	BREA CANON OIL CO	WILMINGTON	1.7	ND	0.00	0.00	1996
185801	A	BERRY PETROLEUM COMPANY LLC	SANTA CLARITA	1.6	ND	0.20	0.70	1999
119920	A	PECHINEY CAST PLATE INC	VERNON	1.6	ND	0.30	0.30	1996
132954	A	ALL AMERICAN ASPHALT	SAN FERNANDO	1.6	0.00	0.40	0.30	2017
133660	A	HAYDEN INDUSTRIAL PRODUCTS	CORONA	1.6	ND	0.80	0.40	1998
2638	A	OCCIDENTAL COLLEGE	LOS ANGELES	1.5	ND	0.10	0.00	2007
25070	A	LA CNTY SANITATION DISTRICT-PUENTE HILLS (c)	CITY OF INDUSTRY	1.5	0.00	0.30	0.10	2009
107350	A	NATIONAL O-RINGS	DOWNEY	1.5	ND	0.00	0.00	2001
126536	A	CPP - POMONA	POMONA	1.5	ND	0.00	0.00	1999
3968	A	TABC, INC	LONG BEACH	1.4	ND	0.10	0.20	1999
82513	A	BREA CANON OIL COMPANY INC	HARBOR CITY	1.4	ND	0.00	0.00	1996
800408	A	NORTHROP GRUMMAN SYSTEMS	MANHATTAN BEACH	1.4	ND	0.90	0.10	1998
2526	A	CHEVRON USA INC	VAN NUYS	1.3	ND	0.00	0.00	1996
62679	O	KOP-COAT INC	LOS ANGELES	1.3	ND	0.00	0.50	1997
126544	A	PAC FOUNDRIES-INDUSTRY	CITY OF INDUSTRY	1.3	ND	0.60	0.10	1996
187348	A	HYDRO EXTRUDER, LLC	CITY OF INDUSTRY	1.3	ND	0.00	0.00	1999
800330	A	THUMS LONG BEACH	LONG BEACH	1.2	ND	0.00	0.00	2000

Table C-1 (cont'd)

Health Risks from Facilities with an Approved HRA

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Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
42633	A	LA COUNTY SANITATION DISTRICTS (SPADRA)	POMONA	1.2	ND	0.00	0.00	1996
185093	A	BEVERLY HILLS UNIFIED SCHOOL DISTRICT	BEVERLY HILLS	1.2	ND	0.00	0.00	2005
42514	A	LA COUNTY SANITATION DIST (CALABASAS)	AGOURA	1.1	0.00	0.10	0.00	2010
152054	A	LINN WESTERN OPERATING INC	BREA	1.1	ND	0.00	0.10	1996
20375	A	PRUDENTIAL OVERALL SUPPLY	RIVERSIDE	1.0	ND	0.00	0.10	1997
124806	O	EXIDE TECHNOLOGIES	CITY OF INDUSTRY	1.0	ND	0.00	0.00	1999
800127	A	SO CAL GAS CO	MONTEBELLO	1.0	0.00	0.00	0.00	2009
7730	A	CARPENTER CO	RIVERSIDE	1.0	ND	0.03	1.34	2003
800301	A	ITT GILFILLAN	VAN NUYS	0.9	ND	0.10	0.20	1998
22808	O	PRICE PFISTER INC	PACOIMA	0.9	ND	0.20	0.10	1996
47056	A	MYERS CONTAINER CORP, IMACC CORP DIV	HUNTINGTON PARK	0.9	ND	0.20	2.00	2002
11818	A	HIXSON METAL FINISHING	NEWPORT BEACH	0.8	ND	0.04	0.01	2015
14544	O	SANTA FE ENAMELING & METAL FINISHING CO	SANTA FE SPRINGS	0.8	ND	0.00	0.40	1999
18378	A	GRUBER SYS INC	VALENCIA	0.8	ND	0.10	0.10	2004
111415	O	VAN CAN COMPANY	FONTANA	0.8	ND	0.00	0.10	1996
186899	A	ENERY HOLDINGS LLC	CARSON	0.8	ND	0.20	0.00	2007
150201	A	BREITBURN OPERATING LP	SANTA FE SPRINGS	0.8	ND	0.00	0.00	1998
126964	A	EDWARDS LIFESCIENCES LLC	IRVINE	0.8	ND	0.00	0.00	1995
174340	A	PRC DE SOTO INTERNATIONAL, INC.	IRVINE	0.7	ND	0.00	0.00	1995
22373	A	SMURFIT-STONE CONTAINER ENTERPRISES, INC	LOS ANGELES	0.7	ND	0.00	0.00	1996
24060	A	AQUATIC COMPANY	ANAHEIM	0.7	ND	0.00	0.00	1996
182822	A	TORRANCE LOGISTICS COMPANY LLC	ANAHEIM	0.7	ND	0.00	0.00	1999
15647	A	CUSTOM ENAMELERS INC	FOUNTAIN VALLEY	0.6	ND	0.10	0.00	2000
24756	A	CRANE CO, HYDRO-AIRE DIV	BURBANK	0.6	ND	0.00	0.10	1997
115394	A	AES ALAMITOS, LLC	LONG BEACH	0.6	ND	0.00	0.00	1999
134931	A	ARCONIC GLOBAL FASTENERS & RINGS, INC.	FULLERTON	0.6	ND	1.90	0.02	1997
800327	A	GLENDALE CITY, GLENDALE WATER & POWER	GLENDALE	0.6	ND	0.00	0.00	1999

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1634	A	STEELCASE INC, WESTERN DIV	TUSTIN	0.5	ND	0.00	0.00	1995
3093	A	LA CO., OLIVE VIEW/UCLA MEDICAL CENTER	SYLMAR	0.5	ND	0.00	0.00	1999
6281	A	US GOVT,MARINE CORPS AIR STATION,EL TORO	SANTA ANA	0.5	ND	0.00	0.00	1996
21895	A	AC PRODUCTS INC	PLACENTIA	0.5	ND	0.00	0.00	2003
61160	A	GE ENGINE SERVICES, LLC	ONTARIO	0.5	ND	0.70	0.01	2003
152501	A	PRECISION SPECIALTY METALS, INC.	LOS ANGELES	0.5	ND	0.40	0.20	2001
188380	A	VALENCE SURFACE TECHNOLOGIES - LYNWOOD	LYNWOOD	0.5	0.00	0.10	0.40	2012
12660	O	GOLDSHIELD FIBERGLASS, INC, PLANT #58	FONTANA	0.4	ND	0.00	0.00	1994
18990	A	LIFE PAINT CO	SANTA FE SPRINGS	0.4	ND	0.00	0.00	2001
43436	A	TST, INC.	FONTANA	0.4	0.11	0.00	0.40	1997
44577	A	LONG BEACH CITY, SERRF PROJECT	LONG BEACH	0.4	0.00	0.00	0.10	2011
115536	A	AES REDONDO BEACH, LLC	REDONDO BEACH	0.4	ND	0.00	0.00	1998
122295	A	FALCON FOAM, A DIV OF ATLAS ROOFING CORP	LOS ANGELES	0.4	ND	0.00	0.00	1999
550	A	LA CO., INTERNAL SERVICE DEPT	LOS ANGELES	0.3	ND	0.00	0.00	2008
19989	O	PARKER HANNIFIN AEROSPACE CORP	IRVINE	0.3	ND	0.00	0.00	1999
24520	A	LA CNTY SANITATION DISTRICT-PALOS VERDES	ROLLING HILLS ESTATES	0.3	ND	0.00	0.00	1998
25638	A	BURBANK CITY, BURBANK WATER & POWER	BURBANK	0.3	ND	0.30	0.00	1996
99119	A	INTERPLASTIC CORP	HAWTHORNE	0.3	ND	0.10	0.30	1999
107149	A	MARKLAND MANUFACTURING INC	SANTA ANA	0.3	ND	0.10	0.10	2007
92881	O	WAYMIRE DRUM COMPANY INC, SOUTH GATE FAC	SOUTH GATE	0.3	ND	0.00	0.00	1997
115663	A	EL SEGUNDO POWER, LLC	EL SEGUNDO	0.3	ND	0.00	0.00	2000
122300	A	BASF CORPORATION	COLTON	0.3	ND	0.60	0.00	2002
124805	A	EXIDE TECHNOLOGIES	COMMERCE	0.3	ND	0.00	0.00	2000
161142	A	FOAMEX INNOVATIONS, INC.	COMPTON	0.3	0.00	0.00	0.00	2010
4210	O	HUGHES AIRCRAFT CO, EDSG	EL SEGUNDO	0.3	ND	0.00	0.20	1996
16264	A	INTERNATIONAL COATINGS CO INC	CERRITOS	0.2	ND	0.00	0.00	1999
48300	A	PRECISION TUBE BENDING	SANTA FE SPRINGS	0.2	ND	0.00	0.00	2002

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800074	A	LA CITY, DWP HAYNES GENERATING STATION	LONG BEACH	0.2	ND	0.00	0.00	2000
800168	A	PASADENA CITY, DWP	PASADENA	0.2	ND	0.70	0.00	1996
800193	A	LA CITY, DWP VALLEY GENERATING STATION	SUN VALLEY	0.2	ND	0.30	0.00	1999
1992	O	PRUDENTIAL OVERALL SUPPLY	VAN NUYS	0.1	ND	0.00	0.00	1997
7416	A	PRAXAIR INC	WILMINGTON	0.1	ND	0.00	0.00	2001
16044	A	SPECIALTY ORGANICS, INC.	IRWINDALE	0.1	ND	0.00	0.20	1997
24118	A	DEVOE COATINGS CO	RIVERSIDE	0.1	ND	0.30	0.10	1999
24812	A	FARMER BROS CO	TORRANCE	0.1	ND	0.00	0.00	1999
25012	A	AMADA AMERICA, INC.	LA MIRADA	0.1	ND	0.00	0.00	2002
37336	A	COMMERCE REFUSE TO ENERGY FACILITY	COMMERCE	0.1	0.00	0.00	0.00	2010
42676	A	CES PLACERITA INC	NEWHALL	0.1	ND	0.10	0.00	2003
94872	A	METAL CONTAINER CORP	MIRA LOMA	0.1	ND	0.40	0.40	2002
20528	A	BRISTOL FIBERLITE IND	SANTA ANA	0.1	ND	0.00	0.00	1995
180908	A	ECO SERVICES OPERATIONS CORP.	CARSON	0.1	ND	0.00	0.10	2006
115389	A	AES HUNTINGTON BEACH, LLC	HUNTINGTON BEACH	0.1	ND	0.00	0.00	1999
57304	A	HARBOR COGENERATION CO	WILMINGTON	0.1	ND	0.00	0.00	2002
6670	O	TRU CUT INC	LOS ANGELES	0.0	ND	0.00	0.00	2002
809	O	GARNER GLASS CO	CLAREMONT	0.0	ND	0.00	0.00	1996
1732	O	INTL ELECTRONIC RESEARCH CORP	BURBANK	0.0	ND	0.00	0.00	1996
1746	A	UNITED ALLOYS INC	LOS ANGELES	0.0	ND	0.00	0.00	1998
3084	A	CARDINAL INDUSTRIAL FINISHES INC	SOUTH EL MONTE	0.0	ND	0.00	0.00	1996
3100	A	BAXTER HEALTHCARE CORPORATION	IRVINE	0.0	ND	0.00	0.40	1994
3578	A	PRUDENTIAL OVERALL SUPPLY	CARSON	0.0	ND	0.00	0.00	1995
4616	O	SUPERIOR IND INTL INC	VAN NUYS	0.0	ND	0.00	0.40	1997
5125	A	UTILITY TRAILER MFG CO	CITY OF INDUSTRY	0.0	ND	0.00	0.30	1996
5645	O	STANDARD NICKEL CHROMIUM PLATING CO INC	LOS ANGELES	0.0	ND	0.00	0.00	1999
6163	A	OHLINE	GARDENA	0.0	ND	0.30	0.70	1996

