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

SUBJECT: **NOTICE OF COMPLETION OF A DRAFT ENVIRONMENTAL ASSESSMENT**

PROJECT TITLE: **PROPOSED AMENDED RULE 307.1 – ALTERNATIVE FEES FOR AIR TOXICS EMISSIONS INVENTORY;**
PROPOSED AMENDED RULE 1401 – NEW SOURCE REVIEW OF TOXIC AIR CONTAMINANTS;
PROPOSED AMENDED RULE 1402 – CONTROL OF TOXIC SUBSTANCES FROM EXISTING SOURCES;
PUBLIC NOTIFICATION PROCEDURES FOR PHASE I AND II FACILITIES UNDER AIR TOXICS 'HOT SPOTS' INFORMATION AND ASSESSMENT ACT OF 1987 (AB 2588); AND
DRAFT SCAQMD GUIDELINES FOR PARTICIPATING IN THE RULE 1402 VOLUNTARY RISK REDUCTION PROGRAM

In accordance with the California Environmental Quality Act (CEQA), the South Coast Air Quality Management District (SCAQMD) is the Lead Agency and has prepared a Draft Environmental Assessment (EA) to analyze environmental impacts from Proposed Amended Rule (PAR) 307.1 – Alternative Fees for Air Toxics Emissions Inventory, PAR 1401 – New Source Review of Toxic Air Contaminants, PAR 1402 – Control of Toxic Air Contaminants from Existing Sources, Public Notification Procedures for Phase I and II Facilities Under Air Toxics 'Hot Spots' Information and Assessment Act of 1987 (AB 2588), and Draft SCAQMD Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program pursuant to its certified regulatory program (SCAQMD Rule 110).

This letter and the attached Notice of Completion (NOC) are to notify you that a Draft EA has been prepared and is being circulated for public review. This letter and the attached NOC are not SCAQMD applications or forms requiring a response from you. Their purpose is to allow public agencies and the public the opportunity to review and comment on the environmental analysis. If the proposed project has no bearing on you or your organization, no action on your part is necessary.

The Draft EA and other relevant documents may be obtained by calling the SCAQMD Public Information Center at (909) 396-2039 or accessing the SCAQMD's CEQA website at http://www.aqmd.gov/home/library/documents-support-material/lead-agency-scaqmd-projects. Comments focusing on issues relative to the environmental analysis should be addressed to Ms. Cynthia Carter (c/o CEQA) at the address shown above, or sent by fax to (909) 396-3324 or by email to ccarter@aqmd.gov. Comments must be received no later than 5:00 p.m. on Thursday, September 22, 2016. Please include the name and phone number of the contact person in your organization. Questions regarding the proposed amendments and workshop inquiries should be directed to Ms. Uyen-Uyen Vo at (909) 396-2238.

The Public Hearing will be held at the SCAQMD Headquarters in Diamond Bar, California on October 7, 2016 at 9:00 a.m. Note: the Public Hearing date is subject to change.

Date: August 17, 2016

Signature: Jillian Wong

Jillian Wong, Ph.D.
Planning and Rules Manager
Planning, Rules, and Area Sources
Telephone: (909) 396-3176

Reference: California Code of Regulations, Title 14, §§ 15070, 15072, 15105, 15251, 15252 and 15372

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Drive, Diamond Bar, CA 91765-4182
NOTICE OF COMPLETION OF A DRAFT ENVIRONMENTAL ASSESSMENT

Project Title:
Proposed Amended Rule 307.1 – Alternative Fees for Air Toxics Emissions Inventory;
Proposed Amended Rule 1401 – New Source Review of Toxic Air Contaminants;
Proposed Amended Rule 1402 – Control of Toxic Air Contaminants from Existing Sources;
Public Notification Procedures for Phase I and II Facilities Under Air Toxics 'Hot Spots' Information and Assessment Act of 1987 (AB 2588); and
Draft SCAQMD Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program

Project Location:
The South Coast Air Quality Management District's (SCAQMD) area of jurisdiction consisting of the four-county South Coast Air Basin (Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino counties), and the Riverside County portions of the Salton Sea Air Basin and the Mojave Desert Air Basin.

Description of Nature, Purpose, and Beneficiaries of Project:
Proposed Amended Rule (PAR) 1402 includes a voluntary program to allow facilities to use an alternative public notification approach if they implement early measures that reduce facility health risks at least 60% below Rule 1402 Action Risk Levels. Facilities that do not use this voluntary program would still be subject to the traditional regulatory approach to reduce risks and notify the public if health risks exceed Rule 1402 thresholds. In addition, PAR 1402 streamlines implementation, includes provisions for potentially high risk facilities, and includes other amendments to improve clarity of the rule. PAR 307.1 includes a fee category for Voluntary Risk Reduction facilities, a provision that requires the facility owner or operator to directly pay or reimburse SCAQMD for costs associated with public meetings, and other administrative changes. Additionally, PARs 1401 and 1402 will revise reporting requirements regarding new or revised toxic air contaminant health values and the potential impacts to permitting and AB 2588, which will be included in the AB 2588 Annual Report. Lastly, one existing procedural guidelines document is being revised and a new procedural guidelines document is being developed. The SCAQMD AB 2588 Public Notification Procedures document "Public Notification Procedures for Phase I and II Facilities Under Air Toxics 'Hot Spots' Information and Assessment Act of 1987 (AB 2588)" is being revised to clarify PAR 1402 notification requirements and a "Draft SCAQMD Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program" is being developed to establish PAR 1402 Voluntary Risk Reduction procedures. The Draft EA concluded that the environmental impacts would be less than significant. PAR 1402 could affect eleven facilities that are on lists of California Department of Toxics Substances Control hazardous waste facilities per Government Code §65962.5 (http://www.envirostor.dtsc.ca.gov/public)

Lead Agency:	**Division:**
South Coast Air Quality Management District	Planning, Rule Development and Area Sources

The Draft EA and all supporting documentation are available at:	**or by calling:**	**The Draft EA can also be obtained by accessing the SCAQMD's website at:**
SCAQMD Headquarters 21865 Copley Drive Diamond Bar, CA 91765	(909) 396-2039	http://www.aqmd.gov/home/library/documents-support-material/lead-agency-scaqmd-projects

The Notice of Completion is provided to the public through the following:

☑ Los Angeles Times (August 23, 2016)
☑ SCAQMD Mailing List & Interested Parties
☑ SCAQMD Public Information Center
☑ SCAQMD Website

Draft EA Review Period (30-days):
August 23, 2016 – September 22, 2016

Scheduled Public Meeting Dates (subject to change):
SCAQMD Governing Board Hearing to consider project adoption and approval on:
October 7, 2016 9:00 a.m.; SCAQMD Headquarters

The proposed project will have NO statewide, regional or areawide significance; therefore, NO scoping meeting is required for the proposed project pursuant to Public Resources Code §21083.9 (a)(2).

	Phone:	**Email:**	**Fax:**
Send CEQA Comments to: Ms. Cynthia Carter	(909) 396-2431	ccarter@aqmd.gov	(909) 396-3324
Send Questions on Proposed Amended Rules to: Ms. Uyen-Uyen Vo	**Phone:** (909) 396-2238	**Email:** uvo@aqmd.gov	**Fax:** (909) 396-3324

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Draft Environmental Assessment for:

Proposed Amended Rule 307.1 – Alternative Fees for Air Toxics Emissions Inventory;
Proposed Amended Rule 1401 – New Source Review of Toxic Air Contaminants;
Proposed Amended Rule 1402 – Control of Toxic Air Contaminants from Existing Sources;
Public Notification Procedures for Phase I and II Facilities Under Air Toxics 'Hot Spots' Information and Assessment Act of 1987 (AB 2588); and
Draft SCAQMD Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program

August 2016

SCAQMD No. 160817CC
SCH No. TBD

Author:	Cynthia A. Carter	Air Quality Specialist
Technical Assistance:	Michael Morris	Program Supervisor
	Uyen-Uyen Vo	Air Quality Specialist
	Jeff Inabinet	Air Quality Specialist
Reviewed By:	Ian MacMillan	Planning and Rules Manager
	William Wong	Principal Deputy District Counsel

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County of San Bernardino

ACTING EXECUTIVE OFFICER:
WAYNE NASTRI

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CHAPTER 1

PROJECT DESCRIPTION

BACKGROUND

On March 6, 2015, the California Office of Environmental Health Hazard Assessment (OEHHA) approved revisions to their Risk Assessment Guidelines (Revised OEHHA Guidelines). The Revised OEHHA Guidelines were triggered by the passage of the Children's Health Protection Act of 1999 (SB 25, Escutia) requiring OEHHA to ensure infants and children are explicitly addressed when assessing risk. Over the past decade, advances in science have shown that early-life exposures to air toxics contribute to an increased estimated lifetime risk of developing cancer, or other adverse health effects, compared to exposures that occur in adulthood. The new risk assessment methodology addresses this greater sensitivity and incorporates the most recent data on infants and childhood and adult exposure to air toxics. The Revised OEHHA Guidelines incorporate age sensitivity factors and other changes which will increase estimated cancer risk to residential and sensitive receptors, based on the change in methodology, by approximately 3 times, and more than 3 times in some cases depending on whether the toxic air contaminant has multiple pathways of exposure in addition to inhalation. Health risks for off-site worker receptors are similar between the existing and revised methodology because the methodology for adulthood exposures remains relatively unchanged. The Revised OEHHA Guidelines do not reflect the significant toxic emission reductions already achieved by facilities in the Basin over the past decades. Instead, the Revised OEHHA Guidelines represents a change to the methodologies and calculations used to estimate health risk based on the most recent scientific data on exposure, childhood sensitivity, and breathing rates. Even though there may be no increase in toxic emissions at a facility, the estimated cancer risk using the Revised OEHHA Guidelines is expected to increase resulting in some facilities that previously were below public notification thresholds now having to provide public notification.

At the June 2015 Governing Board Meeting, the SCAQMD Governing Board adopted amendments to Rule 1402 – Control of Toxic Substances from Existing Sources (Rule 1402) incorporating the Revised OEHHA Guidelines. During the 2015 rulemaking process, some industry stakeholders had commented that even though a facility's emissions remained the same or reduced emissions, with the Revised OEHHA Guidelines their estimated health risk may require the facility to conduct a public notification. As a result, the Governing Board directed staff to work with stakeholders to incentivize early risk reductions beyond those required under Rule 1402, to assess public notification procedures, and explore alternatives for such facilities. In addition, the Governing Board also directed staff to streamline implementation of Rule 1402, if necessary.

PROPOSED AMENDMENTS TO RULES 307.1, 1401, & 1402 AND ASSOCIATED PAR 1420 GUIDANCE DOCUMENTS

Proposed Amended Rule (PAR) 1402 will be amended to streamline implementation to achieve risk reductions sooner and to allow facilities to use an alternative public notification approach if they implement early measures that reduce facility health risks at least 60% below Rule 1402 Action Risk Levels. Facilities that do not use this voluntary program would still be subject to the traditional regulatory approach to reduce risks and notify the public if risks exceed Rule 1402 thresholds. In addition, PAR 1402 includes additional requirements for facilities that are designated as Potentially High Risk Level Facilities, and includes other amendments to improve clarity.

In addition to proposed amendments to Rule 1402, amendments to Rule 307.1 – Alternative Fees for Air Toxics Emissions Inventory and Rule 1401 – New Source Review of Toxic Air Contaminants are being proposed. PAR 307.1 will be amended to include a fee for Voluntary

Risk Reduction facilities and a provision to either directly pay or reimburse the SCAQMD for costs associated with public meetings required by Rule 1402 when a facility is required to provide public notification. PAR 307.1 has been updated to reference North American Industry Classification System (NAICS) codes instead of Standard Industrial Classification (SIC) codes and replaces references to California Air Pollution Control Officers Association (CAPCOA) "Air Toxics 'Hot Spots' Program Facility Prioritization Guidelines, July 1990" with the most current version of SCAQMD "Facility Prioritization Procedures For AB 2588 Program". Additional amendments have been made to PAR 307.1 to improve clarity. As discussed later, SCAQMD staff has reviewed PAR 307.1 and determined that it is exempt from CEQA and a Notice of Exemption will be filed.

Amendments to Rule 1401 and 1402 will remove provisions that require staff to report to the Governing Board regarding changes from OEHHA regarding new or revised toxic air contaminant health values but instead discuss these changes and the potential impacts to permitting and AB 2588 in the AB 2588 Annual Report. Two supporting documents will also be presented to the Governing Board with PAR 1402 for the Governing Board's approval. The SCAQMD AB 2588 Public Notification Procedures document "Public Notification Procedures for Phase I and II Facilities Under Air Toxics 'Hot Spots' Information and Assessment Act of 1987 (AB 2588)")" is being revised to clarify PAR 1402 notification requirements that are specified in PAR 1402 and a "SCAQMD Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program" has been developed to establish PAR 1402 Voluntary Risk Reduction procedures.

There are no expected environmental impacts from PAR 1401 and PAR 1402 associated guidance documents because changes to these rules and guidance documents are administrative in nature and do not require or cause any physical damage to the environment. PAR 1402 may cause environmental impacts, and this Draft EA is a comprehensive environmental document that analyzes potential adverse environmental impacts from the currently proposed amendments to Rule 1402.

AFFECTED FACILITIES

To date, there have been 1,640 facilities in the AB 2588 Air Toxics Hot Spots program. Because of inactivity (out of business, shutdown, etc.), low Priority Scores or low risk, 1,301 facilities are exempt. Of the 339 core facilities, the previous rule development process incorporating the Revised OEHHA Guidelines estimated that 22 facilities could potentially have a cancer risk greater than the Action Risk Level, 42 facilities could potentially have a cancer risk greater than the Public Notification Risk Level, and 28 facilities would likely need to submit a Health Risk Assessment (HRA) because of the Revised OEHHA Guidelines. All 64 facilities with a cancer risk greater than the Public Notification Risk Level or the Action Risk Level have a previously approved HRA below the Action Risk Level and are not likely to be a Potentially High Risk Level Facility making them eligible to participate in Voluntary Risk Reduction. Under PAR 1402, facilities participating in Voluntary Risk Reduction are required to implement risk reduction measures specified in a Voluntary Risk Reduction Plan to reduce the impact of total facility emissions below the Voluntary Risk Threshold by no later than two and a half years. Therefore, participating Voluntary Risk Reduction facilities may be required to add additional pollution controls beyond Rule 1402 requirements.

Implementation of PARs 307.1, 1401, 1402 and the associated PAR 1402 guidance documents affects many industry categories. SCAQMD staff evaluated the primary and secondary toxic

drivers for the AB 2588 facilities that could potentially participate in Voluntary Risk Reduction. Based on this evaluation, SCAQMD staff estimated the types of pollution controls that could be potentially used to reduce the impact of total facility risk below the Voluntary Risk Threshold. Rule 1402 establishes a "facility-wide" risk threshold, so there are a variety of options which can be implemented such as process changes, additional air pollution controls, and reduced throughput. The affected facilities are in the AB 2588 Air Toxics Hot Spots program and must submit toxic reports on a quadrennial cycle.

For the 22 facilities that could potentially be greater than Action Risk Level, the March 2015 Staff Report estimated the types of controls that would bring the impact of total facility emissions below Action Risk Level (March 2015 Staff Report Table 3-2). Upon further analysis, two facilities were removed because their current Priority Scores were estimated to be less than ten and nine facilities were removed because the facilities are currently in risk reduction implementation, subject to a different rule that will result in risk reduction, or have installed air pollution controls. For eight of the facilities, staff estimated that the controls that SCAQMD staff reported in the March 2015 Staff Report would be sufficient to reduce facility risk below the Voluntary Risk Threshold. Therefore, of the 22 facilities potentially greater than Action Risk Level, three facilities would require additional controls to reduce their risk below the Voluntary Risk Threshold.

For the 42 facilities identified as potentially having a cancer risk between the Public Notification Risk Level and Action Risk Level when using the Revised OEHHA Guidelines, staff conducted a similar analysis. Twenty facilities were removed because the facilities are in the process of shutting down, currently in risk reduction implementation, subject to a different rule that will result in risk reduction, have installed pollution controls, or their current Priority Scores were estimated to be less than ten. Staff also identified three additional facilities now with a current Priority Score greater than ten. For these remaining 25 facilities, staff estimated the types of pollution controls that could be added to potentially reduce their risk below the Voluntary Risk Threshold. Subsequently, staff assumed that four of the facilities would not participate in Voluntary Risk Reduction due to the high cost of the air pollution control required to bring their facility risk below Voluntary Risk Threshold. Therefore, of the 42 facilities potentially greater than Public Notification Risk Level, it is estimated that 21 facilities would require additional controls.

Therefore, it is estimated that 24 facilities would require additional controls (three Action Risk Level facilities and 21 Public Notice Risk Level facilities). Table 2-1 shows the different categories of affected facilities.

Based on comments from PAR 1402 working group stakeholders, staff is considering an additional provision to allow facilities that do not have an approved HRA to participate in the Voluntary Risk Reduction Program. For those facilities, it is assumed that these facilities will only be required to complete emissions calculations, risk characterizations, and/or a Risk Reduction Measure (i.e. source test, process change, curtailment, etc.) to satisfy Rule 1402 requirements. If they would be allowed to participate in the Voluntary Risk Reduction Program, it is assumed that they would not require any additional controls to reduce risk.

LEGISLATIVE AUTHORITY

The California Legislature created the SCAQMD in 1977 (Lewis-Presley Air Quality Management Act, California Health and Safety Code §§ 40400 et seq.) as the agency responsible for developing

and enforcing air pollution control rules and regulations in the Basin and portions of the Salton Sea Air Basin and Mojave Desert Air Basin. By statute, SCAQMD is required to adopt an air quality management plan (AQMP) demonstrating compliance with all state and federal ambient air quality standards for the District [California Health and Safety Code §40460(a)]. Furthermore, SCAQMD must adopt rules and regulations that carry out the AQMP [California Health and Safety Code, §40440(a)].

In addition to regulating criteria pollutants, state law specifies that air districts may regulate toxic air contaminants (TACs). Specifically, Health and Safety Code §39656, through the California legislature has delegated the air districts, including the SCAQMD, to establish and implement a program to regulate TACs. Similarly, SCAQMD implements the Air Toxics Hot Spots Act (Health and Safety Code §44300-44394) through Rule 1402.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

The adoption of PARs 307.1, 1401, and 1402 (which affect new and modified permitted equipment at existing facilities), and associated guidance documents, are discretionary actions which have the potential to result in direct or indirect changes to the environment; therefore, is considered a "project" as defined by the California Environmental Quality Act (CEQA). SCAQMD is the lead agency for the proposed project and has prepared this Draft EA pursuant to its Certified Regulatory Program (CEQA Guidelines § 15251).

SCAQMD staff has reviewed PAR 307.1, pursuant to CEQA Guidelines §15002(k)(1) – Three Step Process, and CEQA Guidelines §15061 – Review for Exemption, and has determined that PAR 307.1 is exempt from CEQA for the following reasons. The proposed amendments to Rule 307.1 are strictly administrative in nature, consisting of including a fee for Voluntary Risk Reduction facilities and a provision to either directly pay or reimburse the SCAQMD for costs associated with public meetings required by Rule 1402 when a facility is required to provide public notification. PAR 307.1 has been updated to reference North American Industry Classification System (NAICS) codes instead of Standard Industrial Classification (SIC) codes and the most current version of associated documents. Because these amendments are strictly administrative in nature, it can be seen with certainty that there is no possibility that the proposed project may have a significant adverse effect on the environment. Additionally, PAR 307.1 is statutorily exempt from CEQA requirements pursuant to State CEQA Guidelines §15273 – Rates, Tolls, Fares, and Charges. A Notice of Exemption will be prepared pursuant to CEQA Guidelines §15062 - Notice of Exemption. The Notice of Exemption will be filed with the county clerks of Los Angeles, Orange, Riverside and San Bernardino counties immediately following the adoption of the proposed project.

Rule 1401 includes provisions for analyzing potential permitting impacts and reporting to the Governing Board when OEHHA revises health values for new and existing toxic air contaminants. Consistent with PAR 1402, PAR 1401 will remove these provisions and include this analysis in the AB 2588 annual report to streamline implementation. PAR 1401 removes paragraphs (e)(2) and (e)(3) which requires staff to report to the Governing Board regarding OEHHA changes to risk values.

Hence, there are no expected environmental impacts from PAR 1401 and the associated PAR 1402 guidance documents because changes to these rules and guidance documents are administrative in nature and do not require or cause any physical damage to the environment.

As a result, this Draft EA is a comprehensive environmental document that analyzes and focuses on potential adverse environmental impacts from the currently proposed amendments to Rule 1402. California Public Resources Code §21080.5 allows public agencies with regulatory programs to prepare a plan or other written document in lieu of an environmental impact report or negative declaration once the Secretary of the Resources Agency has certified the regulatory program. SCAQMD's regulatory program was certified by the Secretary of the Resources Agency on March 1, 1989, and is codified as SCAQMD Rule 110.

CEQA and SCAQMD Rule 110 require that potential adverse environmental impacts of proposed projects be evaluated and that feasible methods to reduce or avoid significant adverse environmental impacts of these projects be identified. To fulfill the purpose and intent of CEQA, this Draft EA addresses the potential adverse environmental impacts associated with PAR 1402 according to CEQA Guidelines § 15252. It states that the lead agency has an obligation to identify and evaluate the environmental effects of the project. The Draft EA is an informational document intended to: (a) provide the lead agency, responsible agencies, decision makers and the general public with information on the environmental effects of PAR 1402; and, (b) identify possible ways to minimize the significant effects.

SCAQMD's review shows that PAR 1402 is not expected to generate significant adverse effects on the environment. Pursuant to CEQA Guidelines §§ 15126.4 (a)(3), and 15126.6, mitigation measures and alternatives are not required for effects which are not found to be significant, thus, no mitigation measures or alternatives to the project are included in the Draft EA. In addition, because SCAQMD has a certified regulatory program, the Environmental Assessment is an appropriate substitute for an EIR or Negative Declaration. Pursuant to CEQA Guidelines § 15252(a)(2)(B) and supported by the environmental checklist (in Chapter 2), if the project would not have any significant or potentially significant effect on the environment, "no alternatives or mitigation measures are proposed to avoid or reduce any significant effects on the environment." Comments received on the Draft EA during the 30-day public review period will be addressed and included in the Final EA.

PROJECT LOCATION

The proposed project would apply to equipment and processes operated at toxic emitting facilities located throughout the entire SCAQMD jurisdiction. The SCAQMD has jurisdiction over an area of 10,473 square miles, consisting of the four-county South Coast Air Basin (Basin) and the Riverside County portions of the Salton Sea Air Basin (SSAB) and the Mojave Desert Air Basin (MDAB). The Basin, which is a subarea of the SCAQMD's jurisdiction, is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The 6,745 square-mile Basin includes all of Orange County and the nondesert portions of Los Angeles, Riverside, and San Bernardino counties. The Riverside County portion of the SSAB and MDAB is bounded by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley. The federal nonattainment area (known as the Coachella Valley Planning Area) is a subregion of both Riverside County and the SSAB and is bounded by the San Jacinto Mountains to the west and the eastern boundary of the Coachella Valley to the east (see Figure 1-1).

Figure 1-1 Boundaries of the South Coast Air Quality Management District

PROJECT BACKGROUND

SCAQMD has a robust and comprehensive air toxics regulatory program that consists of rules to address new and modified toxic sources, AB 2588 facilities (existing toxic sources), and source-specific toxic rules. Rules 1401 and 1402 are referred to as the "umbrella" rules that specify requirements for all new and modified permitted sources (Rule 1401) and requirements for the existing sources under the Air Toxics Hot Spots program (Rule 1402). In addition to these umbrella toxics rules, SCAQMD's regulatory program includes over fifteen source-specific toxic rules regulating specific equipment or industry categories such as chrome plating, asbestos remediation, lead emission reductions, perchloroethylene dry cleaners, diesel internal combustion engines to name a few. Implementation of these programs has resulted in significant reductions in toxic emissions. Since the development of SCAQMD's Air Toxics Program in 1990, non-diesel cancer risks have been reduced between 75 to 87 percent, depending on the location within the Basin.

SUMMARY OF SCAQMD RULES 307.1, 1401, 1402 AND ASSOCIATED RULE 1402 GUIDANCE DOCUMENTS

RULE 307.1

Rule 307.1 – Alternative Fees for Air Toxics Emissions Inventory was initially adopted on May 10, 1996. The rule establishes a fee schedule to recover the cost of implementing and administering the Air Toxics "Hot Spots" Information and Assessment Act of 1987.

RULE 1401

Rule 1401 – New Source Review for Toxic Air Contaminants was adopted by the SCAQMD Governing Board in June 1990. The rule establishes cancer and non-cancer health risk requirements for new, relocated, or modified permitted sources of toxic air pollutants. Under Rule 1401, new and modified permitted sources cannot exceed a Maximum Individual Cancer Risk (MICR) of 1 in one million or a non-cancer hazard index of 1.0, if the source is not equipped with Best Available Control Technology for toxics (T-BACT). If T-BACT is installed, the MICR cannot exceed 10 in one million. The MICR is the estimated probability of a potential maximally exposed individual contracting cancer as a result of exposure to toxic air contaminants. A hazard index below 1.0 indicates that adverse non-cancer health effects are not expected. Rule 1401 also has requirements for cancer burden which represents the estimated increase in the occurrence of cancer cases in a given population due to exposure to TACs. The rule also includes non-cancer chronic and acute hazard thresholds. Rule 1401 has been amended several times to add or modify new compounds or risk values to the list of TACs as they are identified and risk values are finalized or amended by the state.

RULE 1402

Rule 1402 – Control of Toxic Air Contaminants from Existing Sources was adopted in April 1994. Rule 1402 establishes facility-wide risk requirements for existing facilities that emit TACs and implements the state AB 2588 Air Toxics "Hot Spots" program. It contains requirements for toxic emissions inventories, health risk assessments, public notification and risk reduction. A maximum individual cancer risk exceeding 10 in one million or a non-cancer hazard index greater than 1.0, as demonstrated by an approved HRA, requires a facility to conduct public notification. A maximum individual cancer risk of 25 in one million or a non-cancer hazard index greater than 3.0, as demonstrated by an approved HRA, requires a facility to reduce their facility-wide risk within three years of

submitting a Risk Reduction Plan, with an option to request time extensions. Any facility whose facility-wide emissions of TACs exceed the significant risk level of 100 in one million or a non-cancer hazard index of 5.0 is not allowed to ask for a time extension.

ASSOCIATED RULE 1402 GUIDANCE DOCUMENTS

The SCAQMD AB 2588 Public Notification Procedures document "Public Notification Procedures for Phase I and II Facilities Under Air Toxics 'Hot Spots' Information and Assessment Act of 1987 (AB 2588)" are guidelines on how to properly mail notices, hold public meetings, and notify via the web.

A "Draft SCAQMD Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program" has been developed to instruct operators on how to properly submit a PAR 1402 Voluntary Risk Reduction Plan.

PROJECT DESCRIPTION

A description of PARs 307.1, 1401, 1402 and the associated PAR 1402 guidance documents are provided below.

Proposed Amendments to Rule 307.1

PAR 307.1 includes a new category of billing for facilities in the voluntary risk reduction program, a provision to reimburse the SCAQMD for logistics costs associated with public meetings required by Rule 1402, updates to reference NAICS codes instead of SIC codes, replaces references to California Air Pollution Control Officers Association (CAPCOA) "Air Toxics 'Hot Spots' Program Facility Prioritization Guidelines, July 1990" with the most current version of SCAQMD "Facility Prioritization Procedures For AB 2588 Program", and minor clarifications.

Proposed Amendments to Rule 1401

Rule 1401 includes provisions for analyzing potential permitting impacts and reporting to the Governing Board when OEHHA revises health values for new and existing toxic air contaminants. Consistent with PAR 1402, PAR 1401 will remove these provisions and instead include this analysis in the AB 2588 annual report to streamline implementation. PAR 1401 only removes the staff requirement to report to the Governing Board regarding OEHHA changes to risk values. Staff will continue to analyze impacts on permitting when TACs are added or revised and report these changes in the SCAQMD AB 2588 Annual Report. The AB 2588 Annual Report will include an impact assessment for changing the risk values.

Proposed Amendments to Rule 1402

PAR 1402 includes provisions for the Voluntary Risk Reduction Program, Potentially High Risk Facilities, and provisions to better clarify submittal and approval of Air Toxic Inventory Reports, Health Risk Assessments, and Risk Reduction Plans. Other proposed amendments are designed to streamline implementation and improve clarity.

Proposed Guidance Documents to Rule 1402

Two supporting documents will also be presented to the Governing Board with Proposed Amended Rule 1402. The SCAQMD AB 2588 Public Notification Procedures document "Public Notification Procedures for Phase I and II Facilities Under Air Toxics 'Hot Spots' Information and Assessment Act of 1987 (AB 2588)" is being revised to clarify PAR 1402 notification requirements that are specified in PAR 1402 and a "Draft SCAQMD Guidelines for Participating

in the Rule 1402 Voluntary Risk Reduction Program" has been developed to establish PAR 1402 Voluntary Risk Reduction procedures.

EMISSIONS CONTROL TECHNOLOGIES FOR TOXICS

To comply with the risk limits, certain existing sources, which have been identified as potentially exceeding the significant and public notice risk levels in Rule 1402, may need to implement risk reduction measures that include the following:

- Product reformulation and substitution
- Production system modifications, operational standards or practices modifications
- System enclosure and emission capture, exhaust, control or conversion
- Alternative technologies

Several of these risk reduction measures are facility specific (i.e., operational standards and reduction in operating hours).

The use of the most appropriate control technologies is dependent on:

- the physical characteristics and chemical properties of the regulated substances;
- the concentration of the regulated substance;
- design parameters such as the exhaust flow rate, temperature, and pressure of the air to be controlled; and
- the removal and destruction efficiency of the collection and control equipment needed to comply with the requirements of the appropriate rule.

In order to determine which control technology will be used to control a specific TAC, the regulated TACs were categorized by physical and/or chemical properties. Generally, the TACs comprise the following general categories and sub-categories.

- Toxic inorganic aerosols and particulate matter (T-PM)
    - Metal particles
    - Mineral/fiber particles
    - Inorganic acid aerosols
- Toxic volatile organic compounds (T-VOC)
    - High boiling point (>150^{o}C)
    - Medium boiling point (100 - 150^{o}C)
    - Low boiling point (<100^{o}C)
    - Polar organic compounds
    - Nonpolar organic compounds
    - Aromatic compounds

- Carbonyls

- Toxic halogenated organic compounds (T-HOC)
    - Fluorinated compounds
    - Chlorinated compounds
    - Brominated compounds
    - Dioxins and furans

Control technologies that can be applied to control TACs generally are categorized into the following groups:

- Filtration for T-PM
- Wet scrubbing for inorganic compounds
- Thermal and catalytic oxidation
- Refrigerated condensation
- Carbon adsorption and combined adsorption-oxidation systems
- Chemical absorption for T-VOC
- Special combination systems for the control of T-HOC.

A description of available control technologies expected to be used by affected facilities to comply with PAR 1402 is provided in the following section.

Control Technology for Toxic Aerosols and Particulate Matter (T-PM)

Table 1-1 identifies typical filtration control equipment for T-PM. Filtration control techniques are characterized by high removal efficiency and moderate- to high-energy requirements in most applications. In order to achieve high removal efficiencies, dry filters must be made of extremely low porosity materials which impose a high resistance to the flow of gas, or pressure drop (expressed in inches of water column where one inch of water column equals 0.43 pounds per square inch absolute) through the filter media. The higher the pressure drop across a control device, the higher the electrical energy requirement to operate larger fan motors needed to overcome the flow resistance. Therefore, high-efficiency controls are also high-energy controls with correspondingly high operating costs.

Table 1-1 Filtration Controls for T-PM and T-Aerosols

CONTROL TECHNOLOGY	SUBSTANCE GROUP	CONTROL EFFICIENCY
PTFE membrane baghouse	Dry particulate	99-99.9 %
HEPA filter and prefilter	Dry particulate	99.9-99.99 %
Wet packed scrubber	Aerosols	90-98 %

Polytetrafluoroethylene Membrane Baghouse

Baghouses remove particulate matter from gas streams in the same manner as a household vacuum cleaner bag, using the principle of aerodynamic capture by fibers. In lieu of conventional natural or synthetic bag fabrics such as cotton or Nomex, polytetrafluoroethylene (PTFE, trade name Gore-Tex) fabric consists of a very thin laminate of microporous Teflon on a suitable substrate. PTFE bags are capable of a particulate collection efficiency of 99 to 99.9 percent for particle sizes down to 1.0 micron (μm) when properly operated and maintained. Because of the microporous nature of PTFE, air-to-cloth ratios for these applications are lower than with conventional fabrics, requiring more collector area for a given volume flow rate of gas at a higher relative pressure drop. PTFE can tolerate moderately high temperatures (400^{o}F) at the expense of shortened bag life. The current trend in bag cleaning is the pulsejet technology, where tubular bags are supported from the inside by metal wire frames. Gas flows across the fabric from the outside inward, exiting at the top of the bags. Periodically, a blast of compressed air from a fixed nozzle located inside the wire frame causes the bag to inflate outward, thus knocking the accumulated toxics-bearing dust off the bag exterior and into the baghouse hopper, ready for collection and disposal as dry potentially hazardous solid waste.

High-efficiency Particulate Arrestors (HEPA) Filters

Used in conjunction with a baghouse or cartridge filter as a prefilter, high-efficiency particulate arrestors (HEPA) filters can trap toxic particles as small as 0.1 μm at an efficiency of 99.99 percent or greater. Like cartridge filters, HEPA filter elements are of pleated construction. Air-to-cloth ratios for HEPA filters are low due to high media density, low porosity, and resulting high-pressure drop. HEPA filters are generally limited to ambient temperature (100^{o}F), though special applications for higher temperatures are available. Unlike bags or cartridge filters, HEPA filters are not automatically cleaned. When a HEPA filter element becomes loaded with particulate matter, the element is changed out and disposed of as dry solid waste (possibly hazardous).

Wet Packed Scrubber

The standard air pollution control system for electroplating and anodizing, these devices consist of a vertical column made of fiberglass or other non-corrosive material loosely filled with specially shaped plastic packing material which maximizes gas-to-liquid contact and minimizes pressure drop across the column. Exhaust air from a plating or anodizing tank line enters at the bottom of the scrubber and exits at the top. The scrubbing solution is pumped from a reservoir at the base of the scrubber and sprayed down into the packing from the top. This flow scheme is called counter-current scrubbing and is the dominant method in use today due to its high pollutant removal efficiency, ranging from 90 to 98 percent, depending on residence (contact) time and solution freshness.

Wet packed scrubbers typically use a caustic solution (dilute sodium hydroxide) for absorbing acid mists. For absorbing caustic mists, acid solutions (dilute sulfuric acid) are typically employed. Scrubber solutions are maintained at the proper pH by automatic addition of concentrated sodium hydroxide or sulfuric acid solutions to scrubber make-up water, whichever is applicable. Usually, just slightly acidic or basic conditions are maintained with pH in the 5 to 6 range for acid solutions or 8 to 9 range for caustic solutions. As the scrubber solution becomes loaded with absorbed air contaminants, including trace metals and salts resulting from neutralization reactions, scrubber efficiency is diminished and the risk of clogging the packing increases. Therefore, scrubber solutions must be refreshed by either continuously draining off a small flow of solution and replacing it with fresh water and reagent (the engineering term for this is "blowdown") or by periodically replacing the entire contents of the scrubber solution reservoir. In either case, a liquid/sludge waste stream containing metals and salts is generated. With continuous blowdown, the liquid effluent may need on-site pretreatment prior to discharge into municipal sewers to remove heavy metals. With periodic change out, the spent solutions may need to be disposed of as liquid hazardous waste.

Control Technology for Toxic T-VOC and Combined Controls for T-HOC

Table 1-2 summarizes feasible air pollution control technologies for T-VOC and T-HOC. These control techniques are characterized by moderate to high-energy requirements in most applications. Pressure drops can range from very low (afterburners) to very high (carbon adsorption), with corresponding energy requirements. In general, high destruction removal efficiency (DRE) controls are also high-energy controls with correspondingly high operating costs.

Table 1-2 Controls for T-VOC and T-HOC

CONTROL TECHNOLOGY	SUBSTANCE GROUP	CONTROL EFFICIENCY
Combined Controls:		
Regenerative thermal oxidizer with dry scrubber and PTFE membrane baghouse	Halogenated T-VOC (high concentration)	99.9 - 99.99 %
Moving bed carbon adsorption concentrator with regenerative thermal oxidizer, dry scrubber and PTFE membrane baghouse	Halogenated T-VOC (high concentration)	90 - 99 %
Carbon Absorption Controls:		
Fixed bed with regenerative solvent reclaimer	T-VOC Halogenated T-VOC	50-99 %
Moving bed with regenerative solvent reclaimer	T-VOC Halogenated T-VOC	50-99 %
Moving bed with regenerative thermal oxidizer	T-VOC	50-99 %
Fluidized bed with regenerative thermal oxidizer	T-VOC	50-99 %
Fixed bed disposable	T-VOC Halogenated T-VOC	50-99 %
Chemical Adsorption Controls:		
Acid solution Packed column Plate column	Ethylene oxide (EtO) Caustics	90-98 %
Caustic solution Packed column Plate column	Acid Gases	90-98 %
Water solution Packed column Plate column	Polar/soluble/miscible	90-98 %
Solvent solution Packed column Plate column	Soluble T-VOC	90-98 %
Condensation Controls:		
Refrigerated surface condenser	T-VOC	50-95 %

Oxidation

Oxidation is the process of converting VOC gases to carbon dioxide and water through combustion. Of the various types of oxidizers available, the two basic types of equipment used most often are thermal oxidizers and catalytic oxidizers (Table 1-3). Thermal oxidizers rely on direct contact between toxic gases and high-temperature flames to disassociate and destroy toxic substances. Catalytic oxidizers rely on an active catalyst bed at moderate temperatures to break intramolecular bonds, also causing disassociation and destruction of toxic substances.

Table 1-3 Thermal and Catalytic Controls for T-VOC

CONTROL TECHNOLOGY	SUBSTANCE GROUP	CONTROL EFFICIENCY
Direct flame afterburner 1,200 - 1,400 ^{O}F, t> 0.3 sec*	T-VOC EtO	95-98 %
Recuperative heat exchanger oxidizer 1,400 - 1,600 ^{O}F, t > 0.5 sec	T-VOC	98-99 %
Regenerative heat exchanger oxidizer 1,800 - 2,000 ^{O}F, t > 0.8 sec	T-VOC	99-99.9 %
Catalytic oxidizer 700 - 800 ^{O}F, t > 0.1 sec	T-VOC EtO	90-95 %

Thermal Oxidizers

There are three main categories of thermal oxidizers that could be used to control T-VOCs: afterburners with no heat recovery, thermal oxidizers with recuperative heat recovery and highly efficient regenerative heat recovery oxidizers. When thermal oxidizers are used to destroy halogenated organic compounds, special materials or construction are often required, such as fiber-reinforced plastic (FRP) or stainless steel. In addition, a downstream scrubber is frequently needed to minimize releases of halogenated acid gases. The extent and type of these additional items depend upon the level of the halogenated compounds in the inlet stream and applicable regulatory requirements. The following paragraphs briefly describe the three types of thermal oxidizers.

Afterburners: Afterburners are most commonly used to control intermittent and emergency releases of T-VOCs. Due to factors such as noise and the lack of heat recovery, (which results in high energy consumption and high NO_X, CO, and CO_2 emissions) their use for steady-state control of VOCs is not widespread. They are most often used for controlling intermittent releases of ethylene oxide from medical or food product sterilizers. Afterburners operate in the 1,200 ^{O}F to 1,400 ^{O}F range with a residence time of at least 0.3 seconds and destruction removal efficiency of 95 to 98 percent.

Both recuperative and/or regenerative thermal oxidation systems generally consist of a refractory-lined chamber, one or more burners, a temperature-control system and heat-recovery equipment. Contaminated gases are collected by an industrial ventilation system and delivered to the preheater inlet, where they are heated by indirect contact with the hot oxidizer exhaust. Gases are then mixed thoroughly with the burner flame in the upstream portion of

the unit, and then pass through the combustion zone where the combustion process is completed. The T-VOC concentrations in most industrial process vent-streams are too low for self-sustaining combustion. Therefore, a supplemental fuel (natural gas) is required. Depending on the heat recovery efficiency, this supplemental fuel requirement may or may not translate into significant annual operating costs.

Recuperative thermal oxidizers: Recuperative thermal oxidizers recover 60 to 80 percent of the system's energy demands with a shell and tube type heat exchanger. Recuperative units operate in the 1,400^{o}F to 1,600^{o}F range with a residence time of at least 0.5 seconds and DREs of 98 to 99 percent. Thermal oxidizers with recuperative heat exchangers can recover 80 to 95 percent of the energy requirement. These recuperative thermal oxidizers use a ceramic medium for heat transfer, which is stored in three or more dedicated beds that feed a central combustion chamber. Valves control which bed is being preheated by exhaust gases and which bed is transferring its heat to incoming T-VOC contaminated air.

Regenerative thermal oxidizers: Regenerative units operate in the 1,800 ^{o}F to 2,000 ^{o}F range with a residence time of at least 0.8 seconds and DREs of 99 to 99.9 percent. Regenerative oxidizers cost more than recuperative designs of equal capacity. However, their life-cycle costs are less because annual fuel costs are less than for recuperative units.

