# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

# **Draft Staff Report**

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;

Draft "SCAQMD Public Notification Procedures for Facilities Under the Air Toxics 'Hot Spots' Information and Assessment Act (AB 2588) and Rule 1402"; and

Draft "SCAQMD Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program"

# September 2016

#### **Acting Executive Officer**

Wayne Nastri

#### **Deputy Executive Officer**

Planning, Rule Development, and Area Sources Philip M. Fine, Ph.D.

### **Acting Assistant Deputy Executive Officer**

Planning, Rule Development, and Area Sources

Susan Nakamura

Author: Uyen-Uyen Vo – Air Quality Specialist

Contributors: Amir Dejbakhsh – Assistant Deputy Executive Officer

Cher Snyder – Assistant Deputy Executive Officer

Shah Dabirian – Program Supervisor Victoria Moaveni – Program Supervisor Jason Aspell – Senior Air Quality Engineer Hoshik Yoo – Air Quality Engineer II James Koizumi – Air Quality Engineer II Cynthia Carter – Air Quality Specialist Pierre Sycip – Air Quality Specialist Sam Wang – Air Quality Specialist

Reviewed by: Mike Morris – Program Supervisor

William Wong – Principal Deputy District Counsel Ian MacMillian – Planning and Rule Manager Jillian Wong – Planning and Rule Manager

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT GOVERNING BOARD

Chairman: WILLIAM A. BURKE, Ed.D.

Speaker of the Assembly Appointee

Vice Chairman: BEN BENOIT

Councilmember, Wildomar Cities of Riverside County

#### MEMBERS:

MICHAEL D. ANTONOVICH Supervisor, Fifth District County of Los Angeles

JOHN J. BENOIT Supervisor, Fourth District County of Riverside

JOE BUSCAINO Councilmember, 15<sup>th</sup> District City of Los Angeles Representative

MICHAEL A. CACCIOTTI Mayor Pro Tem, South Pasadena Cities of Los Angeles County/Eastern Region

JOSEPH K. LYOU, Ph.D. Governor's Appointee

LARRY MCCALLON Mayor, Highland Cities of San Bernardino County

JUDY MITCHELL Councilmember, Rolling Hills Estates Cities of Los Angeles County/Western Region

SHAWN NELSON Supervisor, Fourth District County of Orange

DR. CLARK E. PARKER, SR. Senate Rules Committee Appointee

DWIGHT ROBINSON Councilmember, Lake Forest Cities of Orange County

JANICE RUTHERFORD Supervisor, Second District County of San Bernardino

# ACTING EXECUTIVE OFFICER:

**WAYNE NASTRI** 

# **TABLE OF CONTENTS**

# **TABLE OF CONTENTS**

BACKGROUND	1
INTRODUCTION	1
PUBLIC PROCESS AND OUTREACH EFFORTS	2
PROPOSED AMENDED RULE 307.1	2
PROPOSED AMENDED RULE 1401	3
PROPOSED AMENDED RULE 1402	4
NOTIFICATION PROCEDURES	14
VOLUNTARY RISK REDUCTION GUIDELINES	15
AFFECTED INDUSTRIES	15
COMMENTS AND RESPONSES	21
SOCIOECONOMIC ASSESSMENT	23
CALIFORNIA ENVIRONMENTAL QUALITY ACT	24
DRAFT FINDINGS UNDER CALIFORNIA HEALTH AND SAFETY	
CODE SECTION 40727	24
COMPARATIVE ANALYSIS	26
REFERENCES	R-1

#### **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 in 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, children and adult exposure to air toxics. The Revised OEHHA Guidelines incorporate age sensitivity factors and other changes which have increased 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 (TAC) 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 change the toxic emission reductions already achieved by facilities in the Basin. The Revised OEHHA Guidelines represent 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 the Notification Risk Level and Action Risk Level now having to provide public notification and risk reduction, respectively. At the June 2015 Board Hearing, the SCAQMD Governing Board adopted amendments to Rule 1402 - Control of Toxic Air Contaminants 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 were reduced, with the Revised OEHHA Guidance, their estimated health risk may require the facility to conduct 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.

#### INTRODUCTION

Proposed Amended Rule (PAR) 1402 will be amended to streamline implementation to achieve risk reductions sooner and to provide a modified notification approach for certain facilities that elect to participate in a voluntary program that will achieve risk reductions that go beyond the Action Risk Level threshold in Rule 1402. PAR 1402 also includes additional requirements for facilities that are designated as Potentially High Risk Level Facilities and includes other amendments to improve clarity.

In addition to PAR 1402, amendments to Rule 307.1 – Alternative Fees for Air Toxics Emissions Inventory (Rule 307.1) and Rule 1401 – New Source Review of Toxic Air Contaminants (Rule 1401) are being proposed. PAR 307.1 proposes adding fee categories for the new provisions established in PAR 1402. PAR 307.1 includes a fee category for Voluntary Risk Reduction

facilities, consistent with fees that these facilities would incur under implementation of Rule 1402 and a provision that requires the facility to either directly pay or reimburse the SCAQMD for costs associated with Rule 1402 public meeting requirements. The proposed changes to Rule 307.1 will not result in any additional fees; facilities participating the Voluntary Risk Reduction Program would otherwise incur fees under existing Rule 1402 and public meetings were previously conducted and paid for by the facility. PAR 307.1 also references 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 are made to PAR 307.1 to improve clarity. Amendments to Rule 1401 are being proposed in order to remain consistent with Rule 1402. PARs 1401 and 1402 remove provisions that require staff to report to the Governing Board OEHHA changes to risk values to allow staff to consolidate reporting of these changes annually in the SCAQMD's AB 2588 Annual Report.

"Public Notification Procedures for Phase I and II Facilities Under Air Toxics 'Hot Spots' Information and Assessment Act of 1987 (AB 2588)" (Notification Procedures) is being revised to clarify Rule 1402 notification requirements. "Draft SCAQMD Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program" (Voluntary Risk Reduction Guidelines) is being developed to establish Rule 1402 Voluntary Risk Reduction procedures.

#### PUBLIC PROCESS AND OUTREACH EFFORTS

Development of PARs 307.1, 1401, and 1402 was conducted through a public process. SCAQMD has held four working group meetings to date: September 9, 2015, March 2, 2016, May 26, 2016, and July 27, 2016. The Working Group is composed of representatives from businesses, environmental groups, public agencies, and consultants. The purpose of the Working Group meetings is to work with stakeholders to discuss proposed concepts and to work through details of staff's proposal. Working Group meetings are open to the public. A Public Workshop was held on August 10, 2016. The four Working Group meetings and Public Workshop were all held at the SCAQMD Headquarters in Diamond Bar.

#### PROPOSED AMENDED RULE 307.1

PAR 307.1 includes provisions to add a fee category for owner or operators that elect to participate in in the Voluntary Risk Reduction Program, require facilities to directly pay or reimburse the SCAQMD for costs associated with public meetings required by Rule 1402, replace references to SIC codes with NAICS codes and references to 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 provide clarifications.

#### Purpose (Subdivision (a))

PAR 307.1 clarifies potential costs that may be recovered by SCAQMD to implement and administer the Air Toxics "Hot Spots" Information and Assessment Act also includes costs incurred to review air toxics inventory reports and administer Rule 1402.

#### **Applicability (Subdivision (b))**

PAR 307.1 clarifies that Rule 307.1 is also applicable to facilities subject to Rule 1402.

#### **Definitions (Subdivision (c))**

PAR 307.1 modifies, removes, and adds definitions to improve the overall clarity of the proposed amended rule. "Facility Program Category" is modified to reference the correct subparagraphs. The definitions for "Flat Fee" and "Standard Industrial Classification (SIC) Code" are removed. Definitions for "North American Industry Classification System (NAICS)" and "Voluntary Risk Reduction Facility" are added; please refer to PAR 307.1 for definitions.