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6315	A	LMC ENTERPRISES, DBA FLO-KEM	RANCHO DOMINGUEZ	0.0	ND	0.00	0.60	1999
6362	O	JACUZZI WHIRLPOOL BATH INC	SANTA ANA	0.0	ND	0.00	0.00	1995
7010	A	PRUDENTIAL OVERALL SUPPLY	IRVINE	0.0	ND	0.00	0.00	1995
8560	A	PRUDENTIAL OVERALL SUPPLY CO	COMMERCE	0.0	ND	0.20	0.40	1995
8935	A	TRAIL RITE INC	SANTA ANA	0.0	ND	0.00	0.30	1996
10656	A	NEWPORT LAMINATES	SANTA ANA	0.0	ND	0.00	0.00	1996
12493	O	REMO INC	NORTH HOLLYWOOD	0.0	ND	0.00	0.00	1997
12879	O	CYTEC ENGINEERED MATERIALS, INC	SAUGUS	0.0	ND	0.00	0.00	1994
14191	O	NIKLOR CHEMICAL COMPANY INC	CARSON	0.0	ND	0.00	0.00	2002
14217	A	MODERN FAUCET MFG COMPANY	LOS ANGELES	0.0	ND	0.00	0.50	1996
19953	A	RISTON KELLER INC	IRVINE	0.0	ND	0.00	0.00	1996
20144	A	CANON BUSINESS MACHINES INC	COSTA MESA	0.0	ND	0.00	0.10	1999
21544	A	US GOVT, MARINE CORPS AIR STA @BLD	TUSTIN	0.0	ND	0.00	0.00	2000
22092	A	WESTERN TUBE & CONDUIT CORP	LONG BEACH	0.0	ND	0.00	0.60	1997
22229	A	PROCESSES BY MARTIN INC (MARTIN METALS F	LYNWOOD	0.0	ND	0.00	0.00	2002
24647	A	J. B. I. INC	RANCHO DOMINGUEZ	0.0	ND	0.00	0.20	1999
40806	A	NEW BASIS	RIVERSIDE	0.0	ND	0.70	0.20	1997
45938	A	E.M.E. INC/ELECTRO MACHINE & ENGINEERING	COMPTON	0.0	ND	0.00	0.00	1999
47459	O	JACUZZI WHIRLPOOL BATH	IRVINE	0.0	ND	0.00	0.00	1995
2261	A	WHEELABRATOR NORWALK ENERGY CO INC	NORWALK	0.0	ND	0.00	0.00	1996
51849	A	ELIMINATOR CUSTOM BOATS	MIRA LOMA	0.0	ND	0.00	0.00	1995
55711	A	SUNLAW COGENERATION PARTNERS I	VERNON	0.0	ND	0.00	0.00	1996
55714	A	SUNLAW COGENERATION PARTNERS I	VERNON	0.0	ND	0.00	0.00	1996
61209	O	AKZO NOBEL CHEM INC, FILTROL CORP SUB OF	LOS ANGELES	0.0	ND	0.00	0.00	1996
61743	A	AMERON STEEL FABRICATION DIVISION	FONTANA	0.0	ND	0.20	0.20	2000
70021	A	XERXES CORP (A DELAWARE CORP)	ANAHEIM	0.0	ND	0.00	0.00	1996
115586	A	SUNDANCE SPAS, INC	CHINO	0.0	ND	0.00	0.40	1996

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117785	A	BALL METAL BEVERAGE CONTAINER CORP.	TORRANCE	0.0	ND	0.20	0.90	2001
119127	O	PRC-DE SOTO INTERNATIONAL	GLENDALE	0.0	ND	0.00	0.00	2000
124016	O	CHEMETALL U,S., INC,	LA MIRADA	0.0	ND	0.10	0.10	2000
124838	A	EXIDE TECHNOLOGIES	VERNON	0.0	ND	0.00	0.00	2013
132343	A	SPECTRUM PAINT & POWDER, INC.	ANAHEIM	0.0	ND	0.20	0.70	1997
175126	A	AEROJET ROCKETDYNE OF DE, INC.	CANOGA PARK	0.0	ND	0.00	0.00	1996
149241	A	REGAL CULTURED MARBLE	POMONA	0.0	ND	0.00	0.20	1995
185282	A	BKEP MATERIALS LLC - FONTANA	FONTANA	0.0	ND	0.30	0.00	1999
160916	A	FXI, INC.	ORANGE	0.0	ND	0.40	0.40	1994
800075	A	LA CITY, DWP SCATTERGOOD GENERATING STN	PLAYA DEL REY	0.0	ND	0.00	0.00	2000
800087	A	MENASCO MFG CO (EIS USE)	BURBANK	0.0	ND	0.00	0.00	1997
800273	O	CHEMOIL REF CORP (NSR USE ONLY)	SIGNAL HILL	0.0	ND	0.00	0.00	2000
800320	A	AMVAC CHEMICAL CORP	LOS ANGELES	0.0	ND	0.10	0.30	2004
800337	A	CHEVRON U.S.A., INC (NSR USE)	LA HABRA	0.0	ND	0.00	0.00	1996

Notes:

(a) "A" – Active (note that facilities with this status may not be in operation currently); O = Out of Business or Inactive

(b) The specific risk driver listed in this HRA is no longer in use & the resulting risk has been eliminated or minimized.

(c) South Coast AQMD staff has requested these facilities to update their HRAs.

(d) All HRAs with HRA Approval Year dated 2015 and later have used the 2015 OEHHA Risk Assessment Guidelines for preparation of their HRA.

(e) ND = Not Determined

Table C-2 (cont'd)

Health Risks from Facilities with an Approved HRA

(Listed by Facility ID)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
550	A	LA CO., INTERNAL SERVICE DEPT	LOS ANGELES	0.3	ND	0.00	0.00	2008
809	O	GARNER GLASS CO	CLAREMONT	0.0	ND	0.00	0.00	1996
1073	A	BORAL ROOFING LLC	CORONA	6.4	0.00	0.51	2.72	2018
1208	A	MICROSEMI CORP	SANTA ANA	2.3	ND	0.00	0.00	2001
1226	A	HYATT DIE CAST & ENGINEERING CORP	CYPRESS	6.2	ND	0.00	0.10	1996
1634	A	STEELCASE INC, WESTERN DIV	TUSTIN	0.5	ND	0.00	0.00	1995
1732	O	INTL ELECTRONIC RESEARCH CORP	BURBANK	0.0	ND	0.00	0.00	1996
1746	A	UNITED ALLOYS INC	LOS ANGELES	0.0	ND	0.00	0.00	1998
1836	A	UNION OIL CO OF CALIFORNIA	BREA	5.0	ND	0.00	0.00	2001
1992	O	PRUDENTIAL OVERALL SUPPLY	VAN NUYS	0.1	ND	0.00	0.00	1997
2261	A	WHEELABRATOR NORWALK ENERGY CO INC	NORWALK	0.0	ND	0.00	0.00	1996
2526	A	CHEVRON USA INC	VAN NUYS	1.3	ND	0.00	0.00	1996
2605	A	3M DRUG DELIVERY SYSTEMS	NORTHRIDGE	2.0	ND	0.40	0.40	1996
2613	A	U.S.GVT,NAVY,NAVAL WEAPONS STN SEAL BCH	SEAL BEACH	2.9	ND	0.10	0.00	2002
2638	A	OCCIDENTAL COLLEGE	LOS ANGELES	1.5	ND	0.10	0.00	2007
2680	A	LA CO., SANITATION DISTRICT	WHITTIER	8.6	ND	0.00	0.00	1999
2852	A	THE WALT DISNEY COMPANY	BURBANK	6.4	0.03	0.00	0.00	1997
3084	A	CARDINAL INDUSTRIAL FINISHES INC	SOUTH EL MONTE	0.0	ND	0.00	0.00	1996
3093	A	LA CO., OLIVE VIEW/UCLA MEDICAL CENTER	SYLMAR	0.5	ND	0.00	0.00	1999
3100	A	BAXTER HEALTHCARE CORPORATION	IRVINE	0.0	ND	0.00	0.40	1994
3420	A	HONEYWELL INTERNATIONAL INC	EL SEGUNDO	3.6	ND	0.00	0.50	2000
3578	A	PRUDENTIAL OVERALL SUPPLY	CARSON	0.0	ND	0.00	0.00	1995
3609	A	AL'S PLATING CO INC	LOS ANGELES	7.8	ND	0.30	0.20	1999
3950	A	CROWN CORK & SEAL CO INC	LA MIRADA	4.6	ND	0.00	0.10	1997
3968	A	TABC, INC	LONG BEACH	1.4	ND	0.10	0.20	1999

Table C-2 (cont'd)

Health Risks from Facilities with an Approved HRA

(Listed by Facility ID)

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4210	O	HUGHES AIRCRAFT CO, EDSG	EL SEGUNDO	0.3	ND	0.00	0.20	1996
4477	A	SO CAL EDISON CO	AVALON	6.3	0.02	0.00	0.00	2012
4616	O	SUPERIOR IND INTL INC	VAN NUYS	0.0	ND	0.00	0.40	1997
5125	A	UTILITY TRAILER MFG CO	CITY OF INDUSTRY	0.0	ND	0.00	0.30	1996
5645	O	STANDARD NICKEL CHROMIUM PLATING CO INC	LOS ANGELES	0.0	ND	0.00	0.00	1999
5723	A	DUCOMMUN AEROSTRUCTURES INC	ORANGE	6.7	ND	0.00	0.10	1999
5887	A	NEXGEN PHARMA INC	IRVINE	2.7	ND	0.00	0.00	1997
6163	A	OHLINE	GARDENA	0.0	ND	0.30	0.70	1996
6281	A	US GOVT,MARINE CORPS AIR STATION,EL TORO	SANTA ANA	0.5	ND	0.00	0.00	1996
6315	A	LMC ENTERPRISES, DBA FLO-KEM	RANCHO DOMINGUEZ	0.0	ND	0.00	0.60	1999
6362	O	JACUZZI WHIRLPOOL BATH INC	SANTA ANA	0.0	ND	0.00	0.00	1995
6384	A	LA CO., RANCHO LOS AMIGOS NAT. REHAB CTR	DOWNEY	3.1	ND	0.00	0.10	1999
6459	O	HONEYWELL INTERNATIONAL INC	VERNON	4.1	ND	0.00	0.00	1999
6643	A	TECHNICOLOR INC	NORTH HOLLYWOOD	6.5	ND	0.00	0.10	2007
6670	O	TRU CUT INC	LOS ANGELES	0.0	ND	0.00	0.00	2002
7010	A	PRUDENTIAL OVERALL SUPPLY	IRVINE	0.0	ND	0.00	0.00	1995
7203	A	HESSCO IND INC	LA HABRA	8.6	ND	0.00	0.00	1995
7416	A	PRAXAIR INC	WILMINGTON	0.1	ND	0.00	0.00	2001
7427	A	OWENS-BROCKWAY GLASS CONTAINER INC	VERNON	3.6	ND	0.01	0.06	1999
7533	A	SIMS HUGO NEU WEST	TERMINAL ISLAND	4.1	ND	1.30	0.10	2003
7730	A	CARPENTER CO	RIVERSIDE	1.0	ND	0.03	1.34	2003
8015	A	ANADITE INC	SOUTH GATE	3.5	ND	0.63	0.78	1998
8309	A	CAMBRO MANUFACTURING CO	HUNTINGTON BEACH	1.7	ND	0.00	0.10	2000
8547	A	QUEMETCO INC (c)	CITY OF INDUSTRY	7.1	0.45	0.09	0.69	2016
8560	A	PRUDENTIAL OVERALL SUPPLY CO	COMMERCE	0.0	ND	0.20	0.40	1995
8578	A	ASSOCIATED CONCRETE PROD. INC	SANTA ANA	5.8	ND	0.10	0.60	1999
8820	A	REULAND ELECTRIC CO, H.BRITTON LEES	CITY OF INDUSTRY	3.7	ND	0.00	0.00	1996

Table C-2 (cont'd)