Catalytic oxidizers

Catalytic oxidation is similar to thermal oxidation in that heat is used to convert the T-VOC contaminants to carbon dioxide and water. However, a catalyst is used to lower the oxidation activation energy, allowing combustion to occur at 600^{o}F to 800^{o}F, significantly lower temperatures than those of thermal units. In catalytic oxidation, the preheated gas stream is passed through a catalyst bed, where the catalyst initiates and promotes the oxidation of the T-VOC without being permanently altered itself. Catalyst units have a residence time of at least 0.1 seconds and DREs of 90 to 95 percent. The primary advantage of catalytic oxidation over thermal oxidation is lower fuel cost, depending on the efficiency of the air preheater. Disadvantages include higher capital costs, periodic catalyst replacement, and the inability to handle halogenated organics.

The most common catalyst configuration is the plate-and-frame arrangement, in which blocks of catalyst material are held in place within the oxidizer body by a metal frame. The catalyst consists of a reactive material (such as platinum, platinum alloys, copper chromite, copper oxide, chromium, manganese or nickel) on an inert substrate (such as honeycomb-shaped ceramic). For the catalyst to be effective, the reactive sites upon which the T-VOC gas molecules react must be accessible. The build-up of polymerized material or reaction with certain metal particulates will prevent contact between reactive sites and the exhaust gas. A catalyst can be reactivated by removing such a coating. Cleaning methods vary with the type of catalyst and include air blowing, steam blowing and operating at elevated temperatures (100^{o}F above the operating temperature) in a clean air stream. As with other catalytic processes, oxidation catalyst material can be lost by erosion, attrition, and vaporization at high temperatures.

Carbon Adsorption

Adsorption is a process by which T-VOCs are retained on the surface of granular solids. The solid adsorbent particles are highly porous and have very large surface-to-volume ratios. Gas molecules penetrate the pores of the adsorbent and contact the large surface area available for adsorption.

Materials such as activated carbon, silica gel, or alumina may be used as adsorbents. Activated carbon is the most common adsorbent for T-VOC removal. Carbon may also be used to remove other compounds such as sulfur-bearing or odorous materials. Advantages of carbon adsorption include the recovery of a relatively pure product for recycle and reuse and a high removal efficiency with low inlet concentrations. In addition, if a process stream is already available onsite, additional fuel costs are low, the main energy requirement being electrical power to run fan motors. Disadvantages are the potential generation of a hazardous organic waste if the recovered product cannot be reused, the generation of potentially contaminated wastewater that must be treated (when regeneration is by steam), and potentially higher operating and maintenance costs for the disposal of these two waste streams.

Fixed, moving, or fluidized-bed regenerative carbon adsorption systems operate in two modes, adsorption and desorption. Adsorption is rapid and removes from 50 to 99 percent of T-VOCs in the air stream, depending on their composition, concentration, temperature, and bed characteristics. Well-designed and operated systems, however, can usually achieve removal efficiencies in the 90 to 99 percent range. Eventually, the adsorbent becomes saturated with the vapors and system efficiency drops. At this point (called "breakthrough," since the contaminants "break through" the saturated bed), the T-VOC contaminated stream is directed to another bed containing regenerated adsorbent, and the saturated bed is then regenerated. Although it is possible to operate a nonregenerative adsorption system (i.e., the saturated carbon is disposed of and fresh carbon is placed into the bed), most applications, especially those with high VOC loadings, are regenerative.

The adsorption/regeneration cycle can last from a few hours to many days, depending on the inlet T-VOC concentration, the variability of T-VOC loading and the design parameters of the carbon bed (e.g., the amount of carbon and the bed's depth). Saturated carbon beds can be regenerated with steam, hot air, or a combination of vacuum and hot gas. Although the bed can be regenerated, complete desorption is not possible, and a small amount of T-VOC (called a "heel") will remain on the bed after each regeneration. After time, the bed can no longer be used and must be replenished with fresh carbon. Carbon life of five years is typical. The concentrated T-VOCs in the regeneration stream must be reclaimed (decanted or distilled), destroyed (oxidized), or otherwise disposed of in an environmentally sound manner.

An important consideration in the design of a carbon adsorption system is the temperature of the gas stream. Adsorption capacity of the carbon, and thus the performance of the adsorber, are directly related to this temperature -- adsorption capacity decreases with increasing temperature. Operating temperature must be less than 100^{o}F. Otherwise, the gas will have to be cooled in a heat exchanger prior to being passed through the absorber. Also, the relative humidity of the gas stream can affect the operating capacity of the carbon, and should not exceed 50 percent. Entrained liquid and particulate matter can also cause operating problems, such as plugging, and should be removed by mist eliminators or a packed filter upstream of the absorber. In addition, T-VOCs with boiling points above 300^{o}F (such as phenol) will be

collected by the carbon, but will not be removed during regeneration of the bed. These compounds should be removed upstream of the absorber inlet or captured on a sacrificial bed in the absorber.

Equipment has been developed that combines moving-bed activated carbon adsorption with thermal or catalytic oxidation. T-VOCs are collected by rotating-wheel carbon beds and subsequently desorbed with hot air. The concentrated exhaust stream is then sent to a thermal or catalytic oxidizer, where the T-VOC is combusted. The benefit of this configuration is that the volume of the desorption air stream is as much as fifteen times less than the original T-VOC stream, which translates into a smaller and less expensive oxidizer. Fuel costs are also lower than for a full-sized oxidizer for the same application. This approach is particularly useful for T-VOC streams with low concentrations and high volumes [concentrations less than 100 ppm and flow rates over 10,000 cubic feet per meter (CFM)], such as paint spray booths. Combination systems provide the inherent advantages of the individual techniques - the high destruction efficiency and no generation of liquid or solid waste of oxidation, and the low fuel consumption and good control efficiency of adsorption - without many of the disadvantages of each system. The ability of combination units to concentrate the T-VOC emission stream and thus lower the flow rate requiring oxidation not only minimizes the capital costs associated with the oxidizer, but also maximizes the energy input derived by combusting the T-VOC. In addition, by eliminating the steam for regeneration (and the subsequent condensate), the system does not generate contaminated wastewater.

Chemical Absorption or Wet Scrubbing

Absorption is the mass transfer of selected components from a gas stream into a nonvolatile liquid. Such systems are typically classified by the absorbent used (water or organic liquid, such as mineral oil or low-volatility hydrocarbon solvent). The choice of absorbent depends on the solubility of the gaseous T-VOC compounds and the cost of the absorbent. Absorption will occur when the concentration of the organic species in the liquid phase is less than the equilibrium concentration of the gaseous component. The gradient between the actual and the equilibrium concentrations is the driving force. Absorption is a function of both the physical properties of the system and the operating parameters of the absorber. The best absorption systems are characterized by low operating temperatures, large contacting surface areas, high liquid-to-gas (L/G) ratios and high T-VOC concentrations in the gas stream. Removal efficiencies in the 90 to 98 percent range may be achieved for well-designed and operated systems. Absorption is also efficient for dilute streams provided the T-VOC is highly soluble in the absorbent. Packed columns and plate columns are commonly used for high-efficiency pollution control applications.

The efficiency of absorption as a VOC control technique depends on several factors: the solubility of the T-VOC in the solvent; the concentration of the T-VOC in the gas stream; temperature; the L/G ratio; and the contact surface area. Higher gas solubilities and inlet concentrations provide a larger driving force for more efficient absorption. Since lower temperatures correspond to higher gas solubilities, absorption is also enhanced at reduced temperatures. The solvent flow rate is determined from the minimum L/G ratio, which can be found from material balances and equilibrium data. Generally, the most economical absorption factor is 1.25 to 2 times the minimum L/G. Absorption efficiency increases with contact surface area. Increasing the surface area, however, also raises the pressure drop through the packed bed. Thus, while a larger contact surface area may increase the overall removal efficiency, the higher energy consumption (fan power) may make it uneconomical.

Two modes of operation are typical for absorption systems: simple absorption and complex absorption. Simple absorption uses a single liquid pass system, where the T-VOC contaminated liquid is disposed of directly after exiting the absorber. In complex absorption, the T-VOC contaminant is recovered via stripping or other desorption techniques and the cleaned absorbent is recycled to the absorber. This option is generally feasible for organic-based systems employing expensive absorbents. In either case, waste streams are generated. In simple absorption systems where the absorbent is water, dilute acids, or dilute caustics, the spent solution, called "blowdown," is continuously bled off and replenished with fresh reagent. Typical blowdown rates are one to 10 percent of the solution recirculation rate, depending on the concentration of T-VOC air contaminants being absorbed. In complex absorption systems, a concentrated T-VOC stream is generated and must be reclaimed, destroyed, or otherwise disposed of in an environmentally sound manner.

CHAPTER 2

Introduction

General Information

Environmental Factors Potentially Affected

Determination

Discussion and Evaluation of Environmental Checklist

INTRODUCTION

The environmental checklist provides a standard evaluation tool to identify a project's adverse environmental impacts. This checklist identifies and evaluates potential adverse environmental impacts that may be created by the proposed project.

GENERAL INFORMATION

Project Title:	Proposed Amended Rules 307.1, 1401, and 1402 and Associated PAR 1402 Guidance Documents
Lead Agency Name:	South Coast Air Quality Management District
Lead Agency Address:	21865 Copley Drive, Diamond Bar, CA 91765
Rule Contact Person:	Uyen-Uyen Vo, (909) 396-2238
CEQA Contact Person:	Cynthia Carter, (909) 396-2431
Project Sponsor's Name:	South Coast Air Quality Management District
Project Sponsor's Address:	21865 Copley Drive, Diamond Bar, CA 91765
General Plan Designation:	Not applicable
Zoning:	Not applicable
Description of Project:	Not applicable
Surrounding Land Uses and Setting:	Not applicable
Other Public Agencies Whose Approval is Required:	Not applicable

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The following environmental impact issues have been assessed to determine their potential to be affected by the proposed project. As indicated by the checklist on the following pages, environmental topics marked with an "✓" may be adversely affected by the proposed project. An explanation relative to the determination of the significance of the impacts can be found following the checklist for each area.

☑ Aesthetics	☑ Geology and Soils	☐ Population and Housing
☐ Agriculture and Forestry Resources	☑ Hazards and Hazardous Materials	☑ Public Services
☑ Air Quality and Greenhouse Gas Emissions	☑ Hydrology and Water Quality	☐ Recreation
☐ Biological Resources	☐ Land Use and Planning	☑ Solid/Hazardous Waste
☐ Cultural Resources	☐ Mineral Resources	☑ Transportation/Traffic
☑ Energy	☑ Noise	☑ Mandatory Findings

DETERMINATION

On the basis of this initial evaluation:

☑ I find PARs 1401, 1402 and the associated PAR 1402 guidance documents, in accordance with those findings made pursuant to CEQA Guideline §15252, COULD NOT have a significant effect on the environment, and that an ENVIRONMENTAL ASSESSMENT with no significant impacts has been prepared. Pursuant to CEQA Guidelines §15002(k)(1), 15061, and 15273, PAR 307.1 is determined to be exempt from CEQA requirements.

☐ I find that although PARs 1401, 1402 and the associated PAR 1402 guidance documents could have a significant effect on the environment, there will NOT be significant effects in this case because revisions in the project have been made by or agreed to by the project proponent. An ENVIRONMENTAL ASSESSMENT with no significant impacts will be prepared.

☐ I find that PARs 1401, 1402 and the associated PAR 1402 guidance documents MAY have a significant effect(s) on the environment, and an ENVIRONMENTAL ASSESSMENT will be prepared.

☐ I find that PARs 1401, 1402 and the associated PAR 1402 guidance documents MAY have a "potentially significant impact" on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL ASSESSMENT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although PARs 1401, 1402 and the associated PAR 1402 guidance documents could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL ASSESSMENT pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL ASSESSMENT, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Date: August 17, 2016 **Signature:** Jillian Wong

Jillian Wong, Ph.D.
Planning and Rules Manager
Planning, Rules, and Area Sources

DISCUSSION AND EVALUATION OF ENVIRONMENTAL IMPACTS

This Draft EA evaluated potential adverse environmental impacts that could potentially occur from additional air pollution control equipment needed as a result of implementing PAR 1402 and the Voluntary Risk Reduction program for facilities under the AB 2588 Hot Spots program. There are no expected environmental impacts resulting from amendments to Rule 1401 and the associated PAR 1402 guidance documents because the changes are administrative in nature and do not require or cause a physical change to the environment. This analysis assumes that there would be 33 new or modified permit applications and about 24 AB 2588 facilities that could potentially be affected and may require additional pollution control equipment. Potential adverse environmental impacts can occur from the construction and operation of air pollution control equipment. The environmental impact analysis for each environmental topic incorporates a "worst-case" approach. A discussion of the assumptions and basis for the number of facilities that could potentially require additional APCDs is discussed below.

PAR 307.1 Analysis

SCAQMD staff has reviewed PAR 307.1, pursuant to CEQA Guidelines §15002(k)(1) – Three Step Process, and CEQA Guidelines §15061 – Review for Exemption, and has determined that PAR 307.1 is exempt from CEQA for the following reasons. The proposed amendments to Rule 307.1 are strictly administrative in nature, consisting of including a fee for Voluntary Risk Reduction facilities and a provision to either directly pay or reimburse the SCAQMD for costs associated with public meetings required by Rule 1402 when a facility is required to provide public notification. PAR 307.1 has been updated to reference North American Industry Classification System (NAICS) codes instead of Standard Industrial Classification (SIC) codes and the most current version of associated documents. Because these amendments are strictly administrative in nature, it can be seen with certainty that there is no possibility that the proposed project may have a significant adverse effect on the environment. Additionally, PAR 307.1 is statutorily exempt from CEQA requirements pursuant to State CEQA Guidelines §15273 – Rates, Tolls, Fares, and Charges. Therefore, PAR 307.1 will not be discussed any further in this analysis.

PAR 1401 Analysis

Currently, Rule 1401 includes provisions for analyzing and reporting potential permitting impacts to the Governing Board when OEHHA revises health values for new and existing toxic air contaminants. Consistent with PAR 1402, PAR 1401 will remove these provisions and include this analysis in the AB 2588 annual report to streamline implementation. PAR 1401 removes the requirement for staff to report to the Governing Board regarding OEHHA changes to risk values. Staff will continue to analyze impacts to permitting and AB 2588 when TACs are added or revised and report these changes in the SCAQMD AB 2588 Annual Report. The AB 2588 Annual Report will include an impact assessment that evaluates the change in risk values. The proposed amendments for Rule 1401 align state timelines with District timelines for implementing updated toxicity factors and are administrative in nature, and therefore, will not have any direct or indirect physical environmental impact and will not be discussed any further in this analysis.

PAR 1402 Analysis

AB 2588 is the state-required Air Toxics Hot Spots Program required by Health and Safety Code §44360(b)(2) which is implemented in the SCAQMD through Rule 1402. Under the AB 2588 program, facilities are divided into four implementation groups (Phase 1A, 1B, 2, and 3). During the "quadrennial" review, AB 2588 facilities are required to submit a more detailed emissions inventory for 177 toxic air contaminants. During the three years between the quadrennial review

AB 2588 facilities submit a toxics inventory for 23 toxic air contaminants under the existing SCAQMD Annual Emissions Reporting fee program. Based on the quadrennial toxics emissions inventory, SCAQMD staff prioritizes facilities and sends a letter to those facilities with a Priority Score in the highest category to submit an even more detailed air toxics emissions inventory and HRA. Implementing the AB 2588 program using the quadrennial review approach provides a more even workflow and reduces the impact on affected facilities to provide a detailed emissions inventory. Consistent with the quadrennial cycle in AB 2588, SCAQMD staff is estimating permitting impacts over a four year period. Construction of new facilities beyond the four years scope is considered speculative according to CEQA Guidelines §15145 and will not be evaluated further in this analysis.

PAR 1402 Guidance Documents Analysis

Two supporting documents will also be presented to the Governing Board with PAR 1402 for the Governing Board's approval. The SCAQMD AB 2588 Public Notification Procedures document "Public Notification Procedures for Phase I and II Facilities Under Air Toxics 'Hot Spots' Information and Assessment Act of 1987 (AB 2588)")" is being revised to clarify PAR 1402 notification requirements that are specified in PAR 1402 and a "SCAQMD Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program" has been developed to establish PAR 1402 Voluntary Risk Reduction procedures.

There are no expected environmental impacts from PAR 1401 and the associated PAR 1402 guidance documents because changes to these rules and guidance documents are administrative in nature and do not require or cause any physical damage to the environment

PAR 1402 Voluntary Risk Reduction Program

With the proposed Voluntary Risk Reduction program, a total of 24 facilities have been identified as eligible facilities to participate in the program. A detailed discussion of these facilities and the impact analysis approach is as follows:

> To qualify for the Voluntary Risk Reduction Program, facilities must have a Priority Score greater than 10 and a cancer risk greater than 10 in a million or a non-cancer hazard index greater than 1.0, or an offsite lead concentration greater than the National Ambient Air Quality Standard (NAAQS) or applicable lead limit in an SCAQMD rule (e.g., Rule 1420.1). The facilities that could utilize this program would be Action Risk Level Facilities (e.g., cancer risk ≥ 25 in a million) and Public Notice Risk Level (e.g., cancer risk ≥10) Facilities.
>
> Based on previously approved HRAs, SCAQMD staff estimates that approximately 11 facilities have the potential to have a cancer risk greater than the Action Risk Level when using the Revised OEHHA Guidelines and would be eligible to participate in the Voluntary Risk Reduction Program. However, only 3 of the 11 facilities will require additional control equipment beyond that identified in the March 2015 Staff Report. Additionally, there are 21 other facilities that are in the AB 2588 program that have a cancer risk greater than the Public Notification Risk Level and may volunteer to do a Risk Reduction Plan when using the Revised OEHHA Guidelines. Hence, these two groups of facilities could consider participating in the Voluntary Risk Reduction program to implement controls to reduce health risks to below 10 in a million cancer risk.

There is a different group of 28 facilities that are categorized as Intermediate Priority and cancer risks may be less than 10 in a million. These facilities may be impacted when their quadrennial reports are due[1]. Some of these facilities are requesting to be allowed to participate in the Voluntary Risk Reduction program and staff is considering to allow these facilities in the program. It is anticipated that when these facilities submit their Voluntary Risk Reduction Plan, the facilities may pass the screening level through calculations, risk characterizations and/or risk reduction measures (i.e. source testing, process change, curtailment, etc) and no further action will be needed. No environmental impacts are anticipated from these 28 facilities.

SCAQMD staff evaluated these facilities' primary and secondary toxic risk drivers. Since Rule 1402 establishes a "facility-wide" risk threshold, there are a variety of options which can be implemented, such as process changes, material changes, additional air pollution controls, and reduced throughput.

Table 2-1 summarizes the types of facilities, key toxic air contaminants that are contributing to the cancer risk, and the type of air pollution controls that could be implemented to reduce the cancer risk.

Table 2-1 PAR 1402 Potential APCDs to Reduce Health Risks

Facility Type	Key Toxic Driver	APCDs
Aerospace	Hexavalent chromium	HEPA/Scrubber
Aerospace	Hexavalent chromium	Scrubber
Electricity Generation	PAHs	Oxidation catalyst
Gasoline Pipeline	Gasoline vapor	Small thermal oxidizer
Gasoline Pipeline	Benzene and gasoline vapor	Small thermal oxidizer
Glass Manufacturer	Nickel	HEPA Filters
Hospital	Formaldehyde and PAHs	Two Oxidation Catalysts
Hospital	Ethylene oxide and formaldehyde	Scrubber
Metal Melting	Nickel	Two HEPAs/Scrubbers
Metal Melting	Hexavalent chromium and PAHs	Scrubber/Oxidation Catalyst
Metal Plating	Hexavalent chromium	HEPA Filters
Refinery	Hexavalent chromium	Scrubber
Refinery	Benzene	Oxidation catalyst
Refinery	Benzene and acrolein	Small thermal oxidizer

[1] Since the implementation of the Revised OEHHA Guidelines (June 2015), facilities are not prioritized until they report their quadrennial emissions.

Facility Type	Key Toxic Driver	APCDs
Refinery	Carbon tetrachloride and nickel	Carbon Adsorber
Roofing Supplies	Hydrogen sulfide	Scrubber
Ski Facility	Acrolein	Oxidation catalyst
University	PAHs and acrolein	Diesel particulate filters
Waste Management	Formaldehyde	Carbon Adsorber/ Oxidation Catalyst
Waste Management	Tetrachloroethylene	Carbon Adsorber
Waste Management	Formaldehyde	Carbon Adsorber
Waste Management	Hexavalent chromium and Benzene	HEPA Filters
Waste Management	Vinyl chloride and hydrochloric acid	Scrubber/Carbon Adsorber
Waste Management	chloroform	Scrubber/Carbon Adsorber

It is assumed that 24 facilities may elect to install additional air pollution controls due to the Voluntary Risk Reduction program. This is based on review of previously approved HRAs that have been received through implementation of the AB 2588 program. This is likely a conservative estimate (meaning there will not be more facilities) based on previously approved HRAs.

The review and approval process for the AB 2588 program is staggered, even for facilities within the same quadrennial review cycle. SCAQMD staff is estimating that of the 24 identified AB 2588 facilities (among the entire 4-year cycle), a conservative estimate would be to assume a maximum of three facilities would be installing equipment on a given day.

The 24 affected facilities could potentially be installing and operating 33 pieces of control equipment. A summary of the types of pollution controls from Rule 1402 are provided in Table 2-2 below.

Table 2-2 Summary of Types of APCD's to be Installed at Estimated Affected Facilities and Analyzed for Impacts

	HEPA Filters	Oxidation Catalysts	Carbon Adsorber	Wet Scrubbers	Thermal Oxidizers	Total
PAR 1402 Impacts (# of APCDs)	6	8	6	10	3	33
Environmental Topics to be Analyzed	• Aesthetics • AQ • Solid waste	• Aesthetics • AQ • Solid waste	• Aesthetics • AQ • Energy	• Aesthetics • AQ • Energy • Hydrology • Solid/ Hazardous waste	• Aesthetics • AQ • Energy	

ENVIRONMENTAL CHECKLIST AND DISCUSSION

I. AESTHETICS.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☑
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☑
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☑	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☑

SIGNIFICANCE CRITERIA
The proposed project impacts on aesthetics will be considered significant if:
- The project will block views from a scenic highway or corridor.
- The project will adversely affect the visual continuity of the surrounding area.
- The impacts on light and glare will be considered significant if the project adds lighting which would add glare to residential areas or sensitive receptors.

DISCUSSION
As discussed earlier under the "Environmental Checklist and Discussion", there are no expected environmental impacts from PAR 1401 and the associated PAR 1402 guidance documents, since they are administrative in nature and do not require or cause any physical damage to the environment. A discussion of impacts from PAR 1402 are discussed below.

I. a), b), d) No Impact. In general, the proposed amended rules have no potential to affect scenic vistas because installation of APCDs (i.e. HEPA filters, Thermal Oxidizers, Oxidation Catalysts, Wet Scrubbers, and Carbon Adsobers) will occur at existing commercial, industrial, or institutional facilities. Likewise, additional light or glare would not be created since no additional light generating equipment would be required for implementation of PAR 1402. Equipment used to control TAC emissions is typically located inside buildings which are located in industrial/commercial areas.

I. c) Less than Significant Impact. There will be additional pieces of industrial APCDs (i.e. HEPA filters, Thermal Oxidizers, Oxidation Catalysts, Wet Scrubbers, and Carbon Adsobers), but the facilities will be installing in an existing commercial, industrial setting with commercial,

industrial and institutional equipment so not likely to change the usual character or quality of the site and its surroundings. Therefore, impacts are considered less than significant.

Based upon these considerations, significant aesthetic impacts are not expected from implementing PAR 1402. Since no significant aesthetic impacts were identified for any of the issues, no mitigation measures are necessary or required.

II. AGRICULTURE AND FORESTRY RESOURCES.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?	☐	☐	☐	☑
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☑
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code §12220(g)), timberland (as defined by Public Resources Code §4526), or timberland zoned Timberland Production (as defined by Government Code §51104 (g))?	☐	☐	☐	☑
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☑

Significance Criteria

Project-related impacts on agriculture and forest resources will be considered significant if any of the following conditions are met:

- The proposed project conflicts with existing zoning or agricultural use or Williamson Act contracts.
- The proposed project will convert prime farmland, unique farmland or farmland of statewide importance as shown on the maps prepared pursuant to the farmland mapping and monitoring program of the California Resources Agency, to non-agricultural use.
- The proposed project conflicts with existing zoning for, or causes rezoning of, forest land (as defined in Public Resources Code §12220(g)), timberland (as defined in Public Resources Code §4526), or timberland zoned Timberland Production (as defined by Government Code § 51104 (g)).
- The proposed project would involve changes in the existing environment, which due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use.

DISCUSSION

As discussed earlier under the "Environmental Checklist and Discussion", there are no expected environmental impacts from PAR 1401 and the associated PAR 1402 guidance documents, since

they are administrative in nature and do not require or cause any physical damage to the environment. A discussion of impacts from PAR 1402 are discussed below.

II. a), b), c), & d) No Impact. Land use, including agriculture- and forest-related uses, and other planning considerations are determined by local governments. While implementation of PAR 1402 may cause APCDs to be installed and operated on existing equipment to control toxic emissions, these activities will occur at established toxic emitting facilities which are located on previously developed land in primarily industrial areas and are not located on agricultural or forest areas.

Further, no new construction of buildings or other structures is expected that would require conversion of farmland to non-agricultural use or conflict with zoning for agricultural uses or a Williamson Act contract. Further, because PAR 1402 does not require construction or operation activities within an area designated as forest land, implementation of PAR 1402 is not expected to conflict with any forest land zoning codes or convert forest land to non-forest uses. Similarly, there is nothing in PAR 1402 that would affect or conflict with existing land use plans, policies, or regulations or require conversion of farmland to non-agricultural uses or forest land to non-forest uses. Thus, no agricultural land use or planning requirements will be altered by PAR 1402.

Finally, the installation of toxic emission control equipment will ensure that projected toxic emission reductions will occur and that air quality in the region will improve. Thus, assuring that these air quality improvements occur could provide benefits to agricultural and forest land resources by reducing the adverse oxidation impacts of ozone on plants and animals located in the Basin.

Based upon these considerations, significant agricultural and forest resources impacts are not expected from implementing PAR 1402. Since no significant agriculture and forest resources impacts were identified for any of the issues, no mitigation measures are necessary or required.

III. AIR QUALITY AND GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☑
b) Violate any air quality standard or contribute to an existing or projected air quality violation?	☐	☐	☑	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☐	☑	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☑
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☑
f) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?	☐	☐	☑	☐
g) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☑	☐
h) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☑	☐

Significance Criteria

To determine whether or not air quality impacts from the proposed project may be significant, impacts will be evaluated and compared to the criteria in Table 2-3.

Table 2-3 SCAQMD Air Quality Significance Thresholds

Mass Daily Thresholds [a]		
Pollutant	**Construction** [b]	***Operation*** [c]
NOx	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM10	150 lbs/day	150 lbs/day
PM2.5	55 lbs/day	55 lbs/day
SOx	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Toxic Air Contaminants (TACs), Odor, and GHG Thresholds		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
GHG	10,000 MT/yr CO2eq for industrial facilities	
Ambient Air Quality Standards for Criteria Pollutants [d]		
NO2 1-hour average annual arithmetic mean	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.03 ppm (state) and 0.0534 ppm (federal)	
PM10 24-hour average annual average	10.4 μg/m^3 (construction)[e] & 2.5 μg/m^3 (operation) 1.0 μg/m^3	
PM2.5 24-hour average	10.4 μg/m^3 (construction)[e] & 2.5 μg/m^3 (operation)	
SO2 1-hour average 24-hour average	0.25 ppm (state) & 0.075 ppm (federal – 99th percentile) 0.04 ppm (state)	
Sulfate 24-hour average	25 μg/m^3 (state)	
CO 1-hour average 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)	
Lead 30-day Average Rolling 3-month average	1.5 μg/m^3 (state) 0.15 μg/m^3 (federal)	

[a] Source: SCAQMD CEQA Handbook (SCAQMD, 1993)
[b] Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins).
[c] For Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds.
[d] Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, Table A-2 unless otherwise stated.
[e] Ambient air quality threshold based on SCAQMD Rule 403.

KEY: lbs/day = pounds per day ppm = parts per million μg/m^3 = microgram per cubic meter ≥ = greater than or equal to
MT/yr CO2eq = metric tons per year of CO2 equivalents > = greater than

DISCUSSION

As discussed earlier under the "Environmental Checklist and Discussion", there are no expected environmental impacts from PAR 1401 and the associated PAR 1402 guidance documents, since they are administrative in nature and do not require or cause any physical damage to the environment. A discussion of impacts from PAR 1402 are discussed below. A summary of the type of pollution controls to be installed is provided in Table 2-2.

III. a) No impact. SCAQMD is required by law to prepare a comprehensive district-wide Air Quality Management Plan (AQMP) which includes strategies (e.g., control measures) to reduce emission levels to achieve and maintain state and federal ambient air quality standards, and to ensure that new sources of emissions are planned and operated to be consistent with SCAQMD's air quality goals. The AQMP's air pollution reduction strategies include control measures which target stationary, area, mobile and indirect sources. These control measures are based on feasible methods of attaining ambient air quality standards. Pursuant to the provisions of both the state and federal Clean Air Acts (CAA)s, SCAQMD is required to attain the state and federal ambient air quality standards for all criteria pollutants.

PAR 1401 and the associated PAR 1402 guidance documents are administrative in nature and have no impact on AQMP strategies. PAR 1402 is for facilities choosing to install APCDs for Voluntary Risk Reduction Program. This does not conflict with the AQMP because there are no control measures associated with these proposed amendments and controlling lead (a toxic) is considered an AQMP strategy. Therefore, these proposed amendments are consistent with the AQMP.

Toxic Air Contaminants: General Identification and Control Measures (AB 2728)

AB 2728 was enacted in 1992 and amends the Tanner process (AB 1807) to reflect the shift of certain duties from the Department of Health Services (DHS) to the California Environmental Protection Agency (Cal/EPA) Office of Environmental Health Hazard Assessments (OEHHA). This law requires the ARB to identify all 188 hazardous air pollutants (HAPs) listed under Title III of the 1990 CAA Amendments as TACs under the AB 1807 process. It encourages local air districts to adopt TAC programs to enable local enforcement of Title III - Air Toxics of the federal CAA. AB 2728 further provides that districts may adopt more stringent requirements than those provided under AB 1807. Health & Safety Code 44300 et. Seq. sets forth the state's Air Toxics "Hot Spots" Program (AB 2588), which requires districts to use OEHHA for risk assessment. H&S 44360(b)(2). PAR 1402 will be more stringent than what is required in the H&S Code.

PAR 1402 would reduce toxic emissions and therefore, be consistent with the goals of the AQMP, Additionally, the emissions associated with rule compliance for both construction and operation do not exceed the SCAQMD's CEQA significance thresholds (see analysis in III.b and f). Therefore, implementing the proposed rule amendments do not conflict or obstruct implementation of the AQMP or federal CAA.

III. b) and f) Less than significant impacts.

Criteria Pollutants – Construction Impacts

Affected Facilities

In order to estimate the number of future facilities affected by PAR 1402, as previously discussed at the beginning of this Chapter, SCAQMD staff evaluated AB 2588 facilities to determine which facilities may participate in the Voluntary Risk Reduction Program. The number of affected facilities and corresponding impacts to those facilities or operational activity of new or existing facilities were used as a surrogate to analyze possible impacts. Consistent with the quadrennial cycle in AB 2588, SCAQMD staff is estimating permitting impacts over a four year period. Construction of new facilities beyond the four years scope is considered speculative according to CEQA Guidelines §15145 and will not be evaluated further in this analysis.

Construction emissions were estimated for the various construction phases for the installation of APCDs. The phases are: grading/site preparation, paving, and equipment installation[2]. In addition, criteria pollutant emissions were calculated for all on-road vehicles transporting workers, vendors, and material removal and delivery. Since all phases must be entirely completed before the next phase can commence, there would be no overlap of construction phases for the construction of the new APCDs.

Any process substitutions or product reformulations are not expected to require installation of new equipment. Activities during construction that could potentially adversely affect air quality are those activities associated with the installation of APCDs.

The primary source of construction air quality impacts would be from those facilities installing larger size add-on controls (thermal oxidizers or scrubbers). The type of construction-related activities attributable to existing facilities that would be installing control equipment would consist predominantly of cutting, welding, etc. These construction activities would involve minor grading, slab pouring, or paving activities for the APCDs footprint. For the purposes of this analysis, construction activities undertaken at affected facilities are anticipated to entail the use of portable equipment (e.g., cranes, backhoes, etc.) and hand held equipment by small construction crews to weld, cut, and grind metal structures. Hence, all of PAR 1402 elements were considered in the daily construction emissions.

To analyze the "worst-case" emissions from construction activities associated with the implementation of the proposed amendments, SCAQMD staff assumed that three facilities would be installing APCDs at any given time at affected facilities to comply with the risk thresholds.

SCAQMD staff assumed that the maximum daily emissions from construction-related activities for each phase would all occur on the same day. Table 2-4 presents the results of the SCAQMD's construction air quality analysis. Appendix B contains the spreadsheets with the results and assumptions used for this analysis.

It should be noted that the analysis of construction air quality impacts was a "worst-case" analysis because it assumes that the peak construction would occur from the facilities that had the largest APCDs to install in regards to footprint size (i.e. thermal oxidizer or scrubber). There are a number

[2] *In general, no or limited construction emissions from grading are anticipated because modifications or installation of new equipment would occur at existing industrial/commercial facilities and, therefore, would not be expected to require earthmoving, grading, etc.*

of factors that would preclude concurrent construction activities including: engineering time necessary to plan and design the control equipment, permitting constraints, and type and size of control equipment to be constructed, etc. Furthermore, as a "worst-case," the SCAQMD's air quality impacts analysis assumes that peak construction activities could take up to two months to complete. Depending on the type and size of the control equipment to be constructed, actual construction time could be substantially less than two months. Further, some affected facilities could reduce emissions through methods other than installing control equipment, thus, eliminating construction impacts at those facilities. Construction emissions at any three facilities would not exceed any of the significance thresholds identified in Table 2-4. Finally, once construction is complete, construction air quality impacts would cease.

The peak daily emissions vary for each pollutant depending on the construction phase, which do not overlap in time (i.e. a site would need to be graded before paving and paved before installing). As mentioned before, this analysis assumes three facilities will be constructing at the same time for a worst case scenario. The significance determination for the construction is based on the peak daily emissions during any construction phase. Therefore, all of the construction impacts from the project are not significant for criteria pollutant emissions.

Table 2-4 PARs Daily Peak Construction Emissions in SCAQMD for Three Facilities

Construction Phase	CO, lb/day	NOx, lb/day	PM10, lb/day	PM2.5, lb/day	VOC, lb/day	SOx, lb/day
Grading/Site Preparation	34.3	75.7	**11.6**	**4.7**	8.2	0.1
Paving	22.6	35.9	2.2	2.0	0.7	0.0
Equipment Installation	**44.8**	**88.9**	4.3	3.9	**10.3**	**0.1**
Significance Threshold, lb/day	550	100	150	55	75	150
Exceed Significance?	No	No	No	No	No	No

Criteria Pollutants – Operation Impacts

Five different types of add-on control equipment were identified to reduce toxic risk at the affected facilities. Two of the control devices, thermal oxidizers and carbon adsorbers, have the potential to generate adverse secondary air quality impacts during operation. (All other APCDs will reduce toxic emissions, but will not increase criteria pollutants.)

To analyze maximum air quality impacts, it was assumed that for each operation needing to incinerate, the add-on control equipment would be a thermal oxidizer because they generate the highest emissions compared to other types of oxidizers. Thermal oxidizers destroy T-VOC emissions, but the process produces secondary criteria pollutant emissions such as CO, NO_x, VOC, SO_X, and PM10. Carbon adsorbers possess a carbon bed that requires regeneration for reuse. Emissions are produced when the spent carbon is regenerated.

The operation of the control equipment will reduce toxic exposure and will assist in meeting the risk threshold. The direct and indirect criteria emissions for each control equipment are totaled, in Table 2-7 and are less than the SCAQMD's mass daily operational significance thresholds; therefore, the proposed amendments are not expected to result in significant adverse operational criteria pollutant emission impacts.

Air Quality Assumptions

1. Affected facilities were assumed to operate the control equipment for twenty-four hours per day, seven days per week, and 52 weeks per year. These parameters represent a "worst-case" scenario, especially for the thermal oxidizer users because it overestimates the typical hours of high-fired load operation. For example, during some hours of operation incinerators operate on low-fired load when T-VOC emissions are not being vented to the combustion chamber, which results in lower combustion emissions from the thermal oxidizer. Additionally, not taken into consideration is the fact that hybrid technology has emerged that allows more efficient use of thermal oxidizers.

2. Affected facilities are medium- to large-sized, therefore, the exhaust emission flowrate (in cubic feet per minute, cfm) was estimated to be at 10,000 cubic feet per minute (cfm) for all APCDs.

Thermal Oxidizers

To estimate criteria pollutant emissions from thermal oxidizers, general default emission factors were used. Currently, SCAQMD permitting staff requires thermal oxidizers less than two million British thermal units (MMbtu) per hour to comply with a NOx concentration of 30 parts per million as BACT. This translates to an emission factor of 36 pounds per million cubic feet (MMcf) of natural gas used as the combustion fuel. The actual emission factors were derived from the Annual Emissions Reporting (AER) default emission factor of 130 pounds per MMcf[3]. For CO, T-VOC, PM10, and SOx, SCAQMD permitting staff uses the general AER default emission factors for all sizes of thermal oxidizers.

As shown in Table 2-2, three thermal oxidizers were identified as likely to be needed for reducing risks. To calculate the daily emissions, the number of devices is multiplied by the assumed operating schedule and the amount of natural gas consumed, and then divided by the heating value of natural gas. The result is multiplied by the criteria pollutant emission factor to determine the pounds per day of emissions. At 10,000 cfm, the amount of natural gas consumed by a thermal oxidizer is 0.488 MMBTU per hour. The heating value of natural gas is 1,050 MMBTU/MMcf.

(3 Thermal Oxidizers x 24 hrs/day x 0.488 MMBTU/hr)/(1050 MMBTU/MMcf) = 0.03 MMcf/day

Table 2-5 shows total criteria pollutant emissions generated by the facilities anticipated to install thermal oxidizers to reduce TAC emissions.

[3] SCAQMD AER Help and Support Manual, Criteria Pollutant Factors: http://www3.aqmd.gov/webappl/help/newaer/index.html

Table 2-5 Estimated Operational Emissions from Three Thermal Oxidizers

Criteria Pollutant	Emission Factor (lb/MMcf)	MMcf/day	Total Emissions (lb/day)
NO_x	130	0.03	3.90
VOC	7	0.03	0.21
CO	35	0.03	1.05
PM10	7.5	0.03	0.23
SOx	0.83	0.03	0.02

Carbon Adsorbers

As set forth in Table 2-2, approximately six carbon adsorbers were identified as needed to comply with PAR 1402. For these facilities, thermal oxidizers were not considered to be applicable as a method of controlling TAC emissions. As described in Chapter 1, the initial control efficiency of carbon adsorption equipment is extremely high. As the activated carbon becomes saturated with organic material over time, control efficiency drops until breakthrough occurs. When breakthrough occurs, the saturated carbon must be removed and either disposed of or regenerated and the solvent recovered, or removed and destroyed.

Typically, the carbon is regenerated by raising the temperature of the carbon, evacuating the bed, or both. A regenerant, either steam or a noncondensible gas, is heated and injected into the carbon bed to desorb the organic materials. This procedure can be performed daily, but may be done more or less frequently, depending on the capacity of the control unit and the concentration of the VOC being collected. The resulting heated organic mixture is vented to a condenser where the organic material is separated from the regenerant by gravity or distillation, and recycled or disposed of properly.

Regenerating carbon typically requires a combustion source using natural gas as the combustion fuel for boilers or steam generators used to heat the regenerant and/or to heat the carbon beds. Only 15 percent of the carbon bed volume collects toxic VOC emissions and a typical carbon bed is sized to reduce 55 pounds of VOC per day. Based on these two characteristics, a typical carbon bed size is approximately 400 pounds (55/0.15 = 400). According to the Standard Handbook of Environmental Engineering (Corbitt, 1990), the projected natural gas fuel use is 5.5 scf per pound of carbon. For a worst case scenario, the carbon bed is assumed to be regenerated four times per day. From the calculation below, the amount of natural gas required per day is 0.053 MMcf.

(400 lbs C) x (5.5 scf/lb C per regen) x (4 regen/day) x (6 Carbon Adsorbers) = 0.053 MMcf/day

Using emission factors from the SCAQMD's AER Program, the projected criteria pollutant emissions from the combustion equipment used to regenerate spent carbon are listed in Table 2-6.

Table 2-6 Estimated Operational Emissions from Regenerating Spent Carbon

Criteria Pollutant	AER Emission Factor (lb/MMcf)	Amount of Natural Gas Consumed (MMcf/day)	Total Emissions (lb/day)
NO_x	130	0.053	6.9
VOC	7.0	0.053	0.4
CO	35	0.053	1.9

Operation-related Mobile Source Emissions

Some types of control equipment generate waste products that will need to be disposed of properly. The wastes and controls include: spent carbon generated from the carbon adsorption process; solids and sludge from wet scrubbers; and dry solids from filtration controls. Although thermal oxidizers produce little or no waste products, this part of the air quality analysis assumed that catalytic oxidizers could be used instead of thermal oxidizers. The catalysts in catalytic oxidizers need to be replaced every few years so this potential waste product was considered to contribute to the waste transport impacts.