#### Fees (Subdivision (d))

In PAR 307.1 subparagraph (d)(2)(C), the provision is changed to refer to "Diesel Engine Facility" instead of a "Emergency Standby Diesel Engine Only Facility". The rule does not have an "Emergency Standby Diesel Engine Only Facility" Program Category, only a "Diesel Engine Facility" Program Category.

PAR 307.1 adds a fee category for "Voluntary Risk Reduction Facilities". The fee is based on the fee for the Facility Program Category "PS>10, No HRA." If these facilities did not elect to participate in the Voluntary Risk Reduction Program, they would pay a similar, and in some cases higher fee if the facility is over the Rule 1402 Risk Reduction Level. The facility will pay the appropriate Voluntary Risk Reduction fee in Table I until the facility completes risk reduction, then the facility will be assessed the HRA Tracking Facility Program Category in Table I.

PAR 307.1 adds a provision, Public Notifications and Meetings, which requires the facility owner or operator to either directly pay or reimburse SCAQMD for the costs of public meetings. The costs would include, venue rental, audio visual rental equipment and personnel, mailing, translation services, parking, security, and equipment rental. The costs would not include staff hours. Previously, under Rule 1402 and "Public Notification Procedures for Phase I and II Facilities under the Air Toxics 'Hot Spots' Information and Assessment Act of 1987", if a public meeting was required, it was responsibility of the facility to plan, conduct and pay for the public meeting. Now, PAR 1402 and Notification Procedures have SCAQMD staff plan and conduct the public meeting. Therefore, this provision was added to allow SCAQMD to be reimbursed for the costs of conducting the public meetings or for the facility to pay these costs directly. The costs for public meetings are not expected to change. If the facility does not directly pay vendors, SCAQMD will send the facility an invoice which must be paid within 60 days.

Throughout PAR 307.1, all references to SIC codes are changed to NAICS codes and the codes are converted. This change follows the national standard of switching from SIC codes to NAICS codes. References to CAPCOA "Air Toxics 'Hot Spots' Program Facility Prioritization Guidelines, July 1990" are replaced with the most current version of SCAQMD "Facility Prioritization Procedures For AB 2588 Program".

#### PROPOSED AMENDED RULE 1401

Rule 1401 includes provisions for analyzing potential impacts and reporting to the Governing Board when OEHHA revises risk values for new and existing TACs. To remain consistent with PAR 1402 and streamline implementation, PAR 1401 will remove paragraphs (e)(2) and (e)(3) and include this information in the AB 2588 annual report. Staff will implement the changes in risk values for new or revised TACs, report to the Stationary Source Committee, and continue to

analyze impacts of new or revised TACs and report these changes in the SCAQMD AB 2588 Annual Report.

#### PROPOSED AMENDED RULE 1402

PAR 1402 does not change risk thresholds, but does include provisions to streamline implementation and improve clarity, provisions for the Voluntary Risk Reduction Program and Potentially High Risk Facilities, and provisions to better clarify the submittal and approval processes of Air Toxic Inventory Reports, Health Risk Assessments, and Risk Reduction Plans. Amendments to Rule 1402 result in traditional risk reduction occurring 8 months faster than the current process while risk reduction through the voluntary program and for potentially high risk level facilities occur 2 years and 1.4 years faster, respectively, than the current process. Figure 1 summarizes the three proposed overall timelines compared to the current Rule 1402 timeline.

#### Purpose (Subdivision (a))

Amendments are proposed to clarify that Rule 1402 includes "Air Toxic Inventory Report, Health Risk Assessment, public notification, and specified industry-wide emissions inventory requirements." As currently implemented, Air Toxics Inventory Reports (ATIRs) are a requirement within Health Risk Assessments (HRAs). PAR 1402 separates the submittal of the ATIR from the HRA.

#### **Applicability (Subdivision (b))**

PAR 1402 clarifies the applicability stating that the rule applies to any facility for which the impact of total facility emissions has the potential to be greater than or equal to the "Notification Risk Level." Currently, Rule 1402 references the "significant or action risk level", but includes provisions for facilities with the potential to be greater than or equal to the Notification Risk Level. Paragraph (b)(2) was deleted as this provision is redundant with the opening paragraph under subdivision (b).

#### **Definitions (Subdivision (c))**

PAR 1402 adds and modifies definitions to clarify and explain key concepts and removes obsolete definitions. Please refer to PAR 1402 for each definition.

Proposed Added Definitions: Air Toxics Inventory Report

Health Risk Assessment

North American Industry Classification System

(NAICS) Code Notification Risk Level

Potentially High Risk Level Facility

Reference Exposure Level

Reference Source

Standard Industrial Classification (SIC) Code

Voluntary Risk Threshold

Proposed Modified Definition: Action Risk Level

Proposed Deleted Definitions: Initial Plan Submittal Date

Phase I Facility

Figure 1: Summary of PAR 1402 Timelines

#### **Current Risk Reduction Schedule**



#### **Proposed Traditional Risk Reduction Schedule**



# **Voluntary Risk Reduction Schedule**



# Schedule for Potentially High Risk Level Facility



# Air Toxics Inventory Report (ATIR) Requirements (Subdivision (d))

Provisions for the submittal and approval of the ATIR are added to PAR 1402 to create separate processes for the ATIR and HRA. Under Rule 1402, affected facilities are required to submit an ATIR as part of the HRA. The ATIR is the foundation for the HRA as it contains specific information about each device and process, stack parameters, emission rate, hours of operation, and other information that is used to estimate the health risk. By separating the submittal of the ATIR and HRA, SCAQMD staff can evaluate the ATIR to determine if a HRA is needed. Upon submittal of the ATIR, the SCAQMD staff will review and run California Air Resources Board's (CARB's) Hotspots Analysis Reporting Program (HARP) to estimate the health risk. Only facilities where the results from HARP indicate that the health risk is greater than or equal to the Notification Risk Level will be required to submit a HRA, which will streamline the process by eliminating the need for facilities to submit a HRA if the estimated health risk is below the Notification Risk Level.

#### **Submittal of the Air Toxics Inventory Reports**

The Executive Officer may require an ATIR from a facility when, based on investigation, the Executive Officer determines that emission levels could potentially be greater than or equal to the Notification Risk Level. There are two elements for the ATIR: 1) Submittal of Initial Information for the ATIR; and 2) Submittal of the ATIR.

The Initial Information for the ATIR must be submitted within 30 days of notification by the Executive Officer to prepare an ATIR or notification that the facility is a Potentially High Risk Level Facility. The Initial Information for the ATIR includes: a list of each device and/or process that will be included in the ATIR; and for each device and/or process included in the ATIR, the TAC emissions and the Reference Source of each emission factor. The Reference Source is the basis of deriving an emission factor; such as source test, AP-42, mass balance analysis, or other published source.

The ATIR must be submitted within 150 days of notification to prepare an ATIR. The ATIR must be prepared following the procedures in the most current version of "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act". If the Executive Officer requires a source test to obtain appropriate emission factors, additional time would be provided for submittal of the ATIR, but only the portion of the ATIR that is for that device or process where a source test is required. The portions of the ATIR where the devices and/or processes did not require a source test pursuant to PAR 1402, must be submitted within 150 days of notification to prepare an ATIR.

# **Source Test Requirements**

PAR 1402 includes a provision that will require a facility to conduct a source test if a Reference Source: does not quantify applicable TACs; is not consistent with the purpose, type, and/or size of the device or process; is not in accordance with the most current version of CARB's "Emission Inventory Criteria and Guidelines for the Air Toxics 'Hot Spots' Program"; or is not in accordance with California Health and Safety Code Section 44342. PAR 1402 also includes a provision that allows the owner or operator to request to conduct a source test to quantify TAC emissions if the same criteria above are met. These source test provisions will ensure that TACs are appropriately quantified.