Health Risks from Facilities with an Approved HRA

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Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
8935	A	TRAIL RITE INC	SANTA ANA	0.0	ND	0.00	0.30	1996
9114	O	SOMITEX PRINTS OF CAL INC	CITY OF INDUSTRY	3.7	ND	0.10	0.00	1996
9163	A	INLAND EMPIRE UTL AGEN, A MUN WATER DIS	ONTARIO	3.4	ND	0.30	0.00	2007
9668	A	DELUXE LABORATORIES	HOLLYWOOD	2.1	ND	0.00	0.00	2000
9793	O	MODERN PLATING CO	LOS ANGELES	8.2	ND	0.10	0.00	1995
10005	A	ELECTRONIC CHROME GRINDING CO, INC	SANTA FE SPRINGS	3.0	0.01	0.20	0.10	2001
10245	A	LA CITY, TERMINAL ISLAND TREATMENT PLANT	SAN PEDRO	1.8	ND	0.00	0.00	2000
10510	A	GREGG INDUSTRIES INC	EL MONTE	9.4	ND	0.60	0.60	2008
10656	A	NEWPORT LAMINATES	SANTA ANA	0.0	ND	0.00	0.00	1996
11142	A	KEYSOR-CENTURY CORP	SAUGUS	17.0	ND	0.50	0.10	2000
11192	A	HI-SHEAR CORPORATION	TORRANCE	4.8	ND	0.00	0.00	2008
11197	O	TRIGEN-LA ENERGY CORP	HUNTINGTON BEACH	7.0	ND	0.00	0.00	1995
11435	A	PQ CORPORATION	SOUTH GATE	3.0	ND	0.00	0.00	1998
11726	A	GE ENGINE SERVICES	ONTARIO	6.5	ND	0.10	0.60	1999
11818	A	HIXSON METAL FINISHING	NEWPORT BEACH	0.8	ND	0.04	0.01	2015
12493	O	REMO INC	NORTH HOLLYWOOD	0.0	ND	0.00	0.00	1997
12660	O	GOLDSHIELD FIBERGLASS, INC, PLANT #58	FONTANA	0.4	ND	0.00	0.00	1994
12879	O	CYTEC ENGINEERED MATERIALS, INC	SAUGUS	0.0	ND	0.00	0.00	1994
13920	A	SAINT JOSEPH HOSPITAL	ORANGE	7.7	0.00	0.80	0.30	2008
14140	O	SHILEY INC.	IRVINE	2.3	ND	0.00	0.00	1996
14146	A	MAC GREGOR YACHT CORP	COSTA MESA	5.5	ND	0.00	0.10	1998
14191	O	NIKLOR CHEMICAL COMPANY INC	CARSON	0.0	ND	0.00	0.00	2002
14217	A	MODERN FAUCET MFG COMPANY	LOS ANGELES	0.0	ND	0.00	0.50	1996
14495	A	VISTA METALS CORPORATION	FONTANA	19.8	0.06	0.00	0.30	2008
14502	A	CITY OF VERNON, VERNON GAS & ELECTRIC	VERNON	2.0	0.00	0.00	0.00	2007
14544	O	SANTA FE ENAMELING & METAL FINISHING CO	SANTA FE SPRINGS	0.8	ND	0.00	0.40	1999
15504	A	SCHLOSSER FORGE COMPANY	RANCHO CUCAMONGA	9.5	0.07	1.59	1.11	2002

Table C-2 (cont'd)

Health Risks from Facilities with an Approved HRA

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Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
15549	O	A J INDUSTRIES INC, SARGENT-FLETCHER CO	EL MONTE	4.9	ND	0.20	0.00	1999
15647	A	CUSTOM ENAMELERS INC	FOUNTAIN VALLEY	0.6	ND	0.10	0.00	2000
15736	A	HENRY CO	HUNTINGTON PARK	8.5	ND	0.00	0.00	2000
16044	A	SPECIALTY ORGANICS, INC.	IRWINDALE	0.1	ND	0.00	0.20	1997
16264	A	INTERNATIONAL COATINGS CO INC	CERRITOS	0.2	ND	0.00	0.00	1999
16642	A	ANHEUSER-BUSCH LLC., (LA BREWERY)	VAN NUYS	2.7	ND	0.00	0.10	1999
16660	A	THE BOEING COMPANY	HUNTINGTON BEACH	6.4	0.02	0.01	0.08	2015
16951	A	ANAPLEX CORP	PARAMOUNT	2836.0	9.73	23.84	2.02	2018
17325	A	ACE CLEARWATER ENTERPRISES	PARAMOUNT	3.7	ND	0.00	0.00	2002
18294	A	NORTHROP GRUMMAN SYSTEMS CORP	EL SEGUNDO	7.6	ND	0.13	0.05	1999
18378	A	GRUBER SYS INC	VALENCIA	0.8	ND	0.10	0.10	2004
18396	A	SPRAYLAT CORP	LOS ANGELES	3.2	0.00	0.70	0.00	2012
18439	O	ACE PLATING CO INC	LOS ANGELES	4.1	ND	0.60	0.20	1998
18452	A	UNIVERSITY OF CALIFORNIA, LOS ANGELES (c)	LOS ANGELES	2.9	ND	0.00	0.10	1999
18648	O	CROWN CITY PLATING CO.	EL MONTE	12.0	ND	0.40	0.10	2000
18931	A	TAMCO	RANCHO CUCAMONGA	8.7	0.25	0.49	0.61	2015
18989	A	BOWMAN PLATING CO INC	COMPTON	17.0	0.00	0.01	0.01	2015
18990	A	LIFE PAINT CO	SANTA FE SPRINGS	0.4	ND	0.00	0.00	2001
19953	A	RISTON KELLER INC	IRVINE	0.0	ND	0.00	0.00	1996
19989	O	PARKER HANNIFIN AEROSPACE CORP	IRVINE	0.3	ND	0.00	0.00	1999
20144	A	CANON BUSINESS MACHINES INC	COSTA MESA	0.0	ND	0.00	0.10	1999
20197	A	LAC/USC MEDICAL CENTER	LOS ANGELES	7.5	ND	0.70	0.40	2007
20280	A	METAL SURFACES INC	BELL GARDENS	6.8	0.00	0.90	0.30	2011
20375	A	PRUDENTIAL OVERALL SUPPLY	RIVERSIDE	1.0	ND	0.00	0.10	1997
20528	A	BRISTOL FIBERLITE IND	SANTA ANA	0.1	ND	0.00	0.00	1995
21544	A	US GOVT, MARINE CORPS AIR STA @BLD	TUSTIN	0.0	ND	0.00	0.00	2000
21615	O	PERKINELMER OPTOELECTRONICS SC, INC	AZUSA	8.1	ND	0.20	0.10	1998

Table C-2 (cont'd)

Health Risks from Facilities with an Approved HRA

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Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
21895	A	AC PRODUCTS INC	PLACENTIA	0.5	ND	0.00	0.00	2003
22092	A	WESTERN TUBE & CONDUIT CORP	LONG BEACH	0.0	ND	0.00	0.60	1997
22128	O	AEROJET ORDNANCE CO	DOWNEY	9.8	ND	0.00	0.10	2000
22229	A	PROCESSES BY MARTIN INC (MARTIN METALS F	LYNWOOD	0.0	ND	0.00	0.00	2002
22373	A	SMURFIT-STONE CONTAINER ENTERPRISES, INC	LOS ANGELES	0.7	ND	0.00	0.00	1996
22410	A	PALACE PLATING	LOS ANGELES	5.6	ND	0.73	0.38	2004
22467	A	LEFIELL MFG CO	SANTA FE SPRINGS	1.7	ND	0.70	0.20	2000
22808	O	PRICE PFISTER INC	PACOIMA	0.9	ND	0.20	0.10	1996
22911	A	CARLTON FORGE WORKS	PARAMOUNT	15.4	ND	1.76	1.04	2016
23559	A	JOHNSON CONTROLS BATTERY GROUP INC	FULLERTON	1.8	ND	0.00	0.10	2001
23752	A	AEROCRAFT HEAT TREATING CO INC	PARAMOUNT	1900.0	11.00	2.90	0.15	2018
23907	A	JOHNS MANVILLE CORP	CORONA	13.0	ND	0.40	2.70	1999
24060	A	AQUATIC COMPANY	ANAHEIM	0.7	ND	0.00	0.00	1996
24118	A	DEVOE COATINGS CO	RIVERSIDE	0.1	ND	0.30	0.10	1999
24520	A	LA CNTY SANITATION DISTRICT-PALOS VERDES	ROLLING HILLS ESTATES	0.3	ND	0.00	0.00	1998
24647	A	J. B. I. INC	RANCHO DOMINGUEZ	0.0	ND	0.00	0.20	1999
24756	A	CRANE CO, HYDRO-AIRE DIV	BURBANK	0.6	ND	0.00	0.10	1997
24812	A	FARMER BROS CO	TORRANCE	0.1	ND	0.00	0.00	1999
25012	A	AMADA AMERICA, INC.	LA MIRADA	0.1	ND	0.00	0.00	2002
25070	A	LA CNTY SANITATION DISTRICT-PUENTE HILLS (c)	CITY OF INDUSTRY	1.5	0.00	0.30	0.10	2009
25440	A	INVENSYS CLIMATE CONTROLS	LONG BEACH	2.7	ND	0.00	1.00	1998
25638	A	BURBANK CITY, BURBANK WATER & POWER	BURBANK	0.3	ND	0.30	0.00	1996
27343	O	CON AGRA INC, GILROY FOODS DBA	SANTA ANA	7.1	ND	0.20	0.10	1995
27701	O	CADDOCK ELECTRONIC	RIVERSIDE	2.7	ND	0.00	0.10	2002
34764	A	CADDOCK ELECTRONICS INC	RIVERSIDE	6.5	ND	0.00	0.10	2002
35302	A	OWENS CORNING ROOFING AND ASPHALT, LLC (c)	COMPTON	14.0	0.02	0.10	0.10	2000
35483	A	WARNER BROTHERS STUDIO FACILITIES	BURBANK	2.6	ND	0.10	0.30	1997

Table C-2 (cont'd)

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37336	A	COMMERCE REFUSE TO ENERGY FACILITY	COMMERCE	0.1	0.00	0.00	0.00	2010
37507	A	TROJAN BATTERY COMPANY, LLC	SANTA FE SPRINGS	2.6	0.00	1.10	1.30	2012
37603	A	SGL TECHNIC INC, POLYCARBON DIVISION	VALENCIA	7.8	ND	0.00	0.40	1998
38971	A	RICOH ELECTRONICS INC	IRVINE	5.6	ND	0.00	0.40	1995
40806	A	NEW BASIS	RIVERSIDE	0.0	ND	0.70	0.20	1997
40829	A	HAWKER PACIFIC AEROSPACE	SUN VALLEY	2.1	0.00	0.00	0.10	2009
41229	A	LUBECO INC	LONG BEACH	14.0	ND	0.00	0.10	2002
42514	A	LA COUNTY SANITATION DIST (CALABASAS)	AGOURA	1.1	0.00	0.10	0.00	2010
42633	A	LA COUNTY SANITATION DISTRICTS (SPADRA)	POMONA	1.2	ND	0.00	0.00	1996
42676	A	CES PLACERITA INC	NEWHALL	0.1	ND	0.10	0.00	2003
42922	A	CMC PRINTED BAG INC	WHITTIER	9.0	ND	0.00	0.00	1995
43436	A	TST, INC.	FONTANA	0.4	0.11	0.00	0.40	1997
44454	A	STRUCTURAL COMPOSITES IND	POMONA	8.6	0.00	0.00	0.20	2002
44577	A	LONG BEACH CITY, SERRF PROJECT	LONG BEACH	0.4	0.00	0.00	0.10	2011
45262	A	LA COUNTY SANITATION DIST SCHOLL CANYON	GLENDALE	6.2	ND	0.00	0.10	1998
45489	A	ABBOTT CARDIOVASCULAR SYSTEMS, INC.	TEMECULA	3.8	0.01	1.30	0.00	2002
45938	A	E.M.E. INC/ELECTRO MACHINE & ENGINEERING	COMPTON	0.0	ND	0.00	0.00	1999
46268	A	CALIFORNIA STEEL INDUSTRIES INC	FONTANA	2.7	0.02	0.20	0.00	1995
47056	A	MYERS CONTAINER CORP, IMACC CORP DIV	HUNTINGTON PARK	0.9	ND	0.20	2.00	2002
47459	O	JACUZZI WHIRLPOOL BATH	IRVINE	0.0	ND	0.00	0.00	1995
48274	A	FENDER MUSICAL INST	CORONA	2.8	ND	0.00	0.40	1997
48300	A	PRECISION TUBE BENDING	SANTA FE SPRINGS	0.2	ND	0.00	0.00	2002
49387	A	UNIV CAL, RIVERSIDE	RIVERSIDE	7.1	ND	0.00	0.00	2018
51849	A	ELIMINATOR CUSTOM BOATS	MIRA LOMA	0.0	ND	0.00	0.00	1995
52517	A	REXAM BEVERAGE CAN COMPANY	CHATSWORTH	2.9	0.01	0.70	0.10	2009
54424	A	L&L CUSTOM SHUTTERS INC,ALLWOOD SHUTTERS	PLACENTIA	5.5	ND	0.20	0.20	2001
55711	A	SUNLAW COGENERATION PARTNERS I	VERNON	0.0	ND	0.00	0.00	1996