Any wastes generated will require delivery and transport to disposal or recycling facilities. It is assumed here that enough waste could be generated as a result of proposed project to require a "worst-case" scenario of 2 truck trips per day of the 24 affected facilities[4] installing APCDs to comply with PAR 1402. To calculate transport truck trip emissions, it is assumed that medium-duty trucks (5,000-8,500 pounds) would be used to transport waste, with two start-ups and the trucks would travel 20 miles each way.

TOTAL OPERATIONAL EMISSIONS

Total operational emissions from both stationary sources (control equipment) and mobile sources (waste disposal trucks) are shown in Table 2-7. As indicated in Table 2-7, operational emissions anticipated from implementing PAR 1402 do not exceed any significance threshold and therefore, are considered less than significant.

Table 2-7 SCAQMD Operational Criteria Pollutant Emissions

Description	CO	NOx	PM10	PM2.5	VOC	SOx
	(lb/day)					
Emissions from Thermal Oxidizers	1.05	3.90	0.23	--	0.21	0.02
Emissions from Regenerating Spent Carbon	1.86	6.89	--	--	0.37	--
Emissions from Mobile Sources[5]	0.3	1.4	0	0	0.1	0
Total Operational Emissions	3.21	12.19	0.23	0	0.68	0.02
Significance Threshold	550	55	150	55	75	150
Exceed Significance?	No	No	No	No	No	No

[4] *See Section XVII for a further discussion.*

[5] *No new permanent employees are expected for operation of the control equipment as a result of PAR 1402; therefore no worker vehicles' emissions are calculated. However, delivery and disposal of new carbon or removal of spent catalysts is expected to generate mobile source emissions.*

Indirect Criteria Pollutant Emissions from Electricity Consumption
Indirect criteria pollutant and GHG emissions are expected from the generation of electricity to operate new equipment that occurs off-site at electricity generating facilities (EGFs). Emissions from electricity generating facilities are already evaluated in the CEQA documents for those projects when they are built or modified. The analysis in Section VI. Energy b), c) and d)) demonstrates that there is sufficient capacity from power providers for the increased electricity consumption from PAR 1402 and impacts are less than significant.

III. c) Less than significant impacts.
Cumulatively Considerable Impacts
As Lead Agency, the SCAQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment. Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant[6].

This approach was upheld by the Court in *Citizens for Responsible Equitable Environmental Development v. City of Chula Vista* (2011) 197 Cal. App. 4th 327, 334. The Court determined that where it can be found that a project did not exceed the SDAPCD's established air quality significance thresholds, the City of Chula Vista properly concluded that the project would not cause a significant environmental effect, nor result in a cumulatively considerable increase in these pollutants. The court found this determination to be consistent with CEQA Guidelines §15064.7, stating, "The lead agency may rely on a threshold of significance standard to determine whether a project will cause a significant environmental effect." The court found that, "Although the project will contribute additional air pollutants to an existing nonattainment area, these increases are below the significance criteria…" "Thus, we conclude that no fair argument exists that the Project will cause a significant unavoidable cumulative contribution to an air quality impact." As in *Chula Vista*, here the District has demonstrated, when using accurate and appropriate data and assumptions, that the project will not exceed the established SCAQMD significance thresholds. See also, *Rialto Citizens for Responsible Growth v. City of Rialto* (2012) 208 Cal. App. 4th 899. Here again the court upheld the lead agency's approach to utilizing the established air quality significance thresholds to determine whether the impacts of a project would be cumulatively considerable. Thus, it may be concluded that the Project will not cause a significant unavoidable cumulative contribution to an air quality impact.

Based on the foregoing analysis, project-specific air quality impacts from PAR 1402 would not exceed air quality significance thresholds; therefore, potential adverse impacts from PAR 1402 would not be "cumulatively considerable" as defined by CEQA Guidelines §15064(h)(1) for air quality impacts. Per CEQA Guidelines §15064(h)(4), the mere existing of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that PAR 1402's incremental effects are cumulative considerable. Furthermore, in Section III.a), PAR 1402 was found not to conflict with the 2012 AQMP, which is the currently adopted regional air quality plan

[6] SCAQMD Cumulative Impacts Working Group White Paper on Potential Control Strategies to Address Cumulative Impacts From Air Pollution, August 2003, Appendix D, Cumulative Impact Analysis Requirements Pursuant to CEQA, at D-3, http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper-appendix.pdf?sfvrsn=4

for the Basin. Therefore, the cumulative impacts from PAR 1402 are considered less than significant.

III. d) No impacts.

Toxic Air Contaminants (TAC) – Construction

Localized Significance Thresholds

The localized significance threshold (LST) methodology was developed to assist lead agencies to analyze localized impacts associated with proposed projects. Since PAR 1402 affects facilities located across the region and it is unknown where future construction would be located, a LST analysis is not possible.

Diesel exhaust particulate is considered a carcinogenic and chronic TAC. Construction TAC emissions (diesel particulate matter [DPM]) may be generated from diesel exhaust emissions (i.e. heavy-duty trucks and construction equipment) at each facility and is a localized impact. Since construction is expected to last less than two months for each facility and carcinogenic health risk is estimated over a 25 year exposure period for off-site occupational receptors and a 30 year exposure period for sensitive receptors, diesel exhaust particulate from construction is not expected to generate significant adverse health risk impacts.

SCAQMD currently does not have guidance on construction Health Risk Assessments and only applies the revised OEHHA Guidelines for operational impacts.

Therefore, PAR 1402 is not expected to generate significant adverse TAC impacts from construction.

Toxic Air Contaminants (TAC) – Operation

Direct Health Risk Reductions from PAR 1402

PAR 1402 would be expected to reduce overall TAC emissions. Therefore, PAR 1402 is expected to have the benefit of reducing adverse health risk impacts from the facilities to nearby sensitive receptors.

Secondary Health Risk Impacts from PAR 1402

The operation of non-combustion APCDs, that may be needed to comply with PAR 1402, are not expected to generate any TAC emissions. These APCDs are expected to be powered by electricity and there's availability currently to meet the demand, so no new combustion emissions would be generated.

The thermal oxidizers would generate TAC emissions (i.e. benzene, formaldehyde, and polycyclic aromatic hydrocarbons**)** from the combustion of natural gas. These thermal oxidizers will be subject to SCAQMD Air Permits and toxic rules. This is a voluntary risk reduction program and any toxics from APCDs will be evaluated as part of a Risk Reduction Plan for each facility to ensure that the total facility cancer risks stay below 10 per million.

Based on the above discussion, PAR 1402 is not expected to expose sensitive receptors to substantial concentrations.

III. e) No impact.

Odor Impacts

The operation of new APCDs are not expected to generate any new odors as APCDs are not typically odor generating equipment. The new APCDs would be designed to reduce TAC emissions from facilities, which may potentially further reduce odors.

Therefore, PAR 1402 is not expected to generate significant adverse odor impacts.

III. g) and h) Less than significant impacts.

Greenhouse Gas Impacts

Global warming is the observed increase in average temperature of the earth's surface and atmosphere. The primary cause of global warming is an increase of greenhouse gas (GHG) emissions in the atmosphere. The six major types of GHG emissions are carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), sulfur hexafluoride (SF6), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs). The GHG emissions absorb longwave radiant energy emitted by the earth, which warms the atmosphere. The GHGs also emit longwave radiation both upward to space and back down toward the surface of the earth. The downward part of this longwave radiation emitted by the atmosphere is known as the "greenhouse effect."

The current scientific consensus is that the majority of the observed warming over the last 50 years can be attributable to increased concentration of GHG emissions in the atmosphere due to human activities. Events and activities, such as the industrial revolution and the increased consumption of fossil fuels (e.g., combustion of gasoline, diesel, coal, etc.), have heavily contributed to the increase in atmospheric levels of GHG emissions. As reported by the California Energy Commission (CEC), California contributes 1.4 percent of the global and 6.2 percent of the national GHG emissions (CEC, 2004). Further, approximately 80 percent of GHG emissions in California are from fossil fuel combustion (e.g., gasoline, diesel, coal, etc.).

GHGs are typically reported as CO2 equivalent emissions (CO2e). CO2e is the amount of CO2 that would have the same global warming potential (relative measure of how much heat a greenhouse gas traps in the atmosphere) as a given mixture and amount of greenhouse gas. CO2e is estimated by the summation of mass of each GHG multiplied by its global warming potential (global warming potentials: CO2 = 1, CH4 = 21, N2O = 310, etc.).[7]

Construction

Based on the same assumptions made for the criteria pollutant estimates, approximately 346 metric tons of CO2e per facility would be generated from all construction activity including: grading, site preparation, paving, equipment installation, and construction and worker vehicles. Thus, since there are 24 facilities, there will be approximately 10,378 CO2e generated from construction due to PAR 1402. Amortized over 30 years as prescribed by the SCAQMD Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans adopted by the SCAQMD Governing Board in December 2008, approximately 346 metric tons of CO2e emissions per year (see Appendix B for calculations) would be generated from construction activities over the life of the project.

[7] California Air Resource Board Conversion Table: http://www.arb.ca.gov/cc/facts/conversiontable.pdf

Operation
The operation of the HEPA filters, oxidation catalysts, and wet scrubbers are not expected to generate greenhouse gases. However, the operation of thermal oxidizers, carbon adsorbers, and delivery/disposal trucks are equal to 4,538.56 metric tons of CO2e per year.

Total GHG Emissions
PAR 1402 may result in the generation of 346 CO2e amortized metric tons of CO2e construction emissions per year and 4,538.56 metric tons of CO2e operational emissions per year. The addition of 4,884.56 metric tons of CO2e emissions is less than the SCAQMD significance threshold of 10,000 metric tons per year for CO2e from industrial projects.

Based upon these considerations, PAR 1402 would not generate significant adverse construction or operational air quality impacts and, therefore, no further analysis is required or necessary and no mitigation measures are necessary or required.

IV. BIOLOGICAL RESOURCES.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☑
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☑
c) Have a substantial adverse effect on federally protected wetlands as defined by §404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☑
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☑
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☑
f) Conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☑

Significance Criteria

Impacts on biological resources will be considered significant if any of the following criteria apply:

- The project results in a loss of plant communities or animal habitat considered to be rare, threatened or endangered by federal, state or local agencies.
- The project interferes substantially with the movement of any resident or migratory wildlife species.
- The project adversely affects aquatic communities through construction or operation of the project.

DISCUSSION

As discussed earlier under the "Environmental Checklist and Discussion", there are no expected environmental impacts from PAR 1401 and the associated PAR 1402 guidance documents, since they are administrative in nature and do not require or cause any physical damage to the environment. A discussion of impacts from PAR 1402 are discussed below.

IV. a), b), c), & d) No Impact. All of the affected units operating at existing facilities are located primarily in developed industrial areas, which have already been greatly disturbed and paved. These areas currently do not support riparian habitat, federally protected wetlands, or migratory corridors. Additionally, special status plants, animals, or natural communities are not expected to be found within close proximity to the affected facilities. Therefore, PAR 1402 would have no direct or indirect impacts that could adversely affect plant or animal species or the habitats on which they rely in the SCAQMD's jurisdiction. While some of the APCDs may be located at new facilities, the rule amendment does not cause the new facilities to be built. Construction of the required APCDs in itself would not have any impact on plants or animals beyond the impact of construction and operating a new source itself. The current and expected future land use development to accommodate population growth is primarily due to economic considerations or local government planning decisions. A conclusion in the Final Program EIR for the 2012 AQMP was that population growth in the region would have greater adverse effects on plant species and wildlife dispersal or migration corridors in the basin than SCAQMD regulatory activities, (e.g., air quality control measures or regulations). In addition, by reducing air pollutants, biological resources will benefit. Therefore, no impacts are anticipated.

IV. e) & f) No Impact. PAR 1402 is not envisioned to conflict with local policies or ordinances protecting biological resources or local, regional, or state conservation plans. Land use and other planning considerations are determined by local governments and no land use or planning requirements will be altered by PAR 1402. Additionally, PAR 1402 will not conflict with any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or any other relevant habitat conservation plan, and would not create divisions in any existing communities because all activities associated with complying with PAR 1402 will occur at existing industrial facilities. Therefore, no impacts are anticipated.

Based upon these considerations, significant biological resources impacts are not expected from implementing PAR 1402. Since no significant biological resources impacts were identified for any of the issues, no mitigation measures are necessary or required.

V. CULTURAL RESOURCES.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☑
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	☐	☐	☐	☑
c) Directly or indirectly destroy a unique paleontological resource, site, or feature?	☐	☐	☐	☑
d) Disturb any human remains, including those interred outside formal cemeteries?	☐	☐	☐	☑
e) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code §21074?	☐	☐	☐	☑

Significance Criteria

Impacts to cultural resources will be considered significant if:

- The project results in the disturbance of a significant prehistoric or historic archaeological site or a property of historic, cultural significance, or tribal cultural significance to a community or ethnic or social group or a California Native American tribe.
- Unique paleontological resources or objects with cultural value to a California Native American tribe are present that could be disturbed by construction of the proposed project.
- The project would disturb human remains.

DISCUSSION

As discussed earlier under the "Environmental Checklist and Discussion", there are no expected environmental impacts from PAR 1401 and the associated PAR 1402 guidance documents, since they are administrative in nature and do not require or cause any physical damage to the environment. A discussion of impacts from PAR 1402 are discussed below.

V. a) No Impact. Since construction-related activities associated with the implementation of PAR 1402 are expected to be confined within the existing footprint of the affected facilities that either have been fully developed and paved, or will be developed regardless of whether the project is approved, no impacts to historical resources are expected to occur as a result of implementing PAR 1402. Therefore, no impacts are anticipated.

V. b), c), & d) No Impact. Installing or modifying add-on controls and other associated equipment to comply with PAR 1402 may require disturbance of previously disturbed areas at the affected existing industrial facilities. However, since construction-related activities are expected to be confined within the existing footprint of the affected facilities that have been fully developed and

paved, or will be regardless of whether the project is approved, PAR 1402 is not expected to require physical changes to the environment, which may disturb paleontological or archaeological resources. Furthermore, it is envisioned that these areas are already either devoid of significant cultural resources or whose cultural resources have been previously disturbed. As noted in Section IV, the project does not cause new source construction, regardless, this will occur whether or not the project is approved. Therefore, PAR 1402 has no potential to cause a substantial adverse change to a historical or archaeological resource, directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, or disturb any human remains, including those interred outside a formal cemeteries. PAR 1402 is, therefore, not anticipated to result in any activities or promote any programs that could have a significant adverse impact on cultural resources in the District. Therefore, no impacts are anticipated.

Based upon these considerations, significant cultural resources impacts are not expected from implementing PAR 1402. Since no significant cultural resources impacts were identified for any of the issues, no mitigation measures are necessary or required.

VI. ENERGY.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Conflict with adopted energy conservation plans?	☐	☐	☐	☑
b) Result in the need for new or substantially altered power or natural gas utility systems?	☐	☐	☑	☐
c) Create any significant effects on local or regional energy supplies and on requirements for additional energy?	☐	☐	☑	☐
d) Create any significant effects on peak and base period demands for electricity and other forms of energy?	☐	☐	☑	☐
e) Comply with existing energy standards?	☐	☐	☐	☑

Significance Criteria

Impacts to energy resources will be considered significant if any of the following criteria are met:

- The project conflicts with adopted energy conservation plans or standards.
- The project results in substantial depletion of existing energy resource supplies.
- An increase in demand for utilities impacts the current capacities of the electric and natural gas utilities.
- The project uses non-renewable resources in a wasteful and/or inefficient manner.

DISCUSSION

As discussed earlier under the "Environmental Checklist and Discussion", there are no expected environmental impacts from PAR 1401 and the associated PAR 1402 guidance documents, since they are administrative in nature and do not require or cause any physical damage to the environment. A discussion of impacts from PAR 1402 are discussed below.

VI. a) & e) No impact. PAR 1402 does not require any action which would result in any conflict with an adopted energy conservation plan or violation of any energy conservation standard. PAR 1402 is not expected to conflict with adopted energy conservation plans because existing facilities would be expected to continue implementing any existing energy conservation plans.

PAR 1402 is not expected to cause new development. The local jurisdiction or energy utility sets standards (including energy conservation) and zoning guidelines regarding new development and will approve or deny applications for building new equipment at the affected facility. During the local land use permit process, the project proponent may be required by the local jurisdiction or energy utility to undertake a site-specific CEQA analysis to determine the impacts, if any, associated with the siting and construction of new development.

As a result, PAR 1402 would not conflict with energy conservation plans, use non-renewable resources in a wasteful manner, or result in the need for new or substantially altered power or natural gas systems.

VI. b), c) & d. **Less than Significant Impact.** In the event a facility may partake in this program, increased energy use would be expected (i.e. natural gas, diesel, electricity, etc.) depending on the chosen APCD. There may be an increase in electricity consumption associated with the new APCD. Diesel fuel would be consumed by construction equipment. Gasoline fuel would be consumed by the construction workers vehicles. Natural gas fuel would be consumed by the new thermal oxidizers. The following sections evaluate the various forms of energy sources affected by PAR 1402.

Construction-Related Impacts

During the construction phases, diesel and gasoline fuel will be consumed in construction equipment (e.g., cranes, backhoes, etc.) and by construction workers' vehicles traveling to and from construction sites. To estimate "worst-case" energy impacts associated with the construction phases of PAR 1402, it is assumed that the portable equipment would be operated up to 960 hours in a year (up to 8 hours per day for 120 days).

To estimate construction workers' fuel usage per round trip, it is assumed that workers' vehicles would get 20 miles to the gallon and would travel 40 miles round trip to and from the construction site in one day. Table 2-8 lists the projected energy impacts associated with the construction and installation at the three affected facilities at any given time. Please refer to Appendix B for the assumptions used to estimate fuel usage associated with the implementation of PAR 1402.

Table 2-8 Total Projected Fuel Usage for Construction Activities

Fuel Type	Year 2012 Projected Basin Fuel Demand[a] (mmgal/yr)	Fuel Usage[b] (mmgal/yr)	Total % Above Baseline	Exceed Significance?
Diesel	524	0.0014	3.0E-10	No
Gasoline	5,589	0.012	2.1E-12	No

[a] Figures taken from Table 3.3-3 of the 2012 AQMP Final EIR

[b] Estimated peak fuel usage from the implementation of the proposed amendments. Diesel usage estimates are based on portable construction equipment operation. Gasoline usage estimates are derived from workers' vehicle daily trips to and from work.

Operational Energy Impacts

Any operational natural gas impacts associated with implementing PAR 1402 are attributable to fuel consumed in thermal oxidizers used by affected facilities to reduce toxic risk. According to Table 2-2, approximately three thermal oxidizers could use some type of oxidation device to comply with the risk reduction requirements in PAR 1402. To estimate natural gas fuel usage from thermal oxidizer operation, it is assumed that the three units (one unit per facility) would operate twenty-four hours per day, seven days per week, 52 weeks per year and fire natural gas only. At an exhaust emission flow rate of 10,000 cfm, the amount of natural gas consumed is 0.488 MMBTU/hr and 28 kW of instantaneous power.

(3 Thermal Oxidizers x 24 hrs/day x 7 days/wk x 52 wks/yr x 0.488 MMBTU/hr)/(1050 MMBTU/MMcf) = 12.18 MMcf per year or 0.03 MMcf/day

Table 2-9 lists the projected natural gas impacts associated with the operational phase of the proposed amendments. The natural gas usage from PAR 1402 is negligible compared to the demand of natural gas available in the district.

Table 2-9 Total Projected Natural Gas Usage for Thermal Oxidizer Operations

Year	Projected Regional Natural Gas Demand[a] (mmcf/day)	Project Total Natural Gas Usage[b] (mmcf/day)	Total Impact % of Capacity	Significant?
2010	493	0.03	0.006	No

[a] Figures taken from Table 3.3-6 of the 2012 AQMP Final EIR-Commercial Sector
[b] Estimated natural gas usage from the implementation of PAR 1402.

Electricity Impacts

There will be additional electricity usage for the new APCDs. Electrical energy impacts associated with ancillary equipment (e.g., fans, motors, etc.) used in conjunction with the three thermal oxidizers, six HEPA filters, six carbon adsorbers, and ten wet scrubbers will need 25 blowers. As shown in Table 2-10, the additional electricity consumption is less than significant.

Table 2-10 PARs Additional Electricity Consumption

Energy	Consumption (GW-h)
25 Blowers (100 bhp@ 0.001788 GW-h) x 25	0.045
SCAQMD District Electrical Demand[1]	113,109
Total Impact % of Capacity	**3.0E-5**
Significant?	**No**

[1]AQMP 2012 TABLE 3.3-1 2011 Electricity Use GWh (Aggregated, includes self generation and renewables)

Therefore, operational activities associated with the implementation of PAR 1402 will not result in the need for new or substantially altered power systems, will not result in substantial depletion of existing energy resource supplies; nor will significant amounts of electricity or fuel be needed when compared to existing supplies. Therefore, impacts are less than significant.

Based upon these considerations, significant adverse energy impacts are not anticipated. Therefore, no further analysis or mitigation measures are required or necessary.

VII. GEOLOGY AND SOILS.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☐	☑
• Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	☐	☑
• Strong seismic ground shaking?	☐	☐	☐	☑
• Seismic–related ground failure, including liquefaction?	☐	☐	☐	☑
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☑	☐
c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☑
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☑
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☑

Significance Criteria

Impacts on the geological environment will be considered significant if any of the following criteria apply:

- Topographic alterations would result in significant changes, disruptions, displacement, excavation, compaction or over covering of large amounts of soil.
- Unique geological resources (paleontological resources or unique outcrops) are present that could be disturbed by the construction of the proposed project.
- Exposure of people or structures to major geologic hazards such as earthquake surface rupture, ground shaking, liquefaction or landslides.

- Secondary seismic effects could occur which could damage facility structures, e.g., liquefaction.
- Other geological hazards exist which could adversely affect the facility, e.g., landslides, mudslides.

DISCUSSION

As discussed earlier under the "Environmental Checklist and Discussion", there are no expected environmental impacts from PAR 1401 and the associated PAR 1402 guidance documents, since they are administrative in nature and do not require or cause any physical damage to the environment. A discussion of impacts from PAR 1402 are discussed below.

VII. a) No Impact. Since PAR 1402 would result in construction activities at existing facilities located in developed industrial settings to install or modify control equipment, little site preparation is anticipated that could adversely affect geophysical conditions in the jurisdiction of the SCAQMD. While some APCDs may be installed at new facilities, the project does not cause the new facility construction. Southern California is an area of known seismic activity. Accordingly, the installation of add-on controls at existing or new affected facilities to comply with PAR 1402 is expected to conform to the Uniform Building Code and all other applicable state and local building codes. As part of the issuance of building permits, local jurisdictions are responsible for assuring that the Uniform Building Code is adhered to and can conduct inspections to ensure compliance. The Uniform Building Code is considered to be a standard safeguard against major structural failures and loss of life. The basic formulas used for the Uniform Building Code seismic design require determination of the seismic zone and site coefficient, which represents the foundation condition at the site. The Uniform Building Code requirements also consider liquefaction potential and establish stringent requirements for building foundations in areas potentially subject to liquefaction. Thus, PAR 1402 would not alter the exposure of people or property to geological hazards such as earthquakes, landslides, mudslides, ground failure, or other natural hazards. As a result, substantial exposure of people or structures to the risk of loss, injury, or death involving the rupture of an earthquake fault, seismic ground shaking, ground failure or landslides is not anticipated.

VII. b) Less than Significant Impact. Since add-on controls will be installed at existing developed facilities, during construction of PAR 1402, a less than significant impact exists for temporary erosion resulting from grading activities, if required (controls included as part of new facilities are not expected to cause erosion or excavating beyond that otherwise resulting from constructing the new facility). These activities are expected to be minor since the existing facilities are generally flat and have previously been graded and paved. Further, wind erosion is not expected to occur to any appreciable extent, because operators at dust generating sites would be required to comply with the best available control measure (BACM) requirements of SCAQMD Rule 403 – Fugitive Dust. In general, operators must control fugitive dust through a number of soil stabilizing measures such as watering the site, using chemical soil stabilizers, revegetating inactive sites, etc. PAR 1402 involves the installation or modification of add-on control equipment at existing facilities, so that grading could be required to provide stable foundations. Potential air quality impacts related to grading are addressed elsewhere in this EA (as part of construction air quality impacts). No unstable earth conditions or changes in geologic substructures are expected to result from implementing PAR 1402. Therefore, impacts are less than significant.

VII. c) No Impact. Since PAR 1402 will affect existing facilities, it is expected that the soil types present at the affected facilities will not be made further susceptible to expansion or liquefaction. Furthermore, subsidence is not anticipated to be a problem since only minor excavation, grading, or filling activities are expected occur at affected facilities. Additionally, the affected areas are not envisioned to be prone to new landslide impacts or have unique geologic features since the affected equipment units are located at existing facilities in industrial areas. Controls installed at new facilities would not increase these risks beyond those resulting from the new facility itself. Therefore, no impacts are anticipated.

VII. d) & e) No Impact. Since PAR 1402 will affect equipment units at existing facilities located in industrial zones, it is expected that people or property will not be exposed to new impacts related to expansive soils or soils incapable of supporting water disposal. Further, typically each affected facility has some degree of existing wastewater treatment systems that will continue to be used and are expected to be unaffected by PAR 1402. Sewer systems are available to handle wastewater produced and treated by each affected facility. Each existing facility affected by PAR 1402 does not require installation of septic tanks or alternative wastewater disposal systems. As a result, PAR 1402 will not require facility operators to utilize septic systems or alternative wastewater disposal systems. Thus, implementation of PAR 1402 will not adversely affect soils associated with a septic system or alternative wastewater disposal system. Therefore, no impacts are anticipated.

Based upon these considerations, significant geology and soils impacts are not expected from the implementation of PAR 1402. Since no significant geology and soils impacts were identified for any of the issues, no mitigation measures are necessary or required.

VIII. HAZARDS AND HAZARDOUS MATERIALS.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, and disposal of hazardous materials?	☐	☐	☑	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset conditions involving the release of hazardous materials into the environment?	☐	☐	☑	☐
c) Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☑	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would create a significant hazard to the public or the environment?	☐	☐	☑	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public use airport or a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☑
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☑
g) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☑
h) Significantly increased fire hazard in areas with flammable materials?	☐	☐	☑	☐

Significance Criteria

-
- Exposure to hazardous chemicals in concentrations equal to or greater than the Emergency Response Planning Guideline (ERPG) 2 levels.

DISCUSSION

As discussed earlier under the "Environmental Checklist and Discussion", there are no expected environmental impacts from PAR 1401 and the associated PAR 1402 guidance documents, since they are administrative in nature and do not require or cause any physical damage to the environment. A discussion of impacts from PAR 1402 are discussed below.

VIII. a) & b) Less Than Significant Impact. The facilities affected by PAR 1402 are currently located in urbanized industrial or commercial areas. PAR 1402 will increase the amount of captured toxic emissions through the use of additional air pollution control equipment. Thus, the capture of these emissions would reduce toxic exposure to the public and the environment.

Oxidation systems can be susceptible to compressor failure and flame flashbacks, particularly during startup and shutdown. As a result, oxidation systems could pose potential hazard risks primarily to workers or to a lesser extent the public in the event of explosions or fires. Oxidation systems historically have a good safety record when operated properly according to the manufacturers' instruction. Proper tune-up and maintenance is also important and necessary to avoid failures or explosions. When installed, operated, and maintained properly, oxidation systems are not expected to create fire or explosion hazards to workers or the public in general.

Operation of a carbon adsorption control system has potential hazard risks, primarily during the desorption cycle when there is a slight risk of explosion or release of T-VOC into the atmosphere. Carbon adsorption systems may also represent a fire risk during operation when carbon particles are saturated with solvent. Although most halogenated hydrocarbons have low flammability potential, use of such solvents is expected to decrease due to implementation of regulations to prevent global warming and stratospheric ozone depletion. Therefore, fire risks associated with carbon adsorption systems could differ depending upon the solvents used in place of halogenated compounds. Further, hazard risks would depend on the flammability of the material, concentration of T-VOC adsorbed into the activated carbon, ambient oxygen levels, characteristics of the specific system, and the operating conditions. Additionally, use of carbon adsorption units may concentrate hazardous organic compounds into the spent carbon, requiring recycling or disposal. This practice may generate environmental hazards during handling and disposal.

The engineering specifications for a carbon adsorption unit are typically designed to guard against risks by including an energy balance, which is an acceptable range of temperatures for the carbon bed. Good engineering practice means this range of temperatures should not exceed the lower explosive limit (LEL) of the compound(s) being adsorbed. There is little risk of fire if the LEL is not exceeded.

In addition to following good engineering practice for both thermal oxidizers and carbon adsorption systems, Health and Safety Code §25506 specifically requires all businesses handling hazardous materials to submit a business emergency response plan to assist local administering agencies in the emergency release or threatened release of a hazardous material. Business emergency response plans generally require the following:

* Identification of individuals who are responsible for various actions, including reporting, assisting emergency response personnel and establishing an emergency response team;

* Procedures to notify the administering agency, the appropriate local emergency rescue personnel, and the California Office of Emergency Services;

* Procedures to mitigate a release or threatened release to minimize any potential harm or damage to persons, property or the environment;

* Procedures to notify the necessary persons who can respond to an emergency within the facility;

* Details of evacuation plans and procedures;

* Descriptions of the emergency equipment available in the facility;

* Identification of local emergency medical assistance; and

* Training (initial and refresher) programs for employees in:

    1. The safe handling of hazardous materials used by the business;

    2. Methods of working with the local public emergency response agencies;

    3. The use of emergency response resources under control of the handler;

    4. Other procedures and resources that will increase public safety and prevent or mitigate a release of hazardous materials.

In general, every county or city and all facilities using a minimum amount of hazardous materials are required to formulate detailed contingency plans to eliminate, or at least minimize, the possibility and effect of fires, explosion, or spills. In conjunction with the California Office of Emergency Services, local jurisdictions have enacted ordinances that set standards for area and business emergency response plans. These requirements include immediate notification, mitigation of an actual or threatened release of a hazardous material, and evacuation of the emergency area.

Further, all hazardous materials are expected to be used in compliance with established OSHA or Cal/OSHA regulations and procedures, including providing adequate ventilation, using recommended personal protective equipment and clothing, posting appropriate signs and warnings, and providing adequate worker health and safety training.

When taken together, the above regulations provide comprehensive measures to reduce hazards of explosive or otherwise hazardous materials. Compliance with these and other federal, state and local regulations and proper operation and maintenance of equipment should ensure the potential for explosions or accidental releases of hazardous materials is less than significant.

Each facility is already equipped with at least one APCD. Hazardous material is already properly transported for treatment offsite and/or out of the Basin. The additional hazardous material captured by the new air pollution control systems would be hauled off to a hazardous landfill,

which is what the facilities are currently doing. Hence, no new significant hazards are expected to the public or environment through its routine transport, use and disposal.

Therefore, PAR 1402 is not expected to create a significant hazard to the public or environment through reasonably foreseeable upset conditions involving the release of hazardous materials into the environment and the impact is considered less than significant.

VIII. c) Less Than Significant Impact. There are six affected facilities located within a quarter mile of any school. However, it is expected that these facilities near schools are taking the appropriate and required actions to ensure proper handling of hazardous or acutely hazardous materials, substances or wastes within one-quarter mile of an existing or proposed school.

Each facility is already equipped with at least one APCD. Hazardous material should be already properly handled to comply with all of the appropriate rules and regulations (i.e. DOT, DTSC, EPA, etc) for treatment offsite and/or out of the Basin. PAR 1402 does not change non-conformance with any applicable hazardous regulations.

In addition to complying with hazardous regulations, SCAQMD has public notification procedures (Rule 212- Standards for Approving Permits and Issuing Public Notice) prior to granting facilities a Permit to Construct or permit modification for facilities near a school. Rule 212 informs and makes the students of affected schools aware of any proposed air pollution emitting equipment. Therefore, impacts are less than significant.

VIII. d) Less Than Significant Impact. Government Code §65962.5 refers to the "Hazardous Waste and Substances Site List," which is a list of facilities that may be subject to the Resource Conservation and Recovery Act (RCRA) corrective action program. There are eleven affected facilities that are included on the list prepared by the Department of Toxic Substances Control (DTSC) pursuant to Government Code §65962.5, some of the facilities are included on a list of RCRA-permitted sites that require corrective action as identified by DTSC. Furthermore, some of the affected facilities may be subject to corrective action under the Spill Cleanup Program (SCP) formerly "Spills, Leaks, Investigation & Cleanup (SLIC) Program" administered by the Regional Water Quality Control Board (RWQCB) pursuant to California Water Code §13304.

In the event that the installation of new or modification of existing air pollution control equipment would involve soil disturbing activities such as grading and excavation during construction of the proposed project, there is the potential for uncovering some contaminated soil. Contaminated soil is defined in SCAQMD Rule 1166 - Volatile Organic Compound Emissions From Decontamination of Soil, as soil with the potential to meet or exceed a VOC concentration of 50 ppmv. Rule 1166 includes requirements for SCAQMD notification at least 24 hours prior to the start of excavation activities, monitoring (at least once every 15 minutes, within three inches of the excavated soil surface), as well as implementation of a mitigation plan when VOC-contaminated soil is detected. To ensure compliance with SCAQMD Rule 1166, the affected facility or a construction contractor will need to obtain a pre-approved SCAQMD Rule 1166 VOC-Contaminated Soil Mitigation Plan (Plan) in order to assure that fugitive emissions will be controlled prior to the start of excavation activities. In general, a SCAQMD Rule 1166 Plan will require the contaminated soil pile to be covered with heavy plastic sheeting and will include watering requirements to assure the soil remains moist and will require removal of the VOC-contaminated soils from the disturbed site within 30 days from the time of excavation.

Soil remediation activities are also under the jurisdiction of the RWQCB and are implemented via a Soil Management Plan for the management of small quantities of contaminated soil. Following SCAQMD approval of a Rule 1166 Plan, a Soil Management Plan will need to be submitted to the RWQCB for approval. The RWQCB, when considering the Soil Management Plan, relies on the analysis in this CEQA document and the SCAQMD Rule 1166 Plan.

In the event that any excavated soils contain concentrations of certain substances, such as heavy metals and hydrocarbons, the handling, processing, transportation and disposal of the contaminated soil would also be subject to applicable hazardous waste regulations (i.e., Title 22 of the California Code of Regulations and other local and federal rules). Title 22, Division 4.5 - Environmental Health Standards for the Management of Hazardous Waste has multiple requirements for hazardous waste characterization, handling, transport, and disposal, such as requirements to use approved disposal and treatment facilities, to use certified hazardous waste transporters, and to have manifests for tracking the hazardous materials. If discovered, contaminated excavated soil would be properly characterized to determine an appropriate offsite processing method(s). These methods may include recycling of the soil if it is considered a non-hazardous waste, off-site treatment to reduce the contaminant concentrations to non-hazardous levels so that the treated soil could be used as landfill cover, or disposal as a hazardous waste at a permitted hazardous waste facility.

In addition, there are other regulatory requirements that address the discovery and remediation of contaminated sites, including the discovery of such sites during construction activities. Further, health and safety plans, worker training, and various other activities which serve to protect workers from exposure to contamination are also required. The following federal and state regulatory requirements are specific to worker protection and contaminated soil discovery:

- Hazardous Waste Operations and Emergency Response Standard (HAZWOPER, Fed-OSHA, 29 CFR 1910.120 and Cal-OSHA HAZWOPER, 8 CCR 5192) including the requirements for health and safety plans, worker training, evaluation of the potential for chemical exposure, and physical hazards at the site.

- Resource Conservation and Recovery Act and Associated Hazardous and Solid Waste Amendments (40 CFR 260) are the federal laws and regulations that govern the generation, transportation, treatment, and disposal of hazardous waste.

- Hazardous Waste Control Law (California Health and Safety Code, Chapter 6.5) governs the generation, transportation, treatment, and disposal of hazardous waste.

- Cal-OSHA Construction Worker Safety Orders in Title 8 CCR including Permissible Exposure Levels (8 CCR 5155), injury and illness prevention plans, and workplace safety.

Hazardous wastes from the existing affected facilities are required to be managed in accordance with applicable federal, state, and local rules and regulations. Thus, while the types of additional waste that may be generated from implementing the proposed project could potentially change from the existing setting, the affected facilities would still be required to comply with all of the aforementioned regulations. For example, if the use of a new or increased use of an existing catalyst is needed to operate the installed or modified air pollution control equipment, for those affected facilities which already use catalyst for other operational activities on-site, the additional

collected spent catalyst will continue to be handled in the same manner as currently handled such that it will be disposed and/or recycled at approved facilities. Further, if any of other affected facilities are new to handling catalyst waste, the same disposal/recycling procedures are expected to be followed.

For any affected facility that is designated pursuant to Government Code §65962.5 as a large quantity generator of hazardous waste, complying with the proposed project will not alter in any way how each facility would manage their hazardous wastes and each affected facility would be expected to continue to be managed in accordance with all applicable federal, state, and local rules and regulations. Similarly, for any affected facility that is not designated pursuant to Government Code §65962.5 as a large quantity generator, implementing the proposed project would not change a facility's status regarding hazardous waste generation. Thus, implementing the proposed project would not be expected to interfere with site cleanup activities or create additional site contamination. Thus, for the aforementioned reasons, less than significant hazards impacts from the soil disturbing activities as well as the disposal and/or recycling of hazardous materials are expected from implementing the proposed project. Therefore, impacts are less than significant.

VIII. e) No Impact. Federal Aviation Administration, 14 CFR Part 77 – Safe, Efficient Use and Preservation of the Navigable Airspace[8], provides information regarding the types of projects that may affect navigable airspace. Projects may adversely affect navigable airspace if they involve construction or alteration of structures greater than 200 feet above ground level within a specified distance from the nearest runway or objects within 20,000 feet of an airport or seaplane base with at least one runway more than 3,200 feet in length and the object would exceed a slope of 100:1 horizontally (100 feet horizontally for each one foot vertically from the nearest point of the runway).

Construction activities from implementing the proposed project are expected to occur within the existing confines of the affected facilities. However, some of these facilities may be located within two miles of an airport (either public or private) and are located within an airport land use plan. Nonetheless, the installation of the toxic control devices is expected to be constructed according to the all appropriate building, land use and fire codes and operated at a low enough height relative to existing flight patterns so that the structure would not interfere with plane flight paths consistent with Federal Aviation Regulation, Part 77. Such codes are designed to protect the public from hazards associated with normal operation. Therefore, the proposed project is not expected to result in a safety hazard for people residing or working in the area of the affected facilities even if construction would occur within the vicinity of an airport. Further, since no significant impacts were identified for this issue, no mitigation measures are necessary or required.

VIII. f) No Impact. Emergency response plans are typically prepared in coordination with the local city or county emergency plans to ensure the safety of the public (surrounding local communities), and the facility employees as well. PAR 1402 would not impair implementation of, or physically interfere with any adopted emergency response plan or emergency evacuation plan. It is expected that the existing affected facilities already have an emergency response plan in place, where required. The addition of air pollution control equipment is not expected to require

[8] Department of Transportation. Federal Aviation Administration, 14 CFR Part 77 [Docket No. FAA–2006–25002; Amendment No. 77–13] RIN 2120–AH31. *Safe, Efficient Use and Preservation of the Navigable Airspace*. 42296 Federal Register / Vol. 75, No. 139 / Wednesday, July 21, 2010 / Rules and Regulations. http://www.gpo.gov/fdsys/pkg/FR-2010-07-21/pdf/2010-17767.pdf.

modification of the existing emergency response plan at the affected facilities. Thus, PAR 1402 is not expected to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan and no impacts are anticipated.

VIII. g) No Impact. It is not known if the affected facilities are adjacent to wildlands. However, PAR 1402 does not result in any new or relocated facilities adjacent to wildland areas. Therefore, no impacts are anticipated.

PAR 1402 would also not increase the existing risk of fire hazards in areas with flammable brush, grass, or trees. No substantial or native vegetation typically exists on or near the affected facilities. So PAR 1402 is not expected to expose people or structures to wild fires. Therefore, no significant increase in fire hazards is expected at the affected facilities associated with PAR 1402.

VIII. h) Less Than Significant Impact. The three thermal oxidizers may have a risk of flammability because of the open burner. However, operators must comply with the Uniform Fire Code and Uniform Building Code. These codes set standards intended to minimize risks from flammable or otherwise hazardous materials. Local jurisdictions are required to adopt the uniform codes or comparable regulations. Local fire agencies require permits for the use or storage of hazardous materials and permit modifications for proposed increases in their use. Permit conditions depend on the type and quantity of the hazardous materials at the facility. Permit conditions may include, but are not limited to, specifications for sprinkler systems, electrical systems, ventilation, and containment. The fire departments make annual business inspections to ensure compliance with permit conditions and other appropriate regulations. Further, businesses are required to report increases in the storage or use of flammable and otherwise hazardous materials to local fire departments. Local fire departments ensure that adequate permit conditions are in place to protect against potential risk of upset. PAR 1402 would not change the existing requirements and permit conditions. Therefore, PAR 1402 is not expected to create a significant hazard to the public or environment through reasonably foreseeable upset conditions involving the release of hazardous materials into the environment and impacts are less than significant.

Based upon these considerations, significant adverse hazards and hazardous materials impacts are not anticipated. Therefore, no further analysis or mitigation measures are required or necessary.