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. Source test protocols must be submitted within 30 days of the date of notification to conduct a source test and the source test report is due within 120 days of the date of source test protocol approval. Within 30 days of source test report approval, the owner or operator must submit the remaining portion of the ATIR for the specific device or process for which a source test was required or requested.

An example of when a source test will be required is if the process or equipment has metal particulate emissions and the existing Reference Source only quantifies a subset of potential toxic metal particulates or quantifies total particulate with no speciation of any toxic metals. Evidence of metal particulate emissions from this type of example can be determined through evaluation of feedstock materials, deposition plates at that facility or a facility with a similar operation, and/or analysis of materials from the catch of a baghouse. In this example, the Executive Officer will require that the facility conduct a source test to quantify toxic metals emissions. Another example in which a source test will be required is if the facility has a reference source from a source test of a comparable process, where all parameters are equivalent except for the feedstock. The Executive Officer will require that the facility conduct a source test with the appropriate feedstock.

# **Approval of Air Toxics Inventory Reports**

PAR 1402 includes an ATIR approval process and identifies the criteria used to approve or reject an ATIR and the ATIR resubmission process. The Executive Officer will conduct an initial review of the ATIR and confirm receipt within 30 days. Then the Executive Officer will approve or reject the ATIR based on whether the ATIR meets the requirements as outlined in "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act" and whether the information is complete and accurate. The owner or operator will have 30 days from the date of notification of ATIR rejection to correct all identified deficiencies and resubmit a revised ATIR. The Executive Officer will either approve the revised and resubmitted ATIR or modify the ATIR and approve it as modified.

#### Health Risk Assessment Requirements (Subdivision (e))

Under PAR 1402, this subdivision clarifies the HRA submittal and approval process. Similar to revisions to the Purpose and Applicability, the Executive Officer will require a HRA from a facility when the ATIR or the Executive Officer determines that emission levels from the facility could potentially cause an exceedance of the "Notification Risk Level". The current Rule 1402 threshold for a HRA is the Notification Risk Level, the proposed language now incorporates the correct threshold.

#### **Submittal of Health Risk Assessment**

Facilities will be required to submit a HRA if their ATIR, based on HARP, indicates that their health risk is greater than or equal to the Notification Risk Level or the Executive Officer determines that the facility could potentially cause exceedance of the Notification Risk Level. The owner or operator shall submit a HRA within 90 days of the date of notification by the Executive Officer to prepare a HRA. Facilities that have been determined to be Potentially Significant Risk Level facilities have separate HRA submittal requirements as specified in subdivision (g) of PAR 1402. Procedures for preparing the HRA are located in the most current version of the "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots'

Information and Assessment Act". Staff believes that 90 days is sufficient time to prepare a HRA because the more detailed inventory requirements will have been completed with the ATIR. Additionally, separating the submittals of the ATIR and HRA will reduce costs and minimize the need to unnecessarily prepare a HRA for those facilities where the health risk is less than the Notification Risk Level.

# **Approval of Health Risk Assessments**

PAR 1402 includes a HRA approval process which clarifies current practice and is consistent with the requirements from the Health and Safety Code. The Executive Officer will conduct an initial review of the HRA and confirm receipt. Next, the Executive Officer will approve or reject the HRA based on whether the HRA meets the requirements of "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act" and whether the information is complete and accurate. The owner or operator will have 60 days from the date of notification of HRA rejection to correct all identified deficiencies and resubmit a revised HRA. The Executive Officer will then either approve the revised and resubmitted HRA or will modify the HRA and approve it as modified.

### Risk Reduction Plan Requirements (Subdivision (f))

Subdivision (f) of PAR 1402 consolidates the submittal, requirements, and approval of Risk Reduction Plans into one subdivision. Implementation of Risk Reduction Plans has been moved to subdivision (i). Provisions for time extensions for implementing Risk Reduction Plans are addressed in subdivision (l).

#### **Submittal of Risk Reduction Plans**

Facilities with an approved or SCAQMD-prepared HRA greater than or equal to the Action Risk Level are required to submit a Risk Reduction Plan within 120 days from the date of HRA approval or preparation by the SCAQMD. PAR 1402 changes the risk reduction submittal date from 180 to 120 days. Staff believes that reducing the submittal timeframe will help streamline the entire process and is sufficient time to submit a Risk Reduction Plan. Once facilities complete their HRAs, the facility will know the health risk drivers and can begin planning to identify the appropriate risk reduction measures for their Risk Reduction Plan as they are waiting for their HRAs to be approved.

#### **Requirements for Risk Reduction Plans**

In addition to SIC codes, PAR 1402 will require facilities to list their NAICS code as part of the Risk Reduction Plan. There are no additional substantive changes proposed for this paragraph.

#### **Approval of Risk Reduction Plans**

PAR 1402 adds provisions for the Executive Officer to conditionally approve elements of the Risk Reduction Plan or the entire Plan and also adds approval criteria. This allows facilities to begin specific approved risk reduction measures immediately while the SCAQMD and the facility finalize other portions of the Risk Reduction Plan. PAR 1402 adds criteria for the approval or rejection of the Risk Reduction Plan. The Risk Reduction Plan must meet the requirements in paragraph (f)(2), be complete and accurate, and be capable of reducing the impact of total facility emissions below the Action Risk Level by no later than two and a half years from Risk Reduction Plan approval. Under PAR 1402, the appeal process is the same except the time to revise and

resubmit a Risk Reduction Plan once the Hearing Board denies an appeal is reduced from 90 to 30 days after the Hearing Board's decision.

# Potentially High Risk Level Facilities (Subdivision (g))

PAR 1402 adds requirements for Potentially High Risk Level Facilities. Under PAR 1402, a Potentially High Risk Level facility is defined as a facility which the Executive Officer has determined that emissions data, ambient data, or data from previously approved HRAs indicate that the facility has a likely potential to either exceed or has exceeded the Significant Risk Level. PAR 1402 incorporates the current practice of requiring high risk level facilities to take actions to immediately address toxic emissions and health risk to the community. Requiring an Early Action Reduction Plan and its implementation will result in immediate health risk reductions. The risk reduction measures in the Early Action Risk Reduction Plan will be incorporated into the overall Risk Reduction Plan.

# **Determination of a Potentially High Risk Level Facility**

Based on input from the Working Group, PAR 1402 includes a process for the determination of a Potentially High Risk Level Facility. First, the Executive Officer will notify the owner or operator that the facility may be designated as a Potentially High Risk Level Facility. The Executive Officer will then schedule a meeting and collect any additional information from the owner or operator. This process will allow facilities the opportunity to review the evidence and provide feedback prior to being designated as a Potentially High Risk Level Facility. If the Executive Officer concludes that the facility should be designated as a Potentially High Risk Level Facility, the Executive Officer will notify the owner or operator and provide findings from the evaluation of data, facility site visits, and investigation of surrounding sources.

# Early Action Reduction Plans for Potentially High Risk Level Facilities

PAR 1402 requires facilities that have been designated as Potentially High Risk Level Facilities to submit an Early Action Reduction Plan within 90 days of notification of designation. The purpose of the Early Action Reduction Plan is to expedite risk reduction to mitigate the elevated health risk to protect public health. In the Early Action Reduction Plan, the facility will be required to identify the facility's key health risk driver(s), corresponding risk reduction measures, and an implementation schedule.

Upon Early Action Reduction Plan submittal, the Executive Officer will conduct an initial review and confirm receipt. Next, the Executive Officer will approve or reject the Early Action Reduction Plan based on proper identification of key health risk drivers, corresponding risk reduction measures, implementation schedule, and overall health risk reduction. 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 owner or operator will have 14 days from the date of the decision to correct all deficiencies identified and resubmit a revised Early Action Risk Reduction Plan. The Early Action Reduction Plan is subject to Rule 221 – Plans. Additionally, risk reduction measures in an approved Early Action Reduction Plan shall be implemented according to the dates specified in the Early Action Reduction Plan. These provisions are consistent with those for Risk Reduction Plans.