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55714	A	SUNLAW COGENERATION PARTNERS I	VERNON	0.0	ND	0.00	0.00	1996
57304	A	HARBOR COGENERATION CO	WILMINGTON	0.1	ND	0.00	0.00	2002
57329	O	KWIKSET CORP	ANAHEIM	3.4	ND	0.00	0.10	2000
61160	A	GE ENGINE SERVICES, LLC	ONTARIO	0.5	ND	0.70	0.01	2003
61209	O	AKZO NOBEL CHEM INC, FILTROL CORP SUB OF	LOS ANGELES	0.0	ND	0.00	0.00	1996
61743	A	AMERON STEEL FABRICATION DIVISION	FONTANA	0.0	ND	0.20	0.20	2000
62679	O	KOP-COAT INC	LOS ANGELES	1.3	ND	0.00	0.50	1997
62897	A	NORTHROP GRUMMAN CORP, MASD	PICO RIVERA	9.4	ND	1.00	0.50	2000
70021	A	XERXES CORP (A DELAWARE CORP)	ANAHEIM	0.0	ND	0.00	0.00	1996
79682	A	RAMCAR BATTERIES INC	COMMERCE	2.4	1.00	0.00	0.20	1998
82512	A	BREA CANON OIL CO	WILMINGTON	1.7	ND	0.00	0.00	1996
82513	A	BREA CANON OIL COMPANY INC	HARBOR CITY	1.4	ND	0.00	0.00	1996
83102	A	LIGHT METALS INC	CITY OF INDUSTRY	4.5	0.01	0.00	2.70	2002
87908	O	STRUCTURAL POLYMER SYSTEMS, INC	CULVER CITY	6.6	ND	0.00	0.20	1997
92881	O	WAYMIRE DRUM COMPANY INC, SOUTH GATE FAC	SOUTH GATE	0.3	ND	0.00	0.00	1997
93346	A	WAYMIRE DRUM CO,INC.,S EL MONTE FACILITY	SOUTH EL MONTE	4.3	ND	0.10	0.20	1997
94872	A	METAL CONTAINER CORP	MIRA LOMA	0.1	ND	0.40	0.40	2002
99119	A	INTERPLASTIC CORP	HAWTHORNE	0.3	ND	0.10	0.30	1999
99773	A	CYTEC ENGINEERED MATERIALS INC	ANAHEIM	2.2	0.00	0.00	0.20	2000
101977	A	SIGNAL HILL PETROLEUM INC	SIGNAL HILL	4.7	ND	0.60	1.00	1998
103659	A	ASCENT MEDIA MANAGEMENT SERVICES INC	BURBANK	2.2	ND	0.60	0.00	2004
105598	A	SENIOR AEROSPACE SSP	BURBANK	3.6	ND	1.00	0.50	2001
106797	A	SAINT-GOBAIN CONTAINERS, INC.	LOS ANGELES	9.9	ND	0.00	0.10	2000
106838	A	VALLEY-TODECO, INC	SYLMAR	3.7	ND	0.20	0.20	2000
107149	A	MARKLAND MANUFACTURING INC	SANTA ANA	0.3	ND	0.10	0.10	2007
107350	A	NATIONAL O-RINGS	DOWNEY	1.5	ND	0.00	0.00	2001
108701	A	SAINT-GOBAIN CONTAINERS, INC.	EL MONTE	7.3	ND	0.10	0.10	2000

Table C-2 (cont'd)

Health Risks from Facilities with an Approved HRA

(Listed by Facility ID)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
110924	A	WESTWAY TERMINAL COMPANY, LLC	SAN PEDRO	8.0	ND	0.30	0.50	1997
111415	O	VAN CAN COMPANY	FONTANA	0.8	ND	0.00	0.10	1996
113170	A	SANTA MONICA - UCLA MEDICAL CENTER (b)	SANTA MONICA	7.6	0.14	0.20	0.00	1997
113676	A	VICKERS	LOS ANGELES	3.0	ND	0.00	0.00	1995
115315	A	NRG CALIFORNIA SOUTH LP, ETIWANDA GEN ST	ETIWANDA	2.7	ND	0.00	0.20	2000
115389	A	AES HUNTINGTON BEACH, LLC	HUNTINGTON BEACH	0.1	ND	0.00	0.00	1999
115394	A	AES ALAMITOS, LLC	LONG BEACH	0.6	ND	0.00	0.00	1999
115536	A	AES REDONDO BEACH, LLC	REDONDO BEACH	0.4	ND	0.00	0.00	1998
115586	A	SUNDANCE SPAS, INC	CHINO	0.0	ND	0.00	0.40	1996
115663	A	EL SEGUNDO POWER, LLC	EL SEGUNDO	0.3	ND	0.00	0.00	2000
116868	A	EQUILON ENTER. LLC, SHELL OIL PROD. U S	BLOOMINGTON	2.9	ND	0.00	0.00	1999
117560	A	EQUILON ENTER, LLC-SHELL OIL PROD. US	WILMINGTON	7.3	ND	0.00	0.10	1998
117785	A	BALL METAL BEVERAGE CONTAINER CORP.	TORRANCE	0.0	ND	0.20	0.90	2001
119127	O	PRC-DE SOTO INTERNATIONAL	GLENDALE	0.0	ND	0.00	0.00	2000
119920	A	PECHINEY CAST PLATE INC	VERNON	1.6	ND	0.30	0.30	1996
122295	A	FALCON FOAM, A DIV OF ATLAS ROOFING CORP	LOS ANGELES	0.4	ND	0.00	0.00	1999
122300	A	BASF CORPORATION	COLTON	0.3	ND	0.60	0.00	2002
122822	O	CONSOLIDATED FILM INDUSTRIES, LLC	HOLLYWOOD	21.0	ND	0.10	0.40	2000
124016	O	CHEMETALL U,S., INC,	LA MIRADA	0.0	ND	0.10	0.10	2000
124506	A	THE BOEING COMPANY	TORRANCE	4.2	ND	0.50	0.10	1995
124805	A	EXIDE TECHNOLOGIES	COMMERCE	0.3	ND	0.00	0.00	2000
124806	O	EXIDE TECHNOLOGIES	CITY OF INDUSTRY	1.0	ND	0.00	0.00	1999
124838	A	EXIDE TECHNOLOGIES	VERNON	0.0	ND	0.00	0.00	2013
126060	A	STERIGENICS US, LLC	ONTARIO	3.8	0.00	0.00	0.00	2007
126191	A	STERIGENICS US, INC.	LOS ANGELES	3.3	ND	0.00	0.00	1996
126197	A	STERIGENICS US, INC.	LOS ANGELES	3.6	ND	0.00	0.00	1996
126536	A	CPP - POMONA	POMONA	1.5	ND	0.00	0.00	1999

Table C-2 (cont'd)

Health Risks from Facilities with an Approved HRA

(Listed by Facility ID)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
126544	A	PAC FOUNDRIES-INDUSTRY	CITY OF INDUSTRY	1.3	ND	0.60	0.10	1996
126964	A	EDWARDS LIFESCIENCES LLC	IRVINE	0.8	ND	0.00	0.00	1995
127568	A	ENGINEERED POLYMER SOLUTION, VALSPAR	MONTEBELLO	3.5	ND	0.10	0.50	2000
132343	A	SPECTRUM PAINT & POWDER, INC.	ANAHEIM	0.0	ND	0.20	0.70	1997
132954	A	ALL AMERICAN ASPHALT	SAN FERNANDO	1.6	0.00	0.40	0.30	2017
133405	A	BODYCOTE THERMAL PROCESSING	LOS ANGELES	2.4	ND	0.00	0.20	1999
133660	A	HAYDEN INDUSTRIAL PRODUCTS	CORONA	1.6	ND	0.80	0.40	1998
134018	A	INDUSTRIAL CONTAINER SERVICES-CA LLC	MONTEBELLO	5.2	ND	0.60	0.20	2000
134931	A	ARCONIC GLOBAL FASTENERS & RINGS, INC.	FULLERTON	0.6	ND	1.90	0.02	1997
134943	A	ARCONIC GLOBAL FASTENERS & RINGS INC	TORRANCE	2.6	ND	0.60	0.00	2008
136148	A	E/M COATING SERVICES	NORTH HOLLYWOOD	5.8	ND	0.30	0.60	1998
140811	A	DUCOMMUN AEROSTRUCTURES INC	MONROVIA	3.5	0.01	0.00	0.00	2002
140961	A	GKN AEROSPACE TRANSPARENCY SYS INC	GARDEN GROVE	6.0	ND	0.00	0.50	1996
142267	A	FS PRECISION TECH LLC	COMPTON	2.0	ND	0.10	0.20	2001
146570	A	ROHM AND HAAS CHEMICALS LLC	LA MIRADA	6.2	ND	0.50	0.80	1999
148925	A	CHERRY AEROSPACE	SANTA ANA	9.7	ND	0.10	0.20	1999
149241	A	REGAL CULTURED MARBLE	POMONA	0.0	ND	0.00	0.20	1995
150201	A	BREITBURN OPERATING LP	SANTA FE SPRINGS	0.8	ND	0.00	0.00	1998
151798	A	TESORO REFINING AND MARKETING CO, LLC	CARSON	2.8	ND	0.10	0.00	1999
151899	A	CALIFORNIA RESOURCES PRODUCTION CORP	NEWHALL	3.5	ND	0.00	0.20	2000
152054	A	LINN WESTERN OPERATING INC	BREA	1.1	ND	0.00	0.10	1996
152501	A	PRECISION SPECIALTY METALS, INC.	LOS ANGELES	0.5	ND	0.40	0.20	2001
153546	A	HUCK INTERNATIONAL INC	CARSON	3.3	ND	0.00	0.00	1999
155828	A	GARRETT AVN. SVCS. LLC DBA STANDARD AERO	LOS ANGELES	9.3	ND	0.19	0.25	2002
157451	A	BENDER CCP INC	VERNON	4.4	0.00	1.00	0.00	2002
160437	A	SOUTHERN CALIFORNIA EDISON	REDLANDS	2.3	0.00	0.00	0.00	2013
160916	A	FXI, INC.	ORANGE	0.0	ND	0.40	0.40	1994

Table C-2 (cont'd)

Health Risks from Facilities with an Approved HRA

(Listed by Facility ID)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
161142	A	FOAMEX INNOVATIONS, INC.	COMPTON	0.3	0.00	0.00	0.00	2010
164864	A	ARROWHEAD BRASS & PLUMBING	LOS ANGELES	5.7	ND	0.30	0.00	1995
165192	A	TRIUMPH AEROSTRUCTURES, LLC (b)	HAWTHORNE	19.7	ND	0.64	0.24	1999
167981	A	TESORO LOGISTICS, WILMINGTON TERMINAL	WILMINGTON	2.8	ND	0.00	0.00	2000
168088	A	POLYNT COMPOSITES USA INC	LYNWOOD	6.5	ND	0.10	1.60	1995
169990	A	SPS TECHNOLOGIES, LLC	GARDENA	8.9	ND	0.10	0.10	1999
171107	A	PHILLIPS 66 CO/LA REFINERY WILMINGTON PL	WILMINGTON	23.2	0.29	0.10	0.70	2013
171109	A	PHILLIPS 66 COMPANY/LOS ANGELES REFINERY	CARSON	6.6	0.11	0.00	0.30	2011
172878	A	TESORO LOGISTICS LONG BEACH TERMINAL	LONG BEACH	2.4	ND	0.00	0.00	1999
174340	A	PRC DE SOTO INTERNATIONAL, INC.	IRVINE	0.7	ND	0.00	0.00	1995
174591	A	TESORO REF & MKTG CO LLC,CALCINER (c)	WILMINGTON	4.3	ND	0.10	0.20	1995
174655	A	TESORO REFINING & MARKETING CO, LLC	CARSON	7.3	ND	0.30	0.10	2000
174703	A	TESORO LOGISTICS,CARSON PROD TERMINAL	CARSON	3.0	ND	0.00	0.00	1994
174710	A	TESORO LOGISTICS, VINVALE TERMINAL	SOUTH GATE	9.0	ND	0.00	0.00	1994
175124	A	AEROJET ROCKETDYNE OF DE, INC.	CANOGA PARK	8.7	ND	0.00	0.00	1995
175126	A	AEROJET ROCKETDYNE OF DE, INC.	CANOGA PARK	0.0	ND	0.00	0.00	1996
177042	A	SOLVAY USA, INC	LONG BEACH	4.3	ND	0.30	0.00	2001
180631	A	STCDARA, LLC	LA PUENTE	13.8	0.02	0.01	0.74	2001
180908	A	ECO SERVICES OPERATIONS CORP.	CARSON	0.1	ND	0.00	0.10	2006
181426	A	OC WASTE & RECYCLING, COYOTE	NEWPORT COAST	20.1	0.18	0.60	0.30	2009
181667	A	TORRANCE REFINING COMPANY LLC	TORRANCE	7.7	0.15	0.20	0.50	2013
182610	A	ELITE COMFORT SOLUTIONS	COMMERCE	2.0	ND	0.00	0.50	1998
182752	A	TORRANCE LOGISTICS COMPANY LLC	VERNON	5.3	ND	0.10	0.00	1997
182822	A	TORRANCE LOGISTICS COMPANY LLC	ANAHEIM	0.7	ND	0.00	0.00	1999
183567	A	GS II, INC. (c)	WILMINGTON	7.0	ND	0.00	0.00	2000
183926	A	EVONIK CORPORATION	LOS ANGELES	2.4	ND	0.10	0.80	1999
184301	A	SENTINEL PEAK RESOURCES CALIFORNIA, LLC	LOS ANGELES	2.7	ND	0.00	0.10	1997