IX. HYDROLOGY AND WATER QUALITY.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Violate any water quality standards, waste discharge requirements, exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board, or otherwise substantially degrade water quality?	☐	☐	☑	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☑	☐
c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in substantial erosion or siltation on- or off-site or flooding on- or off-site?	☐	☐	☑	☐
d) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☑	☐
e) Place housing or other structures within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, which would impede or redirect flood flows?	☐	☐	☐	☑
f) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam, or inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☑

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
g) Require or result in the construction of new water or wastewater treatment facilities or new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☑	☐
h) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☑	☐
i) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☑	☐

Significance Criteria

Potential impacts on water resources will be considered significant if any of the following criteria apply:

Water Demand:

- The existing water supply does not have the capacity to meet the increased demands of the project, or the project would use more than 262,820 gallons per day of potable water.
- The project increases demand for total water by more than five million gallons per day.

Water Quality:

- The project will cause degradation or depletion of ground water resources substantially affecting current or future uses.
- The project will cause the degradation of surface water substantially affecting current or future uses.
- The project will result in a violation of National Pollutant Discharge Elimination System (NPDES) permit requirements.
- The capacities of existing or proposed wastewater treatment facilities and the sanitary sewer system are not sufficient to meet the needs of the project.
- The project results in substantial increases in the area of impervious surfaces, such that interference with groundwater recharge efforts occurs.
- The project results in alterations to the course or flow of floodwaters.

DISCUSSION

As discussed earlier under the "Environmental Checklist and Discussion", there are no expected environmental impacts from PAR 1401 and the associated PAR 1402 guidance documents, since they are administrative in nature and do not require or cause any physical damage to the environment. A discussion of impacts from PAR 1402 are discussed below.

IX. a) & g) Less Than Significant Impact. PAR 1402 is not expected to alter any existing wastewater treatment requirements or otherwise substantially degrade water quality that the requirements are meant to protect because the small volume expected through the APCDs should not warrant a modification to their existing permit.

The potential increase in wastewater volume generated by the proposed amendments is well within the existing and projected overall capacity of POTWs in the district. If PAR 1402 does exceed a facilities' wastewater discharge limit, the POTW may deem that a secondary peak permit could be required to allow the discharge during non-peak hours. Significance thresholds for industrial wastewater discharge are determined by its impact to the affected sewer system. Therefore, wastewater impacts associated with the disposal of waterborne clean-up waste material generated from implementing the proposed amendments are less than significant.

IX. b) & h) Less Than Significant Impact. As identified in Table 2-2, the two groups of controls that have the potential to increase water demand from PAR 1402 are carbon adsorption and wet scrubbers. The removal of organic material from spent carbon from carbon adsorbers may involve the use of a steam stripping application. The steam/organic mixture is vented to a condenser where the mixture is cooled. The mixture can either be disposed of or the water can be separated from the organic mixture by decanting or distillation.

The absorption process involves the transfer of components from a gas stream into a liquid form. The choice of absorbent is dependent on the physical properties of the pollutants to be controlled. Water can be used as an absorbent media for soluble gases. There are typically two modes of operation for an absorption process: simple and reclaiming/recycling. The simple process uses a single-liquid-pass system, where the water containing the toxic emission is disposed of directly after exiting the absorber. The water absorbent would need to be replaced periodically. In the complex process, the toxic component is removed or stripped from the water, and the water is recirculated into the system. In order for an absorption process to function efficiently, a certain volume of the water/toxic solution must be removed at a steady rate. The portion that is removed, which is termed the wet scrubber blowdown, constitutes the wastewater component of the process. The water that is removed must also be replaced.

According to Table 2-2, 16 new wet scrubbers and carbon adsorption systems will be needed to comply with PAR 1402. For the purposes of this analysis, an average emission exhaust flowrates was evaluated to estimate potential water demand generated by the proposed amendments. The flowrate evaluated are 10,000 CFM (Table 2-11).

If all of the 16 APCDs are assumed to be in full twenty-four hours operation, it is assumed that the control equipment will be able to handle a flowrate of 10,000 CFM, as much as 165,000 gallons per day [0.17 million gallons per day (MMgal/day)] may be utilized. This incremental daily increase in water demand anticipated for PAR 1402 is negligible (5.22E-7%) compared to the total SCAQMD supply of 9.8 million acre-feet (MAF) or 3,193,344 million gallons for 2012. Further, this incremental increase in water demand does not exceed the SCAQMD's significance threshold

of potable water of 262,820 gallons per day and total water of 5,000,000 gallons per day and, therefore, is not considered to be significant.

Table 2-11 Wastewater Discharge Volumes/Freshwater Demand From Carbon Adsorption and Wet Scrubbing

	AVERAGE SYSTEM FLOWRATE
WASTEWATER STREAM TYPE	**10,000 CFM**
Wet Scrubber blowdown (MMgal/day)[a]	0.039 - 0.214
Wet Scrubber sludge dewatering (MMgal/day)[b]	0.005
Carbon Adsorption stream stripping condense (MMgal/day)[c]	0.0004 – 0.0006
Total Wastewater discharge (MMgal/day)[d]	0.044 – 0.220

a Assumes 0.75 - 3.7 gal min per 1,000 CFM recirculation rate, 10 percent blowdown, fourteen units.

b Assumes wet scrubber dewatered sludge 20 percent solids, 90-98 percent control efficiency.

c Assumes 3/8 - 1/2 gal water per pound VOC collected, eight units

d Equal to additional freshwater demand.

PAR 1402 would not require the use of groundwater. The facilities use potable water that is treated in their respective on-site wastewater treatment, reused, and then directed to the sanitary sewer.

Therefore, it would not substantially deplete groundwater supplies, or interfere substantially with groundwater recharge, or the additional water usage from the affected facilities would be negligible. Therefore, impacts are less than significant.

IX. c) & d) Less Than Significant Impact. PAR 1402 will result in additional APCDs installed on equipment at existing commercial or industrial facilities. Since PAR 1402 will only affect existing facilities, it is not expected to have significant adverse effects on any existing drainage patterns, or cause an increase rate or amount of surface runoff water that would exceed the capacity of the facilities' existing or planned storm water drainage systems.

IX. e) & f) No Impact. PAR 1402 will result in additional APCDs installed on equipment at existing commercial or industrial facilities. PAR 1402 does not include or require any new or relocated facilities to build structures that could be located in 100-year flood hazard areas or in an area where people or structures would be exposed to flooding as a result of levee or dam failure or inundation by seiche, tsunami or mudflow. Therefore, no impacts are anticipated.

IX. i) Less Than Significant Impact. Staff estimates the additional water discharge from the wet scrubbers and carbon adsorbers are expected to be 0.17 MMgal/day are from facilities that are capable of handling the waste water from these activities.

If PAR 1402 does exceed a facilities' wastewater discharge limit, the POTW may deem that a secondary peak permit could be required to allow the discharge during non-peak hours. Significance thresholds for industrial wastewater discharge are determined by its impact to the affected sewer system. Therefore, based on the above analysis, there would be adequate capacity

to serve the PAR 1402 projected demand addition to the provider's existing commitments and less than significant impacts are anticipated.

Based upon these considerations, significant adverse hydrology and water quality impacts are not anticipated from PAR 1402. Further, since no significant impacts were identified for any of these issues, no mitigation measures are necessary or required.

X. LAND USE AND PLANNING.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☑
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☑

Significance Criteria
Land use and planning impacts will be considered significant if the project conflicts with the land use and zoning designations established by local jurisdictions.

DISCUSSION
As discussed earlier under the "Environmental Checklist and Discussion", there are no expected environmental impacts from PAR 1401 and the associated PAR 1402 guidance documents, since they are administrative in nature and do not require or cause any physical damage to the environment. A discussion of impacts from PAR 1402 are discussed below.

X. a) No Impact. PAR 1402 does not require the construction of new facilities, and any physical effects that will result from PAR 1402, will occur at existing facilities located in commercial/industrial areas and would not be expected to go beyond existing boundaries. Therefore, no impacts are anticipated.

X. b) No Impact. There are no provisions in PAR 1402 that would affect land use plans, policies, or regulations. Land use and other planning considerations are determined by local governments and no land use or planning requirements will be altered by PAR 1402. All proposed construction activities are expected to occur within the confines of the existing facilities and would not affect in any way habitat conservation or natural community conservation plans, agricultural resources or operations, and would not create divisions in any existing communities. Further, no new development or alterations to existing land designations will occur as a result of the implementation of PAR 1402. Therefore, present or planned land uses in the region will not be affected as a result of implementing PAR 1402.

Based upon these considerations, significant land use planning impacts are not expected from the implementation of PAR 1402. Further, since no significant impacts were identified for any of these issues, no mitigation measures are necessary or required.

XI. MINERAL RESOURCES.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☑
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☑

Significance Criteria

Project-related impacts on mineral resources will be considered significant if any of the following conditions are met:

- The project would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
- The proposed project results in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

DISCUSSION

As discussed earlier under the "Environmental Checklist and Discussion", there are no expected environmental impacts from PAR 1401 and the associated PAR 1402 guidance documents, since they are administrative in nature and do not require or cause any physical damage to the environment. A discussion of impacts from PAR 1402 are discussed below.

XI. a) & b) No Impact. PAR 1402 does not result in new or relocated facilities, the proposed amendments are only adding APCDs to existing facilities. There are no provisions in PAR 1402 that would result in the loss of availability of a known mineral resource of value to the region and the residents of the state such as aggregate, coal, clay, shale, et cetera, or of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Based upon these considerations, significant mineral resource impacts are not expected from the implementation of PAR 1402. Since no significant mineral resource impacts were identified for any of these issues, no mitigation measures are necessary or required.

XII. NOISE.

Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of permanent noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☑	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☑	☐
c) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☑	☐
d) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public use airport or private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☑	☐

Significance Criteria

Impacts on noise will be considered significant if:

- Construction noise levels exceed the local noise ordinances or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three decibels (dBA) at the site boundary. Construction noise levels will be considered significant if they exceed federal Occupational Safety and Health Administration (OSHA) noise standards for workers.
- The proposed project operational noise levels exceed any of the local noise ordinances at the site boundary or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three dBA at the site boundary.

DISCUSSION

As discussed earlier under the "Environmental Checklist and Discussion", there are no expected environmental impacts from PAR 1401 and the associated PAR 1402 guidance documents, since they are administrative in nature and do not require or cause any physical damage to the environment. A discussion of impacts from PAR 1402 are discussed below.

XII. a), b), & c) Less Than Significant Impact. The existing noise environment at each of the affected facilities is typically dominated by noise from existing equipment onsite, vehicular traffic around the facilities, and trucks entering and exiting facility premises. Construction activities associated with implementing PAR 1402 may generate some noise associated with the use of construction equipment and construction-related traffic temporarily. Operators must comply with

their local noise ordinances for construction. However, noise from the implementation of PAR 1402 is not expected to produce noise in excess of current operations at each of the existing facilities. The operation of APCDs may add new sources of noise to each affected facility. However, control devices are not typically equipment that generate substantial amounts of noise. Nonetheless, for any noise that may be generated by the control devices, it is expected that each facility affected will comply with all existing noise control laws or ordinances. Further, Occupational Safety and Health Administration (OSHA) and California-OSHA (Cal/OSHA) have established noise standards to protect worker health. These potential noise increases are expected within the allowable noise levels established by the local noise ordinances for industrial areas, and thus are expected to be less than significant. Therefore, less than significant noise impacts are expected to result from the operation of PAR 1402.

XII. d) Less Than Significant Impact. PAR 1402 does not result in new or relocated facilities, the proposed amendments are only adding APCDs at existing facilities. However, the addition of new or modification of existing toxic control equipment would not expose people residing or working in the project area to the same degree of excessive noise levels associated with airplanes because APCDs are not typically noise generating equipment. All noise producing equipment must comply with local noise ordinances and applicable OSHA or Cal/OSHA workplace noise reduction requirements. Therefore, less than significant noise impacts are expected to occur at sites located within an airport land use plan, or within two miles of a public airport.

Based upon these considerations, significant noise impacts are not expected from the implementation of PAR 1402. Further, since no significant impacts were identified for any of these issues, no mitigation measures are necessary or required.

XIII. POPULATION AND HOUSING.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Induce substantial growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (e.g. through extension of roads or other infrastructure)?	☐	☐	☐	☑
b) Displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑

Significance Criteria

Impacts of the proposed project on population and housing will be considered significant if the following criteria are exceeded:

- The demand for temporary or permanent housing exceeds the existing supply.
- The proposed project produces additional population, housing or employment inconsistent with adopted plans either in terms of overall amount or location.

DISCUSSION

As discussed earlier under the "Environmental Checklist and Discussion", there are no expected environmental impacts from PAR 1401 and the associated PAR 1402 guidance documents, since they are administrative in nature and do not require or cause any physical damage to the environment. A discussion of impacts from PAR 1402 are discussed below.

XIII. a) and b) No Impact. PAR 1402 is not expected to involve the relocation of individuals, require new housing or commercial facilities, or change the distribution of the population. The operators of affected facilities who need to perform any construction activities to comply with PAR 1402 can draw from the large existing labor pool in the local southern California area. Further, it is not expected that the installation of new or the modification of existing toxic control equipment will require new employees during operation of the equipment. Human population within the jurisdiction of the SCAQMD is anticipated to grow regardless of implementing PAR 1402. As a result, no impacts either direct or indirect, on population growth or displacement of people is anticipated.

Based upon these considerations, no impacts on population and housing are expected from the implementation of PAR 1402. Since no significant population and housing impacts were identified for any of these issues, no mitigation measures are necessary or required.

XIV. PUBLIC SERVICES.

Would the proposal result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:	**Potentially Significant Impact**	**Less Than Significant With Mitigation**	**Less Than Significant Impact**	**No Impact**
a) Fire protection?	☐	☐	☑	☐
b) Police protection?	☐	☐	☑	☐
c) Schools?	☐	☐	☐	☑
d) Other public facilities?	☐	☐	☐	☑

Significance Criteria
Impacts on public services will be considered significant if the project results in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response time or other performance objectives.

DISCUSSION
As discussed earlier under the "Environmental Checklist and Discussion", there are no expected environmental impacts from PAR 1401 and the associated PAR 1402 guidance documents, since they are administrative in nature and do not require or cause any physical damage to the environment. A discussion of impacts from PAR 1402 are discussed below.

XIV. a) & b) Less Than Significant Impact. PAR 1402 does not result in new or relocated facilities, the proposed amendments are only adding APCDs at existing facilities. Implementation of PAR 1402 is expected to cause facility operators to install new or modify existing toxic emissions control devices, all the while continuing current operations at existing affected facilities. PAR 1402 may result in a greater demand for catalyst, scrubbing agents and other chemicals, which will need to be transported to the affected facilities to support the function of toxic emissions control equipment and stored onsite prior to use. As first responders to emergency situations, police and fire departments may assist local hazmat teams with containing hazardous materials, putting out fires, and controlling crowds to reduce public exposure to releases of hazardous materials. In addition, emergency or rescue vehicles operated by local, state, and federal law enforcement agencies, police and sheriff departments, fire departments, hospitals, medical or paramedic facilities, that are used for responding to situations where potential threats to life or property exist, including, but not limited to fire, ambulance calls, or life-saving calls, may be needed in the event of an accidental release or other emergency. While the specific nature or degree of such impacts is currently unknown, the affected facilities have existing emergency

response plans so any changes to those plans would not be expected to dramatically alter how emergency personnel would respond to an accidental release or other emergency. In addition, due the low probability and unpredictable nature of accidental releases, PAR 1402 is not expected to increase the need or demand for additional public services (e.g., fire and police departments and related emergency services, et cetera) above current levels.

No new or physically altered governmental facilities would be needed, since PAR 1402 does not result in any new or relocated facilities. Therefore, less than significant impacts are anticipated.

XIV. c) No Impact. As noted in the previous "Population and Housing" discussion, PAR 1402 is not expected to induce population growth in any way because the local labor pool (e.g., workforce) is expected to be sufficient to accommodate any construction activities that may be necessary at affected facilities and operation of new or modified toxic emissions control equipment is not expected to require additional employees. Therefore, there will be no increase in local population and thus no impacts are expected to local schools or parks.

XIV. d) No Impact. PAR 1402 is expected to result in the use of new or modified add-on control equipment for toxic control. Besides permitting the equipment or altering permit conditions by the SCAQMD, there is no need for other types of government services. PAR 1402 would not result in the need for new or physically altered government facilities in order to maintain acceptable service ratios, response times, or other performance objectives. There will be no increase in population and, therefore, no need for physically altered government facilities.

Based upon these considerations, significant public services impacts are not expected from the implementation of PAR 1402. Since no significant public services impacts were identified for any of these issues, no mitigation measures are necessary or required.

XV. RECREATION.

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☑
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment or recreational services?	☐	☐	☐	☑

Significance Criteria

Impacts to recreation will be considered significant if:

- The project results in an increased demand for neighborhood or regional parks or other recreational facilities.
- The project adversely affects existing recreational opportunities.

DISCUSSION

As discussed earlier under the "Environmental Checklist and Discussion", there are no expected environmental impacts from PAR 1401 and the associated PAR 1402 guidance documents, since they are administrative in nature and do not require or cause any physical damage to the environment. A discussion of impacts from PAR 1402 are discussed below.

XV. a) & b) No Impact. As discussed earlier under the topic of "Population and Housing," there are no provisions in PAR 1402 that would affect or increase the demand for or use of existing neighborhood and regional parks or other recreational facilities or require the construction of new or the expansion of existing recreational facilities that might have an adverse physical effects on the environment because PAR 1402 will not directly or indirectly increase or redistribute population. Based upon these considerations, including the conclusion of "no impact" for the topic of "Population and Housing," significant recreation impacts are not expected from implementing PAR 1402. Since no significant recreation impacts were identified, no mitigation measures are necessary or required.

XVI. SOLID/HAZARDOUS WASTE.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☑	☐
b) Comply with federal, state, and local statutes and regulations related to solid and hazardous waste?	☐	☐	☑	☐

Significance Criteria

The proposed project impacts on solid/hazardous waste will be considered significant if the following occurs:

- The generation and disposal of hazardous and non-hazardous waste exceeds the capacity of designated landfills.

DISCUSSION

As discussed earlier under the "Environmental Checklist and Discussion", there are no expected environmental impacts from PAR 1401 and the associated PAR 1402 guidance documents, since they are administrative in nature and do not require or cause any physical damage to the environment. A discussion of impacts from PAR 1402 are discussed below.

XVI. a) Less Than Significant Impact. Landfills are permitted by the local enforcement agencies with concurrence from the California Department of Resources Recycling and Recovery (CalRecycle). Local agencies establish the maximum amount of solid waste which can be received by a landfill each day and the operational life of a landfill. PAR 1402 would generate minimal waste from the disposal of contaminated concrete and soils that is discussed in further detail in the following paragraphs.

Affected facilities may install control equipment or implement process changes that could increase the waste products in the form of liquid or solids, and operation of control equipment such as filters, carbon adsorption, and wet scrubbers could have solid waste impacts.

Assumptions Used in the Solid Waste Analysis

This analysis of solid waste impacts assumes that safety and disposal procedures required by various agencies in the state of California will provide reasonable precautions against the improper disposal of hazardous wastes in a municipal waste landfill. Because of state and federal requirements, some facilities are attempting to reduce or minimize the generation of solid and hazardous wastes by incorporating source reduction technologies to reduce the volume or toxicity of wastes generated, including improving operating procedures, using less hazardous or nonhazardous substitute materials, and upgrading or replacing inefficient processes.

Carbon Adsorption

The amount of solid waste that may be generated by the carbon adsorption process would depend on the number of carbon adsorbers installed, the operating characteristics, and frequency of carbon replacement. Disposal of spent carbon could adversely affect solid waste disposal facilities because increased quantities of waste may be generated. In addition, spent carbon may be considered hazardous waste depending on the constituents present and their concentrations, which may require disposal in a Class I landfill.

Only six carbon adsorbers may be installed to comply with PAR 1402. The estimated spent carbon waste is 852 tons/yr[9] from those facilities installing carbon adsorbers to comply PAR 1402. It should be noted that the amounts of solid waste generated substantially overestimates solid waste impacts because most carbon is regenerated in a rotary kiln and reused. The rotary kiln typically consumes five percent of the carbon in the process, which has to be replaced.

Wet Scrubbing

It is estimated that ten wet scrubbers may be installed as a control option to comply with the proposed amendments. Assuming a 98 percent control efficiency, wet scrubbing of all metal compounds would be expected to generate a maximum volume of 92 tons per year (9.2 tons per year per wet scrubber x 10 facilities) of hazardous solids and dewatered sludge. Based on the types of facilities that would install wet scrubbers, it is likely that this waste would be concentrated with metals and would most likely need to be disposed of as a hazardous waste in a Class I landfill.

Filtration

Filtration includes usage of HEPA filters. All mixed metal compounds could be generated with the use of filtration controls at a 99.9 percent control rate. It is likely that the majority of the approximately 11.4 tons per year of minerals and silica (6 filtration systems x 1.9 tons per year per filter) that could potentially be generated by filtration devices would be used as land cover at a solid waste, Class II landfill. Otherwise, if traces of asbestos, etc. are found, the filter would need to be disposed in a Class I landfill.

Depending upon what type of control equipment is used, the total quantity of waste requiring disposal in a Class I landfill that may be generated from the disposal of spent carbon, minerals and metal compounds is 2.6 tons per day (or 955.4 tons per year) as shown in Table 2-12.

Table 2-12 Total Solid Waste Generation

Control Type	Potential # APCDs	Annual Waste per Control Device (tons/year)	Total Waste Generated (tons/year)
Carbon adsorption	6	142	852
Wet Scrubbing	10	9.2	92
Filtration	6	1.9	11.4
TOTAL WASTE GENERATED FROM PROPOSED PROJECT			**955.4 tons/yr or 2.6 tons/day**

Currently, there are three Class I landfills in California: Laidlaw Environmental in Westmoreland, Imperial County; Chemical Waste Management Corporation in Kettleman Hills, Kings County;

[9] Based on total emissions of 71 ton/yr for low and medium boiling point VOC and carbon replacement rate 2-lb carbon/lb VOC per year, assuming 5-year bed life, six permit units.

and Laidlaw Environmental, in Buttonwillow, Kern County. According to SCAQMD's 2012 AQMP, the total available capacity of each of these landfills ranges from 83,425 cubic yards (or 116,796 tons per day). With an annual disposal of 955.4 tons of carbon beds, filters, etc., the total solid/hazardous waste impact from PAR 1402 is about 0.0022 percent of the available Class I landfill capacity. The amount of hazardous waste generated by PAR 1402 will not require new Class I landfills and is not considered to be a substantial impact to existing landfill capacity. Therefore, potential hazardous waste impacts are considered less than significant.

XVI.b) Less Than Significant Impact. It is assumed that facility operators at the affected facilities comply with all applicable local, state, or federal waste disposal regulations. Implementing PAR 1402 is not expected to interfere with any affected facility's ability to comply with applicable local, state, or federal waste disposal regulations. Therefore, impacts are less than significant.

Based upon these considerations, significant adverse solid/hazardous waste impacts are not anticipated. Therefore, no further analysis or mitigation measures are required or necessary.

XVII. TRANSPORTATION/TRAFFIC.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☑	☐
b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☑	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☑
d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	☐	☐	☐	☑
e) Result in inadequate emergency access?	☐	☐	☐	☑
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☑

Significance Criteria
Impacts on transportation/traffic will be considered significant if any of the following criteria apply:
- Peak period levels on major arterials are disrupted to a point where level of service (LOS) is reduced to D, E or F for more than one month.
- An intersection's volume to capacity ratio increase by 0.02 (two percent) or more when the LOS is already D, E or F.
- A major roadway is closed to all through traffic, and no alternate route is available.
- The project conflicts with applicable policies, plans or programs establishing measures of effectiveness, thereby decreasing the performance or safety of any mode of transportation.
- There is an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system.
- The demand for parking facilities is substantially increased.
- Water borne, rail car or air traffic is substantially altered.
- Traffic hazards to motor vehicles, bicyclists or pedestrians are substantially increased.
- The need for more than 350 employees.
- An increase in heavy-duty transport truck traffic to and/or from the facility by more than 350 truck round trips per day.
- Increase customer traffic by more than 700 visits per day.

DISCUSSION
As discussed earlier under the "Environmental Checklist and Discussion", there are no expected environmental impacts from PAR 1401 and the associated PAR 1402 guidance documents, since they are administrative in nature and do not require or cause any physical damage to the environment. A discussion of impacts from PAR 1402 are discussed below.

XVII. a) & b) Less than Significant Impact
Construction
PAR 1402 is expected to require construction activities for control equipment. It has been estimated to need 9 delivery and/or disposal trucks and 12 construction worker trips on a peak construction day (during the fill phases) for the three facilities constructing at the same time. Construction is not expected to affect on-site traffic or parking. The additional 21 construction trips are less than the significance threshold of 350 round trips, therefore construction activities are not expected to cause a significance adverse impact to traffic or transportation.

Operation
Waste products may be generated from the use of several types of control technologies. Wastes could include: spent carbon generated from the carbon adsorption process; spent metal catalysts from the catalytic oxidation process; solids and sludge from wet scrubbers; and dry solids from filtration controls. The majority of wastes will likely need to be transported to disposal or recycling facilities. The catalysts in catalytic oxidizers need to be replaced every few years so this potential waste product was considered to contribute to the waste transport impacts.

For a "worst case" analysis, it is assumed that for the 24 facilities that choose to install a control device to comply with PAR 1402, these facilities at any given day would generate an additional 3 truck trips per day in the entire district additional for delivery and disposal. These potential truck trips are not expected to significantly adversely affect circulation patterns on local roadways or the level of service at intersections near affected facilities. In addition, this volume of additional daily

truck traffic is negligible over the entire area of the district. Finally, the number waste disposal transport trips substantially overestimates the number of anticipated trips because owners/operators at affected facilities may use other types of add-on control equipment that do not generate wastes and the actual volume of wastes is expected to much less than estimated here, resulting in fewer truck trips per day.

Table 2-13 Estimation of Maximum Daily Vehicle Trips

Phase	Worker Vehicles	Delivery/Disposal Trucks
Construction	12/day	9 per day[a]
Operation	N/A	3 per day[b]

[a] A maximum of 12 worker vehicles and 9 delivery/disposal trucks per day were estimated from three affected facilities peak construction

[b] A maximum of 3 delivery/disposal trucks will travel in the District for the 24 Affected Facilities

XVII. c) No Impact. Compliance with PAR 1402 will not require operators of existing facilities to construct buildings or other structures that could interfere with flight patterns so the height and appearance of the existing structures are not expected to change. Therefore, implementation of PAR 1402 is not expected to adversely affect air traffic patterns. Further, PAR 1402 will not affect in any way air traffic in the region because it will not require transport of any materials by air.

XVII. d) & e) No Impact. PAR 1402 does not involve construction of any roadways or other transportation design features, so there would be no change to current roadway designs that could increase traffic hazards. Thus, PAR 1402 is not expected to substantially increase traffic hazards or create incompatible uses at or adjacent to the affected facilities. Emergency access at the affected facilities is not expected to be impacted by PAR 1402. Further, each affected facility is expected to continue to maintain their existing emergency access. Since PAR 1402 involves short-term construction activities and operational of control equipment is not expected to increase vehicle trips, PAR 1402 is not expected to alter the existing long-term circulation patterns. PAR 1402 is not expected to require a modification to circulation, thus, no long-term impacts on the traffic circulation system are expected to occur.

XVII. f) No Impact. The affected facilities would still be expected to comply with, and not interfere with adopted policies, plans, or programs supporting alternative transportation (e.g. bicycles or buses). Since all of PAR 1402 compliance activities would occur on-site, PAR 1402 would not hinder compliance with any applicable alternative transportation plans or policies.

Based upon these considerations, significant adverse transportation/traffic impacts are not anticipated. Therefore, no further analysis or mitigation measures are required or necessary.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☑
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	☐	☐	☑	☐
c)	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☑	☐

DISCUSSION

As discussed earlier under the "Environmental Checklist and Discussion", there are no expected environmental impacts from PAR 1401 and the associated PAR 1402 guidance documents, since they are administrative in nature and do not require or cause any physical damage to the environment. A discussion of impacts from PAR 1402 are discussed below.

XVIII. a) Less than Significant Impact. As discussed in the "Biological Resources" section, PAR 1402 are not expected to significantly adversely affect plant or animal species or the habitat on which they rely because any construction and operational activities associated with affected sources are expected to occur entirely within the boundaries of existing developed facilities in areas that have been greatly disturbed and that currently do not support any species of concern or the habitat on which they rely. PAR 1402 are not expected to reduce or eliminate any plant or animal species or destroy prehistoric records of the past.

XVIII. b) Less than Significant Impact. Based on the foregoing analyses, PAR 1402 would not result in significant adverse project-specific environmental impacts. Potential adverse impacts

from implementing PAR 1402 would not be "cumulatively considerable" as defined by CEQA Guidelines §15064(h)(1) for any environmental topic because there are no, or only minor incremental project-specific impacts that were concluded to be less than significant. Per CEQA Guidelines §15064(h)(4), the mere existing of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that PAR 1402's incremental effects are cumulative considerable. SCAQMD cumulative significant thresholds are the same as project-specific significance thresholds.

This approach was upheld by the Court in *Citizens for Responsible Equitable Environmental Development v. City of Chula Vista* (2011) 197 Cal. App. 4th 327, 334. The Court determined that where it can be found that a project did not exceed the South Coast Air Quality Management District's established air quality significance thresholds, the City of Chula Vista properly concluded that the project would not cause a significant environmental effect, nor result in a cumulatively considerable increase in these pollutants. The court found this determination to be consistent with CEQA Guidelines §15064.7, stating, "The lead agency may rely on a threshold of significance standard to determine whether a project will cause a significant environmental effect." The court found that, "Although the project will contribute additional air pollutants to an existing nonattainment area, these increases are below the significance criteria…" "Thus, we conclude that no fair argument exists that the Project will cause a significant unavoidable cumulative contribution to an air quality impact." As in *Chula Vista*, here the District has demonstrated, when using accurate and appropriate data and assumptions, that the project will not exceed the established South Coast Air Quality Management District significance thresholds. See also, *Rialto Citizens for Responsible Growth v. City of Rialto* (2012) 208 Cal. App. 4th 899. Here again the court upheld the South Coast Air Quality Management District's approach to utilizing the established air quality significance thresholds to determine whether the impacts of a project would be cumulatively considerable. Thus, it may be concluded that the Project will not cause a significant unavoidable cumulative contribution to an air quality impact.

Therefore, there is no potential for significant adverse cumulative or cumulatively considerable impacts to be generated by PAR 1402 for any environmental topic.

XVIII. c) Less than Significant Impact. Based on the foregoing analyses, PAR 1402 is not expected to cause adverse effects on human beings for any environmental topic because the air quality impacts were determined to be less than the significance thresholds (See Section III-AQ), the energy demand, water demand and solid waste disposal can be met utilizing existing services (See Section VI-Energy, Section IX-Hydrology and Section XVI-Solid/Hazardous Waste) and the aesthetics, noise, hazards and public services will not be significantly impacted (See Section I-Aesthetics, Section VII-Hazards, Section XII-Noise, and Section XIV-Public Services).

As previously discussed in environmental topics I through XVIII, PAR 1402 has no potential to cause significant adverse environmental effects. Therefore, no further analysis or mitigation measures are required or necessary.

APPENDICES

APPENDIX A

PROPOSED AMENDED RULES

(Adopted May 10, 1996)(Amended May 14, 1999)(Amended May 19, 2000)
(Amended May 11, 2001)(Amended May 3, 2002) (Amended June 6, 2003)
(Amended July 9, 2004)(Amended June 3, 2005)(Amended June 9, 2006)
(Amended May 4, 2007)(Amended May 2, 2008)(Amended June 5, 2009)
(Amended May 7, 2010)(Updated July 1, 2011)(Updated July 1, 2012)
(Updated July 1, 2013)(Amended June 6, 2014)(Amended May 1, 2015)
(Updated July 1, 2016)
PAR 307.1 07-19-16

Changes to the fees are effective July 1, 2016

RULE 307.1 ALTERNATIVE FEES FOR AIR TOXICS EMISSIONS INVENTORY

(a) Purpose

California Health and Safety Code Section 44300 et seq. provides authority for the District to adopt a fee schedule to recover the cost of implementing and administering the Air Toxics "Hot Spots" Information and Assessment Act of 1987. The District will annually collect from the owner/operator of each facility meeting the criteria set forth in paragraph (b)(1), (b)(2), and (b)(3), and each owner/operator shall pay, fees which shall provide for the following:

(1) Recovery of anticipated costs to be incurred by the California Air Resources Board (CARB) and Office of Environmental Health Hazard Assessment (OEHHA) to implement and administer the Act, and any costs incurred by OEHHA or its independent contractor for review of facility risk assessments submitted to the State after March 31, 1995 under Health and Safety Code Section 44361(c).

(2) Recovery of anticipated costs to be incurred by the District to implement and administer the Act, including but not limited to the cost incurred to review emission inventory plans, emission inventory data, <u>air toxics inventory reports,</u> risk assessments, to verify plans and data, and to administer this rule<u>, Rule 1402 – Control of Toxic Air Contaminants from Existing Sources,</u> and the Air Toxics "Hot Spots" program.

(b) Applicability

Except for facilities exempted by Health and Safety Code Sections 44324, 44344.4(a), or 44380.1, this rule applies to any facility that operates in any portion of the fiscal year for which the fee is assessed and which:

(1) Manufactures, formulates, uses, or releases any of the substances listed by the State Board pursuant to Health and Safety Code Section 44321 and contained in Appendix A of the Guidelines Report, or any other substance which reacts to form a substance so listed, and releases ten (10) tons per year or greater of any criteria pollutant; ~~or~~

(2) Manufactures, formulates, uses or releases any listed substance or any other substance which reacts to form any listed substance, and which releases less than ten (10) tons per year of any criteria pollutant and falls in any class listed in Appendix E of the Guidelines Report; ~~or~~

(3) ~~i~~Is reinstated under Health and Safety Code Section 44344.7~~;~~. or

(4) Is subject to Rule 1402.

(c) Definitions

For the purpose of this rule, the following definitions shall apply:

(1) COMPLEX FACILITY means a facility that has more than five (5) processes as determined by six-digit Source Classification Codes (SCC).

(2) CRITERIA POLLUTANT means total organic gases, particulate matter, nitrogen oxides, or sulfur oxides.

(3) DIESEL ENGINE means an internal combustion engine with operating characteristics similar to the theoretical diesel combustion cycle. The regulation of power by controlling fuel supply in lieu of a throttle is indicative of a diesel (or compression ignition) engine.

(4) DIESEL ENGINE FACILITY means any facility which has a diesel engine and is not subject to any other Rule 307.1 fees.

(5) DIESEL-FUELED as defined in Rule 1470 – Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines.

(6) Diesel Particulate Matter (PM~~m~~) ~~As~~ as Defined In Rule 1470.

(7) DISTRICT means South Coast Air Quality Management District.

(8) DISTRICT TRACKING FACILITY means a facility:

(A) ~~t~~That has been prioritized by the District in accordance with Health and Safety Code Section 44360(a) using procedures that have undergone public review and that are consistent with the procedures presented in the most current version of the California Air Pollution Control Officers Association (CAPCOA) "Air Toxics 'Hot Spots' Program Facility Prioritization Guidelines~~, July 1990~~", which has

been approved by the State Board and which is incorporated by reference herein;~~, and~~

(B) ~~t~~That is required by the District to submit a quadrennial emissions inventory update pursuant to Health and Safety Code Section 44344 during the applicable fiscal year;~~,~~ and

(C) ~~w~~Whose prioritization scores for cancer and non-cancer health effects are both greater than 1.0 and equal to or less than 10.0.

(9) FACILITY has the same meaning as defined in Section 44304 of the Health and Safety Code.

(10) FACILITY PROGRAM CATEGORY means a grouping of facilities, meeting the definitions in subparagraphs (c)(1), (c)(4), ~~(c)(6),~~ (c)(8), (c)(13), (c)(14), (c)(15), (c)(18), (c)(19), (c)(20), (c)(21), (c)(22), ~~or (c)(28)~~ (c)(27), (c)(30), or (c)(31) of this rule.

~~(11) FLAT FEE means the fee charged to a facility classified as an Emergency Standby "Diesel Engine-Only" Facility.~~

(11~~2~~) GUIDELINES REPORT (Air Toxics Hot Spots Emission Inventory Criteria and Guidelines Report) is the report incorporated by reference under Section 93300.5 of this title that contains regulatory requirements for the Air Toxics Hot Spots Emission Inventory Program.

(12~~3~~) HRA TRACKING FACILITY means a facility that has been prioritized by the District in accordance with Health and Safety Code Section 44360(a) using procedures that have undergone public review and that are consistent with the procedures presented in the most current version of the CAPCOA "Air Toxics 'Hot Spots' Program Facility Prioritization Guidelines~~, July 1990~~", which has been approved by the State Board and which is incorporated by reference herein, and the greater of the facility's prioritization scores for cancer and non-cancer health effects is greater than 10.0, and meets either one of the following criteria:

(A) T~~t~~he facility has had its health risk assessment approved by the District ~~in accordance with Health and Safety Code Section 44362~~ and the risk assessment results show a total potential cancer risk, summed across all pathways of exposure and all compounds, of equal to or greater than 1.0 and less than ten (10) cases per million persons and a total hazard index for each toxicological endpoint, both acute and chronic, of less than or equal to 1.0; or

(B) ~~t~~The facility has had its health risk assessment approved by the District ~~in accordance with Health and Safety Code Section 44362~~ and the risk assessment results show a total hazard index for each toxicological endpoint, either acute or chronic, of greater than or equal to 0.1, but less than or equal to 1.0, and a total potential cancer risk, summed across all pathways of exposure and all compounds, of less than ten (10) cases per million persons.

(~~14~~13) INDUSTRY-WIDE FACILITY means a facility that qualifies to be included in an industry-wide emission inventory prepared by the District pursuant to Health and Safety Code Section 44232, or an individual facility which emits less than ten (10) tons per year of each criteria pollutant, falls within a class composed of primarily small businesses, and whose emissions inventory report was prepared by the District.

(~~15~~14) MEDIUM FACILITY means a facility that has three (3) to five (5) processes as determined by six-digit ~~Source Classification Codes (~~SCCs~~)~~.

(15) NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS) is the standard used to classify business establishments developed under the auspices of the United States Office of Management and Budget and is incorporated by reference herein.

(16) OEHHA means the Office of Environmental Health Hazard Assessment, California Environmental Protection Agency.

(17) OPERATOR means the person who owns or operates a facility or part of a facility.

(18) PRIORITIZATION SCORE GREATER THAN TEN (10.0) FACILITY means a facility that does not have an approved health risk assessment and has been prioritized by the District ~~in accordance with Health and Safety Code Section 44360(a)~~ using procedures that have undergone public review and that are consistent with the procedures presented in the most current version of the CAPCOA "Air Toxics 'Hot Spots' Program Facility Prioritization Guidelines~~, July 1990~~", which has been approved by the CARB and is incorporated by reference herein, and the greater of the facility's prioritization scores for cancer and non-cancer effects is greater than 10.0.

(19) RISK OF 10.0 TO LESS THAN 50.0 PER MILLION FACILITY means a facility that has had its health risk assessment approved by the District ~~in~~

~~accordance with Health and Safety Code Section 44362~~ and whose risk assessment results meet either of the following criteria:

(A) A~~a~~ total potential cancer risk, summed across all pathways of exposure and all compounds, of greater than or equal to 10.0, but less than 50.0 cases per million persons; or~~,~~

(B) ~~a~~A total hazard index for each toxicological endpoint, either acute or chronic, of greater than 1.0 and a total potential cancer risk, summed across all pathways of exposure and all compounds, of less than 50.0.

(20) RISK OF 50.0 TO LESS THAN 100.0 PER MILLION FACILITY means a facility that has had its health risk assessment approved by the District ~~in accordance with Health and Safety Code Section 44362~~ and whose risk assessment results show a total potential cancer risk, summed across all pathways of exposure and all compounds, of greater than or equal to 50.0, but less than 100.0 cases per million persons.

(21) RISK OF 100.0 PER MILLION OR GREATER FACILITY means a facility that has had its health risk assessment approved by the District ~~in accordance with Health and Safety Code Section 44362~~ and whose risk assessment results show a total potential cancer risk, summed across all pathways of exposure and all compounds, of greater than or equal to 100.0 cases per million persons.

(22) SIMPLE FACILITY means a facility that has one (1) or two (2) processes as determined by six-digit ~~Source Classification Codes (~~SCC~~)~~.

(23) SMALL BUSINESS for the purpose of this rule, means a facility which is independently owned and operated and has met all of the following criteria in the preceding year:

(A) The facility has ten (10) or fewer (annual full-time equivalence) employees;

(B) The facility's total annual gross receipts are less than $1,000,000; and

(C) The total annual gross receipts of the facility's California operations are less than $5,000,000.

(24) SOURCE CLASSIFICATION CODES (SCC) means number codes created by the United States Environmental Protection Agency used to identify processes associated with point sources that contribute emissions to the atmosphere.

(25) SPECIAL RISK ASSESSMENT FEE means the fee charged to facilities to cover the cost of the qualified District personnel or a qualified consultant, as determined by the Executive Officer (EO), engaged by the District under contract, in the event that the EO determines that an existing health risk assessment ~~Health Risk Assessment (HRA)~~ should be revised and the owner/operator ~~can not~~cannot perform this task without errors or delays.