# Health Risk Assessments for Potentially High Risk Level Facilities

Under PAR 1402, Potentially High Risk Level Facilities must submit an ATIR and HRA within 180 days of the *date of notification that the facility is a Potentially High Risk Level Facility*. This will accelerate the entire ATIR and HRA process to more quickly initiate the risk reduction process. The ATIR and HRA approval processes will be the same as for non-Potentially High Risk Level Facilities.

#### Risk Reduction Plans for Potentially High Risk Level Facilities

Under PAR 1402, Potentially High Risk Level Facilities must submit the Risk Reduction Plan within 180 days from the date of notification that the facility is a Potentially High Risk Level Facility. The timeframe for submittal of Risk Reduction Plans for Potentially High Risk Level Facilities starts once the facility is notified that they are a Potentially High Risk Level Facility, instead of starting after the HRA has been approved. Potentially High Risk Level Facilities will be preparing their ATIR, HRA, and risk reduction plan concurrently, as is current practice, which accelerates the entire risk analysis and reduction process and will also result in risk reduction starting earlier than the traditional risk reduction process. Rule 1402 currently includes a provision where the Executive Officer can require concurrent submittal of the HRA (which includes the ATIR) and risk reduction plan. PAR 1402 adds more specificity by defining these facilities as "Potentially High Risk Level Facilities". All other facilities will be preparing their documents sequentially to decrease costs and minimize the need to unnecessarily prepare additional reports. The Risk Reduction Plan approval process will be the same as for non-Potentially High Risk Level Facilities.

# Voluntary Risk Reduction Requirements (Subdivision (h))

Under PAR 1402, this new subdivision includes requirements for facilities participating in the Voluntary Risk Reduction Program. The goal of the program is to allow facilities to make process changes, material substitutions, equipment upgrades, or generate additional data to result in a sufficient decrease in potential risk to ensure that the facility is below the Voluntary Risk Threshold. Facilities participating in the Voluntary Risk Reduction Program will achieve up to 60% more risk reductions beyond current Rule 1402 requirements (25 in a million compared to 10 in a million) and these reductions will occur approximately 16 months earlier than the traditional pathway. Although participating facilities are not subject to the traditional ATIR, HRA, and risk reduction requirements in Rule 1402, the Voluntary Risk Reduction Plan is based on an ATIR that accounts for risk reduction measures that are similar to a Risk Reduction Plan. Additionally, the SCAQMD will provide modified public notification for participating facilities as discussed below.

# Participating in the Voluntary Risk Reduction Program

The Executive Officer will determine whether or not a facility is eligible to participate in the Voluntary Risk Reduction Program. In order to be eligible for the Voluntary Risk Reduction Program, facilities must have a previously approved or SCAQMD-prepared HRA below Action Risk Level and must not be a Potentially High Risk Level Facility. The Voluntary Risk Reduction Program relies on an established understanding of the emission sources, risk drivers, meteorology, and receptor locations, therefore, only facilities with a previously approved HRA are eligible to participate. Facilities without an approved HRA would lack necessary data to accurately determine and demonstrate that their actions would result in a sufficient decrease in potential risk.

The previously approved HRA must be below Action Risk Level in order to ensure that facilities are capable of completing the Voluntary Risk Reduction Program.

Once notified by the Executive Officer that a facility is eligible to participate in the Voluntary Risk Reduction Program, facilities must submit a written acceptance within 30 days. Facilities that are eligible, but decline participation will be required to follow the standard risk assessment pathway and submit an ATIR and possibly HRA and Risk Reduction Plan.

# **Voluntary Risk Reduction Plan**

Participating facilities must submit a Voluntary Risk Reduction Plan within 150 days of notification of eligibility. The submittal time for the Voluntary Risk Reduction Plan is the same as the submittal time for the ATIR. Requirements for the Voluntary Risk Reduction Plan are outlined in the Voluntary Risk Reduction Guidelines. The Voluntary Risk Reduction Plan includes an ATIR that must incorporate risk reduction measures to demonstrate how the facility will reduce the total facility emissions below the Voluntary Risk Threshold. Under PAR 1402, the Voluntary Risk Threshold is the estimated health risk level after accounting for implementation of voluntary risk reduction measures that will result in a MICR of ten in one million (10 x 10<sup>-6</sup>), 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 in a SCAQMD rule. The Voluntary Risk Reduction Plan is based on the concept of the ATIR and the facility will submit information similar to information required in an ATIR. The Voluntary Risk Reduction Plan must include: facility information, current facility risk characterization with associated files, proposed facility risk characterization which includes risk reduction measures with the estimated emission reductions, point source and fugitive source information, additional information. SCAQMD staff will then run the information through HARP and compare the result to the Voluntary Risk Threshold pursuant to Rule 1402 paragraph (c)(24).

#### **Approval of Voluntary Risk Reduction Plans**

After submittal of the Voluntary Risk Reduction Plan, the Executive Officer will conduct an initial review and confirm receipt. Next, the Executive Officer will approve or reject the Voluntary Risk Reduction Plan based on whether the Voluntary Risk Reduction Plan meets the requirements as outlined in Voluntary Risk Reduction Guidelines; the information contained is complete and accurate; and its ability to reduce the total facility emissions below the Voluntary Risk Threshold by no later than two and a half years from the date of Voluntary Risk Reduction Plan approval. If the Voluntary Risk Reduction Plan is rejected, the facility has 30 days to correct all deficiencies identified by the Executive Officer and resubmit a revised Voluntary Risk Reduction Plan. Based on input from the Working Group (stakeholders and industry groups), a third submittal of the Voluntary Risk Reduction Plan is allowed. If the revised and resubmitted Voluntary Risk Reduction Plan is rejected, then the facility has 30 days to correct all deficiencies and resubmit a Voluntary Risk Reduction Plan. If the third revision of the Voluntary Risk Reduction Plan is rejected, the facility must submit an ATIR and HRA within 90 days of the final denial notification. Like the Risk Reduction Plan and Early Action Risk Reduction Plan, the Voluntary Risk Reduction Plan will be subject to Rule 221 and shall be enforceable by permit condition or compliance plan.

#### Implementation of Risk Reduction Plans (Subdivision (i))

Under PAR 1402, this subdivision reorganizes existing rule language to clarify implementation of approved Risk Reduction Plans and includes the same requirements for Voluntary Risk Reduction

Plans. The timeframe to implement the Risk Reduction Plan has been reduced from three years to two and a half years, but the risk reduction implementation clock now starts from the time when the Risk Reduction Plan is *approved* versus when the Risk Reduction Plan is *submitted*. Although there is a reduction of six months for risk reduction implementation, the start date of risk reduction adds three months to implementation time for a net reduction of three months for risk reduction implementation.

Currently under Rule 1402, the owner or operator is allowed three years from the date of initial Risk Reduction Plan submittal to implement the Plan. Under PAR 1402, implementation of both the Voluntary Risk Reduction Plan and Risk Reduction Plan is two and one half years from the date the Plan is approved. Based on implementation of previous Risk Reduction Plans, approximately 90% of facilities have implemented Risk Reduction Plans in about two years. For the facilities where two years and one half years is infeasible, PAR 1402 allows for these facilities to apply for a one time extension of up to two and one half years, resulting in a maximum implementation time of five years from the Risk Reduction Plan approval date.

As part of the approval process for the Voluntary Risk Reduction Plan, the Executive Officer will not approve a Voluntary Risk Reduction Plan that will require more than two and a half years to reduce the total facility emissions below the Voluntary Risk Threshold. For the facilities where unforeseen circumstances arise, the rule allows for these facilities to apply for a one time extension of up to two and one half additional years.

# Reports (Subdivision (j))

#### **Progress Reports**

PAR 1402 sets the progress report deadline to "12 months after the approval of the Risk Reduction Plan", instead of "starting no later than 12 months after the approval of the Risk Reduction Plan". This change gives a finite deadline instead of a range for progress report submittal. Under PAR 1402, the approved plan and applicable application and permit numbers must also be added into the progress report. This will provide a more complete progress report for the Executive Officer to review.