Table C-2 (cont'd)

Health Risks from Facilities with an Approved HRA

(Listed by Facility ID)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
185059	A	CUSTOM FIBREGLASS MFG. CO DBA SNUGTOP	LONG BEACH	2.5	ND	0.00	0.00	1995
185093	A	BEVERLY HILLS UNIFIED SCHOOL DISTRICT	BEVERLY HILLS	1.2	ND	0.00	0.00	2005
185282	A	BKEP MATERIALS LLC - FONTANA	FONTANA	0.0	ND	0.30	0.00	1999
185352	A	SNOW SUMMIT, LLC.	BIG BEAR LAKE	5.5	ND	0.20	0.00	2007
185575	A	BRIDGE ENERGY, LLC	BREA	3.4	ND	0.00	0.00	1999
185801	A	BERRY PETROLEUM COMPANY LLC	SANTA CLARITA	1.6	ND	0.20	0.70	1999
186519	A	EMBEE PROCESSING	SANTA ANA	6.6	ND	0.21	0.58	2000
186899	A	ENERY HOLDINGS LLC	CARSON	0.8	ND	0.20	0.00	2007
187165	A	ALTAIR PARAMOUNT, LLC	PARAMOUNT	9.6	ND	0.00	0.00	2002
187348	A	HYDRO EXTRUDER, LLC	CITY OF INDUSTRY	1.3	ND	0.00	0.00	1999
187823	A	KIRKHILL INC	BREA	8.7	0.00	0.20	0.10	2007
188380	A	VALENCE SURFACE TECHNOLOGIES - LYNWOOD	LYNWOOD	0.5	0.00	0.10	0.40	2012
800003	A	HONEYWELL INTERNATIONAL INC	TORRANCE	1.8	ND	0.00	0.00	1999
800022	A	CALNEV PIPE LINE, LLC	BLOOMINGTON	5.9	ND	0.00	0.10	1999
800026	A	ULTRAMAR INC	WILMINGTON	7.2	0.18	0.70	0.20	2012
800030	A	CHEVRON PRODUCTS CO.	EL SEGUNDO	2.7	0.28	0.30	0.10	2001
800032	A	CHEVRON USA INC	MONTEBELLO	7.5	0.14	0.00	0.20	1999
800035	A	CONTINENTAL AIRLINES INC (NSR USE ONLY)	LOS ANGELES	2.8	ND	0.00	0.10	1995
800037	A	DEMENNO-KERDOON DBA WORLD OIL RECYCLING	COMPTON	4.9	0.01	0.01	0.02	2009
800038	A	THE BOEING COMPANY - C17 PROGRAM	LONG BEACH	4.8	ND	0.20	0.10	1999
800039	O	DOUGLAS PRODUCTS DIVISION	TORRANCE	2.4	ND	0.00	0.00	1996
800041	A	DOW CHEM U.S.A.	TORRANCE	4.4	ND	0.10	0.00	2000
800047	O	FLETCHER OIL & REF CO	CARSON	5.9	ND	0.00	0.00	1998
800056	A	KINDER MORGAN LIQUIDS TERMINALS, LLC	WILMINGTON	2.3	0.01	0.00	0.00	1997
800057	A	KINDER MORGAN LIQUIDS TERMINALS, LLC	CARSON	8.5	ND	0.00	0.10	1999
800063	A	GROVER PROD. CO (EIS USE)	LOS ANGELES	3.3	0.04	0.88	0.07	2001
800066	A	HITCO CARBON COMPOSITES INC	GARDENA	6.4	ND	0.30	0.00	1995

Table C-2 (cont'd)

Health Risks from Facilities with an Approved HRA

(Listed by Facility ID)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
800067	A	THE BOEING COMPANY	EL SEGUNDO	6.2	ND	0.00	0.10	2000
800074	A	LA CITY, DWP HAYNES GENERATING STATION	LONG BEACH	0.2	ND	0.00	0.00	2000
800075	A	LA CITY, DWP SCATTERGOOD GENERATING STN	PLAYA DEL REY	0.0	ND	0.00	0.00	2000
800079	A	PETRO DIAMOND TERMINAL CO	LONG BEACH	8.3	ND	0.00	0.20	1998
800087	A	MENASCO MFG CO (EIS USE)	BURBANK	0.0	ND	0.00	0.00	1997
800111	O	THE BOEING COMPANY	DOWNEY	2.3	ND	0.00	0.10	1996
800113	A	ROHR, INC.	RIVERSIDE	7.2	0.01	0.90	0.00	2007
800127	A	SO CAL GAS CO	MONTEBELLO	1.0	0.00	0.00	0.00	2009
800129	A	SFPP, L.P.	BLOOMINGTON	5.8	ND	0.00	0.00	1996
800149	A	US BORAX INC	WILMINGTON	9.5	ND	0.00	0.00	2000
800150	A	US GOVT, AF DEPT, MARCH AIR RESERVE BASE	RIVERSIDE	7.4	0.02	0.30	0.00	2008
800168	A	PASADENA CITY, DWP	PASADENA	0.2	ND	0.70	0.00	1996
800181	A	CALIFORNIA PORTLAND CEMENT CO (c)	COLTON	2.0	ND	0.00	0.40	1996
800182	A	RIVERSIDE CEMENT CO (c)	RIVERSIDE	7.8	0.11	0.10	0.10	2001
800184	A	GOLDEN WEST REF CO	SANTA FE SPRINGS	8.8	ND	0.20	0.10	1997
800189	A	DISNEYLAND RESORT	ANAHEIM	3.3	0.03	0.10	0.10	2009
800193	A	LA CITY, DWP VALLEY GENERATING STATION	SUN VALLEY	0.2	ND	0.30	0.00	1999
800196	A	AMERICAN AIRLINES, INC,	LOS ANGELES	5.4	0.19	0.86	0.08	2002
800198	A	ULTRAMAR INC	WILMINGTON	5.9	ND	0.00	0.10	1999
800202	A	UNIVERSAL CITY STUDIOS, LLC.	UNIVERSAL CITY	2.4	ND	0.00	0.00	1996
800204	O	SIMPSON PAPER CO	POMONA	3.4	ND	0.00	0.00	1996
800209	A	BKK CORP (EIS USE)	WEST COVINA	6.9	ND	0.00	0.10	2000
800214	A	LA CITY, SANITATION BUREAU (HTP) (c)	PLAYA DEL REY	7.6	ND	0.10	0.00	1999
800236	A	LA CO. SANITATION DIST	CARSON	7.2	ND	0.20	0.10	2007
800264	A	EDGINGTON OIL COMPANY	LONG BEACH	4.8	0.00	0.00	0.00	2002
800273	O	CHEMOIL REF CORP (NSR USE ONLY)	SIGNAL HILL	0.0	ND	0.00	0.00	2000
800278	A	SFPP, L.P. (NSR USE)	CARSON	2.4	ND	0.00	0.10	1999

Table C-2 (cont'd)

Health Risks from Facilities with an Approved HRA

(Listed by Facility ID)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (per million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
800279	A	SFPP, L.P. (NSR USE ONLY)	ORANGE	5.9	ND	0.00	0.20	1999
800288	A	UNIV CAL IRVINE (NSR USE ONLY)	IRVINE	5.6	ND	0.00	0.10	1996
800301	A	ITT GILFILLAN	VAN NUYS	0.9	ND	0.10	0.20	1998
800318	A	GRISWOLD INDUSTRIES	COSTA MESA	9.5	0.01	0.10	0.00	2001
800320	A	AMVAC CHEMICAL CORP	LOS ANGELES	0.0	ND	0.10	0.30	2004
800325	A	TIDELANDS OIL PRODUCTION CO	LONG BEACH	1.9	ND	0.10	0.60	1999
800327	A	GLENDALE CITY, GLENDALE WATER & POWER	GLENDALE	0.6	ND	0.00	0.00	1999
800330	A	THUMS LONG BEACH	LONG BEACH	1.2	ND	0.00	0.00	2000
800337	A	CHEVRON U.S.A., INC (NSR USE)	LA HABRA	0.0	ND	0.00	0.00	1996
800372	A	EQUILON ENTER. LLC, SHELL OIL PROD. US	CARSON	6.9	ND	0.40	0.10	2001
800373	A	LAKELAND DEVELOPMENT COMPANY	SANTA FE SPRINGS	9.7	ND	0.30	0.10	2000
800387	A	CAL INST OF TECH	PASADENA	2.4	ND	0.10	0.00	2007
800408	A	NORTHROP GRUMMAN SYSTEMS	MANHATTAN BEACH	1.4	ND	0.90	0.10	1998
800409	A	NORTHROP GRUMMAN SYSTEMS CORPORATION	REDONDO BEACH	5.5	ND	0.50	0.20	1998
800436	A	TESORO REFINING AND MARKETING CO, LLC	WILMINGTON	10.7	0.37	0.30	0.40	2013

Notes:

a) A = Active (note that facilities with "Active" status within South Coast AQMD's database may not currently be in operation); I = Inactive; OB = Out of Business

(b) The specific risk driver listed in this HRA is no longer in use & the resulting risk has been eliminated or minimized.

(c) South Coast AQMD staff has requested these facilities to update their HRAs.

(d) All HRAs with HRA Approval Year dated 2015 and later have used the 2015 OEHHA Risk Assessment Guidelines for preparation of their HRA.

(e) ND = Not Determined

Appendix D – Approved Risk Reduction Plans and Voluntary Risk Reduction Plans

Facilities with an Approved Rule 1402(f) Risk Reduction Plan

Table D-1 — Status of Risk Reduction Plans

Facility ID	Facility Name	Approved	Implemented	Residual Risk			
				Cancer Risk	Chronic HI	Acute HI	Cancer Burden
7427	Owens-Brockway Glass Container Inc	Yes	Yes	3.6	0.01	0.06	0.00
7730	Carpenter Co	Yes	Yes	1.0	0.03	1.34	0.00
8015	Anadite Inc	Yes	Yes	3.5	0.63	0.78	N/A
8547	Quemetco Inc	Yes	Yes	7.1	0.09	0.69	0.45
11818	Hixson Metal Finishing	Yes	In Progress	TBD	TBD	TBD	TBD
14191	Niklor Chemical Company Inc **(a)**	Yes	Yes	N/A	N/A	N/A	N/A
15504	Schlosser Forge Company	Yes	Yes	9.5	1.59	1.11	0.07
16951	Anaplex Corp	In Progress	In Progress	TBD	TBD	TBD	TBD
18294	Northrop Grumman Systems Corp	Yes	Yes	7.6	0.13	0.05	N/A
18931	Gerdau/TAMCO	Yes	In Progress	TBD	TBD	TBD	TBD
18989	Bowman Plating Co Inc	Yes	Yes	17.0	0.01	0.01	0.00
22410	Palace Plating **(a)**	Yes	Yes	N/A	N/A	N/A	N/A
23752	Aerocraft Heat Treating Co Inc	In Progress	In Progress	TBD	TBD	TBD	TBD
25012	Amada America, Inc.	Yes	Yes	0.0	0.00	0.00	0.00
41229	Lubeco Inc **(d)**	In Progress	In Progress	TBD	TBD	TBD	TBD
45938	E.M.E. Inc/Electro Machine & Engineering	Yes	Yes	0.0	0.00	0.00	0.00
61160	GE Engine Services, LLC	Yes	Yes	0.5	0.70	0.01	0.00
119127	PRC DeSoto International **(a)**	Yes	Yes	N/A	N/A	N/A	N/A
124838	Exide Technologies **(d)**	Yes	*(See Note)*	N/A	N/A	N/A	N/A
134931	Arconic Global Fasteners & Rings, Inc.	Yes	Yes	0.6	1.90	0.02	0.00
155828	Garrett Aviation Services, LLC	Yes	Yes	7.0	0.28	0.03	N/A
165192	Triumph Aerostructures, LLC. **(b)**	Yes	Yes	19.7	0.64	0.24	N/A
180631	STCDARA, LLC	Yes	Yes	13.8	0.01	0.74	0.02
186519	Embee Processing	Yes	Yes	6.6	0.21	0.58	N/A
800037	DeMenno/Kerdoon	Yes	Yes	4.9	0.00	0.02	0.01
800063	Grover Products Co.	Yes	Yes	3.3	0.88	0.07	0.04
800196	American Airlines, Inc.	Yes	Yes	5.4	0.86	0.08	0.19

Notes:
(a) Facility has shut down, resulting risks are zero.
(b) The specific risk driver listed in this HRA is no longer in use & the resulting risk has been eliminated.
(c) Facility undergoing closure and is no longer operating.
(d) Represents previously approved HRA and RRP values. New HRA and RRP review is in progress.