~~(26) STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODE means the Standard Industrial Classification Code which classifies establishments by the type of business activity in which they are engaged, as defined by the Standard Industrial Classification Manual, 1987, published by the Executive Office of the President, Office of Management and Budget, 1987, which is herein incorporated by reference.~~

(~~27~~26) STATE COSTS means the reasonable anticipated cost which will be incurred by the CARB and OEHHA to implement and administer the Act, as shown in the District staff report.

(~~28~~27) STATE INDUSTRY-WIDE FACILITY means a facility that (1) qualifies to be included in an industry-wide emission inventory prepared by the District pursuant to Health and Safety Code Section 44323, (2) releases, or has the potential to release, less than ten tons per year of each criteria pollutant, and (3) is either of the following:

(A) ~~a~~A facility in one of the following four classes of facilities: autobody shops, as described by ~~SIC~~ NAICS Codes 441110~~5511-5521~~ or 811121~~7532~~; gasoline stations, as described by ~~SIC~~ NAICS Codes 447110 and 447190~~5541~~; dry cleaners, as described by NAICS ~~SIC~~ Code 812320~~7216~~; and printing and publishing, as described by NAICS ~~SIC~~ Codes 323111 through 323117 ~~2711-2771~~ or 511110 through 511199~~2782~~; or

(B) ~~a~~A facility that has not prepared an Individual Plan and Report in accordance with sections 44340, 44341, and 44344 of the Health and Safety Code and for which the District submits documentation for approval by the Executive Officer of the CARB, verifying that the facility meets the requirements of Health and Safety Code Section 44323(a)-(d).

(~~29~~28) SUPPLEMENTAL FEE means the fee charged, pursuant to Section 44380.5 of the Health and Safety Code, to cover the costs of the District to review a health risk assessment containing supplemental information which

was prepared in accordance with the provisions of Section 44360(b)(3) of the Health and Safety Code.

(2930) TOTAL ORGANIC GASES (TOG) means all gases containing carbon, except carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate.

(310) UNPRIORITIZED FACILITY means a facility that has not been prioritized by the District ~~in accordance with Health and Safety Code Section 44360(a)~~ using procedures that have undergone public review and that are consistent with the procedures presented in the most current version of the CAPCOA "Air Toxics 'Hot Spots' Program Facility Prioritization Guidelines~~, July 1990~~", which has been approved by the State Board and is incorporated by reference herein.

(31) VOLUNTARY RISK REDUCTION FACILITY means a facility that elected to participate in the Voluntary Risk Reduction Program pursuant to Rule 1402.

(d) Fees

All sources subject to this rule shall be assessed an annual fee pursuant to Table I of this rule.

(1) Calculation of Fees

(A) The District will establish the fee applicable to each facility for the recovery of State and District costs. The District will use State costs and District costs to calculate fees, and will take into account and allow for the unanticipated closing of businesses, nonpayment of fees, and other circumstances which would result in a shortfall in anticipated revenue; and

(B) The District will calculate fees on the basis of the Facility Program Category as set forth by July 1 of the applicable fiscal year, except for facilities excluded under subparagraph (d)(~~6~~7) of this rule.

(2) Flat Fees

(A) A facility in the State Industry-~~w~~Wide Facility Program Category, as defined in this rule, shall be assessed the fee specified in Table I.

(B) A facility in the District Tracking Program Category, as defined in this rule, will be assessed the annual fee specified in Table I to cover the cost to the District to review the facility's quadrennial emission inventory update.

(C) A facility in the ~~Emergency Standby "~~Diesel Engine~~ Only"~~ Facility Program Category, as defined in this rule, shall be assessed the annual Flat Fee specified in Table I.

(D) The maximum fee that a small business as defined in this rule shall pay is $368.02.

(E) The supplemental fee as defined in this rule, which may be assessed upon the operator of a facility, shall be no higher than $2,931.23.

(3) Special ~~Health~~ Risk Assessment Fees

When a facility's health risk assessment ~~Health Risk Assessment (HRA)~~ was prepared or revised by District personnel or a contractor engaged by the District, the owner/operator of the facility for which a health risk assessment~~Health Risk Assessment~~ is performed shall pay the fees equal to the total actual and reasonable time incurred by District, including actual contractor costs and District staff time, assessed at the hourly rate of $128.11 per person per hour or prorated portion thereof. When the health risk assessment~~Health Risk Assessment~~ is conducted or is evaluated and verified by a consultant engaged by the District or District personnel, the fees charged will be in addition to all other fees required.

(4) Voluntary Risk Reduction Facility Fees

A Voluntary Risk Reduction Facility, as defined in this rule, shall be assessed the fee specified in Table I until approval of the Final Implementation Report under Rule 1402 paragraph (j)(2). Once the Final Implementation Report is approved by the Executive Officer, the Voluntary Risk Reduction Fee shall be assessed the HRA Tracking Facility Program Category specified in Table I.

(5) Public Notifications and Meetings

When public notification is required pursuant to Rule 1402 subdivision (q), the facility owner/operator shall either directly pay or reimburse the District for costs of Public Meetings, including but not limited to venue rental, mailing, translation services, parking, security, and equipment rental.

(6~~4~~) Fee Payment and Collection; Effect of Failure to Pay

(A) The District will notify and assess the operator of each facility subject to this rule in writing of the fee due. The operator shall remit the fee to the District within sixty (60) days after the receipt of the fee assessment notice or the fee will be considered past due. For the purpose of this rule, the fee payment will be considered received by

the District if it is postmarked by the United States Postal Service on or before the due date stated on the billing notice. If the due date falls on a Saturday, Sunday, or a state holiday, the fee payment may be postmarked on the next business day following the Saturday, Sunday, or state holiday with the same effect as if it had been postmarked on the due date.

(B) If an operator fails to pay the fee within sixty (60) days of this notice pursuant to subparagraph (d)(~~5~~6)(A) of this rule, the District may assess a surcharge of not more than one hundred percent (100%) of the assessed fee, but in an amount sufficient, in the District's determination, to pay the District's additional expenses incurred by the operator's non-compliance. If an operator fails to pay the fee within 120 days after receipt of this notice, the District may initiate permit revocation proceedings. If any permit is revoked it shall be reinstated only upon full payment of the overdue fees plus any surcharge as specified in this subparagraph.

(~~5~~7) Payment to the State

The District will collect the fees assessed by or required to be assessed by this rule. After deducting the costs to the District to implement and administer the program, the District will transmit to the State Board the amount the District is required to collect for recovery of state costs as specified in Table I.

(~~6~~8) Exemptions

A facility shall be exempt from paying fees if, by July 1 of the applicable Fiscal Year, any one or more of the following criteria are met:

(A) The facility has been prioritized by the ~~District in accordance with Health and Safety Code Section 44360(a)~~ using procedures that have undergone public review, and the facility's prioritization score is less than or equal to 1.0 for both cancer and non-cancer health effects. The procedure for estimating priority of facilities were developed based on the most current approved version of ~~California Air Pollution Control Officers' Association (~~CAPCOA~~)~~ "Air Toxics "Hot Spots" Program Facility Prioritization Guidelines~~, July 1990~~", which has been approved by the State Board and is incorporated by reference herein~~and was adopted by the District Board on September 24, 1990~~.

(B) The facility had its health risk assessment approved by the District ~~in accordance with Health and Safety Code Section 44362~~ and the risk assessment results show a total potential cancer risk, summed across all pathways of exposure and all compounds, of less than one case per one million persons and a total hazard index for each toxicological endpoint, both acute and chronic, of less than 0.1. Some appropriate procedures for determining potential cancer risk and total hazard index are presented in the ~~CAPCOA "Air Toxics "Hot Spots" Program Revised 1992 Risk Assessment Guidelines, October 1993",~~ most current approved version of the OEHHA "Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments" and SCAQMD "Supplemental Guidelines for Preparation of Health Risk Assessments for the Air Toxics "Hot Spots" Information and Assessment Act", which ~~is~~ are incorporated by reference herein.

(C) The facility primarily performs printing as described by ~~SIC~~ NAICS Codes ~~2711 through 2771 or 2782~~ 323111 through 323117 or 511110 through 511199, and the facility uses an annualized average of two (2) gallons per day or less [or seventeen (17) pounds per day or less] of all graphic arts materials (deducting the amount of any water or acetone) unless the District required a health risk assessment and results show the facility would not qualify under subparagraph (d)(~~8~~6)(A) of this rule.

(D) The facility is a wastewater treatment plant as described by ~~SIC~~ NACIS Code 221320~~4952~~, the facility does not have a sludge incinerator and the maximum throughput at the facility does not exceed 10,000,000 gallons per day of effluent unless the District required a health risk assessment and results show the facility would not qualify under subparagraph (d)(~~6~~8)(A) of this rule.

(E) The facility is a crematorium for humans, animals, or pets as described by ~~SIC~~ NAICS Codes 812210, 812220, ~~7261~~ or any ~~SIC~~ NAICS Code that describes a facility using an incinerator to burn biomedical waste (animal), the facility uses propane or natural gas as fuel, and the facility annually cremates no more than 300 cases (human) or 43,200 pounds (human or animal) unless the District required a health risk assessment and results show the facility would

not qualify under subparagraph (d)(~~6~~8)(A) of this rule. Facilities using incinerators that burn biomedical waste other than cremating animals do not qualify for this exemption.

(F) The facility is primarily a boat building and repair facility or primarily a ship building and repair facility as described by NAICS ~~SIC~~ Codes 336611, 336622, 488390 or 811490~~3731 or 3732~~, and the facility uses twenty (20) gallons per year or less of coatings or is a coating operation using hand held non-refillable aerosol cans only unless the District required a health risk assessment and results show the facility would not qualify under subparagraph (d)(~~6~~8)(A) of this rule.

(G) The facility is a hospital or veterinary clinic building that is in compliance with the control requirements specified in the Ethylene Oxide Control Measure for Sterilizes and Aerators, section 93108 of this title and has an annual usage of ethylene oxide of less than 100 pounds per year if it is housed in a single story building, or has an annual usage of ethylene oxide of less than 600 pounds per year if it is housed in a multi-story building unless the District required a health risk assessment and results show the facility would not qualify under subparagraph (d)(8~~6~~)(A) of this rule.

(H) The facility was not required to conduct a risk assessment under Health and Safety Code Section 44360(b), and the District, or the facility with the concurrence of the District, has conducted a worst-case, health conservative risk assessment using screening air dispersion modeling criteria set forth in Appendix F of the Guidelines Report and has demonstrated to the satisfaction of the District that the facility's screening risk levels meet the criteria set forth in subparagraph (d)(8~~6~~)(A) of this rule.

TABLE I
FACILITY FEES BY PROGRAM CATEGORY

FACILITY PROGRAM CATEGORY	COMPLEXITY	DISTRICT FEE	STATE FEE	TOTAL FACILITY FEE
HRA Tracking*	Simple	$416.25	$67	$483.25
	Medium	$601.30	$100	$701.30
	Complex	$786.35	$134	$920.35
Unprioritized	Simple	$618.63	$402	$1,020.63
	Medium	$3,390.07	$603	$3,993.07
	Complex	$4,504.91	$804	$5,308.91
PS>10, No HRA	Simple	$5,249.21	$1,674	$6.923.21
	Medium	$5,622.20	$2,009	$7,631.20
	Complex	$5,992.31	$2,344	$8,336.31
Risk ≥10 <50 in a million or HI>1	Simple	$6,365.28	$3,014	$9,379.28
	Medium	$6,736.81	$3,349	$10,085.81
	Complex	$7,108.38	$3,684	$10,792.38
Risk ≥50 <100 in a million	Simple	$7,481.36	$4,353	$11,834.36
	Medium	$7,851.45	$4,688	$12,539.45
	Complex	$8,224.42	$5,023	$13,247.42
Risk ≥ 100 in a million	Simple	$8,597.44	$5,693	$14,290.44
	Medium	$8,967.53	$6,028	$14,995.53
	Complex	$9,344.19	$6,363	$15,707.19
Voluntary Risk Reduction	Simple	$5,249.21	$1,674	$6.923.21
	Medium	$5,622.20	$2,009	$7,631.20
	Complex	$5,992.31	$2,344	$8,336.31
District Tracking*		$230.11		$230.11
State Industry-wide		$167.57	$35	$202.57
Diesel Engine Facility	-	$125.47	-	$125.47

*HRA Tracking --- (PS>10 with HRA) Risk≥1, <10 in a million, or HI≥0.1, ≤1
**District Tracking --- Priority Score greater than 1, and equal to or less than 10
HRA --- Health Risk Assessment
HI --- Hazard Index, Acute or Chronic

(Adopted June 1, 1990)(Amended December 7, 1990)(Amended July 10, 1998)
(Amended January 8, 1999)(Amended March 12, 1999)(Amended August 13, 1999)
(Amended March 17, 2000)(Amended August 18, 2000)(Amended June 15, 2001)
(Amended May 3, 2002)(Amended February 7, 2003)(Amended May 2, 2003)
(Amended March 4, 2005)(Amended March 7, 2008)(Amended June 5, 2009)
(Amended September 10, 2010)(Amended June 5, 2015)
PAR 1401 07-19-16

RULE 1401. NEW SOURCE REVIEW OF TOXIC AIR CONTAMINANTS

(a) Purpose

This rule specifies limits for maximum individual cancer risk (MICR), cancer burden, and noncancer acute and chronic hazard index (HI) from new permit units, relocations, or modifications to existing permit units which emit toxic air contaminants listed in Table I. The rule establishes allowable risks for permit units requiring new permits pursuant to Rules 201 or 203.

(b) Applicability

(1) Applications for new, relocated, and modified permit units which were received by the District on or after June 1, 1990 shall be subject to Rule 1401. Applications shall be subject to the version of Rule 1401 that is in effect at the time the application is deemed complete. Permit units installed without a required permit to construct shall be subject to this rule, if the application for a permit to operate such equipment was submitted after June 1, 1990.

(2) This rule shall apply to new, relocated, and modified equipment identified in Rule 219 as not requiring a written permit if the risk from the equipment will be greater than identified in subparagraph (d)(1)(A), or paragraphs (d)(2) or (d)(3) in Rule 1401.

(c) Definitions

(1) ACCEPTABLE STACK HEIGHT for a permit unit is defined as a stack height that does not exceed two and one half times the height of the permit unit or two and one half times the height of the building housing the permit unit, and shall not be greater than 65 meters (213 feet), unless the applicant demonstrates to the satisfaction of the Executive Officer that a greater height is necessary.

(2) BEST AVAILABLE CONTROL TECHNOLOGY FOR TOXICS (T-BACT) means the most stringent emissions limitation or control technique which:

(A) has been achieved in practice for such permit unit category or class of source; or

(B) is any other emissions limitation or control technique, including process and equipment changes of basic and control equipment, found by the Executive Officer to be technologically feasible for such class or category of sources, or for a specific source.

(3) CANCER BURDEN means the estimated increase in the occurrence of cancer cases in a population subject to a MICR of greater than or equal to one in one million (1.0×10^{-6}) resulting from exposure to toxic air contaminants.

(4) CONTEMPORANEOUS RISK REDUCTION means any reduction in risk resulting from a decrease in emissions of toxic air contaminants at the facility that is permanent, real, quantifiable and enforceable through District permit conditions. Permit applications associated with the increase and decrease in risk must be submitted together and the reduction of risk must occur before the start of operation of the permit unit that will have an increased risk. A contemporaneous risk reduction shall be calculated based on the actual average annual emissions, as determined by facility records, and annual emissions declarations pursuant to Rule 301 as appropriate, or other data approved by the Executive Officer, whichever is less, which have occurred during the two-year period immediately preceding the date of application.

(5) FACILITY means any permit unit or grouping of permit units or other air contaminant-emitting activities which are located on one or more contiguous properties within the District, in actual physical contact or separated solely by a public roadway or other public right-of-way, and are owned or operated by the same person (or by persons under common control), or an outer continental shelf (OCS) source as determined in 40 CFR Section 55.2. Such above-described groupings, if noncontiguous, but connected only by land carrying a pipeline, shall not be considered one facility. Notwithstanding the above, sources or installations involved in crude oil and gas production in Southern California Coastal or OCS Waters and transport of such crude oil and gas in Southern California Coastal or

OCS Waters shall be included in the same facility which is under the same ownership or use entitlement as the crude oil and gas production facility on-shore.

(6) INDIVIDUAL SUBSTANCE ACUTE HAZARD INDEX (HI) is the ratio of the estimated maximum one-hour concentration of a toxic air contaminant for a potential maximally exposed individual to its acute reference exposure level.

(7) INDIVIDUAL SUBSTANCE CHRONIC HAZARD INDEX (HI) is the ratio of the estimated long-term level of exposure to a toxic air contaminant for a potential maximally exposed individual to its chronic reference exposure level. The chronic hazard index calculations shall include multipathway consideration, if applicable.

(8) MAXIMUM INDIVIDUAL CANCER RISK (MICR) is the estimated probability of a potential maximally exposed individual contracting cancer as a result of exposure to toxic air contaminants for residential receptor locations calculated pursuant to the Risk Assessment Procedures referenced in subdivision (e). The MICR for worker receptor locations shall be calculated pursuant to the Risk Assessment Procedures referenced in subdivision (e). The MICR calculations shall include multipathway consideration, if applicable.

(9) MODIFICATION means any physical change in, change in method of operation, or addition to an existing permit unit that requires an application for a permit to construct and/or operate. Routine maintenance and/or repair shall not be considered a physical change. A change in the method of operation of equipment, unless previously limited by an enforceable permit condition, shall not include:

(A) an increase in the production rate, unless such increase will cause the maximum design capacity of the equipment to be exceeded; or

(B) an increase in the hours of operation; or

(C) a change in ownership of a source; or

(D) a change in formulation of the materials processed which will not result in a net increase of the MICR, cancer burden, or chronic or acute HI from the associated permit unit.

For facilities that have been issued a facility permit pursuant to Regulation XX or a Title V permit pursuant to Regulation XXX, modification means any physical change in, change in method of operation of, or addition to an

existing individual article, machine, equipment or other contrivance which would have required an application for a permit to construct and/or operate, were the unit not covered under a facility permit or Title V permit.

(10) PERMIT UNIT means any article, machine, equipment, or other contrivance, or combination thereof, which may cause or control the issuance of air contaminants, and which requires a written permit pursuant to Rules 201 and/or 203. For facilities that have been issued a facility permit or Title V permit, a permit unit for the purpose of this rule means any individual article, machine, equipment or other contrivance which may cause or control the issuance of air contaminants and which would require a written permit pursuant to Rules 201 and/or 203 if it was not covered under a facility permit or Title V permit. For publicly-owned sewage treatment operations, each process within multi-process permit units at the facility shall be considered a separate permit unit for purposes of this rule.

(11) RECEPTOR LOCATION means

(A) for the purpose of calculating acute HI, any location outside the boundaries of the facility at which a person could experience acute exposure; and

(B) for the purpose of calculating chronic HI and MICR, any location outside the boundaries of the facility at which a person could experience chronic exposure.

The Executive Officer shall consider the potential for exposure in determining whether the location will be considered a receptor location.

(12) RELOCATION means the removal of an existing permit unit from one parcel of land in the District and installation at another parcel of land where two parcels are not in actual physical contact and are not separated solely by a public roadway or other public right-of-way. The removal of a permit unit from one location within a facility and installation at another location within the facility is a relocation only if an increase in maximum individual cancer risk in excess of one in one million (1×10^{-6}) or a Hazard Index of 1.0 occurs at any receptor location.

(13) TOTAL ACUTE HAZARD INDEX (HI) is the sum of the individual substance acute HIs for all toxic air contaminants affecting the same target organ system.

(14) TOTAL CHRONIC HAZARD INDEX (HI) is the sum of the individual substance chronic HIs for all toxic air contaminants affecting the same target organ system.

(15) TOXIC AIR CONTAMINANT is an air pollutant which may cause or contribute to an increase in mortality or serious illness, or which may pose a present or potential hazard to human health. For the purpose of this rule, toxic air contaminants are those listed in Table I.

(d) Requirements

The Executive Officer shall deny the permit to construct a new, relocated or modified permit unit if emissions of any toxic air contaminant listed in Table I may occur, unless the applicant has substantiated to the satisfaction of the Executive Officer all of the following:

(1) MICR and Cancer Burden

The cumulative increase in MICR which is the sum of the calculated MICR values for all toxic air contaminants emitted from the new, relocated or modified permit unit will not result in any of the following:

(A) an increased MICR greater than one in one million (1.0×10^{-6}) at any receptor location, if the permit unit is constructed without T-BACT;

(B) an increased MICR greater than ten in one million (1.0×10^{-5}) at any receptor location, if the permit unit is constructed with T-BACT;

(C) a cancer burden greater than 0.5.

(2) Chronic Hazard Index

The cumulative increase in total chronic HI for any target organ system due to total emissions from the new, relocated or modified permit unit owned or operated by the applicant for which applications were deemed complete on or after the date when the risk value for the compound is finalized by the state Office of Environmental Health Hazard Assessment (OEHHA)~~, unless paragraph (e)(3) applies,~~ will not exceed 1.0 at any receptor location.

(3) Acute Hazard Index

The cumulative increase in total acute HI for any target organ system due to total emissions from the new, relocated or modified permit unit owned or operated by the applicant for which applications were deemed complete on or after the date when the risk value for the compound is finalized by

OEHHA~~, unless paragraph (e)(3) applies,~~ will not exceed 1.0 at any receptor location.

(4) If a permit contains operating conditions imposed pursuant to Rule 1401, which prohibit or limit the use or emission of toxic air contaminants, those conditions shall apply only to those toxic air contaminants listed in the version of Rule 1401 applicable at the time the permit conditions were imposed.

(5) Federal New Source Review for Toxics

Pursuant to Section 112(g) of the federal Clean Air Act (CAA), no person shall begin construction or reconstruction of a major stationary source emitting hazardous air pollutants listed in Section 112 (b) of the CAA, unless the source is constructed with Best Available Control Technology for Toxics (T-BACT) and complies with all other applicable requirements, including definitions and public noticing, referenced in 40 CFR 63.40 through 63.44. The requirements of this paragraph shall not apply to:

(A) any source that is subject to an existing National Emission Standard for Hazardous Air Pollutants (NESHAP) pursuant to sections 112(d), 112(h), or 112(j) of the federal CAA;

(B) any source that is exempted from regulations under a NESHAP issued pursuant to sections 112(d), 112(h), or 112(j) of the federal CAA;

(C) any source that has received all necessary air quality permits for such construction or reconstruction before June 29, 1998;

(D) electric utility steam generating units, unless and until such time as these units are added to the source category list pursuant to the requirements of section 112(c)(5) of the federal CAA;

(E) any sources that are within a source category that has been deleted from the source category list pursuant to section 112(c)(9) of the federal CAA; or

(F) research and development activities.

Compliance with this paragraph does not relieve any owner or operator of a major stationary source from complying with all other applicable District rules and regulations, including this rule, any applicable state airborne toxic control measure, or other applicable state and federal laws. Exemptions under subdivision (g) of this rule do not apply to this paragraph. This paragraph shall take effect retroactively from June 29, 1998.

(e) Risk Assessment Procedures

(1) The Executive Officer shall periodically publish procedures for determining health risks under this rule, except as provided in paragraph (e)(~~5~~3). To the extent possible, the procedures will be consistent with the most recently adopted policies and procedures of the state OEHHA.

~~(2) Within 150 days of risk values for compounds not in Table I being finalized by OEHHA, staff will bring proposed amendments to this rule to reflect changes to Table I.~~

~~(3) Within 150 days of risk values for compounds in Table I being updated by OEHHA, staff will:~~

~~(A) publish a Notice of Intent to change risk values;~~

~~(B) perform an impact assessment, including socioeconomic effects; and~~

~~(C) submit a report to the District Governing Board with recommendations for changing the risk values in the procedures for determining risk assessment published pursuant to paragraph (e)(1).~~

(~~4~~2) To calculate the cumulative increase in MICR pursuant to paragraph (d)(1), the increase from each permit unit shall be based on the emissions of toxic air contaminants, the risk values, and risk assessment procedures applicable at the time when each complete application was deemed complete by the District.

(~~5~~3) The following equipment or industry source categories shall be allowed to use SCAQMD Risk Assessment Procedures for Rules 1401 and 212 (Version 7.0, July 1, 2005) in order to calculate the cumulative increase in MICR pursuant to paragraph (d)(1):

(A) spray booths, until the Executive Officer, as quickly as practicable, can make a recommendation regarding a regulation and/or procedures, and the Board approves regulations and/or procedures specific to this source category; and

(B) retail gasoline transfer and dispensing facilities as defined in District Rule 461, until the Executive Officer, as quickly as practicable, can provide an analysis of emissions data from gasoline dispensing activities to the Governing Board, and the Board approves regulations and/or procedures, if needed, specific to this industry.

(f) Emissions Calculations

(1) For the purpose of determining MICR and cancer burden due to a new or relocated permit unit pursuant to this rule, the total Toxic Air Contaminant emissions from the new or relocated permit unit shall be calculated on an annual basis from permit conditions which directly limit the emissions or, when no such conditions are imposed, from:

(A) the maximum rated capacity;

(B) the maximum possible annual hours of operation;

(C) the maximum annual emissions; and

(D) the physical characteristics of the materials processed.

(2) For the purpose of determining chronic HI due to a new or relocated permit unit pursuant to this rule, the total emissions from a permit unit shall be calculated on an annual average basis from permit conditions which directly limit the emissions or, when no such conditions are imposed, from:

(A) the maximum rated capacity;

(B) the annual average hours of operation;

(C) the annual average emissions; and

(D) the physical characteristics of the materials processed.

(3) For the purpose of determining MICR, cancer burden and chronic HI due to a modified permit unit pursuant to this rule, the increase in emissions from the modified permit unit shall be calculated based on the difference between the total permitted emissions after the modification, calculated pursuant to the criteria established in subparagraphs (f)(1)(A), (B), (C), and (D), and:

(A) the total permitted emissions prior to the modification as stated in the permit conditions; or

(B) if there are no existing permit conditions that limit emissions, the average annual emissions which have occurred during the two-year period immediately preceding the date of the complete permit application for modification or other appropriate period determined by the Executive Officer to be representative of a permit unit's operation; or

(C) for modification of any source installed prior to October 8, 1976, resulting from the addition of air pollution controls installed solely to reduce the issuance of air contaminants, emission shall be

calculated from permit conditions which directly limit the emissions or, when no such conditions are imposed, from:

(i) the maximum rated capacity; and

(ii) the maximum proposed daily hours of operation; and

(iii) the physical characteristics of the materials processed.

(4) For the purpose of determining acute HI due to a new, relocated or modified permit unit pursuant to this rule, the total emissions from a permit unit shall be calculated on a maximum hourly basis from permit conditions which directly limit the emissions or, when no such conditions exist, from:

(A) the maximum rated capacity;

(B) the maximum hourly emissions; and

(C) the physical characteristics of the materials processed.

(5) De Minimus Values

Any permit unit with values at or below the screening levels as specified in the procedures for determining health risks under this rule, published pursuant to paragraph (e)(1), shall be deemed in compliance with the requirements of subdivision (d).

(g) Exemptions

(1) The requirements of subdivision (d) shall not apply to:

(A) Permit Renewal or Change of Ownership

Any permit unit which is in continuous operation, without modification or change in operating conditions, for which a new permit to operate is required solely because of permit renewal or change of ownership.

(B) Modification with No Increase in Risk

A modification of a permit unit that causes a reduction or no increase in the cancer burden, MICR or acute or chronic HI at any receptor location.

(C) Functionally Identical Replacement

A permit unit replacing a functionally identical permit unit, provided there is no increase in maximum rating or increase in emissions of any toxic air contaminants. For replacement of dry cleaning permit units only, provided there is no increase in any toxic air contaminants.

(D) Equipment Previously Exempt Under Rule 219

Equipment which previously did not require a written permit pursuant to Rule 219 that is no longer exempt, provided that the equipment was installed prior to the Rule 219 amendment eliminating the exemption and a complete application for the permit is received within one (1) year after the Rule 219 amendment removing the exemption.

(E) Modifications to Terminate Research Projects

Modifications restoring the previous permit conditions of a permit unit, provided that: the applicant demonstrates that the previous permit conditions were modified solely for the purpose of installing innovative control equipment as part of a demonstration or investigation designed to advance the state of the art with regard to controlling emissions of toxic air contaminants; the emission reductions achieved by the demonstration project are not used for permitting any equipment with emission increases under the contemporaneous emission reduction exemption as specified in paragraph (g)(2); the demonstration project is completed within two (2) years; and a complete application is submitted no later than two (2) years after the date of issuance of the permit which modified the conditions of the previous permit for the purpose of the demonstration or investigation.

(F) Emergency Internal Combustion Engines

Emergency internal combustion engines that are exempted under Rule 1304.

(G) Wood Product Stripping

Wood product stripping permit units, provided that the risk increases due to emissions from the permit unit owned or operated by the applicant for which complete applications were submitted on or after July 10, 1998 will not exceed a MICR of 100 in one million (1.0×10^{-4}) or a total acute or chronic hazard index of five (5) at any receptor location. This exemption shall not apply to permit applications received after January 10, 2000, or sooner if the Executive Officer makes a determination that T-BACT is available to enable compliance with the requirements of paragraphs (d)(1), (d)(2) and (d)(3).

(H) Gasoline Transfer and Dispensing Facilities

For gasoline transfer and dispensing facilities, as defined in Rule 461 – Gasoline Transfer and Dispensing, the Executive Officer shall not, for the purposes of paragraphs (d)(1) through (d)(~~5~~4), consider the risk contribution of methyl tert-butyl ether for any gasoline transfer and dispensing permit applications deemed complete on or before December 31, 2003. If the state of California extends the phase-out requirement for methyl tert-butyl ether as an oxygenate in gasoline, the limited time exemption shall be extended to that expiration date or December 31, 2004, whichever is sooner.

(2) Contemporaneous Risk Reduction

(A) Paragraph (d)(1) shall not apply if the applicant demonstrates that a contemporaneous risk reduction resulting in a decrease in emissions will occur such that both of the following conditions are met:

(i) no receptor location will experience a total increase in MICR of greater than one in one million (1.0×10^{-6}) due to the cumulative impact of both the permit unit and the contemporaneous risk reduction; and

(ii) the contemporaneous risk reduction occurs within 100 meters of the permit unit.

T-BACT shall be used on permit units exempted under this subparagraph if the MICR from the permit unit exceeds one in one million (1.0×10^{-6}).

(B) The requirements of paragraphs (d)(2) and (d)(3) shall not apply if the applicant substantiates to the satisfaction of the Executive Officer that a contemporaneous risk reduction will occur such that any increase in individual substance acute or chronic HI from the permit unit exceeding 1.0 is mitigated with an equal or greater decrease in the same individual substance acute or chronic HI, respectively, from the contemporaneous risk reduction such that both of the following conditions are met:

(i) no receptor location will experience an increase in total acute or chronic HI of more than 1.0 due to the cumulative impact of both the permit unit and the contemporaneous risk reduction; and

(ii) the contemporaneous risk reduction occurs within 100 meters of the permit unit.

(3) Alternate Hazard Index Levels

The requirements of paragraphs (d)(2) and (d)(3) shall not apply if the applicant substantiates to the satisfaction of the Executive Officer that at all receptor locations and for every target organ system, the total chronic and acute HI level resulting from emissions from the new, modified or relocated permit unit owned or operated by the applicant for which applications were submitted on or after July 10, 1998 shall not exceed alternate HI levels which are determined by the Executive Officer in consultation with the Office of Environmental Health Hazard Assessment to be protective against adverse health effects. No alternate HI level shall exceed 10.

TABLE I
TOXIC AIR CONTAMINANTS

CAS #	SUBSTANCE	EFFECTIVE DATE CANCER	EFFECTIVE DATE CHRONIC	EFFECTIVE DATE ACUTE
75-07-0	acetaldehyde	December 7, 1990	September 8, 1998	September 10, 2010
60-35-5	acetamide	January 8, 1999		
107-02-8	acrolein		June 15, 2001	August 13, 1999
79-06-1	acrylamide (or propenamide)	December 7, 1990	**	
79-10-7	acrylic acid		*	August 13, 1999
107-13-1	acrylonitrile (or vinyl cyanide)	December 7, 1990	May 3, 2002	
107-05-1	allyl chloride	January 8, 1999		
117-79-3	aminoanthraquinone, 2-	January 8, 1999		
7664-41-7	ammonia		August 18, 2000	August 13, 1999
62-53-3	aniline	January 8, 1999		
7440-38-2	**arsenic and arsenic compounds (inorganic)** including, but not limited to: arsenic compounds (inorganic)	December 7, 1990	June 15, 2001	August 13, 1999
7784-42-1	arsine		September 10, 2010	August 13, 1999
1332-21-4	asbestos	June 1, 1990		
71-43-2	benzene (including benzene from gasoline)	June 1, 1990	August 18, 2000	August 13, 1999
92-87-5	benzidine (and its salts)	December 7, 1990	**	
100-44-7	benzyl chloride	September 8, 1998	**	August 13, 1999
7440-41-7	beryllium and beryllium compounds	December 7, 1990	May 3, 2002	
111-44-4	bis(2-chloroethyl)ether (DCEE)	December 7, 1990		
117-81-7	bis(2-ethylhexyl)phthalate (DEHP)	September 8, 1998	**	

TABLE I
TOXIC AIR CONTAMINANTS

CAS #	SUBSTANCE	EFFECTIVE DATE CANCER	EFFECTIVE DATE CHRONIC	EFFECTIVE DATE ACUTE
542-88-1	bis(chloromethyl)ether	December 7, 1990		
7789-30-2	bromine pentafluoride		*	
106-99-0	butadiene, 1,3-	December 7, 1990	June 15, 2001	
7440-43-9	cadmium and cadmium compounds	June 1, 1990	June 15, 2001	
75-15-0	carbon disulfide		May 3, 2002	August 13, 1999
56-23-5	carbon tetrachloride (or tetrachloromethane)	June 1, 1990	June 15, 2001	August 13, 1999
7782-50-5	chlorine		August 18, 2000	August 13, 1999
10049-04-4	chlorine dioxide		June 15, 2001	
95-83-0	chloro-o-phenylenediamine, 4-	January 8, 1999		
95-69-2	chloro-o-toluidine, p-	January 8, 1999		
108-90-7	chlorobenzene		June 15, 2001	
	chlorofluorocarbons			
75-43-4	dichlorodifluoromethane (CFC-12)		*	
75-69-4	trichlorofluoromethane (CFC-11)		*	
76-13-1	trichlorotrifluoroethane (CFC-113)		*	
67-66-3	chloroform (trichloromethane)	December 7, 1990	August 18, 2000	August 13, 1999
	Chlorophenols			
95-57-8	chlorophenol, 2-		*	
88-06-2	trichlorophenol, 2,4,6-	December 7, 1990		
	tetrachlorophenols (TECPH)		*	
87-86-5	pentachlorophenol	September 8, 1998	**	

TABLE I TOXIC AIR CONTAMINANTS				
CAS #	**SUBSTANCE**	**EFFECTIVE DATE CANCER**	**EFFECTIVE DATE CHRONIC**	**EFFECTIVE DATE ACUTE**
76-06-2	chloropicrin		May 3, 2002	August 13, 1999
126-99-8	chloroprene		**	
18540-29-9	**chromium (hexavalent) and chromium compounds**	June 1, 1990	June 15, 2001	
	including, but not limited to:			
7758-97-6	lead chromate	September 8, 1998	**	
1333-82-0	chromic trioxide		June 15, 2001	
7440-50-8	copper and copper compounds		*	August 13, 1999
120-71-8	cresidine, p-	January 8, 1999		
1319-77-3	**cresols/cresylic acid (all isomers and mixture)**		June 15, 2001	
108-39-4	cresol, m-		June 15, 2001	
95-48-7	cresol, o-		June 15, 2001	
106-44-5	cresol, p-		June 15, 2001	
135-20-6	cupferron	January 8, 1999		
	dialkylnitrosamines			
924-16-3	nitrosodi-n-butylamine, n-	December 7, 1990		
621-64-7	nitrosodi-n-propylamine, n-	September 8, 1998		
55-18-5	nitrosodiethylamine, n-	December 7, 1990		
62-75-9	nitrosodimethylamine, n-	December 7, 1990		
10595-95-6	nitrosomethylethylamine, n-	September 8, 1998		

TABLE I
TOXIC AIR CONTAMINANTS

CAS #	SUBSTANCE	EFFECTIVE DATE CANCER	EFFECTIVE DATE CHRONIC	EFFECTIVE DATE ACUTE
615-05-4	diaminoanisole, 2,4- (sulfate)	January 8, 1999		
95-80-7	diaminotoluene, 2,4-	January 8, 1999		
	dibenzo-p-dioxins (chlorinated)			
1746-01-6	tetrachlorodibenzo-p-dioxin, 2,3,7,8-	June 1, 1990	August 18, 2000	
40321-76-4	pentachlorodibenzo-p-dioxin, 1,2,3,7,8-	June 1, 1990	August 18, 2000	
39227-28-6	hexachlorodibenzo-p-dioxin, 1,2,3,4,7,8-	June 1, 1990	August 18, 2000	
57653-85-7	hexachlorodibenzo-p-dioxin, 1,2,3,6,7,8-	June 1, 1990	August 18, 2000	
19408-74-3	hexachlorodibenzo-p-dioxin, 1,2,3,7,8,9-	June 1, 1990	August 18, 2000	
35822-46-9	heptachlorodibenzo-p-dioxin,	June 1, 1990	August 18, 2000	
3268-87-9	1,2,3,4,6,7,8-	June 1, 1990	August 18, 2000	
	octachlorodibenzo-p-dioxin,			
41903-57-5	1,2,3,4,5,6,7,8-	June 1, 1990	August 18, 2000	
36088-22-9	total tetrachlorodibenzo-p-dioxin	June 1, 1990	August 18, 2000	
34465-46-8	total pentachlorodibenzo-p-dioxin	June 1, 1990	August 18, 2000	
37871-00-4	total hexachlorodibenzo-p-dioxin	June 1, 1990	August 18, 2000	
	total heptachlorodibenzo-p-dioxin			
	total dioxins, with individual isomers reported	June 1, 1990	August 18, 2000	
	total dioxins, without individual isomers reported	June 1, 1990	August 18, 2000	
	dibenzofurans (chlorinated)			
51207-31-9	tetrachlorodibenzofuran, 2,3,7,8-	June 1, 1990	August 18, 2000	

TABLE I TOXIC AIR CONTAMINANTS				
CAS #	**SUBSTANCE**	**EFFECTIVE DATE CANCER**	**EFFECTIVE DATE CHRONIC**	**EFFECTIVE DATE ACUTE**
57117-41-6	pentachlorodibenzofuran, 1,2,3,7,8-	June 1, 1990	August 18, 2000	
57117-31-4	pentachlorodibenzofuran, 2,3,4,7,8-	June 1, 1990	August 18, 2000	
70648-26-9	hexachlorodibenzofuran, 1,2,3,4,7,8-	June 1, 1990	August 18, 2000	
57117-44-9	hexachlorodibenzofuran, 1,2,3,6,7,8-	June 1, 1990	August 18, 2000	
72918-21-9	hexachlorodibenzofuran, 1,2,3,7,8,9-	June 1, 1990	August 18, 2000	
60851-34-5	hexachlorodibenzofuran, 2,3,4,6,7,8-	June 1, 1990	August 18, 2000	
67562-39-4	heptachlorodibenzofuran, 1,2,3,4,6,7,8-	June 1, 1990	August 18, 2000	
55673-89-7	heptachlorodibenzofuran, 1,2,3,4,7,8,9-	June 1, 1990	August 18, 2000	
39001-02-0	octachlorodibenzofuran, 1,2,3,4,5,6,7,8	June 1, 1990	August 18, 2000	
55722-27-5	total tetrachlorodibenzofuran	June 1, 1990	August 18, 2000	
30402-15-4	total pentachlorodibenzofuran	June 1, 1990	August 18, 2000	
55684-94-1	total hexachlorodibenzofuran	June 1, 1990	August 18, 2000	
38998-75-3	total heptachlorodibenzofuran	June 1, 1990	August 18, 2000	
96-12-8	dibromo-3-chloropropane, 1,2- (DBCP)	September 8, 1998	**	
106-46-7	dichlorobenzene, 1,4- (or p-dichlorobenzene)	September 8, 1998	June 15, 2001	
91-94-1	dichlorobenzidine, 3,3	December 7, 1990		
75-34-3	dichloroethane, 1,1-	January 8, 1999		
75-35-4	dichloroethylene, 1,1-		June 15, 2001	
9901 (emittant ID)	diesel PM – diesel particulate matter from diesel-fueled internal combustion engine exhaust	March 7, 2008	March 7, 2008	

TABLE I TOXIC AIR CONTAMINANTS				
CAS #	**SUBSTANCE**	**EFFECTIVE DATE CANCER**	**EFFECTIVE DATE CHRONIC**	**EFFECTIVE DATE ACUTE**
111-42-2	diethanolamine		May 3, 2002	
60-11-7	dimethylaminoazobenzene, p-	January 8, 1999		
68-12-2	dimethylformamide (N,N-)		June 15, 2001	
121-14-2	dinitrotoluene, 2,4-	December 7, 1990		
123-91-1	dioxane, 1,4- (or 1,4-diethylene dioxide)	December 7, 1990	August 18, 2000	August 13, 1999
106-89-8	epichlorohydrin (or 1-chloro-2,3-epoxypropane)	December 7, 1990	June 15, 2001	August 13, 1999
106-88-7	epoxybutane,1,2-		June 15, 2001	
140-88-5	ethyl acrylate		*	
100-41-4	ethyl benzene	June 5, 2009	August 18, 2000	
75-00-3	ethyl chloride (or chloroethane)		August 18, 2000	
106-93-4	ethylene dibromide (or 1,2-dibromoethane)	June 1, 1990	May 3, 2002	
107-06-2	ethylene dichloride (or 1,2-dichloroethane)	June 1, 1990	June 15, 2001	
75-21-8	ethylene oxide (or 1,2-epoxyethane)	June 1, 1990	June 15, 2001	
96-45-7	ethylene thiourea	January 8, 1999		
1101	Fluorides (except hydrogen fluoride, listed separately below)		September 10, 2010	
50-00-0	formaldehyde	December 7, 1990	August 18, 2000	August 13, 1999
	gasoline vapors		*	
111-30-8	glutaraldehyde		June 15, 2001	
	glycol ethers (and their acetates)			

