

APPENDIX B

Proposed Updates to Rule 11-18 Implementation Procedures

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**Bay Area Air District
Regulation 11, Rule 18
Implementation Procedures**

March 2026

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Regulation 11, Rule 18 Implementation Procedures

1. Introduction

The Bay Area Air District (“Air District”) adopted Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Rule 11-18) on November 15, 2017. Rule 11-18 is a health risk-based rule that requires existing facilities to determine their health risk and if that risk equals or exceeds one of the risk action levels, the facility must either (a) reduce health risks below the risk action levels specified in Section 11-18-217 or (b) install best available retrofit controls on all significant sources of health risk.

This document provides additional information about Rule 11-18 and explains how the Air District implements Rule 11-18.

- **Section 1** of this document provides background information about air toxics control in the Air District and explains how Rule 11-18 augments these control programs.
- **Section 2** describes the purpose of this implementation procedures document.
- **Section 3** identifies definitions that apply specifically to the Rule 11-18 program and defines acronyms that are commonly used in air toxics control programs.
- **Section 4** describes the procedures the Air District intends to use to implement Rule 11-18.
- **Section 5** outlines a dispute resolution process for disagreements between refineries and the Air District regarding Rule 11-18, and
- **Section 6** discusses how the Air District will keep the public and industry informed about rule implementation progress.

The purpose of this document is to inform the regulated community and interested public on how the Air District implements Rule 11-18. Unlike Rule 11-18 itself, this document does not have the force of law and does not bind the Air District, regulated entities, or any other person or entity. The Air District may follow different procedures from those described here if it determines that use of such procedures is warranted under the circumstances. The Air District will follow all requirements of Rule 11-18, notwithstanding anything in this document.

1.1 Background on Air Toxics Programs

The Air District has been reducing air toxics emissions from stationary sources for more than thirty years. In addition to adopting and implementing regulations targeting specific toxic air contaminants and specific source types, the Air District began evaluating health risks from stationary source facilities and new or modified projects at these facilities in the early 1990’s. In 2005, the Air District adopted Regulation 2: Permits, Rule 5: New Source Review of Toxic Air Contaminants (Rule 2-5) to implement the Air District’s new source review limitations for stationary sources of toxic air contaminants (TACs). The Air District amended Rule 2-5 in 2010 and 2016 to add new TACs, revise health effects values, and include updated Health Risk Assessment (HRA) guidelines. In 2021, the Air District amended Rule 2-5 to add a more stringent cancer risk limit for projects located in communities that are overburdened with air pollution and other health stressors.

Although health risks from ambient TAC emissions have declined significantly during the last thirty years, some communities in the Air District continue to have elevated and disparate risk levels. Rule 11-18 was adopted in 2017 pursuant to the Air District’s authority to regulate and control TAC emissions from stationary sources.¹ In 2026, the Air District amended Rule 11-18 and updated the Rule 11-18 Implementation Procedures (this document) with aim to improve procedures and implementation efficiency. Rule 11-18 is an important part of the Air District’s efforts to protect public health from toxic air pollution and reduce health impacts for disparately impacted communities. Rule 11-18 focuses on reducing health risks from existing facilities that have the highest potential for local health impacts due to stationary source emissions.

The Air District has several relevant documents to support consistent, transparent, and technically sound implementation of its air toxics programs. The table below provides an overview of each document and its role in the Rule 11-18 process.

Table 1. Overview of Key Documents Available

Document	Purpose	Example Contents
<p>Regulation 11, Rule 18 Implementation Procedures (this document)</p>	<p>Procedures for Rule 11-18 implementation.</p>	<ul style="list-style-type: none"> • List of facilities potentially subject to Rule 11-18 HRA and Risk Reduction Plan (RRP) requirements • Rule 11-18 HRA and RRP submission steps and review timelines • Dispute resolution panel procedures • Stakeholder meetings

¹ California Health and Safety Code § 39666.