Under PAR 1402, facilities participating in the Voluntary Risk Reduction Program will also be required to submit a progress report. Since Voluntary Risk Reduction Plans are enforceable, facilities participating in the Voluntary Risk Reduction Program will need to provide progress updates to the Executive Officer to ensure that the facility is following their Voluntary Risk Reduction Plan.

#### **Final Implementation Report for Voluntary Risk Reduction Plans**

Complete implementation of the Voluntary Risk Reduction Plan is reported in a final implementation report. Requirements for the final implementation report are outlined in Voluntary Risk Reduction Guidelines. The final implementation report provides documentation that the risk reduction measures in the approved Voluntary Risk Reduction Plan have been completed and therefore demonstrates that the facility emissions are below the Voluntary Risk Threshold in Rule 1402 and no further action is necessary. The final implementation report should verify that the measures in the approved Voluntary Risk Reduction Plan have been implemented.

# Updating and Modification of Risk Reduction and Voluntary Risk Reduction Plans (Subdivision (k))

Under PAR 1402, provisions in this subdivision are also applicable to Voluntary Risk Reduction Plans. These proposed provisions provide a pathway for Voluntary Risk Reduction Plans to be updated and modified, if needed.

Provisions to PAR 1402 are added to clarify the process for modification of Risk Reduction or Voluntary Risk Reduction Plans. The owner or operator may request a modification to their Plan. In order to do so, the owner or operator must submit a new Plan to the Executive Officer for approval and demonstrate that the changes will still result in compliance with Rule 1402. The last approved Plan is valid until the modified Plan is approved.

PAR 1402 moves the provision for the time extensions to implement Risk Reduction or Voluntary Risk Reduction Plans to the following subdivision.

# **Risk Reduction Time Extensions (Subdivision (1))**

Under PAR 1402, facilities will be allowed a one-time time extension of up to two and a half years to implement either a Voluntary Risk Reduction or Risk Reduction Plan. Staff believes that this is sufficient for time extensions based on reviewing previous implementation times needed to complete risk reduction for AB 2588 facilities. Only one facility that was implementing a Risk Reduction Plan has requested a time extension. If a facility is granted a two and a half year time extension, the total risk reduction time would be five years. Health and Safety Code Section 44391 requires any risk reduction implementation beyond a total of five years for those required by state law to implement Risk Reduction Plans, to demonstrate an unreasonable economic burden on the facility operator or measures in the risk reduction plan are not technically feasible. By limiting the risk reduction time period with an extension to five years, this additional demonstration is not needed.

Similar to Rule 1402, requests for time extensions in PAR 1402 shall be either as part of the Risk Reduction or Voluntary Risk Reduction Plan or at least 180 days before the end of the risk reduction deadline. Under PAR 1402, facilities that are requesting a time extension will need to: identify the risk reduction measure that requires a time extension; the reason for the time extension; progress of risk reduction implementation; estimated health risk level at the time of the time extension request and at the end of the risk reduction period; and length of time requested. These changes will allow facilities to request extensions on a case by case basis for unforeseen circumstances.

#### **Approval of Time Extensions**

PAR 1402 includes approval criteria for time extensions to assist facilities when requesting a time extension. To be eligible for a time extension the facility must: be below Significant Risk Level at the time of the request; prove that the reason for a time extension was due to circumstances beyond the control of the owner or operator; and not result in an unreasonable risk to public health. Proof that a time extension is needed may include, but is not limited to, providing detailed schedules, engineering designs, construction plans, permit applications, purchase orders, economic burden, and technical infeasibility.

#### Risk Assessment Procedures (Subdivision (m))

PAR 1402 removes the two provisions that require staff to report to the Governing Board regarding OEHHA identifying new TACs or changing risk values. The adopting Resolutions includes the commitment to report any of these changes in the AB 2588 Annual Report. The report will include: identification of new TACs or revised risk values for existing TACs and industries affected and preliminary estimates of Rule 1402 program impacts due to new chemicals being identified or changes in risk values.

# Alternate Hazard Index Levels and Disclaimer (Subdivisions (n) and (o))

No substantive changes to subdivisions n and o.

# Risk Reduction Measures that are Rule Requirements (Previously Subdivision (m))

Currently Rule 1402 includes a provision that acknowledges the use of risk reduction measures that are implemented as part of another rule requirement. This provision is being removed from the rule, but is still allowed. If an owner or operator includes risk reduction measures that are implemented in order to comply with other regulatory requirements, these risk reduction measures will continue to be acceptable risk reduction measures in a Risk Reduction Plan for the purposes of Rule 1402, provided they are consistent with the requirements of this rule.

# **Emissions Inventory Requirements (Subdivision (p))**

Chemical Abstracts Service (CAS) Numbers have been added to Tables I and II, but no changes to the list of Toxic Air Contaminants or the Thresholds. There are no additional substantial changes to subdivision (p).

Phase I Facility Health Risk Assessment Revision Requirements (Previously Subdivision (o)) PAR 1402 removes this obsolete subdivision.

#### Public Notification Requirements (Subdivision q)

The public notification threshold levels have not changed and are still in PAR 1402, but the public notification procedures have moved into Notification Procedures. Facilities with a health risk greater than or equal to the Notification Risk Level shall distribute HRA and Public Notification Materials and participate in a Public Meeting. For Progress Reports, facilities with a health risk greater than or equal to Action Risk Level must distribute Public Notification Material annually, additionally, facilities greater than or equal to the Significant Risk Level shall participate in a Public Meeting. SCAQMD will provide Modified Public Notification for facilities participating in the Voluntary Risk Reduction Program.

#### NOTIFICATION PROCEDURES

As part of the rule amendment process, "Public Notification Procedures for Phase I and II Facilities Under Air Toxics 'Hot Spots' Information and Assessment Act of 1987 (AB 2588)" has been updated and renamed "SCAQMD Public Notification Procedures for Facilities Under the Air Toxics 'Hot Spots' Information and Assessment Act (AB 2588) and Rule 1402".

The primary change to the public notification procedures is the SCAQMD staff will schedule the public meeting, reserve the venue, arrange for audio visual rental equipment and personnel, translation services (if needed), arrangements for parking, and scheduling any other logistics. The owner or operator would be responsible for either directly paying or reimbursing the SCAQMD for costs of the public meeting with the exception of SCAQMD staff time.

The Notification Procedures include Modified Public Notification procedures for facilities participating in the Voluntary Risk Reduction. Modified Public Notification consists of notification on the SCAQMD AB 2588 website and annual report. Additional changes include updating Appendices B, C, and E (now D), and incorporating Appendix D into the document.

#### **VOLUNTARY RISK REDUCTION GUIDELINES**

"SCAQMD Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program" establishes Rule 1402 Voluntary Risk Reduction procedures. The Voluntary Risk Reduction Guidelines includes requirements for the Voluntary Risk Reduction Plan, Risk Reduction Implementation, and Final Implementation Report and describes the Approval of the Voluntary Risk Reduction Plan and the Voluntary Risk Threshold.

#### AFFECTED INDUSTRIES

As a part of the 2015 Rule 1402 amendment process, SCAQMD staff conducted an analysis to better understand the potential number of facilities under the AB 2588 Hot Spots Act that could be affected by the Revised OEHHA Guidelines. A discussion of the assumptions and basis for the number of facilities that could potentially require additional pollution controls is discussed in the June 2015 Staff Report. It is anticipated that the same facilities analyzed previously will be eligible to participate in the Voluntary Risk Reduction program. The impacts analyzed below should be viewed with the understanding that all additional costs are voluntary. Facilities that do not wish to participate may follow the standard risk assessment and reduction pathway for which all costs were already analyzed in the previous report.