TABLE I
TOXIC AIR CONTAMINANTS

CAS #	SUBSTANCE	EFFECTIVE DATE CANCER	EFFECTIVE DATE CHRONIC	EFFECTIVE DATE ACUTE
107-21-1	ethylene glycol		August 18, 2000	
111-76-2	ethylene glycol butyl ether		*	August 13, 1999
110-80-5	ethylene glycol ethyl ether		August 18, 2000	February 10, 1999
111-15-9	ethylene glycol ethyl ether acetate		August 18, 2000	August 13, 1999
109-86-4	ethylene glycol methyl ether		August 18, 2000	August 13, 1999
110-49-6	ethylene glycol methyl ether acetate		August 18, 2000	
118-74-1	hexachlorobenzene	December 7, 1990	**	
608-73-1	**hexachlorocyclohexanes (mixed or technical grade)**	December 7, 1990	**	
58-89-9	hexachlorocyclohexane, gamma- (lindane)	September 8, 1998	**	
77-47-4	hexachlorocyclopentadiene		*	
110-54-3	hexane		August 18, 2000	
302-01-2	hydrazine	September 8, 1998	June 15, 2001	
122-66-7	hydrazobenzene (or 1,2-diphenylhydrazine)	December 7, 1990		
7647-01-0	hydrochloric acid (or hydrogen chloride)		August 18, 2000	August 13, 1999
7664-39-3	hydrofluoric acid (or hydrogen fluoride)		September 10, 2010	August 13, 1999
10035-10-6	hydrogen bromide (HBR)		*	
74-90-8	hydrogen cyanide		August 18, 2000	August 13, 1999
7783-06-4	hydrogen sulfide		August 18, 2000	February 10, 1999
7783-07-5	hydrogen selenide			August 13, 1999

TABLE I
TOXIC AIR CONTAMINANTS

CAS #	SUBSTANCE	EFFECTIVE DATE CANCER	EFFECTIVE DATE CHRONIC	EFFECTIVE DATE ACUTE
	isocyanates			
624-83-9	methyl isocyanate		May 3, 2002	
78-59-1	isophrone		May 3, 2002	
67-63-0	isopropyl alcohol		August 18, 2000	August 13, 1999
7439-92-1	**lead and lead compounds (inorganic, including elemental lead)** including, but not limited to:	September 8, 1998	**	
	lead compounds (inorganic)		September 8, 1998 **	
301-04-2	lead acetate		September 8, 1998 **	
7758-97-6	lead chromate		September 8, 1998 **	
7446-27-7	lead phosphate		September 8, 1998 **	
1335-32-6	lead subacetate		September 8, 1998 **	
	lead compounds (other than inorganic)	September 8, 1998	**	
108-31-6	maleic anhydride		May 3, 2002	
7439-96-5	manganese and manganese compounds		August 18, 2000	
7439-97-6	**mercury and mercury compounds (inorganic)** including, but not limited to:		August 18, 2000	August 13, 1999
7487-94-7	mercuric chloride		August 18, 2000	
593-74-8	methyl mercury		August 18, 2000	

TABLE I TOXIC AIR CONTAMINANTS				
CAS #	**SUBSTANCE**	**EFFECTIVE DATE CANCER**	**EFFECTIVE DATE CHRONIC**	**EFFECTIVE DATE ACUTE**
67-56-1	methanol (methyl alcohol)		August 18, 2000	August 13, 1999
74-83-9	methyl bromide (or bromomethane)		August 18, 2000	August 13, 1999
71-55-6	methyl chloroform (or 1,1,1-trichloroethane)		August 18, 2000	August 13, 1999
78-93-3	methyl ethyl ketone		*	August 13, 1999
80-62-6	methyl methacrylate		*	
1634-04-4	methyl tert-butyl ether	May 2, 2003	August 18, 2000	
101-14-4	methylene bis(2-chloroaniline), 4,4- (MOCA)	January 8, 1999		
75-09-2	methylene chloride (or dichloromethane)	June 1, 1990	August 18, 2000	August 13, 1999
101-77-9	methylene dianiline, 4,4'- (and its dichloride)	September 8, 1998	May 3, 2002	
101-68-8	methylene phenyl diisocyanate		June 15, 2001	
1135	mineral fibers (other than man-made)		*	
90-94-8	michler's ketone	January 8, 1999		
7440-02-0	**nickel and nickel compounds:**	March 12, 1999	August 18, 2000	August 13, 1999
	including, but not limited to:			
373-02-4	nickel acetate	March 12, 1999	August 18, 2000	August 13, 1999
3333-67-3	nickel carbonate	March 12, 1999	August 18, 2000	August 13, 1999
13463-39-3	nickel carbonyl	March 12, 1999	August 18, 2000	August 13, 1999
12054-48-7	nickel hydroxide	March 12, 1999	August 18, 2000	August 13, 1999
1313-99-1	nickel oxide	March 12, 1999	August 18, 2000	August 13, 1999
12035-72-2	nickel subsulfide	December 7, 1990	August 18, 2000	August 13, 1999
1271-28-9	nickelocene	March 12, 1999	August 18, 2000	August 13, 1999

TABLE I
TOXIC AIR CONTAMINANTS

CAS #	SUBSTANCE	EFFECTIVE DATE CANCER	EFFECTIVE DATE CHRONIC	EFFECTIVE DATE ACUTE
	refinery dust from the pyrometallurgical process	December 7, 1990	August 18, 2000	August 13, 1999
7697-37-2	nitric acid		*	August 13, 1999
98-95-3	nitrobenzene		*	
79-46-9	nitropropane, 2-		*	
759-73-9	nitroso-n-ethylurea, n-	December 7, 1990		
684-93-5	nitroso-n-methylurea, n-	December 7, 1990		
86-30-6	nitrosodiphenylamine, n-	December 7, 1990		
156-10-5	nitrosodiphenylamine, p-	September 8, 1998		
59-89-2	nitrosomorpholine, n-	January 8, 1999		
100-75-4	nitrosopiperidine, n-	January 8, 1999		
930-55-2	nitrosopyrrolidine, n-	December 7, 1990		
108171-26-2	paraffins, chlorinated (average chain length, c12; approx. 60% cl by weight)	January 8, 1999		
127-18-4	perchloroethylene (or tetrachloroethylene)	September 8, 1998	September 8, 1998	August 13, 1999
108-95-2	phenol		August 18, 2000	August 13, 1999
75-44-5	phosgene		*	August 13, 1999
7723-14-0 7803-51-2	**phosphorus and phosphorus compounds** phosphine		* February 7, 2003	
7664-38-2	phosphoric acid		August 18, 2000	
85-44-9	phthalic anhydride		June 15, 2001	

TABLE I
TOXIC AIR CONTAMINANTS

CAS #	SUBSTANCE	EFFECTIVE DATE CANCER	EFFECTIVE DATE CHRONIC	EFFECTIVE DATE ACUTE
1336-36-3	**polychlorinated biphenyls (PCBs)**	December 7, 1990	**	
	3,3',4,4' Tetrachlorobiphenyl	March 4, 2005***	March 4, 2005***	
	3,4,4',5 Tetrachlorobiphenyl	March 4, 2005***	March 4, 2005***	
	2,3,3',4,4' Pentachlorobiphenyl	March 4, 2005***	March 4, 2005***	
	2,3,4,4',5 Pentachlorobiphenyl	March 4, 2005***	March 4, 2005***	
	2,3',4,4',5 Pentachlorobiphenyl	March 4, 2005***	March 4, 2005***	
	2',3,4,4',5 Pentachlorobiphenyl	March 4, 2005***	March 4, 2005***	
	3,3',4,4',5 Pentachlorobiphenyl	March 4, 2005***	March 4, 2005***	
	2,3,3',4,4',5 Hexachlorobiphenyl	March 4, 2005***	March 4, 2005***	
	2,3,3',4,4',5' Hexachlorobiphenyl	March 4, 2005***	March 4, 2005***	
	2,3',4,4',5.5' Hexachlorobiphenyl	March 4, 2005***	March 4, 2005***	
	3,3',4,4',5,5' Hexachlorobiphenyl	March 4, 2005***	March 4, 2005***	
	2,3,3'4,4',5,5' Heptachlorobiphenyl	March 4, 2005***	March 4, 2005***	
	polycyclic aromatic hydrocarbons (PAHs)			
56-55-3	benz[a]anthracene	December 7, 1990		
50-32-8	benzo[a]pyrene	December 7, 1990		
205-99-2	benzo[b]fluoranthene	December 7, 1990		
205-82-3	benzo[j]fluoranthene	January 8, 1999		
207-08-9	benzo[k]fluoranthene	December 7, 1990		
218-01-9	chrysene	December 7, 1990		
226-36-8	dibenz[a,h]acridine	January 8, 1999		

TABLE I TOXIC AIR CONTAMINANTS				
CAS #	**SUBSTANCE**	**EFFECTIVE DATE CANCER**	**EFFECTIVE DATE CHRONIC**	**EFFECTIVE DATE ACUTE**
224-42-0	dibenz[a,j]acridine	January 8, 1999		
53-70-3	dibenz[a,h]anthracene	December 7, 1990		
192-65-4	dibenzo[a,e]pyrene	January 8, 1999		
189-64-0	dibenzo[a,h]pyrene	January 8, 1999		
189-55-9	dibenzo[a,i]pyrene	January 8, 1999		
191-30-0	dibenzo[a,l]pyrene	January 8, 1999		
194-59-2	dibenzo[c,g]carbazole, 7h-	January 8, 1999		
57-97-6	dimethylbenz[a]anthracene, 7,12-	January 8, 1999		
42397-64-8	dinitropyrene, 1,6-	January 8, 1999		
42397-65-9	dinitropyrene, 1,8-	January 8, 1999		
193-39-5	indeno[1,2,3-cd]pyrene	December 7, 1990		
56-49-5	methylcholanthrene, 3-	January 8, 1999		
3697-24-3	methylchrysene, 5-	January 8, 1999		
91-20-3	naphthalene	March 4, 2005***	August 18, 2000	
602-87-9	nitroacenaphthene, 5-	January 8, 1999		
7496-02-8	nitrochrysene, 6-	January 8, 1999		
607-57-8	nitrofluorene, 2-	January 8, 1999		
5522-43-0	nitropyrene, 1-	January 8, 1999		
57835-92-4	nitropyrene, 4-	January 8, 1999		
	polycyclic aromatic hydrocarbons (PAHs), total	September 8, 1998		

TABLE I TOXIC AIR CONTAMINANTS				
CAS #	**SUBSTANCE**	**EFFECTIVE DATE CANCER**	**EFFECTIVE DATE CHRONIC**	**EFFECTIVE DATE ACUTE**
7758-01-2	potassium bromate	January 8, 1999		
1120-71-4	propane sultone, 1,3-	January 8, 1999		
115-07-1	propylene		August 18, 2000	
107-98-2	propylene glycol methyl ether		August 18, 2000	
75-56-9	propylene oxide (or 1,2-epoxy propane)	September 8, 1998	February 23, 2000	August 13, 1999
7782-49-2	**selenium and selenium compounds** other than hydrogen selenide		May 3, 2002	
1310-73-2	sodium hydroxide		*	August 13, 1999
100-42-5	styrene (or vinyl benzene)		August 18, 2000	August 13, 1999
7664-93-9	sulfuric acid (and oleum)		May 3, 2002	August 13, 1999
79-34-5	tetrachloroethane, 1,1,2,2-	January 8, 1999		
62-55-5	thioacetamide	January 8, 1999		
108-88-3	toluene (or methyl benzene)		August 18, 2000	August 13, 1999
	toluene diisocyanates			
584-84-9	toluene-2,4-diisocyanate	September 8, 1998	June 15, 2001	
91-08-7	toluene-2,6-diisocyanate	September 8, 1998	June 15, 2001	
79-00-5	trichloroethane, 1,1,2-	January 8, 1999		
79-01-6	trichloroethylene	December 7, 1990	August 18, 2000	
121-44-8	triethylamine		February 7, 2003	August 13, 1999
51-79-6	urethane (or ethyl carbamate)	September 8, 1998		
1314-62-1	vanadium pentoxide			August 13, 1999

TABLE I
TOXIC AIR CONTAMINANTS

CAS #	SUBSTANCE	EFFECTIVE DATE CANCER	EFFECTIVE DATE CHRONIC	EFFECTIVE DATE ACUTE
108-05-4	vinyl acetate		May 3, 2002	
75-01-4	vinyl chloride (or chloroethylene)	December 7, 1990	**	August 13, 1999
75-35-4	vinylidene chloride		*	
1330-20-7	**xylenes (isomers and mixture)**		August 18, 2000	August 13, 1999
108-38-3	xylene, m-		August 18, 2000	August 13, 1999
95-47-6	xylene, o-		August 18, 2000	August 13, 1999
106-42-3	xylene, p-		August 18, 2000	August 13, 1999
7440-66-6	**zinc and zinc compounds**		*	
	including, but not limited to:			
1314-13-2	zinc oxide		*	

* Compounds not classified as carcinogenic, but have chronic risk values proposed by OEHHA that have not yet been finalized. The effective date is the date the Scientific Review Panel approves the chronic risk value~~, unless paragraph (e)(3) applies~~. ~~Paragraph (e)(3) applies when the finalized chronic risk value differs from the value in the latest version of the Risk Assessment Procedures published pursuant to paragraph (e)(1).~~

** Compounds are classified as carcinogenic, but have chronic risk values proposed by OEHHA that have not yet been finalized. The effective date for use of chronic risk values is the date the Scientific Review Panel approves the chronic risk value~~, unless paragraph (e)(3) applies~~.

*** Effective date for these risk values will be March 4, 2005 or the date of implementation of the applicable most recent version of Risk Assessment Procedures for Rules 1401, 1401.1 and 212~~ (Version 7.0)~~, whichever is later.

TABLE II TOXIC AIR CONTAMINANTS WITH PROPOSED RISK VALUES	
CAS #	**SUBSTANCE**
79-10-7	acrylic acid
107-05-1	allyl chloride
7783-20-2	ammonium sulfate
62-53-3	Aniline
1309-64-4	antimony trioxide
	arsenic compounds (other than inorganic)
532-27-4	chloroacetophenone, 2-
75-45-6	chlorodifluoromethane (HCFC-22)
7440-48-4	cobalt and cobalt compounds
74-85-1	Ethylene
96-45-7	ethylene thiourea
	fluorides and fluoride compounds
87-68-3	hexachlorobutadiene
67-72-1	hexachloroethane
822-06-0	hexamethylene-1,6-diisocyanate
78-93-3	methyl ethyl ketone (or 2-butanone)
7697-37-2	nitric acid
156-10-5	nitrosodiphenylamine, p-
7440-22-4	silver and silver compounds
96-09-3	styrene oxide
79-00-5	trichloroethane, 1,1,2-
593-60-2	vinyl bromide

(Adopted April 8, 1994)(Amended March 17, 2000)(Amended March 4, 2005) (Amended June 5, 2015)
PAR 1402 07-19-16

RULE 1402. CONTROL OF TOXIC AIR CONTAMINANTS FROM EXISTING SOURCES

(a) Purpose

The purpose of this rule is to reduce the health risk associated with emissions of toxic air contaminants from existing sources by specifying limits for maximum individual cancer risk (MICR), cancer burden, and noncancer acute and chronic hazard index (HI) applicable to total facility emissions and by requiring facilities to implement ~~risk reduction plans~~ Risk Reduction Plans to achieve specified risk limits, as required by the Hot Spots Act and this rule. The rule also specifies Air Toxics Inventory Report, Health Risk Assessment, public notification, and specified industry-wide emissions inventory requirements.

(b) Applicability

This rule shall apply to any facility which has been notified by the Executive Officer to prepare an Air Toxics Inventory Report, Health Risk Assessment, or Risk Reduction Plan or is subject to the Hot Spots Act. This rule shall also apply ~~and~~ to any facility for which the impact of total facility emissions has the potential to be greater than or equal to the ~~exceeds any significant or action risk level~~ Notification Risk Level as indicated in ~~one of the following:~~

~~(1) A health risk assessment~~ a Health Risk Assessment approved or prepared by the District ~~or~~ for the purpose of this rule for a facility or category of facilities, including but not limited to facilities for which the District has prepared an industrywide emissions inventory pursuant to the Hot Spots Act or this rule.~~; or~~

~~(2) A health risk assessment pursuant to paragraph (b)(2), the risk reduction requirements of this rule shall not apply to facilities which have not been notified by the District to prepare a health risk assessment pursuant to this rule or the Hot Spots Act.~~

(c) Definitions

(1) ACCEPTABLE STACK HEIGHT for a permit unit is ~~defined as~~ a stack height that does not exceed two and one half (2.5) times the height of the permit unit or two and one half (2.5) times the height of the building housing the permit unit, and shall not be greater than 65 meters (213 feet), unless the owner or operator demonstrates to the satisfaction of the Executive Officer that a greater height is necessary.

(2) ACTION RISK LEVEL for purpose of this rule is a MICR of twenty-five in one million (25 x 10^{-6}), cancer burden of one half (0.5), ~~or~~ a total acute or chronic HI of three (3.0) for any target organ system at any receptor location, or the National Ambient Air Quality Standard (NAAQS) for lead.

(3) AIR TOXICS INVENTORY REPORT is a detailed facility toxics emissions inventory listed by device or process along with source parameter and location information as outlined in SCAQMD "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act".

(~~3~~4) CANCER BURDEN means the estimated increase in the occurrence of cancer cases in a population subject to a MICR of greater than or equal to one in one million (1 x 10^{-6}) resulting from exposure to toxic air contaminants.

(~~4~~5) FACILITY means any permit unit, ~~or~~ grouping of permit units, or other air contaminant-emitting activities which are located in one or more contiguous properties within the District, in actual physical contact or separately solely by a public roadway or other public right-of-way, and are owned or operated by the same person (or persons under common control). Such above-described groupings, if remotely located and connected only by land carrying a pipeline, shall not be considered one facility.

(6) HEALTH RISK ASSESSMENT is a technical study identifying toxic emissions released from a facility, exposure assessment, dose-response assessment and risk characterization as outlined by the Office of Environmental Health Hazard Assessment (OEHHA) "Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments" and the SCAQMD "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act".

(~~5~~7) HOT SPOTS ACT means the Air Toxics "Hot Spots" Information and Assessment Act of 1987, incorporated ~~at~~ in Health and Safety Code, Part 6, Division 26 ~~of the Health and Safety Code~~, and amendments to this act.

(~~6~~8) INDIVIDUAL SUBSTANCE ACUTE HAZARD INDEX (HI) is the ratio of the estimated maximum one-hour, or other time period as specified by the Executive Officer, concentration of a toxic air contaminant at a receptor location to its acute reference exposure level.

(~~7~~9) INDIVIDUAL SUBSTANCE CHRONIC HAZARD INDEX (HI) is the ratio of the long-term level of exposure to a toxic air contaminant for a potential maximally

exposed individual to the chronic reference exposure level for the toxic air contaminant.

~~(8) INITIAL PLAN SUBMITTAL DATE is the date that the initial risk reduction plan is submitted to the District, but no later than 180 days following notification by the Executive Officer that a risk reduction plan is required.~~

(~~9~~10) MAXIMUM INDIVIDUAL CANCER RISK (MICR) is the estimated probability of a potential maximally exposed individual contracting cancer as a result of exposure to toxic air contaminants calculated pursuant to the Risk Assessment Procedures referenced in subdivision (~~j~~l) for residential receptor locations. The MICR for worker receptor locations shall be calculated pursuant to the Risk Assessment Procedures referenced in subdivision (~~j~~l). The MICR calculations shall include multi-pathway consideration, if applicable.

(11) NOTIFICATION RISK LEVEL is a MICR of ten in one million (1.0×10^{-5}), a total acute or chronic HI of one (1.0) for any target organ system at any receptor location, or the more stringent of either the NAAQS for lead or applicable ambient lead concentration limit in a SCAQMD rule.

(~~10~~12) OWNER OR OPERATOR means the person who owns or operates a facility or part of a facility.

~~(11) PHASE I FACILITY is any facility that either emitted more than 25 tons per year of any criteria pollutant or was listed in a toxics emitters list, and was required to submit emissions inventory reports pursuant to the Hot Spots Act for the calendar year 1989.~~

(13) POTENTIALLY HIGH RISK LEVEL FACILITY is a facility which the Executive Officer has determined that emissions data, ambient data, or data from previously approved Health Risk Assessments indicate that the facility has a likely potential to either exceed or has exceeded the Significant Risk Level pursuant to paragraph (g)(1).

(~~12~~14) RECEPTOR LOCATION means:

(A) ~~for~~ For the purpose of calculating acute HI, any location outside the boundaries of the facility at which a person could experience acute exposure; and

(B) ~~for~~ For the purpose of calculating chronic HI, MICR, or cancer burden, any location outside the boundaries of the facility at which a person could experience chronic exposure.

The Executive Officer shall consider the possibility of potential exposure at a location in determining whether the location will be considered a receptor location.

(15) REFERENCE EXPOSURE LEVEL (REL) is the concentration level at or below which no adverse non-cancer health effects are anticipated for the specified exposure duration.

(16) REFERENCE SOURCE is the basis of deriving an emission factor; such as a source test, AP-42, mass balance analysis, or other published source.

(~~13~~17) RISK REDUCTION MEASURE is a control measure which will reduce or eliminate the health risk associated with emissions of toxic air contaminants that, is real, permanent, quantifiable, and enforceable through District permit conditions, if applicable, and meets the requirements of the Hot Spots Act. Risk reduction measures may include, but are not limited to: feedstock modification; product reformulations; production system modifications; system enclosure, emissions control, capture or conversion; operational standards or practices modifications; emissions collection and exhaust; source control; or alternative technologies.

(~~14~~18) SIGNIFICANT RISK LEVEL for purpose of this rule is a MICR of one hundred in one million (1.0×10^{-4})~~,~~ or a total acute or chronic HI of five (5.0) for any target organ system at any receptor location.

(~~15~~19) TOTAL ACUTE HAZARD INDEX (HI) is the sum of the individual substance acute HIs for all toxic air contaminants identified in the risk assessment guidelines as affecting the same target organ system.

(~~16~~20) TOTAL CHRONIC HAZARD INDEX (HI) is the sum of the individual substance chronic HIs for all toxic air contaminants identified in the risk assessment guidelines as affecting the same target organ system.

(~~17~~21) TOXIC AIR CONTAMINANT (TAC) is an air pollutant which may cause or contribute to an increase in mortality or serious illness, or which may pose a present or potential hazard to human health as listed by OEHHA.

(22) VOLUNTARY RISK THRESHOLD is the estimated health risk level after accounting for implementation of voluntary risk reduction measures designed to result in a risk below the following: MICR of ten in one million (1.0×10^{-5}), a total acute or chronic HI of one (1.0) for any target organ system at any receptor location, or the more stringent of either the NAAQS for lead or applicable ambient lead concentration limit in a SCAQMD rule.

(d) Air Toxics Inventory Report Requirements

~~Notwithstanding the requirements of subdivision (n), within 150 days of the date of notification by the Executive Officer, an operator shall submit to the District a health risk assessment for total facility emissions.~~ The Executive Officer may require ~~a health risk assessment or~~ an Air Toxics Inventory Report ~~emissions inventory~~ from a facility when, based upon investigation, the Executive Officer determines that emission levels from the facility could potentially cause exceedance of the ~~action risk levels~~Notification Risk Level.

(1) Submittal of Initial Information for Air Toxics Inventory Reports

Within 30 days of the date of notification by the Executive Officer to prepare an Air Toxics Inventory Report or notification by the Executive Officer that the facility is a Potentially High Risk Level Facility, an owner or operator shall submit:

(A) A list identifying each device and/or process that will be included in the Air Toxics Inventory Report following the procedures in the most current version of SCAQMD "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act"; and

(B) The toxic air contaminants and Reference Source of each emission factor for each device and/or process that will be included in the Air Toxics Inventory Report.

(2) Submittal of Air Toxics Inventory Reports

(A) Unless otherwise specified in subparagraph (d)(2)(B), within 150 days of the date of notification by the Executive Officer to prepare an Air Toxics Inventory Report, an owner or operator shall submit an Air Toxics Inventory Report following the procedures in the most current version of SCAQMD "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act".

(B) The additional time allowed under subparagraph (d)(3)(B) applies only for the submittal time of the portion of the Air Toxics Inventory Report for the specific device or process where a source test is required. The owner or operator shall submit the Air Toxics Inventory Report for the remainder of the devices and/or processes that do not require source testing within 150 days of notification by the Executive Officer to prepare an Air Toxics Inventory Report.

(3) Source Test Requirements

(A) The Executive Officer will require the owner or operator to conduct a source test to quantify toxic air contaminant emissions if a Reference Source identified in subparagraph (d)(1)(B):

(i) Does not quantify applicable toxic air contaminants;

(ii) Is not consistent with the purpose, type and/or size of the device or process; or

(iii) Is not in accordance with the most current version of Appendix D of CARB's "Emission Inventory Criteria and Guidelines for the Air Toxics 'Hot Spots' Program".

(B) An owner or operator may submit a request to the Executive Officer to conduct a source test to quantify toxic air contaminant emissions if a Reference Source identified in subparagraph (d)(1)(B) meets any of the criteria specified in clauses (d)(3)(A)(i) through (d)(3)(A)(iii).

(C) When the Executive Officer determines a source test is required under subparagraph (d)(3)(A) or grants a request to conduct a source test under subparagraph (d)(3)(B), the Executive Officer will notify the owner or operator that a source test is required or granted and the appropriate source test method for the applicable device or process.

(D) Within 30 days of the notification date to conduct a source test in subparagraph (d)(3)(C), the owner or operator shall submit a source test protocol to the Executive Officer for approval.

(E) Within 120 days of the notification date to conduct a source test pursuant to subparagraph (d)(3)(C), the owner or operator shall submit to the Executive Officer a source test report for the device or process for approval.

(F) Within 30 days of the notification by the Executive Officer that the source test report is approved, the owner or operator shall submit the portion of the Air Toxics Inventory Report for the specific device or process for which a source test was required or requested.

(4) Approval of Air Toxics Inventory Reports

(A) Within 30 days of receipt of the Air Toxics Inventory Report, the Executive Officer will confirm receipt in writing and conduct an initial review of the Air Toxics Inventory Report.

(B) The Executive Officer will approve or reject the Air Toxics Inventory Report and notify the owner or operator. Approval or rejection will be based on whether:

(i) The Air Toxics Inventory Report was prepared consistent with the most current version of SCAQMD "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act"; and

(ii) The information provided was completes and accurate.

(C) Within 30 days of the date of notification by the Executive Officer of Air Toxic Inventory Report rejection, an owner or operator shall revise and resubmit an Air Toxics Inventory Report that corrects all identified deficiencies.

(D) The Executive Officer will either approve the revised and resubmitted Air Toxics Inventory Report or modify the Air Toxics Inventory Report and approve it as modified.

(e) Health Risk Assessment Requirements

The Executive Officer shall require a Health Risk Assessment from a facility when the Air Toxics Inventory Report or the Executive Officer determines that emission levels from the facility could potentially cause exceedance of the Notification Risk Level.

(1) Submittal of Health Risk Assessments

Notwithstanding paragraph (g)(3), within 90 days of the date of notification by the Executive Officer to prepare a Health Risk Assessment, an owner or operator shall submit a Health Risk Assessment for approval following the procedures in the most current version of SCAQMD "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act".

(2) Approval of Health Risk Assessments

(A) Within 30 days of receipt of the Health Risk Assessment, the Executive Officer will confirm receipt in writing and conduct an initial review of the Health Risk Assessment.

(B) The Executive Officer will approve or reject the Health Risk Assessment and notify the owner or operator in writing. Approval or rejection will be based on whether:

(i) The Health Risk Assessment was prepared consistent with the most current version of SCAQMD "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act"; and

(ii) The information provided was completes and accurate.

(C) Within 60 days of the date of notification of rejection, an owner or operator shall revise and resubmit a Health Risk Assessment that corrects all identified deficiencies.

(D) The Executive Officer will either approve the revised and resubmitted Health Risk Assessment or modify the Health Risk Assessment and approve it as modified.

~~(e) Risk Reduction Requirements~~

~~The following requirements shall apply to the operator of any facility whose emissions cause an exceedance of any significant or action risk level as indicated in a health risk assessment approved or prepared by the District:~~

~~(1) Any operator whose facility-wide risk is greater than or equal to the action risk level shall implement the risk reduction measures specified in a risk reduction plan approved by the Executive Officer to reduce the impact of total facility emissions below the action risk level as quickly as feasible but by no later than three (3) years from the initial plan submittal date.~~

~~(2) For any operator whose facility-wide risk is less than the significant risk level, the Executive Officer may approve time extensions to comply with paragraph (e)(1) in increments of up to two (2) additional years to implement risk reduction measures and achieve required risk reductions, provided the operator demonstrates one or more of the following criteria:~~

~~(A) there is no known technology or risk reduction measure that is commercially available or can achieve required risk reductions within the required time period; or~~

~~(B) the only known technology or risk reduction measure that can be implemented within the facility that will meet the facility-wide risk reduction requirements within the required time period will result in a cost impact that exceeds both of the following:~~

~~(i) $4,000,000 per cancer case avoided; and~~

~~(ii) $18,000 per ton of pollutant reduced if the TAC is also a criteria pollutant.~~

~~(C) Any extension beyond the first two year extension for each facility must be approved by the Governing Board in a public hearing before going into effect.~~

~~(3) The operator shall implement risk reduction measures in an approved plan by the dates specified in the plan for each risk reduction measure.~~

(f) ~~Submittal of~~ Risk Reduction Plans~~s~~ Requirements

~~(1) The Executive Officer will publish procedures for preparing risk reduction plans under this rule. The procedures will include self-conducted audits and checklists which may be used by certain categories of facilities in lieu of preparing a risk reduction plan.~~

(~~2~~1) Submittal of Risk Reduction Plans

An owner or operator of a facility shall submit a Risk Reduction Plan ~~a risk reduction plan~~ to the Executive Officer to reduce the impact of total facility emissions below the Action Risk Level within 120 days from the date of Health Risk Assessment approval or Health Risk Assessment preparation by the SCAQMD, if the approved or District-prepared Health Risk Assessment shows a risk greater than or equal to the Action Risk Level.

~~as specified in Table A.~~

~~Table A~~
~~Risk Reduction Plan Submittal Dates~~

~~Applicability~~	~~Health Risk Assessment (HRA) Approval Date~~	~~Plan Submittal Date~~
~~Any Facility ≥ Action Risk Level~~	~~Before March 17, 2000~~	~~180 Days After March 17, 2000~~
	~~On and After March 17, 2000~~	~~180 Days After HRA Approval Date~~
~~Notification by Executive Officer~~	~~Not Applicable~~	~~180 Days from date of notification from Executive Officer~~

~~(3) The operator shall submit to the Executive Officer for approval a risk reduction plan which includes at a minimum all of the following:~~

(2) Requirements for Risk Reduction Plans

The Risk Reduction Plan shall include:

(A) The name, address, and SCAQMD facility identification number ~~and SIC code of the facility~~;

(B) A facility risk characterization which includes an updated ~~air toxics emission inventory~~ Air Toxics Inventory Report and ~~health risk assessment~~ Health Risk Assessment, if the risk due to total facility emissions has increased above or decreased below the levels indicated in the previously approved ~~health risk assessment~~ Health Risk Assessment;

(C) Identification of each source from which risk needs to be reduced in order to achieve a risk below the ~~action risk level~~ Action Risk Level~~.~~;

(D) For each source identified in subparagraph (f)~~(3)(C)~~(2)(C), an evaluation of the risk reduction measures available to the owner or operator, including

emission and risk reduction potential, estimated costs, and time necessary for implementation;

(E) Specification of the risk reduction measures that shall be implemented by the owner or operator to comply with the requirements of subdivision ~~(e)~~(i) to achieve the ~~action risk level~~ Action Risk Level or the lowest achievable level;

(F) A schedule for implementing the specified risk reduction measures as quickly as feasible. The schedule shall include the submittal of all necessary applications for permits to construct or modify within 180 days of approval of the ~~plan~~ Risk Reduction Plan, or in accordance with another schedule subject to approval of the Executive Officer, and specify the dates for other increments of progress associated with implementation of the risk reduction measures;

(G) If requesting a time extension, provide the information specified under paragraph (l)(3). Time extensions shall be approved as specified under paragraph (l)(4); ~~required to demonstrate that the request meets the required criteria specified under paragraph (e)(2) and the length of time up to two years requested~~;

(H) An estimation of the residual health risk after implementation of the specified risk reduction measures; and

(I) Proof of certification of the Risk Reduction Plan ~~risk reduction plan~~ as meeting all requirements by an individual who is officially responsible for the processes and operations of the facility.

(~~g~~3) Approval of Risk Reduction Plans

(~~1~~A) The Executive Officer shall approve or reject the ~~plan~~ Risk Reduction Plan within three (3) months of submittal. The Executive Officer may approve the Risk Reduction Plan in parts or in its entirety. Approval or rejection will be based on whether:

(i) ~~-~~ The Risk Reduction Plan was prepared consistent with paragraph (f)(2);

(ii) The information provided was ~~the~~ complete and accurate; ~~information contained in paragraph (f)(3).~~ and

(ii) The ability of the Risk Reduction Plan to reduce the impact of total facility emissions below the Action Risk Level as quickly as

feasible, but by no later than two and half years from Risk Reduction Plan approval.

(B) The owner or operator may appeal the rejection of ~~a plan~~ parts or the entire Risk Reduction Plan ~~or the failure of the Executive Officer to act on a plan submittal~~ to the Hearing Board under Rule 216 – Appeals. If the Hearing Board denies the appeal, ~~plans~~ Risk Reduction Plans shall be revised and resubmitted within ~~90~~ 30 days after the decision. The revised ~~plan~~ Risk Reduction Plan shall correct all deficiencies identified by the Executive Officer. The approved ~~plan~~revised Risk Reduction Plan shall be subject to Rule 221 – Plans.

(~~2~~C) If the ~~risk reduction plan~~ Risk Reduction Plan contains a facility risk characterization demonstrating to the satisfaction of the Executive Officer that the facility does not exceed the ~~action risk level~~Action Risk Level, the ~~plan~~ Risk Reduction Plan may be approved without the inclusion of the ~~plan~~ Risk Reduction Plan components specified in subparagraphs (f)~~(3)~~(2)(C) through (H).

~~(3) Measures to achieve risk reductions required by the approved plan shall be incorporated by the Executive Officer through enforceable permit conditions or compliance plans.~~

(g) Potentially High Risk Level Facilities

(1) Determination of Potentially High Risk Level Facilities

(A) Prior to determining if a facility is a Potentially High Risk Level facility, the Executive Officer will notify the owner or operator that the facility may be designated as a Potentially High Risk Level Facility and meet with the owner or operator to obtain any additional information before the facility is designated as a Potentially High Risk Level Facility.

(B) Upon designating the facility as a Potentially High Risk Level Facility, the Executive Officer will notify the owner or operator in writing and will provide the following information to substantiate the designation:

(i) Findings from the evaluation of emissions data that includes, but is not limited to: ambient air quality data, source test data, compliance data, and emissions data;

(ii) Findings from facility site visits; and

(iii) Findings from the investigation of surrounding sources.

(2) Early Action Reduction Plans for Potentially High Risk Level Facilities

(A) Within 90 days of the date of notification by the Executive Officer that the facility is a Potentially High Risk Level Facility, an owner or operator shall submit an Early Action Reduction Plan that identifies a list of measures that can be implemented immediately to reduce the facility-wide health risk. The Early Action Reduction Plan shall include:

(i) The name, address, and SCAQMD facility identification number;

(ii) Identification of device(s) or process(es) that are the key health risk driver(s);

(iii) Risk reduction measure(s) that can be implemented by the owner or operator that includes but are not limited to procedural changes, process changes, physical modifications, and curtailments; and

(iv) A schedule for implementing the specified risk reduction measures.

(B) Approval of Early Action Reduction Plans

(i) Within 30 days of receipt of the Early Action Reduction Plan, the Executive Officer will conduct an initial review of the Early Action Reduction Plan and confirm receipt.

(ii) The Executive Officer will approve or reject the Early Action Reduction Plan and notify the owner or operator in writing. Approval or rejection will be based on whether adequate risk reduction measures have been identified that reduce appropriate key health risk drivers as quickly as feasible.

(iii) The owner or operator may appeal the rejection of the Early Action Reduction Plan to the Hearing Board under Rule 216. If the Hearing Board denies the appeal, the Early Action Reduction Plan shall be revised and resubmitted within 14 days of the decision. The revised Early Action Reduction Plan shall correct all deficiencies identified by the Executive Officer.

(iv) The approved Early Action Reduction Plan shall be subject to Rule 221 – Plans.

(C) Implementation of Early Action Reduction Plans

The owner or operator shall implement risk reduction measures in an approved Early Action Reduction Plan by the dates specified in the Early Action Reduction Plan for each risk reduction measure.

(3) Health Risk Assessments for Potentially High Risk Level Facilities

(A) Within 180 days of the date of notification by the Executive Officer that the facility is a Potentially High Risk Level Facility, an owner or operator shall submit a Health Risk Assessment for approval following the procedures in the most current version of SCAQMD "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act".

(B) The Executive Officer will approve the Health Risk Assessment pursuant to paragraph (e)(2).

(4) Risk Reduction Plans for Potentially High Risk Facilities

(A) Within 180 days from the date of notification by the Executive Officer that the facility is a Potentially High Risk Level Facility, an owner or operator shall submit a Risk Reduction Plan to the Executive Officer pursuant to paragraph (f)(2) to reduce the impact of total facility emissions below the Action Risk Level.

(B) The Executive Officer will approve the Risk Reduction Plan pursuant to paragraph (f)(3).

(h) Voluntary Risk Reduction Requirements

(1) Participation in Voluntary Risk Reduction Program

(A) The Executive Officer will notify an owner or operator of eligibility to participate in the Voluntary Risk Reduction Program based on the following criteria:

(i) The facility has a Health Risk Assessment approved or prepared by the District for the purpose of the Hot Spots Act or this rule that, as approved or prepared, is below Action Risk Level; and

(ii) The Executive Officer has determined that the facility is not a Potentially High Risk Level Facility.

(B) After notification from the Executive Officer of eligibility, the owner or operator of the eligible facility may participate in the Voluntary Risk Reduction Program by:

(i) Submitting a written acceptance to participate in the Voluntary Risk Reduction Program within 30 days of the date of the notification; and

(ii) Complying with all requirements in this subdivision. Compliance with this subdivision shall be in lieu of the requirements in subdivisions (d), (e), and (f).

(2) Voluntary Risk Reduction Plan

(A) Within 150 days of notification of eligibility, an owner or operator shall submit for approval a Voluntary Risk Reduction Plan to reduce the impact of total facility risk to below the Voluntary Risk Threshold.

(B) The Voluntary Risk Reduction Plan shall follow the procedures in the most current version of "SCAQMD Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program".

(3) Approval of Voluntary Risk Reduction Plans

(A) Within 30 days of receipt, the Executive Officer will conduct an initial review of the Voluntary Risk Reduction Plan and confirm receipt.

(B) The Executive Officer will approve or reject the Voluntary Risk Reduction Plan based on whether:

(i) The Voluntary Risk Reduction Plan was prepared consistent with the most current version of "SCAQMD Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program";

(ii) The information provided was completes and accurate; and

(iii) The Voluntary Risk Reduction Plan has risk reduction measures that will reduce the impact of total facility emissions below the Voluntary Risk Threshold as quickly as feasible, but by no later than two and half years from Voluntary Risk Reduction Plan approval.

(C) Within 30 days of the date of rejection, the owner or operator shall correct all deficiencies identified by the Executive Officer and resubmit the Voluntary Risk Reduction Plan.

(D) If the revised Voluntary Risk Reduction Plan pursuant to subparagraph (h)(3)(C) is denied, the owner or operator shall correct all deficiencies identified by the Executive Officer and resubmit the Voluntary Risk Reduction Plan within 30 days of the date of rejection.

(E) If the second revised Voluntary Risk Reduction Plan pursuant to subparagraph (h)(3)(D) is denied, this denial acts as a notification to prepare an Air Toxics Inventory Report and Health Risk Assessment within 90 days and the owner or operator shall comply with all subsequent requirements following such notification.

(i) The Air Toxics Inventory Report shall follow the procedures in the most current version of SCAQMD "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots'

Information and Assessment Act". The Executive Officer will approve the Air Toxics Inventory Report pursuant to paragraph (d)(4).

(ii) The Health Risk Assessment shall follow the procedures in the most current version of SCAQMD "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act". The Executive Officer will approve the Health Risk Assessment pursuant to paragraph (e)(2).

(F) Any approved Voluntary Risk Reduction Plan shall be subject to Rule 221 – Plans.