Facilities with an Approved Rule 1402(h) Voluntary Risk Reduction Plan

South Coast AQMD's Rule 1402 — Control of Toxic Air Contaminants from Existing Sources includes a Voluntary Risk Reduction Program. Facilities that participate in the Voluntary Risk Reduction Program reduce their health risks sooner and below the thresholds required under Rule 1402. Facilities that participate in this program have already had a HRA approved by South Coast AQMD that shows the facility's risks were below risk reduction thresholds at the time of HRA approval. An HRA is a study that estimates how a facility's emissions affect people's health risks in the surrounding community.

On March 6, 2015, OEHHA approved revisions to its guidelines (2015 OEHHA Guidelines) that are used by all air districts throughout the state to prepare HRAs. The 2015 OEHHA Guidelines incorporates age sensitivity factors which will increase cancer risk estimates to residential and sensitive receptors by approximately three times, and more than three times in some cases depending on whether the TAC has multiple pathways of exposure in addition to inhalation. Under the 2015 OEHHA Guidelines, even though the toxic emissions from a facility have not increased, the estimated cancer risk to a residential receptor will increase. Cancer risks for offsite worker receptors are similar between the existing and revised methodology because the methodology for adulthood exposures remains relatively unchanged. The Voluntary Risk Reduction Program provides an opportunity for participating facilities to address the increase in their estimated cancer risk due to the 2015 OEHHA Guidelines.

Table D-2 below lists the facilities with an approved Voluntary Risk Reduction Plan.

Table D-2 — Facilities with Approved Voluntary Risk Reduction Plans

Facility ID	Facility Status (a)	Facility Name	Address	City	VRRP Approval Year (e)
17301	A	ORANGE COUNTY SANITATION DISTRICT	10844 ELLIS AVE	FOUNTAIN VALLEY	2018
29110	A	ORANGE COUNTY SANITATION DISTRICT	22212 BROOKHURST ST	HUNTINGTON BEACH	2018

Appendix E – List of Acronyms and Abbreviations

Acronym	Description
AB 2588	Air Toxics "Hot Spots" Information and Assessment Act
AB 617	Assembly Bill 617
AER	Annual Emissions Reporting
ATIR	Air Toxics Inventory Report
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CEMS	Continuous Emissions Monitoring System
CEQA	California Environmental Quality Act
DPM	Diesel Particulate Matter
EGBE	Ethylene Glycol mono-n-Butyl Ether
EIR	Environmental Impact Report
F.I.N.D	Facility Information Detail
H&S Code	California Health and Safety Code
HARP	Hotspots Analysis and Reporting Program
HI	Hazard Index
HRA	Health Risk Assessment
LPG	Liquefied Petroleum Gas
MATES	Multiple Air Toxics Exposure Study
MDI	Methylene Phenyl Diisocyanate
NAAQS	National Ambient Air Quality Standard
OEHHA	Office of Environmental Health Hazard Assessment
PAMS	Photochemical Assessment Monitoring Stations
REL	Reference Exposure Levels
RRP	Risk Reduction Plan
SB 1731	Facility Air Toxic Contaminant Risk Audit and Reduction Plan
South Coast AQMD	South Coast Air Quality Management District
TBAc	Tert-Butyl Acetate
TS	Total Facility Score
U.S. EPA	United States Environmental Protection Agency
VRRP	Voluntary Risk Reduction Plan

Status Report on Regulation XIII – New Source Review

Stationary Source Committee
July 19, 2019

NSR Status Report Overview

Purpose:

Demonstrate South Coast AQMD's NSR program meets federal NSR offset requirements for Major Sources, as required by EPA, for sources that are exempt from offsets under South Coast AQMD's NSR rule

NSR Status Report History

- South Coast AQMD has produced Annual NSR Status Reports since 1990
- Around 2002-2004 EPA requested South Coast AQMD to adopt a rule to memorialize equivalency demonstrations
- Rule 1315 - Federal NSR Tracking System adopted in 2006/2007 and revised in February 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 South Coast AQMD's federal internal offset account for each pollutant
  - Annual Preliminary Determination of Equivalency (PDE), Final Determination of Equivalency (FDE) and Projections
  - Balances in South Coast AQMD's federal offset account must remain positive
  - Cumulative Net Emission Increases must remain below Rule 1315(g) thresholds

South Coast AQMD's Federal NSR Offset Accounts
Final Determination of Equivalency (FDE)
(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)	3.41	1.49	0.18	0.53
2017 Total Debits (tons/day)	-1.30	-0.40	-0.23	-0.66
2017 Total Discount of Credits for Surplus Adjustment (tons/day)	0.00	-0.05	0.00	0.00
2017 Final Ending Balance (tons/day)	**107.87**	**23.74**	**4.27**	**16.02**

Cumulative Net Emission Increase
February 4, 2011 – December 31, 2017

DESCRIPTION	VOC	NOx	SOx	PM10
2016 Net Emission Increase (tons/day)	-18.02	-2.58	-0.87	-1.30
2017 Increases in Potential to Emit (tons/day)	1.61	0.86	0.32	1.25
2017 Decreases in Potential to Emit (tons/day)	-4.26	-1.86	-0.23	-0.66
Cumulative Net Emission Increase (tons/day)	**-20.67**	**-3.58**	**-0.78**	**-0.71**
Rule 1315(g) Table B Threshold (tons/day)	**8.85**	**0.68**	**0.21**	**1.29**

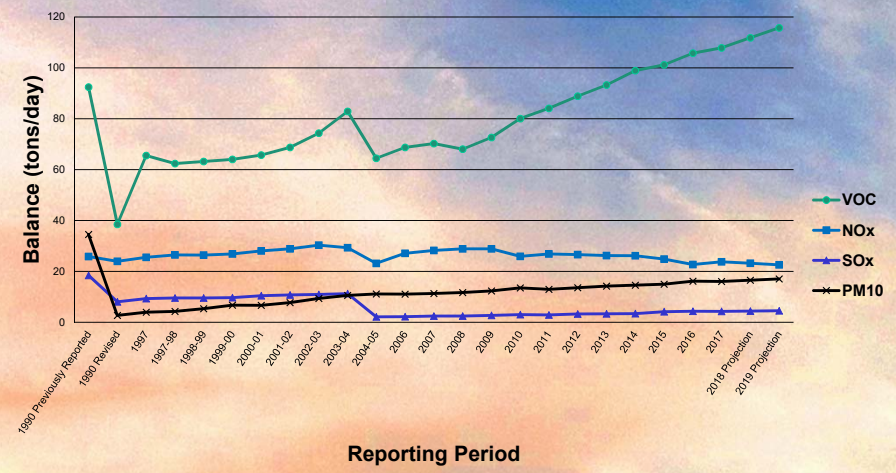
South Coast AQMD's Projected Federal NSR Offset Accounts CY 2018

DESCRIPTION	VOC	NOx	SOx	PM10
2017 Final Ending Balance (tons/day)	**107.87**	**23.74**	**4.27**	**16.02**
CY 2018 Total Projected Credits (tons/day)	4.54	1.12	0.15	0.66
CY 2018 Total Projected Debits (tons/day)	-0.59	-0.19	-0.05	-0.15
CY 2018 Total Projected Discount of Credits for Surplus Adjustment (tons/day)	-0.01	-1.51	0.00	0.00
CY 2018 Projected Ending Balance (tons/day)	**111.82**	**23.16**	**4.37**	**16.53**

South Coast AQMD's Projected Federal NSR Offset Accounts CY 2019

DESCRIPTION	VOC	NOx	SOx	PM10
CY 2018 Projected Ending Balance (tons/day)	**111.82**	**23.16**	**4.37**	**16.53**
CY 2019 Total Projected Credits (tons/day)	4.37	1.17	0.16	0.67
CY 2019 Total Projected Debits (tons/day)	-0.51	-0.22	-0.06	-0.18
CY 2019 Total Projected Discount of Credits for Surplus Adjustment (tons/day)	-0.01	-1.54	0.00	0.00
CY 2019 Projected Ending Balance (tons/day)	**115.68**	**22.57**	**4.48**	**17.02**

South Coast AQMD's Federal Offset Account Balances (1990 – 2017, and 2018-2019 Projections)



Conclusions

- The Final Determination of Equivalency for CY 2017 shows South Coast AQMD's NSR program continued to be at least equivalent to the federal NSR offset requirements
- For CYs 2018 and 2019 it is also projected that South Coast AQMD's NSR program will continue to be at least equivalent to the federal NSR offset requirements
- The Cumulative Net Emission Increases for CY 2017 remained below the thresholds identified in Table B of Rule 1315(g)(4)
- Next Preliminary Determination of Equivalency for CY 2018 will be presented to the Board in February 2020

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 • www.aqmd.gov

HOME RULE ADVISORY GROUP
Wednesday, May 8, 2019
MEETING MINUTES

MEMBERS PRESENT:
Marc Carrel (Breathe California of Los Angeles County); Mike Carroll (Regulatory Flexibility Group); Curt Coleman (Southern California Air Quality Alliance); Carlo De La Cruz (Sierra Club); Martin Hansberger (Holliday Rock Company); Bill LaMarr (California Small Business Alliance); Bridget McCann (Western States Petroleum Association); Dan McGivney (Southern California Gas); Art Montez (AMA International); David Rothbart (Los Angeles County Sanitation District); and TyRon Turner (Dakota Communications).
The following members participated by conference call: Brian Clerico (CARB); Larry Rubio (Riverside Transit Agency); and Janet Whittick (California Council for Environmental & Economic Balance).

MEMBERS ABSENT:
Ben Benoit, Vice Chair (South Coast AQMD Governing Board Member); Michael Downs (Downs Energy); Jaclyn Ferlita (Air Quality Consultants); Rongsheng Luo (SCAG); and Amy Zimpfer (EPA).

OTHER ATTENDEES:
Dr. David Edwards (CARB) and Rita Loof (RadTech).
The following attendee participated by conference call: John Ungvarsky (EPA).

SOUTH COAST AQMD STAFF:
Jacob Allen (Senior Administrative Secretary); Mark Bassett (Air Quality Specialist); Philip Fine (Deputy Executive Officer); Denise Gailey (Public Affairs Manager); Jill Whynot (Chief Operating Officer); and William Wong (Principal Deputy District Counsel).

OPENING COMMENTS AND SELF-INTRODUCTIONS
Ben Benoit, Vice Chair was not available, so the meeting was called to order at 10:00 a.m. and led by Dr. Philip Fine.

APPROVAL OF JULY 2018 MEETING MINUTES
Dr. Fine asked for comments on the January 9, 2019 meeting minutes. Bill La Marr requested additional clarity on the Rules 219 and 222 discussion at the bottom of page two. David Edwards clarified that the regulation is for permitted sources only and remove registered sources. Bridget McCann commented on possible changes to her comments on page eight, and a follow-up email would be sent to Dr. Fine. With these changes, the minutes were approved.