# **Impact Analysis Approach**

From the 2015 Staff Report, the SCAQMD staff estimated that 22 facilities could potentially have a cancer risk greater than the Action Risk Level and 42 facilities that could potentially have a cancer risk greater than Public Notification Risk Level when using the Revised OEHHA Guidelines. All 64 facilities have a previously approved HRA below the Action Risk Level and are not likely to be a Potentially High Risk Level Facility, based on current information, 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.

SCAQMD staff evaluated the primary and secondary toxic drivers for the AB 2588 facilities that could potentially participate in Voluntary Risk Reduction. As a conservative assumption, SCAQMD staff analyzed all facilities that have a previously approved HRA that are expected to have a cancer risk above the Public Notification Risk Level in this analysis. Based on this evaluation, SCAQMD staff estimated the types of pollution controls that could potentially reduce the impact of total facility emissions 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, fuel changes, material substitutions, additional air pollution controls, and reduced throughput. The type of control device(s) necessary for implementing risk reduction

measures will vary by the pollutant(s) creating the risk. As it is not possible to predict exactly which type of air pollution control device will be selected by the facility to reduce risks, staff is conservatively assuming that several air pollution control devices will be installed at each of the impacted facilities. The assumed control devices are carbon adsorbers, enclosures, high efficiency particulate arrestors (HEPA), oxidation catalysts, scrubbers, and thermal oxidizers.

For the 22 facilities that could potentially be greater than Action Risk Level, the June 2015 Staff Report estimated the types of controls that would bring the impact of total facility emissions below Action Risk Level (June 2015 Staff Report Table 3-2). Upon further analysis, two facilities were removed because their current Priority Scores are 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 pollution controls (Table 1). For eight of the facilities, staff estimated that the controls that were reported in the June 2015 Staff Report would be sufficient to reduce the impact of total facility emissions below the Voluntary Risk Threshold. Staff estimated that the remaining three facilities would require additional controls to reduce the impact of total facility emissions below the Voluntary Risk Threshold and their associated costs (Table 2). The additional annualized cost for these three facilities would be approximately \$388,600.

Forty-two facilities were identified in the June 2015 Staff Report that could potentially have a cancer risk between the Public Notification Risk Level and Action Risk Level when using the Revised OEHHA Guidelines. Upon further analysis, staff identified three additional facilities that could potentially be impacted by the Revised OEHHA Guidelines. 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 Priority Scores were estimated to be less than ten (Table 3). For the remaining 25 facilities, staff estimated the types of pollution controls that could potentially reduce the impact of total facility emissions below the Voluntary Risk Threshold and their associated costs (Table 4). Staff assumed that four of the facilities would not participate in Voluntary Risk Reduction due to their annualized cost being greater than \$450,000 to bring facility emissions below the Voluntary Risk Threshold. The total annualized cost for the remaining 21 facilities is approximately \$962,900 or approximately \$45,900 annually per facility.

Staff conservatively estimates that 24 facilities will opt to participate in the Voluntary Risk Reduction Program at an approximate total annual cost of \$1.35 million. The cost impacts analyzed above should be viewed with a qualification that all additional costs are voluntary. Facilities that do not wish to participate may follow the traditional risk assessment and reduction pathway for which all costs were already analyzed in the June 2015 rule amendments.

Table 1
Facilities Identified in June 2015 Staff Report That Are Not Expected to Participate in the Voluntary Risk Reduction Program

Facility Type	Key Toxic Driver(s)	Air Pollution Control Device(s) (APCDs)	Reason Removed
Aerospace	Lead	HEPA/Scrubber	Due to Rule 1420.2
Aerospace	Hexavalent chromium	HEPA/Scrubber	Installed APCD
Aerospace	Hexavalent chromium and cadmium	HEPA/Scrubber	Installed APCD
Aerospace	Tetrachloroethylene and hexavalent chromium	Carbon Adsorber	Installed APCD
Aerospace	Hexavalent chromium	HEPA/Scrubber	PS <10
Metal Melting	Arsenic and cadmium	Scrubber	Due to Rule 1420.1
Metal Melting	Cadmium and lead	HEPA/Scrubber	Currently in Risk Reduction
Metal Plating and Finishing	Hexavalent chromium, nickel and cadmium	HEPA/Scrubber	Currently in Risk Reduction
Metal Plating and Finishing	Hexavalent chromium	HEPA/Scrubber	Due to Rule 1469
Metal Plating and Finishing	Hexavalent chromium	HEPA/Scrubber	HRA Complete
Refinery	Benzene and PAHs	Oxidation catalyst	PS <10

Table 2
Additional Air Pollution Control Device(s)
For Facilities Identified in the June 2015 Staff Report that are Potentially Needed to Achieve the Voluntary Risk Threshold

Facility Type	Key Toxic Driver(s)	APCD(s)	Annualized Cost	Additional APCD(s)	Additional Annualized Cost	Total Annualized Cost
Hospital	Formaldehyde and PAHs	Oxidation catalyst	\$89,200	Oxidation Catalyst	\$89,200	\$178,400
Metal Melting	Nickel	HEPA/ Scrubber	\$40,300	HEPA/ Scrubber	\$40,300	\$80,600
Waste Management	Formaldehyde	Carbon Adsorber	\$40,400	Oxidation Catalyst	\$89,200	\$129,600

 Table 3

 Facilities Removed from Potential Public Notification List

Facility Type	Key Toxic Driver(s)	Reason Removed
Aerospace	Tetrachloroethylene	PS < 10
Aerospace	Hexavalent chromium	HRA Completed
Aerospace	Hexavalent chromium and nickel	PS < 10
Aerospace	Hexavalent chromium	Due to Rule 1469
Aerospace	Hexavalent chromium	Due to Rule 1469
Aerospace	Benzene	PS < 10
Aerospace	Hexavalent chromium	Facility Shutdown
Chemical Plant	Ethylene oxide and propylene oxide	Installed APCD
Crude Oil	PAHs	PS < 10
Gasoline Pipeline	Benzene	PS < 10
Gasoline Pipeline	Benzene	Installed APCD
Hospital	Diesel particulate matter and acrolein	PS < 10
Metal Manufacturing	Hexavalent chromium and acrolein	Installed APCD
Metal Melting	Nickel	PS < 10
Metal Melting	Lead	PS < 10
Metal Plating	Nickel	Installed APCD
Military Base	Hexavalent chromium and acrolein	Installed APCD
Refinery	Gasoline vapor	PS < 10
Refinery	Benzene and PAHs	PS < 10
Rubber Manufacturer	Acrylonitrile and acrolein	Installed APCD

Table 4
Potential Air Pollution Control Device(s)
For Use to Reduce Cancer Risk by Voluntary Risk Reduction Facilities
(Notification Risk Level to Voluntary Risk Threshold)

Facility Type	Key Toxic Driver(s)	Air Pollution Control Device(s)	Annualized Cost	Additional Air Pollution Control Device(s)	Additional Annualized Cost	Total Annualized Cost
Aerospace	Hexavalent chromium	HEPA/ Scrubber	\$40,300			\$40,300
Aerospace	Hexavalent chromium	Scrubber	\$12,200			\$12,200
Electricity	PAHs	Oxidation catalyst	\$89,200			\$89,200
Gasoline Pipeline	Gasoline vapor	Small thermal oxidizer	\$35,000			\$35,000
Gasoline Pipeline	Benzene and gasoline vapor	Small thermal oxidizer	\$35,000			\$35,000
Glass Manufacturer <sup>a</sup>	Nickel	HEPA Filters	\$28,000			\$28,000
Hospital	Ethylene oxide and formaldehyde	Scrubber	\$12,200			\$12,200
Metal Melting	Hexavalent chromium, PAHs, and benzene	Scrubber	\$12,200	Oxidation catalyst	\$89,200	\$101,400
Metal Plating <sup>a</sup>	Hexavalent chromium	HEPA Filters	\$28,000			\$28,000
Refinery	Carbon tetrachloride and nickel	Carbon Adsorber	\$40,400			\$40,400
Refinery	Hexavalent chromium	Scrubber	\$12,200			\$12,200
Refinery <sup>b</sup>	Benzene and toluene	Thermal Oxidizer	\$472,000			\$472,000
Refinery	Benzene	Oxidation catalyst	\$89,200			\$89,200
Refinery <sup>b</sup>	Benzene and formaldehyde	Thermal Oxidizer	\$472,000			\$472,000
Refinery	Benzene and acrolein	Small thermal oxidizer	\$35,000			\$35,000
Refinery <sup>b</sup>	Benzene and lead	Thermal Oxidizer	\$472,000			\$472,000