(~~h~~i) Implementation of Risk Reduction Plans

(1) The owner or operator shall implement the risk reduction measures specified in the Risk Reduction or Voluntary Risk Reduction Plan approved by the Executive Officer, including approved updated and modified plans, as quickly as feasible but no later than two and a half (2.5) years from the date of the approval of the plans.

(2) The owner or operator shall implement risk reduction measures in an approved plan by the dates specified for each risk reduction measure.

(3) Measures to achieve risk reductions required by the approved plan shall also be incorporated by the owner or operator through enforceable permit conditions or compliance plans.

(j) ~~Progress~~ Reports

(1) Progress Reports

The owner or operator shall submit to the Executive Officer for review annual progress report(s), ~~starting no later than~~ 12 months after approval of the ~~plan~~ Risk Reduction or Voluntary Risk Reduction Plan which shall include, at a minimum, all of the following:

(~~1~~A) The increments of progress achieved in implementing the risk reduction measures specified in the ~~plan~~Risk Reduction or Voluntary Risk Reduction Plan;

(B) Submittal dates of all applicable permit application(s), the status of the applications, and the permit numbers, if applicable;

(~~2~~C) A schedule indicating dates for future increments of progress;

(~~3~~D) Identification of any increments of progress that have been or will be achieved later than specified in the plan and the reason for achieving the increments late; and

(4E) A description of any increases or decreases in emissions of toxic air contaminants that have occurred at the facility, including a description of any associated permits that were subject to Rule 1401, since approval of the plan.

(2) Final Implementation Report for Voluntary Risk Reduction Plans

(A) The owner or operator shall submit to the Executive Officer for approval a Final Implementation Report by the voluntary risk reduction deadline as specified in paragraph (i)(1) following the procedures in the most current version of "SCAQMD Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program".

(B) The Executive Officer will approve the Final Implementation Report provided the measures identified in the approved Voluntary Risk Reduction Plan have been implemented.

(ik) Updating and Modification of Risk Reduction or Voluntary Risk Reduction Plans

(1) If information becomes known to the Executive Officer after the last submitted plan that would substantially impact risks to exposed persons, implementation, or effectiveness of the risk reduction plan, the Executive Officer may require the plan to be updated and resubmitted.

(2) The owner or operator may request Prior to a changes in the risk reduction measures or schedule specified in the currently approved plan, the operator shall by submitting to the Executive Officer for approval an application for a modified plan modification. The application owner or operator shall include a demonstration that the any change in the risk reduction measures is necessary and will still result in expeditious compliance with this rule to achieve below the Action Risk Level or Voluntary Risk Threshold, as applicable risk level as specified in the approved plan. The last approved plan is valid until the modified plan is approved. Any requests for a time extensions must be submitted pursuant to subdivision (l). Any request for a time extension shall be made at least 180 days before the end of the applicable deadline to achieve the required facility-wide risk level that is specified in the approved risk reduction plan.

(jl) Risk Reduction Time Extensions

(1) An owner or operator may submit a request to the Executive Officer for a one-time extension for up to two and a half years to complete implementation of a plan

provided the facility-wide health risk is below the Significant Health Risk Level at the time of the request for the time extension.

(2) An owner or operator that elects to submit a request for a time extension shall submit the request:

(A) At the time the plan is submitted; or

(B) At least 180 days before the end of the risk reduction deadline specified in the approved plan.

(3) An owner or operator that submits a request for a time extension request shall provide the following information to the Executive Officer:

(A) A description of the risk reduction measure(s) for which a time extension is needed;

(B) The reason(s) a time extension is needed;

(C) Progress in implementing risk reduction measures in the plan;

(D) For Risk Reduction Plans, estimated health risk level at the time of the time extension request and at the end of the risk reduction period; and

(E) The length of time requested.

(4) Approval of Time Extensions

The Executive Officer will review the request for the time extension and will approve the time extension based on the following criteria:

(A) The facility-wide health risk is below the Significant Risk Level at the time of submittal of the time extension request;

(B) The owner or operator provides sufficient details identifying the reason(s) a time extension is needed that demonstrates to the Executive Officer that there are specific circumstances beyond the control of the owner or operator that necessitate additional time to complete implementation of the plan. Such a demonstration may include, but is not limited to, providing detailed schedules, engineering designs, construction plans, permit applications, purchase orders, economic burden, and technical infeasibility; and

(C) The time extension will not result in an unreasonable risk to public health.

(~~j~~m) Risk Assessment Procedures

(1) The Executive Officer shall periodically publish or designate procedures for determining health risks under this rule. To the extent possible, the procedures shall be consistent with the policies and procedures of the ~~Office of Environmental Health Hazard Assessment (~~OEHHA~~)~~. Such procedures shall specify:

(A) Acute and chronic reference exposure levels and upper bound estimates of carcinogenic potency that shall be used in evaluating risks;

(B) Compounds that must be subject to a multiple pathway risk assessment. A compound is subject to multiple pathway analysis if the Executive Officer determines that it may reasonably be expected to cause health risk through ingestion exposure, if it is expected to deposit and persist in the environment after emission, and if a quantitative oral cancer potency estimate or reference exposure level has been derived for the compound;

(C) Health protective assumptions that shall be used in evaluating exposure to compounds from inhalation and other routes of exposure;~~.~~

(D) Risk for the potential maximally exposed individual in residential areas and health protective estimates of exposure duration in nonresidential areas; and

(E) Estimates of pollutant dispersion and risk from a source shall not be based upon stack height in excess of acceptable stack height as defined in (c)(1).

~~(2) Within 120 days of publication of risk assessment guidelines required to be published by the OEHHA pursuant to the Air Toxics "Hot Spots" Information and Assessment Act of 1987, the Executive Officer shall report to the District Governing Board if there are any material differences between the OEHHA guidelines and the criteria specified in this rule and recommend for Board approval whether to proceed with amendments to this rule in order to make the rule consistent with the OEHHA guidelines before their designation as the risk assessment guidelines under this rule.~~

~~(3) Promptly after OEHHA finalizes the identification of a new TAC or revises a risk value for an existing TAC, staff will provide notice to the Governing Board and affected industries. Use of any new TAC or a more stringent risk value in health risk assessments for this rule shall be 12 months after the Governing Board receives and files the report containing such notification, unless the Governing Board approves another implementation schedule through an official Board action.~~

~~(4) Also, within 150 days of new chemicals being identified or changes in risk values being finalized by OEHHA, staff will report to the District's Governing Board regarding preliminary estimates of Rule 1402 program impacts that are associated with the new values.~~

(~~5~~2) The Executive Officer will publish procedures for determining the emissions estimates to be used in risk assessments in cases in which a compound has not been detected in analyses which have been conducted according to District-approved

methods, including procedures for excluding such compounds from risk assessments. The procedures shall provide methods for estimating the most likely emission levels of non-detected compounds based on consideration of the likelihood of presence and the method detection limits of compounds.

(~~k~~n) Alternate Hazard Index Levels

An alternate ~~hazard index~~HI level may be used as the Action Risk Level ~~action risk level~~ for a particular total acute or chronic HI if the Executive Officer, in consultation with the ~~Office of Environmental Health Hazard Assessment~~OEHHA, determines that such alternate ~~hazard index~~HI level is protective against adverse health effects. The alternate HI level shall not in any case exceed 10. The facility owner or operator shall attain the alternate HI level for the action risk level.

(~~l~~o) Disclaimer

Compliance with this rule does not authorize the emission of a toxic air contaminant in violation of any federal, state, local or District law or regulation or exempt the owner or operator from any law or regulation.

~~(m) Risk reduction measures implemented in order to comply with other regulatory requirements are acceptable risk reduction measures for the purposes of this rule, provided they are consistent with the requirements of this rule.~~

(~~n~~p) Emissions Inventory Requirements

(1) These emission inventory requirements are applicable to the operator of any facility that has not yet submitted a total facility toxic emissions inventory under the Hot Spots ~~Program~~Act, where:

(A) ~~t~~The facility emits one or more toxic air contaminants on Table I and its annual emissions exceed one or more of the threshold(s) identified in Table I; or

(B) ~~the~~ The primary business operation of the facility is listed in Table II and its annual emissions exceed one or more of the threshold(s) identified in Table II.

(2) The operator of any facility subject to subparagraph (~~n~~p)(1)(A) shall submit an emissions inventory within 60 days of notification from the Executive Officer.

(3) The operator of any facility subject to subparagraph (~~n~~p)(1)(B) shall submit an inventory within 60 days of notification from the Executive Officer, unless the AQMD Governing Board adopts a source-specific rule prior to three years after

March 17, 2000 that specifically exempts the industry, of which the facility is a member, from the inventory provisions of this rule.

(4) The operator of any facility that is required to submit an emissions inventory pursuant to subparagraph (~~n~~p)(1)(A) shall submit an inventory that includes the toxic air contaminant(s) identified in Table I applicable to the facility. The operator of any facility that is required to submit an emissions inventory pursuant to subparagraph (~~n~~p)(1)(B) shall submit an inventory that includes: (1) the toxic air contaminant(s) listed in Table II within the industry category that is applicable to the facility; and (2) the toxic air contaminants listed in Table I applicable to the facility, if applicable. The emissions inventory shall be prepared consistent with the emissions inventory methodology specified by the most current version of CARB "~~ARB's~~ Emissions Inventory Criteria and Guidelines for the Air Toxics 'Hot Spots' Program" ~~(July 1997)~~ and/or any subset of these Guidelines as specified by the Executive Officer.

~~(o) Phase I Facility Health Risk Assessment Revision Requirements~~

~~(1) Any operator of a Phase I facility that was required to submit a Hot Spots health risk assessment and has not received District approval on the health risk assessment, due to a request by the operator to update the inventory, shall submit to the District by July 1, 2000 or earlier, as requested by the Executive Officer, a revised total facility inventory for the year 1995 or later which meets the requirements of the Hot Spots Act.~~

~~(2) Phase I facilities requested to provide a revised facility inventory pursuant to paragraph (o)(1), that fail to do so, shall be subject to public notification requirements on the most recent inventory data and OEHHA reviewed risk assessment that is subject to District approval that the facility submitted to the District pursuant to the Hot Spots Act.~~

(~~p~~q) Public Notification Requirements

(1) Health Risk Assessment

The owner or operator of any facility for which total facility risk, as determined through a District approved or prepared Health Risk Assessment, is greater than or equal to the Notification Risk Level shall follow the procedures in the most current version of "SCAQMD Public Notification Procedures for Facilities Under the Air Toxics 'Hot Spots' Information and Assessment Act (AB 2588) and Rule 1402" and:

(A) Distribute the approved or prepared Health Risk Assessment;

(B) Distribute Public Notification Materials; and

(C) Participate in a District-approved Public Meeting.

(2) Progress Reports

Following the procedures in the most current version of "SCAQMD Public Notification Procedures for Facilities Under the Air Toxics 'Hot Spots' Information and Assessment Act (AB 2588) and Rule 1402":

(A) The owner or operator of any facility for which total facility risk, as determined through a progress report pursuant to requirements in subdivision (i)(1), is greater than or equal to the Action Risk Level shall distribute Public Notification Materials 12 months after the Executive Officer approves the Risk Reduction Plan and every 12 months thereafter, until the total facility risk is below the Action Risk Level; and

(B) Notwithstanding subparagraph (q)(2)(A), the owner or operator of any facility for which total facility risk, as determined through a progress report pursuant to requirements in subdivision (i), is greater than or equal to the Significant Risk Level shall participate in a District-approved Public Meeting.

(3) Voluntary Risk Reduction Program

Public notification will be provided by SCAQMD following the procedures in the most current version of "SCAQMD Public Notification Procedures for Facilities Under the Air Toxics 'Hot Spots' Information and Assessment Act (AB 2588) and Rule 1402".

~~(1) The operator of any facility for which total facility risk, as determined through a District approved HRA or progress report, exceeds the action risk level shall provide the following public notification 12 months after the Executive Officer approves the risk reduction plan and every 12 months thereafter, until the total facility risk is below the action risk level:~~

~~(A) written public notification to report the progress of risk reductions pursuant to the most recent Board approved "Public Notification Procedures for Phase I and II Facilities Under the Air Toxics Hot Spots Information and Assessment Act" Section III.C.2. Public Notice Materials, which requires notice materials written in both English and Spanish, and additional languages as deemed appropriate by the Executive Officer; Section III.C.3. Area of Distribution (Area of Impact); Section III.C.4. Method of Distribution; and Section III.C.5. Verification of Distribution.; and~~

~~(B) public meetings if the total facility risk, as determined through a District approved HRA or the progress report, exceeds a MICR of one hundred in one million (100×10^{-6}), pursuant to the "Public Notification Procedures for Phase I and II Facilities Under the Air Toxics Hot Spots Information and Assessment Act" Section III.D. Public Meetings.~~

~~(2) Any operator with a facility-wide risk that exceeds an MICR of 10 in one million or a Hazard Index of 1.0 (0.5 for lead) as determined through a District approved HRA, shall notice the public in accordance with California Health and Safety Code Section 44362 and the most recently District approved "Public Notification Procedures for Phase I and II Facilities Under the Air Toxics Hot Spots Information and Assessment Act".~~

TABLE I
EMISSIONS REPORTING THRESHOLDS FOR SPECIFIC TACs

TAC	CAS NUMBER	THRESHOLD
1,3 Butadiene	106-99-0	2 lb/yr
Benzene	71-43-2	14 lb/yr
Cadmium	7440-43-9	0.09 lb/yr
Formaldehyde	50-00-0	67 lb/yr
Hexavalent Chromium	18540-29-9	0.002 lb/yr
Methylene Chloride	75-09-2	400 lb/yr
Nickel	7440-02-0	1.5 lb/yr
Perchloroethylene	127-18-4	67 lb/yr

TABLE II
EMISSIONS REPORTING THRESHOLDS FOR SPECIFIC INDUSTRIES

INDUSTRY	TAC	CAS NUMBER	THRESHOLD
Biomedical Sterilizing Operations	Ethylene Oxide	75-21-8	4.5 lb/yr
Dry Cleaning	Perchloroethylene	127-18-4	67 lb/yr
	Methylene Chloride	75-09-2	400 lb/yr
Gasoline Stations	Benzene in Gasoline	71-43-2	14 lb/yr
Metal Finishing	Hexavalent Chromium	18540-29-9	0.002 lb/yr
	Cadmium	7440-43-9	0.09 lb/yr
	Nickel	7440-02-0	1.5 lb/yr
	Copper	7440-50-8	500 lb/yr
Motion Picture Film Processing	Perchloroethylene	127-18-4	67 lb/yr
Rubber	Chlorinated Dibenzofurans,		1,000 lb of rubber
	Benzene,	71-43-2	product cured/
	Xylenes,	1330-20-7	processed per year
	Toluene,	108-88-3	
	Phenol, ~~and~~	108-95-2	
	Methylene Chloride	75-09-2	
Wood Stripping/Refinishing,	Methylene Chloride	75-09-2	400 lb/yr
	DEHP	117-81-7	32 lb/yr
	Glycol ethers and their acetates,		500 lb/yr
	Ethylene Glycol (Mono)Methyl Ether, ~~and~~	109-86-4	
	Ethylene Glycol (Mono)Ethyl Ether Acetate	111-15-9	
	Ethylene Glycol (Mono)Butyl Ether ~~and~~	111-76-2	2,000 lb/yr
	Ethylene Glycol (Mono)Ethyl Ether	110-80-5	
	Ethylene Glycol (Mono)Methyl Ether Acetate ~~and Ethylene Glycol (Mono)Methyl Ether~~	110-49-6	1,000 lb/yr

APPENDIX B

ASSUMPTIONS AND CALCULATIONS

Table B-1 Summary

Total On-Site for Three Facilities ("worst-case")

	CO, lb/day	NOx, lb/day	PM10, lb/day	PM2.5, lb/day	VOC, lb/day	SOx, lb/day	CO2e, ton/year	Total GHG Amortized over 30 years for 24 facilities (CO2e/yr)
Grading/Site Preparation	34	76	**10.6**	**4.4**	8.2	0.1	47	
Paving	23	36	2.2	2.0	0.7	0.02	7	
Equipment Installation	**45**	**89**	4.3	3.9	**10.3**	**0.1**	**1243**	
								346
Significance Threshold	550	100	150	55	75	150	10,000	
Exceed Significance?	NO	NO	NO	NO	NO	NO	NO	

Table B-2 Grade/Site Summary

Grading/Site Preparation -	for Three Facilities								
Construction Schedule	**10 days**[a]								
Equipment Type[a,b]	**No. of Equipment**	**hr/day**	**Crew Size per facility**						
Rubber Tired Dozers	3	7.0	4						
Tractors/Loaders/Backhoes	3	7.0							
Construction Equipment Emission Factors									
	CO	**NOx**	**PM10**	**PM2.5**	**VOC**	**SOx**	**CO2**	**CH4**	**NO2**
Equipment Type[c]	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr
Rubber Tired Dozers	1.101	2.381	0.099	0.091	0.284	0.002	238	0.026	0.099
Tractors/Loaders/Backhoes	0.374	0.498	0.034	0.031	0.073	0.001	67	0.007	0.021
Fugitive Dust Bulldozer Parameters									
Vehicle Speed (mph)[d]	**Vehicle Miles Traveled**[e]								
3	63								
Fugitive Dust Material Handling									
Aerodynamic Particle Size Multiplier[f]	**Mean Wind Speed**[g]	**Moisture Content**[h]	**Dirt Handled**[i]					**Dirt Handled**[j]	
	mph		cy					lb/day	
0.35	10	7.9	2,730		136513			6,825,625	
Construction Vehicle (Mobile Source) Emission Factors[k]									
	CO	**NOx**	**PM10**	**PM2.5**	**VOC**	**SOx**	**CO2**	**CH4**	**NO2**
	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile
Automobile	4.12E-03	3.41E-04	1.04E-04	4.41E-05	4.50E-04	8.22E-06	0.73	2.01E-05	4.83E-06
Medium-Duty Truck	3.98E-03	1.81E-02	5.40E-04	3.85E-04	7.84E-04	3.64E-05	3.76	3.64E-05	2.56E-04
Number of Trips and Trip Length									
Vehicle	**No. of One-Way Trips/Day**	**One-Way Trip Length (miles)**							
Automobile	12	20							
Medium-duty Truck[l]	9	20							

Table B-2 Grade/Site Summary (continued)

Incremental Increase in Combustion Emissions from Construction Equipment

Equation: Emission Factor (lb/hr) x No. of Equipment x Work Day (hr/day) = Construction Emissions (lb/day)

	CO	NOx	PM10	PM2.5	VOC	SOx	CO2	CH4	NO2
Equipment Type	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day
Rubber Tired Dozers	23.12	50.00	2.08	1.91	5.96	0.05	4,994	0.54	2.08
Tractors/Loaders/Backhoes	7.86	10.45	0.71	0.66	1.53	0.02	1,402	0.14	0.43
Total	**31.0**	**60.5**	**2.8**	**2.6**	**7.5**	**0.1**	**6,396**	**0.7**	**2.5**

Incremental Increase in Fugitive Dust Emissions from Construction Operations

Equations:

Grading[m]: PM10 Emissions (lb/day) = 0.60 x 0.051 x mean vehicle speed$^{2.0}$ x VMT x (1 - control efficiency)

Material Handling[n] PM10 Emissions (lb/day) = (0.0032 x aerodynamic particle size multiplier x (wind speed (mph)/5)$^{1.3}$/(moisture content/2)$^{1.4}$ x dirt handled (lb/day)/2,000 (lb/ton) (1 - control efficiency)

	Control Efficiency	Unmitigated PM10	Unmitigated PM2.5[o]
Description	%	lb/day	lb/day
Earthmoving	61	6.8	1.422
Material Handling	61	0.54	0.113
Total		**7.3**	**1.535**

Incremental Increase in Combustion Emissions from Onroad Mobile Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

	CO	NOx	PM10	PM2.5	VOC	SOx	CO2	CH4	NO2
Vehicle	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day
Automobiles	1.9114	8.6912	0.2594	0.1846	0.3764	0.0175	1,803	0.0175	0.1231
Medium Duty Trucks	1.4336	6.5184	0.1945	0.1385	0.2823	0.0131	1,352	0.0131	0.0923
	3.345	**15.210**	**0.454**	**0.323**	**0.659**	**0.031**	**3,154**	**0.031**	**0.215**

Table B-2 Grade/Site Summary (continued)

Total Incremental Emissions from Construction Activities							
	CO	**NOx**	**PM10**	**PM2.5**	**VOC**	**SOx**	**CO2**
Sources	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	metric ton/year
Emissions	**34**	**76**	**10.6**	**4.4**	**8.2**	**0.098**	**47**
Significance Threshold[p]	***550***	***100***	***150***	***55***	***75***	***150***	
Exceed Significance?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**	

Notes:

Project specific data may be entered into shaded cells. Changing the values in the shaded cells will not affect the integrity of the worksheets. Verify that units of values entered match units for cell.

Adding lines or entering values with units different than those associated with the shaded cells may alter the integrity of the sheets or produce incorrect results.

a) Based on assumption that each bulldozer can move 35 cubic yards of soil per hour and one acre of area with a depth of 20 feet.

b) Estimated construction equipment assumed to operate one eight-hour shift per day.

c) Emission factors estimated using OFFROAD2011

d) Caterpillar Performance Handbook, Edition 33, October 2003 Operating Speeds, p 2-3.

e) Two bulldozers traveling three miles per hour for seven hours per day.

f) USEPA, AP-42, Jan 1995, Section 13.2.4 Aggregate Handling and Storage Piles, p 13.2.4-3 Aerodynamic particle size multiplier for < 10 µm

g) Mean wind speed - maximum of daily average wind speeds reported in 1981 meteorological data.

i) Assuming 2730.25 cubic yards of dirt handled (4840 ft2 x 20 ft) x yd3/27 ft3)/ days)

j) Dirt handled, lb/day = (2730.25 yd3 x 2,500 lb/yd3)

k) Emission factors estimated using EMFAC2011 for the 2014 fleet year.

l) Assumed 30 cubic yd truck capacity for 2730.25 cy of dirt [(2730.25 cy x truck/30 cy) = 9 one-way truck trips/day].

m) USEPA, AP-42, July 1998, Table 11.9-1, Equation for Site Grading ≤ 10 µm

n) USEPA, Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures, Sept 1992, EPA-450/2-92-004, Equation 2-12

o) Includes watering at least three times a day per Rule 403 (61% control efficiency)

p) SCAQMD CEQA significance thresholds

Table B-3 Paving Summary

Asphalt Paving of Foundation	**for Three Facilities**							
Construction Schedule	**8**	**days**[a]						
Equipment Type[a]	**No. of Equipment**	**hr/day**	**Crew Size per facility**					
Pavers	3	7.0	4					
Cement and Mortar Mixers	3	6.0						
Rollers	3	7.0						
Construction Equipment Combustion Emission Factors								
	CO	**NOx**	**PM10**	**PM2.5**	**VOC**	**SOx**	**CO2**	**CH4**
Equipment Type[b]	lb/hr	lb/hr	lb/hr		lb/hr	lb/hr	lb/hr	lb/hr
Pavers	0.526	0.810	0.056	0.052	0.143	0.001	78	0.013
Cement and Mortar Mixers	0.042	0.055	0.002	0.002	0.009	0.000	7	0.001
Rollers	0.401	0.616	0.042	0.039	0.091	0.001	67	0.008
Construction Vehicle (Mobile Source) Emission Factors[c]								
	CO	**NOx**	**PM10**	**PM2.5**	**VOC**	**SOx**	**CO2**	**CH4**
	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile
Automobile	4.12E-03	3.41E-04	1.04E-04	4.41E-05	4.50E-04	8.22E-06	0.73	2.01E-05
Medium-Duty Truck	3.98E-03	1.81E-02	5.40E-04	3.85E-04	7.84E-04	3.64E-05	3.76	3.64E-05
Number of Trips and Trip Length								
Vehicle	**No. of One-Way Trips/Day**	**One-Way Trip Length (miles)**						
Worker	12	20						
Delivery/Disposal Truck[d]	9	20						

Table B-3 Paving Summary (continued)

Incremental Increase in Combustion Emissions from Construction Equipment

Equation: Emission Factor (lb/hr) x No. of Equipment x Work Day (hr/day) = Construction Emissions (lb/day)

	CO	NOx	PM10	PM2.5	VOC	SOx	CO2	CH4
Equipment Type	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day
Pavers	11.05	17.00	1.18	1.09	0.2	0.00	152	0.02
Cement and Mortar Mixers	7.23	11.09	0.75	0.69	0.0	0.00	0	0.00
Rollers	0.88	1.16	0.05	0.05	0.0	0.00	0	0.00
Total	**19**	**29**	**1.99**	**1.83**	**0.19**	**0.00**	**152**	**0.02**

Incremental Increase in Combustion Emissions from Onroad Mobile Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

	CO	NOx	PM10	PM2.5	VOC	SOx	CO2	CH4
Vehicle	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day
Worker	1.978	0.164	0.0498	0.0212	0.2161	0.0039	349.6105	0.0096
Delivery	1.434	6.518	0.1945	0.1385	0.2823	0.0131	1351.9159	0.0131
Total	**3.412**	**6.682**	**0.2443**	**0.1596**	**0.4984**	**0.0170**	**1701.5264**	**0.0227**

Total Incremental Combustion Emissions from Construction Activities

	CO	NOx	PM10	PM2.5	VOC	SOx	CO2eq
Sources	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	metric ton/year
Emissions	**23**	**36**	**2.2**	**2.0**	**0.7**	**0.0**	**6.8**
Significance Threshold[e]	***550***	***100***	***150***	***55***	***75***	***150***	
Exceed Significance?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**	

Notes:

Project specific data may be entered into shaded cells. Changing the values in the shaded cells will not affect the integrity of the worksheets. Verify that units of values entered match units for cell. Adding lines or entering values with units different than those associated with the shaded cells may alter the integrity of the sheets or produce incorrect results.

a) Estimated construction equipment assumed to operate one eight-hour shift per day.

b) Emission factors estimated using OFFROAD2011

c) Emission factors estimated using EMFAC2011 for the 2014 fleet year.

d) Assumed three deliver truck trips per day.

e) SCAQMD CEQA significance thresholds

Table B-4 Installation Summary

APCD Installation	**for Three Facilities**								
Construction Schedule	30	days							
Equipment Type[a]	**No. of Equipment**	**hr/day**	**Crew Size per facility**						
Cranes	9	4.0	4						
Forklifts	6	6.0							
Tractors/Loaders/Backhoes	6	8.0							
Construction Equipment Combustion Emission Factors									
	CO	**NOx**	**PM10**	**PM2.5**	**VOC**	**SOx**	**CO2**	**CH4**	**NO2**
Equipment Type[b]	lb/hr	lb/hr	lb/hr		lb/hr	lb/hr	lb/hr	lb/hr	lb/hr
Cranes	0.431	1.028	0.044	0.041	0.120	0.001	121	0.011	0.043
Forklifts	0.221	0.355	0.018	0.016	0.050	0.001	54	0.004	0.015
Tractors/Loaders/Backhoes	0.374	0.498	0.034	0.031	0.073	0.001	67	0.007	0.021
Construction Vehicle (Mobile Source) Emission Factors[c]									
	CO	**NOx**	**PM10**	**PM2.5**	**VOC**	**SOx**	**CO2**	**CH4**	**NO2**
	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile
Automobile	4.12E-03	3.41E-04	1.04E-04	4.41E-05	4.50E-04	8.22E-06	0.73	2.01E-05	4.83E-06
Medium-Duty Truck	3.98E-03	1.81E-02	5.40E-04	3.85E-04	7.84E-04	3.64E-05	3.76	3.64E-05	2.56E-04
Number of Trips and Trip Length									
Vehicle	**No. of One-Way Trips/Day**	**One-Way Trip Length (miles)**							
Worker	12	20							
Medium-duty Truck[d]	9	20							

Table B-4 Installation Summary (continued)

Incremental Increase in Combustion Emissions from Construction (Off Road) Equipment

Equation: Emission Factor (lb/hr) x No. of Equipment x Work Day (hr/day) = Construction Emissions (lb/day)

	CO	NOx	PM10	PM2.5	VOC	SOx	CO2	CH4	NO2
Equipment Type	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day
Cranes	15.5	37.0	1.60	1.47	4.3	0.05	4,353	0.39	1.54
Forklifts	8.0	12.8	0.64	0.59	1.79	0.02	1,957	0.16	0.53
Tractors/Loaders/Backhoes	18.0	23.9	1.63	1.50	3.50	0.04	3,204	0.31	0.99
Total	**41.5**	**73.7**	**3.9**	**3.6**	**9.6**	**0.11**	**9,514**	**0.87**	**3.06**

Incremental Increase in Combustion Emissions from Onroad Mobile Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

	CO	NOx	PM10	PM2.5	VOC	SOx	CO2	CH4	NO2
Vehicle	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day
Worker	1.91	8.7	0.259	0.185	0.376	1.75E-02	1,803	0.0175	0.1231
Medium-Duty Truck	1.43	6.5	0.20	0.138	0.28	1.30E-02	1,352	0.013	0.092
Total	**3.3**	**15.2**	**0.45**	**0.32**	**0.66**	**3.05E-02**	**3,154**	**0.031**	**0.215**

Total Incremental Combustion Emissions from Construction Activities

	CO	NOx	PM10	PM2.5	VOC	SOx	CO2eq
Sources	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	metric ton/year
Emissions	**45**	**89**	**4.3**	**3.9**	**10.3**	**0.1**	**1,243**
Significance Threshold[e]	***550***	***100***	***150***	***55***	***75***	***150***	
Exceed Significance?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**	

Notes:

Project specific data may be entered into shaded cells. Changing the values in the shaded cells will not affect the integrity of the worksheets. Verify that units of values entered match units for cell. Adding lines or entering values with units different than those associated with the shaded cells may alter the integrity of the sheets or produce incorrect results.

a) Estimated construction equipment assumed to operate one eight-hour shift per day.

b) Emission factors estimated using OFFROAD2011

c) Emission factors estimated using EMFAC2011 for the 2014 fleet year.

d) Assumed three deliver truck trips per day.

e) SCAQMD CEQA significance thresholds

Table B-5 Operation Summary

Operational	for Three Facilities								
	CO	**NOx**	**PM10**	**PM2.5**	**VOC**	**SOx**	**CO2**	**CH4**	**NO2**
	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile
Automobile	4.12E-03	3.41E-04	1.04E-04	4.41E-05	4.50E-04	8.22E-06	0.73	2.01E-05	4.83E-06
Medium-Duty Truck[a]	3.98E-03	1.81E-02	5.40E-04	3.85E-04	7.84E-04	3.64E-05	3.76	3.64E-05	2.56E-04

Number of Trips and Trip Length									
Vehicle	**No. of One-Way Trips/Day**[i]	**One-Way Trip Length**[j] **(miles)**							
Worker	0	20							
Medium-Duty Truck	3	20							

Incremental Increase in Combustion Emissions from Onroad Mobile Vehicles									
Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)									
	CO	**NOx**	**PM10**	**PM2.5**	**VOC**	**SOx**	**CO2**	**CH4**	**NO2**
Vehicle	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day
Automobile	0.00	0.000	0.0000	0.0000	0.000	0.00000	0	0.0000	4.83E-06
Medium-Duty Truck	0.5	2.2	0.065	0.046	0.09	0.0044	451	0.0044	0.031

Total Incremental Emissions from Operational Activities									
	CO	**NOx**	**PM10**	**PM2.5**	**VOC**	**SOx**	**CO2**		
Sources	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day	metric ton/year		
Emissions	**0.5**	**2.2**	**0.1**	**0.0**	**0.1**	**0.00**	**0.21**		
Significance Threshold[b]	***550***	***55***	***150***	***55***	***75***	***150***	***10,000***		
Exceed Significance?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**		

Notes:

a) Emission factors estimated using EMFAC2011 for the 2016 fleet year.

b) SCAQMD significance thresholds

Table B-6 Thermal Oxidizer Summary

Annual Emission Reporting Default Emission Factors for External Combustion Equipment

Fuel Type (fuel unit)	Organic Gases, lb/mmscf	Rule 1147 Nitrogen Oxides, lb/mmbtu	Sulfur Oxides, lb/mmscf	Carbon Monoxide, lb/mmscf	Particulate Matter, lb/mmscf	CO2, lb/mmscf	N2O, lb/mmscf	CH4, lb/mmscf
Natural Gas/ Other Equipment	7	0.073	0.6	35	7.5	120,000	0.64000	2.3

Annual Emission Reporting (AER) defaulting emission factors from B1 external combustion equipment for all criteria pollutants exempt NOx.
BACT= Rule 1147 NOx emissions limit was used.
CO2, N2O and CH4 emission factors from AP-42 Table 1.4-2, July 1998

Thermal Oxidizer Criteria Pollutant Emissions

Natural Gas Rating, mmbtu/hr	Conversion, btu/scf	Natural Gas Usage, mmscf/hr	Op Time, hr/day	ROG, lb/day	NOx, lb/day	SOx, lb/day	CO, lb/day	PM, lb/day
2.44	1,050	0.00232	8	0.1	1.4	0.01	0.7	0.1

Natural gas rating based on engineering estimate.

Thermal Oxidizer Greenhouse Gas Emisisons

Natural Gas Usage, mmscf/yr	CO2, metric ton/year	N2O, metric ton/year	CH4, metric ton/year	CO2e, metric ton/year
20.3	1,105	0.01	0.02	1,107

Table B-7
Construction Equipment Fuel Use (Off Road)

Grading/Site Preparation

Equipment Type	No. of Equipment	Op Time, hr/day	Fuel Economy, gal/hr	Fuel Used, gal/day
Rubber Tired Dozers	3	7.0	5.2	109.2
Tractors/Loaders/Backhoes	3	7.0	1.9	39.9
			Total:	**149.1**

Paving

Equipment Type	No. of Equipment	Op Time, hr/day	Fuel Economy, gal/hr	Fuel Used, gal/day
Pavers	1	7.0	2.8	19.6
Cement and Mortar Mixers	4	6.0	3.8	91.2
Rollers	1	7.0	1.6	11.2
Tractors/Loaders/Backhoes	1	7.0	1.9	13.3
			Total:	**135.3**

Equipment Installation

Equipment Type	No. of Equipment	Op Time, hr/day	Fuel Economy, gal/hr	Fuel Used, gal/day
Cranes	3	4.0	3.52	42.24
Forklifts	2	6.0	0.96	11.52
Tractors/Loaders/Backhoes	2	8.0	1.9	30.4
			Total:	**84.16**

Table B-8
Vehicle Fuel Use (On Road)
Construction and Operation

Grading/Site Preparation

Vehicle	No. of One-Way, Trips/Day	One-Way Trip Length, miles	Fuel Economy, mpg	Fuel Used, gal/day
Automobile	12	20	10	48
Medium-duty Truck	9	20	40	9

Paving

Vehicle	No. of One-Way, Trips/Day	One-Way Trip Length, miles	Fuel Economy, mpg	Fuel Used, gal/day
Automobile	12	20	10	48
Medium-duty Truck	9	20	40	9

Equipment Installation

Vehicle	No. of One-Way, Trips/Day	One-Way Trip Length, miles	Fuel Economy, mpg	Fuel Used, gal/day
Automobile	12	20	10	48
Medium-duty Truck	9	20	40	9

Operational

Vehicle	No. of One-Way, Trips/Day	One-Way Trip Length, miles	Fuel Economy, mpg	Fuel Used, gal/day
Medium-duty Truck	3	20	40	3

APPENDIX C

ASSOCIATED PAR 1402 GUIDANCE DOCUMENTS

South Coast Air Quality Management District

DRAFT

SCAQMD Public Notification Procedures for Facilities Under the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) and Rule 1402

Updated July 2016

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I. Introduction

The Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) and its subsequent amendments established a statewide program to inventory air toxics emissions from individual facilities as well as requirements for risk assessment, public notification of potential health risks, and risk reduction. South Coast Air Quality Management District (SCAQMD) Rule 1402 – Control of Toxic Air Contaminants from Existing Sources establishes facility-wide requirements for existing facilities that emit toxic air contaminants (TACs) and implements AB 2588. This document specifies the SCAQMD's public notification procedures that a facility must follow if the facility has an approved Health Risk Assessment that shows a cancer risk greater than or equal to the Rule 1402 Notification Risk Level of ten in one million (10×10^{-6}), a total acute or chronic non-cancer Hazard Index (HI) of one (1.0) for any target organ system at any receptor location, or if the facility exceeds the more stringent of either the National Ambient Air Quality Standard (NAAQS) for lead or applicable ambient lead limit in an SCAQMD rule. This document also provides the public notification procedures for a facility that is participating in the Voluntary Risk Reduction Program under Rule 1402. The public notification procedures in this document apply to all AB 2588 and Rule 1402 facilities except for facilities in the industrywide inventory program[1]. For questions regarding the public notification procedures, please contact the AB 2588 Section at 909-396-3616 or AB2588@aqmd.gov.

II. Background

Facility owners or operators subject to AB 2588 must submit a comprehensive air toxics emissions inventory every four years (referred to as a "quadrennial update"). Based on this quadrennial update, along with other parameters such as receptor distance, potency, and multi-pathway exposures, the SCAQMD staff prioritizes the facility and calculates a Total Facility Score[2]. Upon initial prioritization of facilities, the SCAQMD staff conducts further auditing to verify the Total Facility Score. If the Total Facility Score is greater than 10, the SCAQMD staff notifies the facility that they are subject to Rule 1402 and they will be required to prepare an Air Toxics Inventory Report and Health Risk Assessment. If the health risk reported in the approved Health Risk Assessment is greater than or equal to the Rule 1402 Notification Risk Level, then the facility owner or operator must provide public notification. Public notification is also required for facilities that elect to participate in the Rule 1402 Voluntary Risk Reduction Program. Public notification informs the public of their exposure to toxic air contaminants from facilities and the potential health risks associated with those exposures.

Under Health and Safety Code Section 44362(b), the operator of a facility must provide notice to all exposed persons if, in the judgment of the local air district, the facility's AB 2588 Health Risk Assessment indicates there is a significant health risk associated with air toxic emissions from the facility. The notice is to be made in accordance with procedures specified by the district. The SCAQMD Governing Board adopted the Rule 1402 Notification Risk Level which represents the "significant health risk" levels requiring public notification under AB 2588. Health and Safety

[1] Separate notification procedures were approved by the SCAQMD Governing Board in January 2007 for three industry-wide categories, including gas stations, dry cleaners using perchloroethylene, and emergency diesel engines. (Available here: http://www3.aqmd.gov/hb/2007/January/070128a.html)
[2] Total Facility Scores are calculated using SCAQMD's "Facility Prioritization Procedures for AB 2588".

Code Section 44362(b) specifies that the notification threshold and notification procedures be determined by each local air district.

III. Health Risk Thresholds for Public Notification

Rule 1402 establishes the health risk thresholds and specific conditions in which public notification is required. This document establishes the public notification procedures an owner or operator of a facility that is subject to public notification requirements under Rule 1402 subdivision (q) must follow. Facility owners or operators required to conduct public notification will receive a notice to perform public notification from the Executive Officer by certified mail. Pursuant to Rule 1402, there are two scenarios when public notification is required (Table 1):

- Approved Health Risk Assessment that is greater than or equal to the Rule 1402 Notification Risk Level (Rule 1402, paragraph (q)(1)); or
- Total facility risk as determined through a Risk Reduction Plan Progress Report is greater than or equal to the Action Risk Level (Rule 1402, paragraph (q)(2)).

The following provides more details regarding the public notification procedures for these two scenarios.

Public Notification for an Approved Health Risk Assessment that is Greater than or Equal to the Rule 1402 Notification Risk Level

Pursuant to paragraph (q)(1) of Rule 1402, an owner or operator of any facility is required to provide public notification if the total facility risk, as determined through a District approved or prepared Health Risk Assessment, is greater than or equal to the Notification Risk Level. The Rule 1402 Notification Risk Level is:

- A Maximum Individual Cancer Risk (MICR) of ten in one million (10×10^{-6});
- A total acute or chronic non-cancer HI of one (1.0) for any target organ system at any receptor location; or
- The more stringent of either the NAAQS for lead or the applicable ambient lead concentration in a SCAQMD rule.

There are three public notification components that the owner or operator must provide: Distribute Health Risk Assessment (Section IV), Distribute Public Notification Materials (Section V), and Public Meetings (Section VI).

Public Notification for a Progress Report that is Greater than or Equal to the Action Risk Level

Under Rule 1402, a facility that is implementing a Risk Reduction Plan is required to submit for review annual progress reports. Pursuant to paragraph (q)(2) of Rule 1402, an owner or operator of any facility for which total facility risk, as determined through a Progress Report is greater than or equal to the Action Risk Level shall provide written public notification 12 months after the Executive Officer approves the Risk Reduction Plan and every 12 months thereafter, until the total facility risk is below the Action Risk Level. The Rule 1402 Action Risk Level is:

- A MICR of twenty-five in one million (25×10^{-6});
- A cancer burden of one half (0.5);
- A total acute or chronic non-cancer HI of three (3.0) for any target organ system at any receptor location; or

- The NAAQS for lead.

For Progress Reports where the health risk is greater than the Action Risk Level, there is one public notification component: Distribute Public Notification Materials (Section V).

In addition to Health Risk Assessment distribution, Rule 1402 requires that an owner or operator of any facility for which total facility risk, as determined through a Progress Report, is greater than or equal to the Significant Risk Level shall conduct public meetings. Under Rule 1402, the Significant Risk Level is:

- A MICR of one hundred in one million (100×10^{-6}); or
- A total acute or chronic non-cancer HI of five (5.0) for any target organ system at any receptor location.