EPA AND FEDERAL ACTIVITIES
John Ungvarsky provided updates on recent U.S. Environmental Protection Agency (EPA) and federal activities.

- Diesel Emissions Reduction Act (DERA) update, with the anticipation of awarded funds in summer or early fall 2019.
- Targeted Air Shed Program.
- Safer Affordable Fuel Efficient (SAFE) rule.
- Cleaner Trucks Initiative.
- Notice of Proposed Rulemaking on the South Coast AQMD 2016 AQMP Ozone Plan.

Discussion
Art Montez asked about the availability of the $10M through DERA and the timeline. Mr. Ungvarsky indicated that these funds are already allocated through grants and the application window has closed for this year. Mr. Montez further inquired if there are other funds available at the local level for schools or other entities. Mr. Ungvarsky and Dr. Fine indicated that they could provide information on possible future funding opportunities and a contact person at the South Coast AQMD and other funding programs at EPA.

CARB REGULATORY ACTIVITIES

Brian Clerico provided updates on proposed and recent regulatory activities.

- Proposed amendments to the Suggested Control Measures for Architectural Coating.
- Proposed Community Air Protection Incentive Funds Guidelines.
- Proposed alternative certification requirements for zero emission power trains.
- Regulation proposed for zero emission airport shuttle buses.
- Vapor recovery certification for above ground storage tanks.

Discussion
Marc Carrel inquired about AB 617 community air grants for Year 2, and when proposals can be submitted. Dr. Fine responded that CARB is working on the solicitation now and should be out in about a month.

Carlo De La Cruz inquired about the potential overlap from a regulation on zero emission airport shuttles and the South Coast AQMD's indirect source rule with airports, and the impact expectations. Mr. Clerico indicated that this information could be provided.

> *Provided by Zorik Pirveysian, South Coast AQMD - New purchases of shuttles buses operating at airports are currently subject to South Coast AQMD Rule 1194, which requires alternative fueled vehicles. CARB's Zero-emission (ZE) Airport Shuttle Buses regulation, establishes requirements for ZE conversion starting with 33% in 2027 ramping up to 100% in 2035. South Coast AQMD is also currently in the process of developing an MOU with the commercial airports in the Basin. The focus of the MOU is achieving emission reductions above and beyond existing regulations. These regulations and programs are mainly complementary to each other.*

LEGISLATIVE UPDATE

Denise Gailey reported on key legislative updates.

At the May 3, 2019 Governing Board meeting, the Governing Board took position on the following bills:

- **Support for AB 836 (Wicks)** to establish a statewide program that would identify ventilation spaces referred to as "clean air centers" – public centers that would be accessible to the public during wildfires and other smoke events. The bill aligns with our goals of protecting public health and builds upon previous work like the IQAir Program which instituted a number of clear air filtration systems for schools.

- **Support with Amendments for AB 1500 (Carillo)** which would expend the authority of a CUPA or local health officer to temporarily suspend the permit and shutdown a facility that poses an imminent or substantial endangerment to public health and safety. The recommended amendments of "not restricting or limit in any way the authority of an air district" will ensure local coordination.
- **Support with Amendments for SB 44 (Skinner)** which would require CARB to develop a strategy for the deployment of medium and heavy-duty vehicles for the purpose of bringing the state into compliance with federal air quality standards and reduce greenhouse gas emissions emission by 40% by 2030, and 80% by 2050.
- **Support on SB 633 (Stern)** which would require OEHHA in coordination with others to develop and implement a monitoring program to collect data on contaminants from the Santa Susana Field Laboratory in Ventura County. Staff will work with author's office to add South Coast AQMD as a consulting entity, due to the potential for upwind air impacts to the Basin.
- **Support on S 747 (Carper)** to reauthorize the Diesel Emissions Reduction Program for five years, until 2024, at a level of $100 million. The bill would also reallocate unused state funds to the National Competitive DERA grant program.

Update on SB 732 (Allen)

After receiving feedback from stakeholders, South Coast AQMD asked Senator Ben Allen, the author of SB 732, to pull the legislation to stop the bill from advancing to its committee hearing. South Coast AQMD's intent in pulling the legislation, was to continue to educate and address concerns expressed by a large number of stakeholders. Despite South Coast AQMD's request, in a letter dated April 20, 2019, Senator Allen communicated that his intent was to continue to advance the legislation.

South Coast AQMD Executive Officer Wayne Nastri testified in support of the legislation at the April 24, 2019 Senate Governance and Finance committee hearing. The bill passed on a 4-3 vote.

Date	Result	Location	Ayes	Noes	NVR	Motion
04/24/19	(PASS)	Sen Governance and Finance	4	3	0	Do pass as amended, but first amend, and re-refer to the Committee on [Appropriations]
		Ayes: Beall, Hertzberg, McGuire, Wiener				
		Noes: Hurtado, Moorlach, Nielsen				
		No Votes Recorded:				

On May 6, at the request of the South Coast AQMD Board, staff submitted oversight language to the author's office. Staff also submitted technical amendments for the author's consideration. The bill will be heard by the Senate Appropriations Committee on Monday, May 13, 2019.

Discussion

Art Montez asked for clarification on which bills would provide funding for clean air initiatives and specifics about the DERA program. Ms. Gailey responded that both SB 44 and S 747 provide funding for these types of programs. Mr. Montez further inquired about which agency disperses the money and how much of this money is allocated. Ms. Gailey responded that CARB is responsible for dispersing the money.

UPDATE REGARDING LITIGATION ITEMS AND RELATED EPA ACTIONS

William Wong had no updates on the provided April 26, 2019 status report.

CARB'S REGULATION FOR THE REPORTING OF CRITERIA AIR POLLUTANTS AND TOXIC AIR CONTAMINANTS

Dr. Dave Edwards, Assistant Division Chief at CARB, provided a presentation on the previous and ongoing work in developing the Criteria Air Pollutant and Toxic Air Contaminant Emissions Reporting Regulation (or CTR Regulation).

On May 13, CARB released the Notice of Modified Text, which includes all of the proposed updates to the regulation, as well as descriptions of why the changes were incorporated, and other supporting information. The regulation update can be accessed via the CARB home page at: https://ww2.arb.ca.gov/our-work/programs/criteria-and-toxics-reporting. Comments regarding the current updates must be submitted by June 7, 2019. A second comment period will likely be initiated during the summer, with the intention of completing the full regulation package and having it be effective by January 2020.

Discussion

Bill LaMarr requested clarification on the comment period extension. Dr. Edwards indicated that it will be for 25 days, even though it is referred to as a 15-day comment period.

David Rothbart expressed concern about the reporting of emission factors. Dr. Edwards responded that they use the mapping tool platform and if inconsistent data is received they would work with the districts to confirm the data, as to not to misinform the public.

Dan McGivney expressed that CARB should have used the method consistency part first and looked at how the air district emissions factors are calculated. He also stated that default values are historically conservative, which will lead to inconsistent data and unnecessary public concern. Janet Whittick commented that it seems like the problems of the past are being repeated and that districts will have the flexibility to develop their own methods, which will lead to inconsistencies. Dr. Edwards responded that a specific method would not be enforced, but there will be bounds on the methods and emission factors that are used. Dr. Fine responded that there will still be variability in the reporting, and the goal is to update outdated emission factors in a timely manner.

Bill La Marr expressed concern about the regulation, the reporting and the related costs for small businesses. He indicated that small businesses could be faced with the options to invest in testing, business relocation or shutdown. He commented there should be de minimis levels, particularly for smaller sources, and indicated that the focus should be on mobile sources. He also expressed concern that CARB will establish a fee similar to the South Coast AQMD toxic fee. Dr. Edwards indicated that they are looking for statewide ways to leverage the data and reduce the impacts on small businesses.

Art Montez commented that the majority of the communities impacted are communities of color. He inquired if CARB had reached out to these communities, and talked with small business owners on the financial burden. He indicated that the burden should be removed from the small business owners and emphasized the need to balance air quality, business and toxics issues. Dr. Edwards expressed that they consulted with many small business owners, and the feedback reflected that the tracking would not be burdensome. He further indicated that they plan to establish an effective and informative risk analysis, which will identify ideal areas where risk reductions or programs would be most effective.

Bridget McCann commented on the need for transparency and accuracy, and expressed support for the reporting regulation.

David Rothbart inquired if there have been discussions on how much the testing will cost and efficiency. Ambient monitoring should go before a reporting program. Dr. Edwards responded that understanding sources and emission types will allow them to strategically place air monitors to identify ambient concentrations.

Janet Whittick commented that the mapping tool will be very important and inquired if there was consideration for a focus group of different types of users. Dr. Edwards indicated that the 2017 data and mobile emissions will be added to the mapping tool, and other sources will also be considered. He added that before any large changes are made there will be discussions, and a focus group is a good suggestion for the evaluation of data.

SUBCOMMITTEE STATUS REPORTS

A. *Freight Sustainability (Dan McGivney)*

No report was provided.

B. Small Business Considerations *(Bill LaMarr)*

No report was provided.

C. *Environmental Justice and AB 617 Implementation (Curt Coleman)*

An update was provided on the following items.

- Wilmington/Carson/West Long Beach AB 617 Community Steering Committee meeting, May 9, 2019.
- San Bernardino/Muscoy AB 617 Community Steering Committee meeting, May 16, 2019.
- Boyle Heights/East Los Angeles/West Commerce AB 617 Community Steering Committee meeting, May 23, 2019.
- Draft Community Air Monitoring Plans have been prepared for each of the communities, and are posted on the South Coast AQMD website. Comments are currently being accepted.
- Year-2 community identification meetings are being held in the following communities.
    - Buena Park - May 22, 2019
    - Colton - May 29, 2019

D. *Climate Change (David Rothbart)*

An update was provided on the following item.

- On April 18, 2019, CARB released a White Paper on the Technical Feasibility of Lower NOx Standards and Associated Test Procedures for 2022 and Subsequent Model Year for Heavy-Duty and Heavy-Duty Engines.

REPORT TO AND FROM THE STATIONARY SOURCE COMMITTEE

Dr. Philip Fine provided a summary of items on the April and May 2019 meeting agendas.

- Rules 1180 and 1403;
- Updates to Regulation IX and X; and
- RECLAIM Quarterly Report.

OTHER BUSINESS

Art Montez requested an update on the sales related to the CARB Cap-and-Trade Program. Dr. Fine and Mr. Coleman explained that the process is different every year and determined by legislation.

Dr. Fine indicated that the legislators should have made their determinations by the next Home Rule Advisory Group Meeting and an update can be provided.

Bill LaMarr inquired if legislation bill authors could be invited to Advisory Group meetings. Dr. Fine indicated that this is something to consider.

PUBLIC COMMENT
There were no comments.

ADJOURNMENT
The meeting was adjourned at 11:02 am. The next meeting of the Home Rule Advisory Group is scheduled for 10:00 a.m. on July 10, 2019, and will be held at SCAQMD in Conference Room CC-8.