Facility Type	Key Toxic Driver(s)	Air Pollution Control Device(s)	Annualized Cost	Additional Air Pollution Control Device(s)	Additional Annualized Cost	Total Annualized Cost
Refinery <sup>a,b</sup>	Benzene, PAHs and hexavalent chromium	Thermal Oxidizer	\$472,000	Oxidation catalyst	\$89,200	\$561,200
Roofing Supplies	Hydrogen sulfide	Scrubber	\$12,200			\$12,200
Ski Facility	Acrolein	Oxidation catalyst	\$89,200			\$89,200
University	PAHs and acrolein	Oxidation catalyst	\$89,200			\$89,200
Waste Management	Tetra- chloroethylene	Carbon Adsorber	\$40,400			\$40,400
Waste Management	Formaldehyde	Carbon Adsorber	\$40,400			\$40,400
Waste Management	Hexavalent chromium, benzene and PAHs	HEPA Filters	\$28,000		1	\$28,000
Waste Management	Vinyl chloride and hydrochloric acid	Scrubber/ Carbon Adsorber	\$52,700			\$52,700
Waste Management	Chloroform	Scrubber/ Carbon Adsorber	\$52,700			\$52,700

a – Additional facility not identified in June 2015 Staff Report.

b – Assumed cost too high for facility to voluntarily participate in Voluntary Risk Reduction.

#### COMMENTS AND RESPONSES

Comment Letter 1:



August 5, 2016

Ms. Susan Nakamura, Acting Assistant Deputy Executive Officer South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, California 91765

Dear Ms. Nakamura:

#### Re: Comments on the SCAQMD Proposed Amended Rule 1402

The Southern California Alliance of Publicly Owned Treatment Works (SCAP) appreciates this opportunity to provide comments on Proposed Amended Rule 1402. SCAP represents 83 public agencies that provide essential water supply and wastewater treatment to nearly 19 million people in Los Angeles, Orange, San Diego, Santa Barbara, Riverside, San Bernardino and Ventura counties. SCAP's wastewater members provide environmentally sound, cost-effective management of more than two billion gallons of wastewater each day and, in the process, convert wastes into resources such as recycled water and biogas.

SCAP greatly appreciates SCAQMD's support for the voluntary risk reduction option contained in the proposed amended rule. As described below, we have some minor comments intended to maintain existing source test flexibility and to encourage facilities to participate in the voluntary risk reduction program.

<u>Source Test Requirements:</u> Historically, wastewater treatment plants have been allowed to pool emissions data and to rely on modeling to develop emission factors. For example, SCAOMD Rule 1179 provides for joint emissions testing, and in accordance with California Health and Safety Code (H&SC) Section 44342 wastewater treatment plants have used models, such as TOXCHEM, to estimate volatile organic compounds air emissions from wastewater treatment processes. To maintain this flexibility, CARB's entire Emission Inventory Criteria and Guidelines for the Air Toxics 'Hot Spots' Program and H&SC Section 44342 should be referenced. We request the following revisions to PAR 1402(d)(3)(A), which will ensure existing flexibility is maintained:

- Comment 1-1
- (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);
  - Does not quantify applicable toxic air contaminants;

P.O. Box 231565 Encinitas, CA 92024-1565

Fax: 760-479-4881 Tel: 760-479-4880 Website: www.scap1.org Email: info@scap1.org

Ms. Susan Nakamura August 5, 2016

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

ii) 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': or

(iv) Is not in accordance with California Health and Safety Code Section 44342.

Comment 1-1 (Continued)

Comment 1-2

#### Voluntary Risk Reduction Requirements:

As discussed at the July 27th Working Group meeting, we respectfully request that facilities be encouraged to participate in the voluntary risk reduction program. As drafted, only facilities with existing health risk assessments that have been notified by the Executive Officer may participate. We believe that such language may inadvertently exclude facilities that should be encouraged to accelerate emission reductions. For example, OEHHA routinely updates cancer potency factors, which could cause facilities without an existing health risk assessment to become subject to Rule 1402. Such facilities should be allowed to qualify for voluntary risk reduction. We understand that the SCAQMD staff are concerned that some facilities not previously subject to Hot Spots/Rule 1402 may lack "necessary data" (draft Staff Report, page 9), so we have proposed a new provision, (h)(1)(A)(iii), that allows these types of facilities to be eligible for the voluntary risk reduction program, but specifies that in order to qualify a facility must have an approved Toxics Inventory Report. Completing of the Toxics Inventory Report should provide enough data to access potential risk. Similarly, we believe that any facility willing to accelerate emission reductions, not just those notified by the SCAQMD, should be able to opt into this program rather than limiting participation to facilities notified of eligibility. SCAQMD staff expressed concerns over manpower if the ability to opt into the voluntary program is broadened; however, we believe that opening up eligibility requirements in this manner will not create an additional burden.

We request the following revisions to PAR 1402(h)(1)(A) to address these concerns:

#### (h) Voluntary Risk Reduction Requirements

- (1) Participation in Voluntary Risk Reduction Program
  - (A) The Executive Officer will notify an owner or operator of eligibility or a facility may request to participate in the Voluntary Risk Reduction Program based on the following criteria:
    - 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, or
    - (iii) The facility, in accordance with Section (d)(4), has an approved Air Toxics. Inventory Report, but has not yet been required to perform a Health Risk. Assessment by the District for the purpose of the Hot Spot Act or this rule.

2

Ms. Susan Nakamura August 5, 2016

#### Public Notification Requirements:

SCAP requests that it be made clear in the Staff Report that future revisions to "SCAQMD Public Notification Procedures for Facilities Under the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588 and Rule 1402)" be reviewed and vetted by interested parties in public workshops, as well as be subject to Board approval. SCAP greatly appreciates this commitment as discussed at the July 27th Working Group meeting.

Comment 1-3

Thank you for the opportunity to comment Proposed Amended Rule 1402. Please do not hesitate to contact Mr. David Rothbart of the Los Angeles County Sanitation Districts, SCAP Air Quality Committee Chair, should you have any questions regarding this transmittal at (562) 908-4288, extension 2412.

Sincerely,

John Pastore, Executive Director

CC:

Dr. Philip Fine, SCAOMD

Response to Comment 1-1: The recommended language has been incorporated into the proposed rule.

Response to Comment 1-2:

SCAQMD staff discussed with a representative from SCAP their comment to allow a facility without an approved HRA to participate in the Voluntary Risk Reduction Program. SCAP is not aware of any facilities that do not have a previously approved HRA that may be interested in participating in the Voluntary Risk Reduction Program. The general thought was that if there is another major change in the risk estimation methodology, similar to the 2015 Revised OEHHA Guidelines for estimating risk, that facilities are notified so they can make reductions before their quadrennial reports, if needed. To address SCAPs comment, the adoption resolution will include a commitment to notify stakeholders in advance of future revisions to the risk estimation methodology.

Response to Comment 1-3:

These two documents are to be approved by the Governing Board. The adopting Resolution includes a commitment that changes to the Public Notification Procedures and Voluntary Risk Reduction Guidelines are to go through a public process and be approved by the Board.

#### SOCIOECONOMIC ASSESSMENT

A socioeconomic assessment for PARs 307.1, 1401, and 1402, Draft Notification Procedures, and Draft Voluntary Risk Reduction Guidelines was conducted and was made available to the public at least 30 days prior to the SCAQMD Governing Board Meeting anticipated for October 7, 2016.