For Progress Reports where the health risk is greater than or equal to the Significant Risk Level, there are two public notification components: Distribute Public Notification Materials (Section V) and Public Meetings (Section VI).

Table 1
Summary of Threshold Requirements for Public Notifications

Thresholds and Requirements for Public Notifications	Health Risk Assessment Distribution	Distribution of Public Notification Materials	Public Meetings
Approved Health Risk Assessment ≥ Notification Risk Threshold	Yes	Yes	Yes
Progress Report ≥ Action Risk Threshold	No	Yes	No
Progress Report ≥ Significant Risk Threshold	No	Yes	Yes

IV. Procedures to Distribute Health Risk Assessments

This section discusses the procedures for Health Risk Assessment Distribution (summarized in Table 2). Health Risk Assessment Distribution is required after the approved Health Risk Assessment determines the health risk is greater than or equal the Notification Risk Level. Within 30 days of the date of notice to perform public notification, the owner or operator must distribute a copy of the facility's approved Health Risk Assessment, with a cover letter provided by the SCAQMD (sample provided in Appendix D) to all school libraries and schools[3] in the area of impact and the public library closest to the facility. Proof of Health Risk Assessment distribution will be submitted along with proof of Public Notification Materials distribution. The facility owner or operator must verify distribution of Health Risk Assessment and Public Notification Materials using the verification form provided in Appendix A within 15 days of the date of Public Notification Materials distribution.

[3] For the purpose of these public notification procedures, the definition of "school" under Health and Safety Code Section 42301.9 shall be used. Under this definition, "school" means any public or private school used for purposes of the education of more than 12 children in kindergarten or any of grade 1 to 12, but does not include, any school in which education is primarily conducted in private homes.

In addition, within 15 days of the date of Health Risk Assessment approval, SCAQMD staff will post the approved Health Risk Assessment (or an approved version with Business Confidential Information redacted, if appropriate) and the Health Risk Assessment approval letter on the SCAQMD website.

Table 2
Procedures to Distribute Health Risk Assessment

Procedure	Schedule	Responsibility
Distribute copy of facility's approved Health Risk Assessment to all school libraries and schools in the area of impact and public library closest to the facility	Within 30 days of the date of notice to perform public notification	Owner or operator of facility
Submit to SCAQMD proof of Health Risk Assessment distribution	Within 15 days of the date of Public Notification Materials distribution	Owner or operator of facility
Post approved Health Risk Assessment and Health Risk Assessment approval letter on SCAQMD website	Within 15 days of the date of Health Risk Assessment approval	SCAQMD staff

V. Procedures to Distribute Public Notification Materials

This section discusses the procedures for distributing Public Notification Materials (Table 3). Distributing Public Notification Materials is required after the approved Health Risk Assessment determines the health risk is greater than or equal to the Notification Risk Level or the health risk of a Risk Reduction Plan Progress Report is greater than or equal to the Action Risk Level. The Public Notification Materials must include a notification letter developed by the SCAQMD (sample provided in Appendix B). The notification letter will include information about the facility such as facility address and type of business. The notification letter will also include information about the specific toxic air contaminants that are contributing substantially to the health risk, the particular health risk notification levels that are exceeded, and the estimated health risk. If a public meeting is required, the notice letter will include information about the time, date, location, and purpose of the public meeting. The Executive Officer will determine if other languages, in addition to English, should be used. In the past, District staff has required translation for all languages spoken by $\geq$10% of a census block group in a public notification area. Translation can be arranged by the SCAQMD and the cost charged to the facility.

The facility has the option of including a letter of its own authorship which has been reviewed and approved by the Executive Officer. If a facility operator chooses to include their own letter as part of the Public Notification Materials, a draft of the facility letter must be submitted to the SCAQMD within 15 days of the date of notice to perform public notification.

Optional Facility Public Notice Letter

The facility operator may choose to prepare a brief letter that simply refers to the enclosed SCAQMD materials, or a longer letter communicating additional information. In either case, the letter should consist of brief paragraphs in non-technical language. Some acceptable information includes:

- A description of the facility and its products or services;

- An explanation of why the facility emits toxic air contaminants;
- Steps the facility has taken or will take to reduce emissions;
- An invitation to the public meeting;
- Identification of the facility contact person with a phone number; and
- Other information relating to facility emissions or the Health Risk Assessment.

Certain content will not be accepted in the facility letter. Statements that undermine the risk assessment process or trivialize the risk associated with air toxics are not considered appropriate to include in the facility letter and will be disapproved by the SCAQMD. For example, the facility letter should not discredit the risk assessment methodology used in the AB 2588 program or imply that it is overly conservative. The facility letter must be translated to other languages as determined by the Executive Officer. Translation can be arranged by the SCAQMD and the cost charged to the facility.

Area of Impact

For cancer risk, the area of impact is the geographic area encompassed by the ten in one million (10×10^{-6}) MICR isopleth. For non-cancer health risk, the area of impact is the geographic area encompassed by the 1.0 non-cancer HI isopleth or the isopleth corresponding to the lead threshold that triggered notification.

Distribution List

Within 15 days of the date of notice to perform public notification, the facility owner or operator is responsible for submitting to the Executive Officer for approval, a list of all addresses (individual residences and workplaces) subject to notification. Within 25 days of notice to perform public notification, the facility owner or operator must provide the Executive Officer the exact method of distribution to parents of children attending schools in the area of impact.[4] For children attending schools in the notification area, school administrators typically determine how they wish for the notification to occur (e.g., school administrators may provide a mailing list, or they may ask for Public Notification Materials in pre-stuffed envelopes for distribution by the school, or they may choose other methods).

In addition, the SCAQMD staff typically provides the notice materials to local government representatives with jurisdiction in the area receiving public notice.

Schedule and Method of Distribution

Public Notification Materials must be distributed within 30 days of the date of notice to perform public notification. The facility owner or operator is responsible for reproducing and distributing copies of the Public Notification Materials. All Public Notification Materials are to be enclosed in envelopes with SCAQMD return address labels. These envelopes may be obtained from the SCAQMD and the cost charged to the facility. Distribution of the Public Notification Materials must be conducted by a third party which specializes in mail or delivery services, such as the U.S. Postal Service or other mailing or distribution services. Door-to-door hand delivery is not

[4] Extra time is given for providing the method of distribution to students' families due to extra time needed for school administrators to approve and coordinate this notification. Even though there is more time provided for this incremental step, given the extra coordination needed, this process should typically begin first.

acceptable, in part because U.S. Postal Service regulations prohibit the use of individual's mail boxes by unauthorized persons.

Verification of Distribution

Within 15 days of the date of distribution of Public Notification Materials, the facility operator must verify distribution of the Health Risk Assessment and Public Notification Materials using the verification form provided in Appendix A. Proof of distribution must be included with the verification and may be in the form of receipts from delivery or mail service agencies or the post office which describe the boundaries of notification and/or the addresses included in the mailing.

Table 3
Procedures to Distribute Public Notification Materials

Procedure	Schedule	Responsibility
Prepare SCAQMD notification materials that includes information about the facility, specific toxic air contaminants and estimated health risk.	After Health Risk Assessment is approved	SCAQMD staff
Determine if Public Notification Materials need to be translated into other languages.	After notification letter is completed and area of impact is determined	SCAQMD staff
Prepare a letter from the responsible facility – (Optional).	Within 15 days of the date of notice to perform public notification	Owner or operator of facility
Provide a list of all addresses (individual residences and workplaces).	Within 15 days of the date of notice to perform public notification	Owner or operator of facility
Provide the exact method of distribution to the parents of children in schools within the area of impact.	Within 25 days of the date of notice to perform public notification	Owner or operator of facility
Reproduce and distribute Public Notification Materials to individual residences, workplaces, and parents of children attending school in the area of impact.	Within 30 days of the date of notice to perform public notification	Owner or operator of facility
Verification of distribution; such as receipts from delivery or mail service.	Within 15 days of the date of distribution of Public Notification Materials	Owner or operator of facility

VI. Procedures for Public Meetings

This section establishes the procedures for scheduling and other logistics for public meetings (Table 4). Public meetings are required after the approval of a Health Risk Assessment where the health risk is greater than or equal to the Notification Risk Level or the health risk of a Risk Reduction Plan Progress Report is greater than or equal to the Significant Risk Level. Public meetings offer the public an opportunity to learn more about the results of the Health Risk Assessment and how toxic risk is determined and mitigated, and to directly ask questions of the SCAQMD staff and facility representatives. As a result, the facility owner or operator or representative that can respond on behalf of the facility must be present at the public meeting. The SCAQMD staff will work with the facility owner or operator to schedule a date for the public

meeting that is typically within 30 days of distribution of Public Notification Materials. The date, time, and location of a public meeting must be provided within the Public Notification Materials. The SCAQMD staff will schedule the meeting on a weekday evening or weekend and at a location that is ADA compliant and convenient for community members. The SCAQMD staff will reserve a venue for the public meeting, arrange for audio and visual equipment and personnel, and language translation, if necessary. Pursuant to Rule 307.1, the facility owner or operator shall either directly pay or reimburse the SCAQMD for the public meeting costs, including, but not limited to renting of the venue, audio visual equipment and personnel, translation, and any other costs (e.g., parking, etc.).

Facility operators are encouraged to work closely with the SCAQMD staff regarding the meeting agenda. The recommended agenda includes a presentation followed by a question and answer period. It is recommended that the following topics be included in the presentation:

- Purpose of the meeting;
- Overview of the AB 2588 program;
- Description of the facility: type of operation, processes involved, and materials used or produced at the facility;
- Description of the health risk assessment process;
- Description of facility emissions and results of the Health Risk Assessment;
- Description of facility's recent compliance history with SCAQMD;
- Facility's projects or plans to reduce toxic emissions or risk; and
- Applicable current or future regulatory programs to reduce risks from air toxics.

A pre-meeting should be arranged between the SCAQMD and facility staff to finalize meeting plans, including the appropriate persons to attend and assist in the presentation. The SCAQMD staff will be prepared to modify the meeting agenda in response to reasonable needs of the attendees. These sessions provide the public with an opportunity to ask questions directly to experts, learn more generally about toxic risk and provide feedback to the SCAQMD and facility. Informational materials should also be made available at the sessions.

Table 4
Procedures for Public Meetings

Procedure	Schedule	Responsibility
Coordination meeting to identify the appropriate date for public meeting	Before distribution of Public Notification materials	SCAQMD staff and owner or operator of facility
Arrange for venue, audio visual equipment and personnel, translation (if necessary), parking, security, and any other meeting logistics.	Within 30 days of distribution of Public Notification Materials	SCAQMD staff
Pay for venue, audio visual equipment and personnel, translation, and any other costs	Within 60 days of facility's receipt of invoice	Owner or operator of facility
Participate in public meeting.	Public notification meeting	SCAQMD staff and owner or operator of facility

VII. Public Notification Procedures for Facilities Participating in the Voluntary Risk Reduction Program

This section provides the public notification procedures for facilities participating in the Rule 1402 Voluntary Risk Reduction Program. Pursuant to paragraph (q)(3) of Rule 1402, the SCAQMD staff will conduct public notification for facilities that are eligible and that elect to participate in the Rule 1402 Voluntary Risk Reduction Program. Under Rule 1402, facilities that elect to participate in the Voluntary Risk Reduction Program commit to implementing risk reduction measures that will reduce their total facility risk below the Rule 1402 Voluntary Risk Threshold which is a Maximum Individual Cancer Risk of ten in one million (10×10^{-6}), a total acute or chronic non-cancer HI of one (1.0) for any target organ system at any receptor location, or the more stringent of either the NAAQS for lead or applicable ambient lead concentration limit in a SCAQMD rule. The public notification for facilities participating in the Rule 1402 Voluntary Risk Reduction Program will be placed on the SCAQMD's website and will be included in the AB 2588 annual report. The public notification will include the following information:

- Background information about the 2015 update to the Office of Environmental Health Hazard Assessment (OEHHA) Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments that includes:
    - A description of how the updated OEHHA Guidance results in a higher estimated health risk from the facility compared to the previous Guidance;
    - Explanation that a facility's estimated health risk will increase using OEHHA's updated Guidance compared to estimates using the previous OEHHA Guidance even if emissions at the facility stay the same and potentially even if emissions decrease.
- Background information about the Voluntary Risk Reduction Program and that facilities that are participating are committing to risk reductions that:
    - Account for changes in risk estimates based on the Revised OEHHA Guidance; and
    - Risk reductions go beyond what is required through regulatory requirements.
- A list of participating facilities – Facility Name, Facility ID, and Street Address

VIII. Additional Suggestions on Risk Communication

Facility operators may choose to continue their dialogue with the community after they have completed their notification requirements. This dialogue could take the form of newsletters, facility tours, or additional public meetings. The SCAQMD encourages these efforts and requests that facilities keep the SCAQMD informed about their communication activities.

IX. Additional Resources

CARB AB 2588 Air Toxics "Hot Spots" Program

OEHHA Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments

SCAQMD Air Toxics "Hot Spots" Program (AB 2588)

SCAQMD Facility Prioritization Procedures for AB 2588 Program

SCAQMD Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program

SCAQMD Rules 307.1, 1401, and 1402 Staff Report

SCAQMD Rule 307.1 - Alternative Fees for Air Toxics Emissions Inventory

SCAQMD Rule 1402 – Control of Toxic Substance from Existing Sources

SCAQMD Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics "Hot Spots" Information and Assessment Act

APPENDIX A

Verification Form for Distribution of Public Notices and Health Risk Assessments

South Coast Air Quality Management District

Form R1402

Verification Form for Distribution of Public Notices and Health Risk Assessments

Mail To:
SCAQMD – AB 2588
21865 Copley Dr.
Diamond Bar, CA 91765

Tel: (909)-396-2000
www.aqmd.gov

Section A - Facility Information	
1. Facility Name (Business Name of Operator):	**2. Valid AQMD Facility ID:**
3. Facility Location Address: Street Address City CA, Zip Code	**4. Facility Mailing Address:** ☐ Check here if same as facility location address Street Address City CA, Zip Code
5. Facility Contact: Name Title Phone Number E-Mail	

Section B - Verification of Public Notification Requirements			
Date of distribution:			
1.			Distribution of public notice materials to all addresses in the area of impact.
2.			Distribution of public notice materials to all parents of children attending school in the area of impact.
3.			Distribution of a copy of the approved health risk assessment prepared for this facility to the public library closest to the facility and all school libraries in the area of impact.

Section C - List of Attachments			
	Yes	No	The following documents have been attached:
1.	○	◉	Proof of distribution of the notice materials to all addresses required.
2.	○	◉	List of schools for which notices were distributed to parents of attending children.
3.	○	◉	List of school libraries in which a copy of the health risk assessment has been deposited.
4.	○	◉	Name and address of the public library in which a copy of the health risk assessment has been deposited.

Section D – Authorization/Signature *I hereby certify that all the information contained herein are true and correct.*

1. Signature of Responsible Official:	2. Title of Responsible Official:
3. Print Name of Responsible Official:	4. Date Signed:
5. Phone Number of Responsible Official:	6. E-Mail of Responsible Official:

APPENDIX B

Sample SCAQMD Public Notification Materials

NOTICE OF PUBLIC MEETING TO DISCUSS AIR TOXIC RISK FROM A FACILITY IN YOUR NEIGHBORHOOD

State law ensures your right to know about possible health risks from toxic air pollutants emitted by facilities in your neighborhood. The law requires the following facility to notify you:

Facility Name:
Address:
Type of Business: [Oil refinery, chemical manufacturing, etc.]

Even though this facility may be complying with all current air pollution control regulations, some toxic chemicals escape to the air during its normal operations. State law requires the facility to notify all of the people in the area where there is a potential health risk above established thresholds.

Summary of Health Risks Above SCAQMD Thresholds

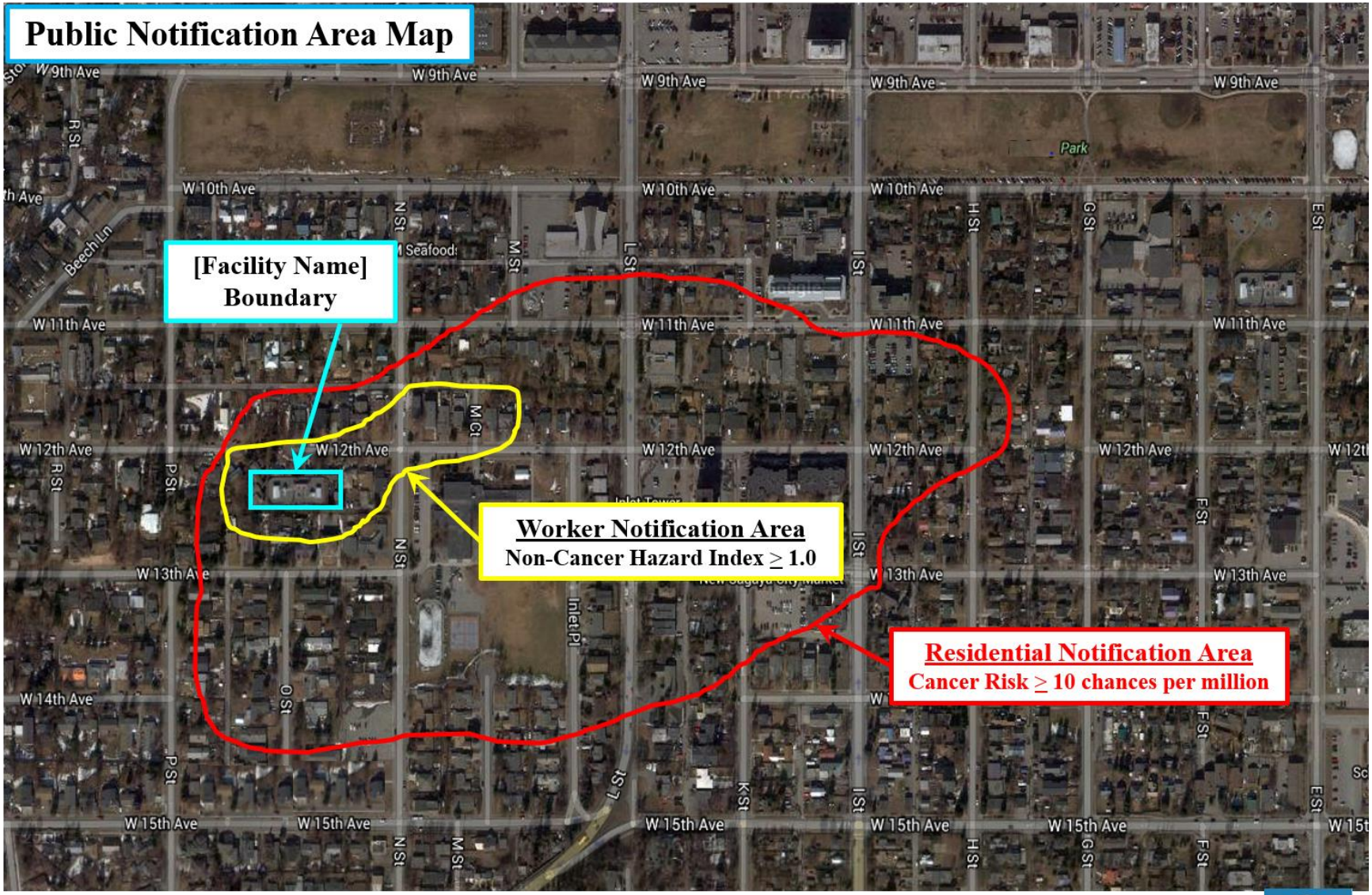
Toxic air pollutants (primarily [CHEMICAL NAME]) from [FACILITY NAME] may increase the health risks above SCAQMD thresholds for people who live or work in the area shown on the attached "Public Notification Area Map". The potential health risks from [FACILITY NAME] are highest for those living or working closest to the facility.

- **If the facility's [YEAR] emissions persisted for 30 years, people who live closest to the facility could have an increased risk of getting cancer up to [RISK] chances in one million.**
- **If the facility's [YEAR] emissions persisted for 25 years, people who work closest to the facility may experience long-term non-cancer health risks that are up to [##]% higher than SCAQMD thresholds.**

As the air pollution control agency for this area, the South Coast Air Quality Management District (SCAQMD) has prepared the enclosed "Information Sheet." Officials from SCAQMD will conduct a public meeting in the community near [FACILITY NAME] to answer questions about the toxic chemicals, the potential health risks, and what is being done to adress toxic emissions [if risk reduction is required]. Officials from [FACILITY NAME] will also attend the meeting to present information about their operations and to help answer your questions.

PUBLIC MEETING	*Date and Time:* *Location:*

For more information about SCAQMD programs to control toxic air pollution or the public meeting, contact [AB 2588 MANAGER] at SCAQMD at (909) 396-[####] or e-mail [HIM/HER] at [AB 2588 MANAGER EMAIL]. For more information about the facility, please contact [FACILITY CONTACT NAME] with [FACILITY NAME] at [FACILITY CONTACT NUMBER] or email [HIM/HER] at [FACILITY CONTACT EMAIL].



Public Notification Required by SCAQMD if:

- Cancer Risk is higher than 10 chances per million, or
- Non-Cancer Risk 'Hazard Index' is greater than 1.0.
  A 'Hazard Index' less than 1.0 indicates that adverse non-cancer health effects are not expected.

South Coast AQMD

What are toxic air pollutants?
Chemicals that cause cancer or other non-cancer health effects are known as toxic substances. When these toxic substances are released in the air, they are called toxic air pollutants.

Where do toxic air pollutants come from?
Toxic air pollutants come from a variety of sources. These sources include chemical plants and large manufacturers as well as cars and trucks and smaller businesses. Many products used at home, such as cleaners and paint thinners also contain toxic air pollutants.

What toxic air pollutants does this facility emit?
Under normal operation, this facility emits many toxic air pollutants including [CHEMICAL 1, CHEMICAL 2, etc.]. These pollutants could present potential cancer and non-cancer health risks to those in close proximity to [FACILITY NAME] if they were exposed to the facility's [YEAR] emissions levels for many years.

What is the cancer risk from this facility?
For chemicals that could cause potential carcinogenic health effects, a calculation called a "Health Risk Assessment" was done. This is the best method officials currently have for estimating the chance that breathing or otherwise being exposed to small amounts of a chemical over a long period of time will cause health effects. The odds are generally small, therefore risks are described as the "number of chances in one million" of getting cancer.

Based on the Health Risk Assessment, people who live in the Residential Impact Area shown on the attached Public Notification Map would have their chance of getting cancer increased up to [RISK] chances in one million because of toxic air pollutant emissions from this facility. People exposed at work in the Worker Impact Area would have their chance of getting cancer increased up to [RISK] chances in one million.

The health risk estimate conservatively assumes that a resident is continually exposed for 30 years at a single location to the toxic air pollutant emissions that came from [FACILITY NAME] in [YEAR]. Most people do not experience this prolonged exposure, so their actual risk from this facility is likely to be lower.

How does the cancer risk from this facility compare to other risks?
The cancer risk from this facility is relatively small compared to the average overall cancer risk from all causes for people living in the United States. Currently, according to the American Cancer Society, about four out of ten people will get cancer sometime during their lifetime. In other words, the odds of getting cancer at some time in your life are about 400,000 per million.

What is the cancer risk from toxic air pollution in general?
SCAQMD's Multiple Air Toxics Exposure Study IV (MATES IV) presents estimates of cancer risk throughout SCAQMD's four county jurisdiction. The average cancer risk from all pollutants emitted from all sources (cars, trucks, factories, power plants, etc.) is about [AVERAGE RISK] per million.

What are the non-cancer health risks from this facility?
Long-term exposure to some toxic air pollutants emitted from [FACILITY NAME] can have harmful effects on the [TARGET ORGAN SYSTEMS]. The non-cancer health risks from toxic air pollutants are described using a 'Hazard Index'. A Hazard Index less than 1.0 indicates that adverse health effects are not expected. The factors used in a Hazard Index calculation are designed to protect public health in order to avoid underestimation, therefore, exceeding a Hazard Index of

1.0 does not automatically indicate that an adverse health impact would occur. However, increasing levels above 1.0 indicate higher likelihood that adverse health impacts could occur.

Assuming [FACILITY NAME]'s [YEAR] emission levels persisted for many years, people who work in the area shown on the Facility Risk Map would experience a Hazard Index up to [HI]. The attached Facility Risk Map shows how far the Hazard Index of 1.0 extends into the community.

How was the health risk from this facility determined?
The health risk assessment relied on data collected from emissions tests directly from [FACILITY NAME]'S air pollution control stacks as inputs into a computer model that predicts air pollutant concentrations throughout the community. Guidance from the state Office of Environmental Health Hazard Assessment was used to determine how the predicted levels of air pollutants in the community may impact people's health. This guidance was updated in March 2015 to specifically address recent scientific advancements in the understanding of how toxic air pollutants have a greater influence on children than they do on adults.

What is being done to address the health risks from this facility?
The state law requiring issuance of this public notice is one step in getting facilities throughout the state to reduce toxic emissions resulting from their operations. The SCAQMD and other agencies have also developed other programs designed to prevent pollution and reduce exposure to toxic air pollution. For example, SCAQMD's Rule 1402 – Control of Toxic Air Contaminants from Existing Sources applies to facilities that exceed specific risk thresholds (e.g., cancer risk greater than 25 in one million) and requires [FACILITY NAME] to submit a Risk Reduction Plan detailing how it will reduce its risk below this threshold as quickly as feasible and no later than two and a half years after the Risk Reduction Plan is approved. [ADDITIONAL FACILITY or SCAQMD ACTIONS].

How can I get more information?
A copy of the [FACILTY NAME] Health Risk Assessment report is available for your review at the following libraries. The Health Risk Assessment and other information about SCAQMD activities related to [FACILITY NAME] can be found on our website at:
www.aqmd.gov/home/regulations/compliance/toxic-hot-spots-ab-2588/[FACILITY]

[CLOSEST LIBRARY]
[LIBRARY ADDRESS]

[LIBRARY PHONE NUMBER]
[LIBRARY HOURS]

SCAQMD Library
21865 Copley Drive
Diamond Bar, CA 91765
(909) 396-2600
Tue - Fri: 8am – 5pm
Sat, Sun, Mon: Closed

APPENDIX C

Sample SCAQMD Cover Letter for Libraries

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

[DATE]

[LIBRARY NAME]
[LIBRARIAN'S NAME]
[LIBRARY ADDRESS]

Dear [LIBRARIAN'S NAME]:

Enclose is a copy of [Facility Name]'s Health Risk Assessment report to be made available to the public in your library for six months.

Under the state law known as the Air Toxics "Hot Spots" Information and Assessment Act, certain facilities are required to inform their neighbors about potential health risks due to pollutants that they routinely emit into the air in the course of doing business. The South Coast Air Quality Management District (SCAQMD) has required [FACILITY NAME], a company in your neighborhood, to provide a copy of this report to your library pursuant to this law. The SCAQMD is the agency that monitors facilities to ensure that they comply with the requirements of air pollution laws.
The enclosed Health Risk Assessment report evaluates the air toxic emissions from the facility and the potential health risks associated with these emissions.

If you have any questions concerning this report, please call the SCAQMD at 909-396-[####].

Very Truly Yours,

[AB 2588 MANAGER]
Planning and Rules Manager

APPENDIX D

Sample SCAQMD Modified Public Notification

Sample Notification of Facilities Participating in the Rule 1402 Voluntary Risk Reduction Program

Updated (DATE)

SCAQMD'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 thresholds required under Rule 1402. Facilities that are participating in this program have already had a Health Risk Assessment (HRA) approved by SCAQMD 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, the California Office of Environmental Health Hazard Assessment (OEHHA) approved revisions to its guidelines (Revised OEHHA Guidelines) that are used by all air districts throughout the state to prepare HRAs. These Revised OEHHA Guidelines take into account recent science that shows children have a greater risk from exposures to cancer causing compounds than previously considered. Cancer risk estimates using the Revised OEHHA Guidelines result in an approximately three-fold increase for residential and sensitive receptors and more for certain toxic air contaminants with multi-pathway health effects (exposure routes beyond inhalation such as ingestion or skin exposure), even with no increase in toxic emissions at a facility. The Voluntary Risk Reduction Program provides an opportunity for facilities that elect to participate to address the increase in their estimated cancer risk due to the Revised OEHHA Guidelines.

The SCAQMD is providing this Notification to inform the public of facilities that have elected to participate in the Voluntary Risk Reduction Program. Facilities that elect to participate in this program are committing to reduce their health risk 60 percent below the current regulatory health risk reduction threshold. In addition these facilities will complete their risk reductions sooner than under the current regulatory program. Facilities that have elected to participate in this Voluntary Risk Reduction Program are listed in Table 1 below.

Questions about the SCAQMD's Voluntary Risk Reduction Program or this Notification can be directed to AB 2588 staff at 909 396-3616 or AB2588@aqmd.gov.

Table 1
List of Facilities Participating in Voluntary Risk Reduction Program

SCAQMD Facility ID	Facility Name	Address

South Coast Air Quality Management District

DRAFT

SCAQMD Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program

July 2016

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ACRONYMS AND ABBREVIATIONS

AB 2588	Air Toxics "Hot Spots" Information and Assessment Act of 1987
ATIR	Air Toxics Inventory Report
HI	Hazard Index
HRA	Health Risk Assessment
MICR	Maximum Incremental Cancer Risk
OEHHA	California Office of Environmental Health Hazard Assessment
RRP	Risk Reduction Plan
Rule 1402	SCAQMD Rule 1402 – Control of Toxic Air Contaminants from Existing Sources
SCAQMD	South Coast Air Quality Management District
TAC	Toxic Air Contaminant

QUICK REFERENCE OF TERMS

Action Risk Level	MICR of twenty-five in one million (25×10^{-6}), cancer burden of one half (0.5), a total acute or chronic HI of three (3.0) for any target organ system at any receptor location, or the National Ambient Air Quality Standard (NAAQS) for lead.
Notification Risk Level	MICR of ten in one million (10×10^{-6}), a total acute or chronic HI of one (1.0) for any target organ system at any receptor location, or the more stringent of either the NAAQS for lead or applicable ambient lead concentration limit in a SCAQMD rule.
Significant Risk Level	MICR of one hundred in one million (100×10^{-6}) or a total acute or chronic HI of five (5.0) for any target organ system at any receptor location.
Voluntary Risk Threshold	Estimated health risk level after accounting for implementation of voluntary risk reduction measures designed to result in a risk below the following: MICR of ten in one million (10×10^{-6}), a total acute or chronic HI of one (1.0) for any target organ system at any receptor location, or the more stringent of either the NAAQS for lead or applicable ambient lead concentration limit in a SCAQMD rule.

INTRODUCTION

The Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) established a statewide program to inventory air toxics emissions from individual facilities as well as requirements for risk assessment, public notification of potential health risks, and risk reduction. South Coast Air Quality Management District (SCAQMD) Rule 1402 – Control of Toxic Air Contaminants from Existing Sources (Rule 1402) implements various aspects of AB 2588 and includes public notification and risk reduction requirements for facilities that are above set thresholds.

Rule 1402 includes a provision to allow facilities to participate in the Voluntary Risk Reduction Program. The Voluntary Risk Reduction Program was developed based on comments from some industry representatives that wanted the opportunity to voluntarily reduce their health risk beyond the Action Risk Level to below the Notification Level in lieu of the standard process. The Voluntary Risk Reduction Program is an alternative to complying with the traditional AB 2588 and Rule 1402 approach that provides qualifying facilities an opportunity to reduce health risks below the Notification Risk Level with a Modified Public Notification approach that does not require distribution of individual letters and public meetings. The Modified Public Notification will be placed on the SCAQMD's website in the AB 2588 Annual Report in lieu of traditional Public Notification (Please refer to the SCAQMD's "Public Notification Procedures for Facilities Under the Air Toxics "Hot Spots" Information and Assessment Act (AB2588) and Rule 1402"). This Program will achieve risk reductions both sooner and beyond what is required in the traditional Rule 1402 process as it focuses on implementation of risk reduction measures immediately.

Under Rule 1402, facilities that meet the eligibility requirements and elect to participate in the Voluntary Risk Reduction Program must submit a Voluntary Risk Reduction Plan. The Voluntary Risk Reduction Plan identifies the risk reduction measures that a facility will implement to achieve risk reductions below the Voluntary Risk Threshold. The SCAQMD "Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program" (Guidelines) specify the procedures for preparing, approving, and demonstrating implementation of the Voluntary Risk Reduction Plan. As discussed in more detail below, the purpose of these Guidelines are to specify:

1. The procedures an owner or operator must follow in preparing a Voluntary Risk Reduction Plan pursuant to paragraph (h)(2) of Rule 1402;
2. The information that the Executive Officer will use when approving or rejecting the Voluntary Risk Reduction Plan pursuant to (h)(3) of Rule 1402; and
3. The information required in the Final Implementation Report for the Voluntary Risk Reduction Plan

PREPARING A VOLUNTARY RISK REDUCTION PLAN

The owner or operator is responsible for preparing a Voluntary Risk Reduction Plan that identifies the risk reduction measures that shall be implemented in order to reduce the impact of the total facility emissions below the Voluntary Risk Threshold. Rule 1402 defines the Voluntary Risk Threshold as the estimated health risk level after accounting for implementation of voluntary risk reduction measures designed to result in a risk below the following: MICR of ten in one million (10×10^{-6}), a total acute or chronic HI of one (1.0) for any target organ system at any receptor

location, and the more stringent of either the NAAQS for lead or applicable ambient lead concentration limit in a SCAQMD rule. Only those risk reduction measures that are needed to reduce facility risks below the Voluntary Risk Threshold need to be identified in the Voluntary Risk Reduction Plan.

The Voluntary Risk Reduction Plan shall include:

1. Facility Information
   - Name
   - SCAQMD Facility Identification Number (FID)
   - Location (i.e., address and UTM coordinates in WGS84)
   - E-mail address to confirm receipt
   - Facility plot plan
     - Property boundaries
     - Horizontal scale
     - Building heights (for building downwash calculations)
     - Source locations including elevations
2. Current Facility Risk Characterization
   - Increases or decreases in facility emissions, by toxic air contaminant (TAC) with CAS number, for each device and process compared to the previously approved HRA
   - Files listed in Table 1 must be provided with Currently Facility Risk Characterization
3. Proposed Facility Risk Characterization
   - A description of the verifiable risk reduction measure(s) and estimated emission reductions or efficiency that includes
     - A description of how the risk reduction measures(s) will be enforced, such as through a new or modified SCAQMD permit or compliance plan
     - A description of how the estimated emission reductions or efficiency will be demonstrated, such as through a source test, manufacturers' data, etc.
   - Permit number(s) associated with source(s) or process(es) to be reduced, if applicable
   - Schedule for implementing the specified risk reduction measures
     - The schedule shall include dates for increments of progress, including submittal dates for application for permits, purchase of equipment, source tests and commissioning of equipment
   - Anticipated increases or decreases in facility emissions, by TAC with CAS number, for each device and process with verifiable risk reduction measure(s)
4. Point Source Information (stacks, vents, etc.)
   - Number of operating hours per day, days per week, and weeks per year
   - Maximum and average hourly emission rates
   - Annual emissions
   - Stack location (in UTM coordinates in WGS84) on plot plan including elevation
   - Stack height
   - Stack gas exit velocity
   - Stack gas exit temperature
   - Stack and building dimensions, heights, and location
5. Fugitive Source Information (area and volume sources)
   - Maximum and average hourly emission rates

- Annual emissions
- Source location (in UTM coordinates in WGS84) on plot plan including elevations
- Source height
- Area or volume dimensions

Table 1: Files for Facility Risk Characterizations

File Type	Notes
Facility Risk Characterization Input	All files from a previously approved HRA in either CARB's Air Dispersion Modeling & Risk Assessment Tool (ADMRT) or HAPR Version 1 format
Facility Risk Characterization Output	
Emission Inventory Input	All files in CARB's Emissions Inventory Module format
Emission Inventory Output	
Emission Calculations	Provided in electronic format (e.g., Excel) and reference sources
Source Tests	Source tests can only be used if approved by SCAQMD
Air Monitoring Data	Any monitoring data used in the Facility Risk Characterization shall be provided

APPROVAL OF THE VOLUNTARY RISK REDUCTION PLAN

Within 30 days of receipt, the Executive Officer will conduct an initial review of the Voluntary Risk Reduction Plan and confirm receipt. The Executive Officer will approve or reject the Voluntary Risk Reduction Plan based on whether it meets the requirements outlined above, the information provided is complete and accurate, and the ability of the proposed Voluntary Risk Reduction Plan to verifiably reduce the impact of total facility risk below the Voluntary Risk Threshold as quickly as feasible, but by no later than two and half years from Voluntary Risk Reduction Plan approval. If the Voluntary Risk Reduction Plan is rejected, the facility has 30 days to correct all deficiencies and resubmit. If the revised plan is rejected, the facility has one more opportunity to fix the deficiencies. If the second revised plan is rejected, then the facility will not be allowed to participate in the Voluntary Risk Reduction program and the denial will act as a notification to prepare an Air Toxics Inventory Report (ATIR) and the facility will be subject to the standard risk assessment pathway.

Emission reductions or control efficiencies must be verifiable to be considered as a risk reduction measure in a Voluntary Risk Reduction Plan. Verifiable emission reductions or control efficiencies are those which are permanent, can be sustained, and must be enforceable through permit conditions or compliance plans. Emission reductions or control efficiencies must be demonstrable through a source test, manufacturers' data, or other mechanism. Each risk reduction measure shall be implemented by the date specified in the approved Voluntary Risk Reduction Plan. Rule 1402 includes provisions for modifying Voluntary Risk Reduction Plans and extending implementation dates, if needed.

VOLUNTARY RISK THRESHOLD

The Voluntary Risk Threshold is based on the concept of the ATIR. The facility will submit information required in Voluntary Risk Reduction Plan. SCAQMD staff will then run the information through the latest approved version of California Air Resources Board's Hotspots Analysis and Reporting Program (HARP) or equivalent and compare the result to the Voluntary Risk Threshold pursuant to Rule 1402 paragraph (c)(22).

For example, consider a facility with an original MICR of 6.6 in one million where 60% of the risk is hexavalent chromium emissions from a single source. Applying the new OEHHA guidelines, a multiplier of 3.7 for hexavalent chromium and 2.3 for the remainder of the TACs results in a new facility MICR of approximately 20.7 (14.7 for hexavalent chromium and 6.1 for the remaining TACs) in one million. Through the Voluntary Risk Reduction Program, the facility could opt to install a scrubber with a 98% control factor, to control hexavalent chromium emissions. The new theoretical MICR for hexavalent chromium would be 0.3 in one million, while the remaining TACs would still be 6.1 in one million for a total facility MICR of 6.4 in one million. The facility would propose installation of the scrubber system in their Voluntary Risk Reduction Plan and SCAQMD staff would verify that the measure(s) would indeed result in facility emissions below the Voluntary Risk Threshold.

FINAL IMPLEMENTATION REPORT

The owner or operator shall submit a final implementation report pursuant to Rule 1402 paragraph (j)(2). The final implementation report demonstrates that the measures in the Voluntary Risk Reduction Plan have been completed, risk reduction measures have been verified, and the facility is below Voluntary Risk Threshold. Approval of the final implementation report by the Executive Officer acknowledges compliance with Rule 1402 requirements and that no further action is necessary.

The final implementation report shall include, at a minimum, all of the following:

- The name, address, and SCAQMD facility identification number;
- The approved Voluntary Risk Reduction Plan; and
- Proof and verification the operator implemented the risk reduction measures in the approved Voluntary Risk Reduction Plan.

Proof would include enforceable permit conditions or compliance plans. Verification of emission reductions include, but are not limited to, specifications in the SCAQMD permit issued to the facility, a surrender of the existing SCAQMD permit(s), or reductions as required by SCAQMD rule(s). Letters of intent or internal memos mandating new company policy are not considered verifiable emission reductions. Verification of pollution control equipment which have been installed and are now in operation, includes but is not limited to, the source test protocol, final report, and all documents relating to the results.

RISK REDUCTION IMPLEMENTATION

Risk reduction measures identified in the Voluntary Risk Reduction Plan demonstrate how the facility will reduce the facility risk below the Voluntary Risk Threshold. All measures must be completed within the designated schedule and be verifiable and enforceable by permit condition or compliance plan. With Executive Officer approval, facilities may update, modify and request extensions to the Voluntary Risk Reduction Plan. Complete implementation of measures in the Voluntary Risk Reduction Plan demonstrates that facility emissions will be below the Voluntary Risk Threshold in Rule 1402 and no further action is necessary. Facilities failing to implement their Voluntary Risk Reduction Plan are in violation of Rule 1402 and subject to daily penalties. Facilities that cannot achieve compliance immediately may seek a variance from the SCAQMD Hearing Board, which may issue one depending on whether statutorily required findings can be made. See, e.g., Rule 515 – Findings and Decision .

REFERENCES

CAPCOA, 2016. **Air Toxics "Hot Spots" Program - Facility Prioritization Guidelines**. Prepared by the AB 2588 Risk Assessment Committee of the California Air Pollution Control Officers Association, 2016.

OEHHA, 2015. **Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessment.** Prepared by Office of Environmental Health Hazard Assessment OEHHA, February 2015.

SCAQMD, 2015. **Facility Prioritization Procedures for AB 2588 Program**. Prepared by South Coast Air Quality Management District, June 2015.SCAQMD, 2015. **Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics "Hot Spots" Information and Assessment Act**. Prepared by South Coast Air Quality Management District

SCAQMD, 2016. **(Proposed Amended) Rule 1402 – Control of Toxic Air Contaminants from Existing Sources.** Prepared by South Coast Air Quality Management District.