South Coast Air Quality Management District

HOME RULE ADVISORY GROUP – Attendance Record – 2019

	(Term: 1/1/19 - 1/1/21) Board/Member, Business & Community Reps, SCAQMD Staff	1/9	FEB	3/13	APR	5/8	JUN	7/10	AUG	9/11	OCT	11/13	DEC
1	**Dr. Joseph Lyou, Chair**	X	dark	X	dark		dark		dark		dark		dark
2	**Council Member Ben Benoit, Vice Chair**	A		A		A							
3	**Dr. Clark E. Parker, Sr., Governing Board Member**	A		A									
4	**Dr. Philip Fine** (Agency Member) - **SCAQMD**	X		X		X							
5	**Zimpfer, Amy** (Agency Member) - **EPA** *Representing Elizabeth Adams*	A		T		T*							
6	**Clerico, Brian** (Agency Member) - **CARB** *Representing Richard Corey*	T		T		T							
7	**Chang, Ping** (Agency Member) - **SCAG** *Alternate – Rongsheng Luo*	T*		X*		A*							
8	**Carrel, Marc** (Environmental Representative)	T		X		X							
9	**Carroll, Mike** (Business Representative) *Alternate – Robert Wyman*	A		A		X							
10	**Coleman, Curtis** (Business Representative) *Alternate – Susan Stark*	X		X		X							
11	**De La Cruz, Carlo** (Environmental Representative)	T		X		X							
12	**Keeler, Frances** (Business Representative) *Alternate – Janet Whittick*	T		X*		X*							
13	**McCann, Bridget** (Business Representative) *Alternate – Patty Senecal*	A*		X		X							
14	**LaMarr, Bill** (Business Representative)	X		X		X							
15	**McGivney, Dan** (Business Representative) *Alternate – Lauren Nevitt*	A*		X		X							
16	**Downs, Michael** (Community Representative - McCallon)	A		A		A*							
17	**Ferlita, Jaclyn** (Community Representative - Lyou)	X		A		A							
18	**Hansberger, Martin** (Community Representative - Rutherford)	X		X		X							
19	**Montez, Art** (Community Representative - Lyou)	A		X		X							
20	**Rothbart, David** (Community Representative - Mitchell)	X		A*		X							
21	**Rubio, Larry** (Community Representative - Ashley)	A*		A*		A*							
22	**Smith, Larry** (Community Representative - Benoit)	A		A*									
23	**Turner, TyRon** (Community Representative - Burke)	A		X		X							

Attendance Codes					
X	Present	T	Teleconference	A	Absence
X*	Alternate in Attendance	T*	Alternate Teleconference Participation	A*	Absence Excused

July 2019 Update on Work with U.S. EPA on New Source Review Issues for the RECLAIM Transition

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 NSR 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 – June 18, 2019	• Staff discussed with U.S. EPA calculation methodologies for NSR applicability and amount of offsets required • Discussed NSR requirements for secondary pollutants
Adoption of Amendments to Rule 2001 – Applicability, July 12, 2019	• Board approved amendments to keep facilities in RECLAIM until all rules associated with the transition are approved into the State Implementation Plan • RECLAIM facilities will remain subject to Rule 2005 for New Source Review throughout the transition

Back to Agenda

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
General Counsel's Office

June 2019 Settlement Penalty Report
DRAFT

Total Penalties

Civil Settlements:	**$462,200.00**
MSPAP Settlements:	**$18,080.00**
Hearing Board Settlements:	**$26,000.00**
Total Cash Settlements:	**$506,280.00**
Total SEP Value:	**$0.00**
Fiscal Year through 6 / 2019 Cash Total:	**$7,186,386.49**
Fiscal Year through 6 / 2019 SEP Value Only Total:	**$265,000.00**

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
Civil Settlements						
101656	AIR PRODUCTS AND CHEMICALS, INC.	2004(f)(1) 2005 3002(c)(1)	6/14/2019	NSF	P63375 P63380	$11,000.00
182157	BAXALTA US INC	3002(c)(1)	6/20/2019	NSF	P66807	$2,500.00
186599	CEDROS INVESTMENT LLC	1403	6/11/2019	KCM	P66271	$1,100.00
56940	CITY OF ANAHEIM/COMB TURBINE GEN STATION	2012	6/4/2019	MJR	P60571	$500.00
109013	EMERALD COURT	203(a) 222	6/12/2019	TRB	P63877	$1,000.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
800372	EQUILON ENTER. LLC, SHELL OIL PROD. US	2004(f)(1) 3002(c)(1)	6/27/2019	TRB	P65318	$2,500.00
124838	EXIDE TECHNOLOGIES	3002	6/18/2019	NSF	P63309	$3,500.00
800089	EXXONMOBIL OIL CORPORATION	3002(c)(1)	6/6/2019	DH	P63406	$165,000.00
148373	FULLERTON CUSTOM WORKS INC	203	6/6/2019	KCM	P63167	$5,200.00
187243	JOSEPH FENTON	1403	6/6/2019	KCM	P66277	$5,400.00
800075	LA CITY, DWP SCATTERGOOD GENERATING STN	2004 2012(c)(3)(A) 3002	6/7/2019	NSF	P64423 P66507	$3,000.00
181933	NORTH GAS & MINI MART	203 461(c)(2)(B) 41960.2	6/13/2019	MJR	P61279	$6,000.00
800408	NORTHROP GRUMMAN SYSTEMS	2012	6/27/2019	NSF	P68301	$5,000.00
171941	Q.E.P. INC.	3002(c)(1)	6/27/2019	NSF	P66766 P66779	$40,000.00
144835	QUALITY ALUMINUM FORGE A DIV OF GEL IND	1430(d)(2)	6/21/2019	KCM	P63875	$7,000.00
104512	SOUTHERN CAL REGIONAL RAIL AUTHORITY	203(b)	6/14/2019	KCM	P65064 P66769	$2,500.00
174655	TESORO REFINING & MARKETING CO, LLC	3002(c)(1)	6/27/2019	NSF	P65602	$59,000.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
800436	TESORO REFINING AND MARKETING CO, LLC	40 CFR 60	6/27/2019	NSF	P60583	$116,000.00
		1173			P64024	
		1176			P64025	
		1178			P64026	
		2004			P64028	
		3002(c)(1)			P64031	
800436	TESORO REFINING AND MARKETING CO, LLC	3002(c)(1)	6/27/2019	NSF	P64036	$26,000.00

Total Civil Settlements: $462,200.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
MSPAP Settlements						
182900	7-ELEVEN INC #37979	203	6/27/2019	TF	P66371	$800.00
182901	7-ELEVEN INC #37980	203	6/27/2019	TF	P66372	$800.00
186339	ADAPTIVE REALTY	1403	6/27/2019	GC	P66266	$1,600.00
177905	APRO LLC DBA UNITED OIL #120	461(c)(2)(B)	6/27/2019	TF	P67667	$1,000.00
177905	APRO LLC DBA UNITED OIL #120	461	6/27/2019	TF	P67659	$1,000.00
180128	ATLANTIC PETROLEUM, INC	203(b)	6/21/2019	TF	P65260	$800.00
182448	CHEVRON RIVERSIDE RD	461	6/27/2019	GC	P66353	$440.00
153864	DIVERSIFIED ASPHALT PRODUCTS	203	6/28/2019	GC	P65168	$640.00
179338	DUNCAN BROTHERS, INC.	3002	6/27/2019	GC	P59698	$1,000.00
188465	E. STEWART & ASSOCIATES	203	6/27/2019	TF	P68509	$250.00
119409	GOOSE CREEK GOLF CLUB	203	6/28/2019	GC	P67152	$1,275.00
154188	MAIN STREET VALERO	461 H&S 41960	6/21/2019	TF	P64950	$1,600.00
160499	NIETO'S STATION	461	6/21/2019	TF	P64945	$1,000.00
187193	OCEANWIDE REPAIR	203	6/27/2019	TF	P67656	$375.00
137487	P & S MOBIL	461 H&S 41960.2	6/27/2019	GC	P68111	$400.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
187466	PALM SPRINGS INC.	461	6/27/2019	GV	P63231	$400.00
187466	PALM SPRINGS INC.	203	6/27/2019	GV	P66362	$400.00
188119	ROD'S TREE SERVICE INC	203	6/27/2019	TF	P65799	$250.00
187775	RUSSEL COACH COMPANY LLC.	13 CCR 2485	6/21/2019	TF	P66808	$1,200.00
179045	SILLY MONKEY, INC	13 CCR 2460	6/21/2019	GC	P60694	$550.00
186767	STOUT ROOF CO	203	6/21/2019	TF	P62758	$800.00
187709	TREZ COMPANY	403	6/21/2019	TF	P66768	$1,000.00
123871	VERIZON WIRELESS/SIERRA PEAK #602	203(b)	6/27/2019	TF	P65393	$500.00

Total MSPAP Settlements: $18,080.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
Hearing Board Settlements						
104234	MISSION FOODS CORPORATION	202 203(b) 1153.1 1303	6/18/2019	KCM	5400-4	$25,000.00
156902	PROVIDENCE TARZANA MEDICAL CENTER	203 1470	6/27/2019	TRB	6128-1	$1,000.00

Total Hearing Board Settlements: $26,000.00

SOUTH COAST AQMD'S RULES AND REGULATIONS INDEX FOR JUNE 2019 PENALTY REPORT

REGULATION II - PERMITS

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 403	Fugitive Dust - Pertains to solid particulate matter emitted from man-made activities
Rule 461	Gasoline Transfer and Dispensing

REGULATION XI - SOURCE SPECIFIC STANDARDS

Rule 1173	Fugitive Emissions of Volatile Organic Compounds
Rule 1176	Sumps and Wastewater Separators
Rule 1178	Further Reductions of VOC Emissions from Storage Tanks at Petroleum Facilities

REGULATION XIV - TOXICS

Rule 1403	Asbestos Emissions from Demolition/Renovation Activities
Rule 1430	Control of Emissions from Metal Grinding Operations at Metal Forging Facilities

REGULATION XX - REGIONAL CLEAN AIR INCENTIVES MARKET (RECLAIM)

Rule 2004	RECLAIM Program Requirements
Rule 2005	New Source Review for RECLAIM
Rule 2012	Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NO_X) Emissions

REGULATION XXX - TITLE V PERMITS

Rule 3002	Requirements for Title V Permits

CALIFORNIA HEALTH AND SAFETY CODE

41960	Certification of Gasoline Vapor Recovery System
41960.2	Gasoline Vapor Recovery

CALIFORNIA CODE OF REGULATIONS

13 CCR 2460 Portable Equipment Testing Requirements

13 CCR 2485 Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling

CODE OF FEDERAL REGULATIONS

40 CFR 60, QQQ – Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater

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South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

Twelve-Month and Three-Month Rolling Average Price of Compliance Years 2018 and 2019 NOx and SOx RTCs

July 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)

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
Feb-19	Feb-18 to Jan-19	521.6	$1,460,268	87	$2,800
Mar-19	Mar-18 to Feb-19	625.6	$1,534,266	97	$2,452
Apr-19	Apr-18 to Mar-19	636.4	$1,581,537	98	$2,485
May-19	May-18 to Apr-19	666.4	$1,695,472	117	$2,544
Jun-19	Jun-18 to May-19	668.6	$1,703,114	119	$2,547
Jul-19	Jul-18 to Jun-19	674.0	$1,657,307	118	$2,459

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
Feb-19	Feb-18 to Jan-19	19.0	$108,200	6	$5,682
Mar-19	Mar-18 to Feb-19	19.0	$108,200	6	$5,682
Apr-19	Apr-18 to Mar-19	29.6	$181,921	8	$6,153
May-19	May-18 to Apr-19	30.2	$186,852	9	$6,182
Jun-19	Jun-18 to May-19	31.2	$195,323	10	$6,256
Jul-19	Jul-18 to Jun-19	44.3	$278,708	14	$6,288

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 III

Three-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
Feb-19	Nov-18 to Jan-19	363.4	$790,999	41	$2,177
Mar-19	Dec-18 to Feb-19	467.2	$893,954	49	$1,914
Apr-19	Jan-19 to Mar-19	375.9	$630,248	44	$1,677
May-19	Feb-19 to Apr-19	159.8	$337,688	36	$2,113
Jun-19	Mar-19 to May-19	48.8	$204,832	27	$4,196
Jul-19	Apr-19 to Jun-19	62.2	$228,907	30	$3,681

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
Feb-19	Nov-18 to Jan-19	19.0	$107,500	5	$5,658
Mar-19	Dec-18 to Feb-19	14.0	$80,000	4	$5,714
Apr-19	Jan-19 to Mar-19	11.3	$78,922	3	$6,969
May-19	Feb-19 to Apr-19	11.2	$78,653	3	$7,034
Jun-19	Mar-19 to May-19	12.2	$87,123	4	$7,154
Jul-19	Apr-19 to Jun-19	14.8	$96,787	6	$6,560

Table V

Twelve-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
Feb-19	Feb-18 to Jan-19	218.3	$209,829	14	$961
Mar-19	Mar-18 to Feb-19	259.7	$292,629	16	$1,127
Apr-19	Apr-18 to Mar-19	259.7	$292,629	16	$1,127
May-19	May-18 to Apr-19	259.7	$292,629	16	$1,127
Jun-19	Jun-18 to May-19	225.4	$268,655	13	$1,192
Jul-19	Jul-18 to Jun-19	225.4	$268,655	13	$1,192

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	-	-	-
Feb-19	Feb-18 to Jan-19	None	-	-	-
Mar-19	Mar-18 to Feb-19	25.0	$50,000	1	$2,000
Apr-19	Feb-18 to Jan-20	25.0	$50,000	1	$2,000
May-19	May-18 to Apr-19	25.0	$50,000	1	$2,000
Jun-19	Jun-18 to May-19	26.4	$53,376	2	$2,021
Jul-19	Jul-18 to Jun-19	26.4	$53,376	2	$2,021

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.