# CALIFORNIA ENVIRONMENTAL QUALITY ACT

Pursuant to the California Environmental Quality Act (CEQA) Guidelines §15252 and §15070 and the SCAQMD's Certified Regulatory Program (Rule 110 and CEQA Guidelines §15251(l)), the SCAQMD, acting as Lead Agency, has prepared a Draft Environmental Assessment (EA) for the following proposed project:

- 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;
- SCAQMD Public Notification Procedures for Facilities Under the Air Toxics "Hot Spots" Information and Assessment and Rule 1402; and,
- SCAQMD Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program.

The environmental analysis in the Draft EA concluded that the proposed project would result in less than significant environmental impacts. The Draft EA was circulated for a 30-day public review and comment period from August 23, 2016 to September 22, 2016. If any comments are received from the public regarding the Draft EA, the comment letters and responses to the comments will be included in the Final EA.

In addition, SCAQMD staff has reviewed the proposed amendments to Rule 307.1 and because these amendments are strictly administrative in nature, it can be seen with certainty that there is no possibility that the adoption of the proposed amendments to Rule 307.1 may have a significant adverse effect on the environment [General Rule Exemption - CEQA Guidelines §15061 (b)(3)]. Additionally, PAR 307.1 is statutorily exempt from CEQA requirements, pursuant to CEQA Guidelines §15273 – Rates, Tolls, Fares, and Charges, because the proposed amendments to Rule 307.1 involve charges by public agencies for the purpose of meeting operating expenses and financial reserve requirements. A Notice of Exemption has been prepared for PAR 307.1 pursuant to CEQA Guidelines §15062 - Notice of Exemption. If PAR 307.1 is approved, a Notice of Exemption will be filed with the county clerks immediately following adoption of PAR 307.1.

# DRAFT FINDINGS UNDER CALIFORNIA HEALTH AND SAFETY CODE SECTION 40727

# **Requirements to Make Findings**

California Health and Safety Code Section 40727 requires that prior to adopting, amending or repealing a rule or regulation, the SCAQMD Governing Board shall make findings of necessity, authority, clarity, consistency, non-duplication, and reference based on relevant information presented at the public hearing, and in the staff report, the Draft Notification Procedures and Draft Voluntary Risk Reduction Guidelines for the Voluntary Risk Reduction Program.

#### Necessity

PARs 307.1, 1401, and 1402 are needed to clarify rule language, requirements and deadlines relating to risk reductions and to include a voluntary risk reduction pathway. The Draft

Notification Procedures and Draft Voluntary Risk Reduction Guidelines are needed to further implement PAR 1402.

# **Authority**

The AQMD Governing Board has authority to adopt amendments to Rules 307.1, 1401, and 1402, Notification Procedures, and Voluntary Risk Reduction Guidelines pursuant to the California Health and Safety Code Sections 39002, 39650 et. seq., 40000, 40001, 40440, 40441, 40702, 40725 through 40728, 41508, 41700, 41706, 44300 through 44394.

#### Clarity

PARs 307.1, 1401, and 1402, Draft Notification Procedures, and Draft Voluntary Risk Reduction Guidelines are written or displayed so that their meaning can be easily understood by the persons directly affected by them.

#### Consistency

PARs 307.1, 1401, and 1402, Draft Notification Procedures, and Draft Voluntary Risk Reduction Guidelines are in harmony with and not in conflict with or contradictory to, existing statutes, court decisions or state or federal regulations.

# **Non-Duplication**

PARs 307.1, 1401, 1402, Draft Notification Procedures, and Draft Voluntary Risk Reduction Guidelines will not impose the same requirements as any existing state or federal regulations. The proposed amended rules are necessary and proper to execute the powers and duties granted to, and imposed upon, the SCAQMD.

#### Reference

By adopting PARs 307.1, 1401, and 1402, Draft Notification Procedures, and Draft Voluntary Risk Reduction Guidelines, the SCAQMD Governing Board will be implementing, interpreting or making specific the provisions of the California Health and Safety Code Sections 39666 (District new source review rules for toxics), 41700 (prohibited discharges), and 44300 through 44394 (Air Toxics "Hots Spots" Information And Assessment).

#### **Rule Adoption Relative to Cost-Effectiveness**

On October 14, 1994, the Governing Board adopted a resolution that requires staff to address whether rules being proposed for adoption are considered in the order of cost-effectiveness. The 2012 Air Quality Management Plan (AQMP) ranked, in the order of cost-effectiveness, all of the control measures for which costs were quantified. It is generally recommended that the most cost-effective actions be taken first. PARs 307.1, 1401, and 1402 are not control measures in the 2012 AQMP and, thus, was not ranked by cost-effectiveness relative to other AQMP control measures in the 2012 AQMP. In addition, cost-effectiveness defined as cost per ton of emission reductions is not meaningful for toxic risk since risk depends on several factors in addition to emission numbers such as geography, meteorology, and location of receptors.

#### **Incremental Cost-Effectiveness**

Health and Safety Code Section 40920.6 requires an incremental cost effectiveness analysis for Best Available Retrofit Control Technology (BARCT) rules or emission reduction strategies when there is more than one control option which would achieve the emission reduction objective of the proposed amendments, relative to ozone, CO, SOx, NOx, and their precursors. Since the proposed amended rules apply to TACs, the incremental cost effectiveness analysis requirement does not apply.

### **COMPARATIVE ANALYSIS**

Health and Safety Code section 40727.2 requires a comparative analysis of the proposed amended rule with any Federal or SCAQMD rules and regulations applicable to the same source. There are no comparable Federal rules or regulations to PARs 307.1, 1401, and 1402. Rules 1401 and 1402 apply to any permitted source and potentially non-permitted sources; different sources are subject to a wide variety of SCAQMD rules. Therefore, it is not possible to list all such rules. See Table 5 below.

**Table 5**Comparative Analysis of PAR 307.1, 1401, and 1402 with Federal Regulations

Rule Element	PAR 307.1	PAR 1401	PAR 1402	Equivalent Federal Regulation
Applicability	Facilities subject to Health and Safety Code Sections 44321 and 44344.7 and Rule 1402	New, relocated or modified permit unit	Existing facilities subject to Air Toxics "Hot Spots" Information and Assessment Act of 1987 and facilities with total facility emissions exceeding any significant or action risk level	None
Requirements	Pays fees associated with AB 2588 and Rule 1402	Limits maximum individual cancer risk, cancer burden and chronic and acute hazards	Submittal of health risk assessment for total facility emissions when notified. Implement risk reduction measures if facility-wide	None

Rule Element	PAR 307.1	PAR 1401	PAR 1402	Equivalent Federal Regulation
			risk is greater	
			than or equal	
			to action risk	
			level	
Reporting	None	None	Progress	None
			reports and	
			updates to risk	
			reduction	
			plans	
Monitoring	None	None	None	None
Recordkeeping	None	None	None	None

#### REFERENCES

"Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments", Office of Environmental Health Hazard Assessment, February 2015.

"Draft SCAQMD Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program", South Coast Air Quality Management District, July 2016

"Draft SCAQMD Public Notification Procedures for Facilities under the Air Toxics 'Hot Spots' Information and Assessment Act (AB 2588) and Rule 1402", South Coast Air Quality Management District, July 2016

"Emission Inventory Criteria and Guidelines for the Air Toxics 'Hot Spots' Program", State of California Air Resources Board, August 2007

"Prioritization of Toxic Air Contaminants – Children's Environmental Health Protection Act", Office of Environmental Health Hazard Assessment, October 2001

"Public Notification Procedures for Phase I and II Facilities under the Air Toxics 'Hot Spots' Information and Assessment Act of 1987 (AB 2588)", South Coast Air Quality Management District, July 1994

"Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act", South Coast Air Quality Management District, June 2015