Document	Purpose	Example Contents
Air Toxics Control Programs HRA Guidelines²	Analytical outline for health risk calculation and evaluation.	<ul style="list-style-type: none"> • Technical risk calculation methodology • Receptor assumptions • Exposure duration • Interpretation of results • Documentation requirements
HRA Modeling Protocol³	Technical instructions for conducting dispersion modeling used in HRAs.	<ul style="list-style-type: none"> • Technical modeling inputs and setup (e.g., meteorological data, terrain, stack parameters) • Receptor grid spacing • Modeling domain • Output file formats
Prioritization Score Procedures for Air Toxics Hot Spots Program and Regulation 11, Rule 18⁴	Procedures for calculating prioritization scores.	<ul style="list-style-type: none"> • Prioritization score steps • Standard prioritization score calculation equations • Alternative prioritization score calculation equations for specific facility types
TAC Emission Factor Guidelines⁵	Procedures for identifying representative TAC emission factors for a specific source.	<ul style="list-style-type: none"> • Overriding principles • Pollutant demonstration • Source-specific TAC emission factors • Default TAC emission factors
TAC Emission Factor Guidelines, Appendix A: Default TAC Emission Factors for Specific Source Categories⁶	Default TAC emission factors for specific source categories.	<ul style="list-style-type: none"> • Default TAC emission factors for boilers • Default TAC emission factors for gas turbines

² **HRA Guidelines:** As of preparation of this document, the most recent version is December 2021 and is available here: https://www.baaqmd.gov/~media/dotgov/files/rules/reg-2-permits/2021-amendments/documents/20211215_hraguidelines-pdf.pdf?rev=eb18ff83f96049fa84d54552b58baee3

³ **HRA Modeling Protocol:** As of preparation of this document, the most recent version is December 2020 and is available here: https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol-pdf.pdf?rev=0d07ca2f01de4c36a3a22f411c8b8f6f

⁴ **Prioritization Score Procedures for Air Toxics Hot Spots Program and Regulation 11, Rule 18:** As of preparation of this document, the most recent version is March 2017 and is available here: https://www.baaqmd.gov/~media/dotgov/files/rules/regulation-11-rule-18/documents/20171003_priorproc_1118-pdf.pdf?rev=14cd7841f4b64710907d28122806c45e&sc_lang=en

⁵ **TAC Emission Factor Guidelines:** As of preparation of this document, the most recent version is August 2020 and is available here: https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/tac_emission_factor_guidance_august_2020-pdf.pdf

⁶ **TAC Emission Factor Guidelines, Appendix A: Default TAC Emission Factors for Specific Source Categories:** As of preparation of this document, the most recent version is August 2020 and is available here: https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/tac_emission_factor_guidance_appendixa_august_2020-pdf.pdf

Document	Purpose	Example Contents
Petroleum Refinery Emissions Inventory Guidelines ⁷	Describes methodologies for calculating and reporting refinery emission inventories	<ul style="list-style-type: none"> • Overriding principles • Source-specific emission calculation procedures • Other procedures to ensure consistency

1.2 Public Engagement

Rule 11-18 supports the Air District’s mission to create a healthy breathing environment for every Bay Area resident. The Air District recognizes the public’s desire to understand local health impacts due to air pollution in their communities and to be engaged in the process of reducing these health impacts.

To meet these public expectations and in addition to this document, the Air District regularly posts information about Rule 11-18 and implementation progress on two web pages: (1) the Air District’s Facility Risk Reduction Program web page (<https://www.baaqmd.gov/community-health/facility-risk-reduction-program>) and (2) the Rule 11-18 Risk Reduction Facilities web page (<https://www.baaqmd.gov/community-health/facility-risk-reduction-program/facility-risk-reduction-list>). Please visit these web pages to find current lists of facilities under review and implementation status updates. These web pages are or will be used to:

- Identify procedures and guidelines to be used when preparing TAC inventories, conducting HRAs, and reviewing RRP’s;
- Inform the public about the status and results of the Air District’s TAC inventory review, risk assessment results, and risk reduction requirements for individual facilities; and
- Provide opportunities for public review and comment on site-specific HRA results and site-specific RRP’s.

The Air District plans to update these Implementation Procedures when any future amendments to Rule 11-18 are adopted. Invitations to workshops and information about public comment opportunities will be posted to the Air District web site, and the Air District will use multiple messaging options to inform the public of these opportunities.

The Air District also plans to have meetings with interested stakeholders to inform the public about the progress of Rule 11-18 implementation, to discuss improvements to the Facility Risk Reduction Program, to learn about community air toxic concerns, and to strategize on ways to improve public health in adversely impacted communities.

⁷ **Petroleum Refinery Emissions Inventory Guidelines:** As of preparation of this document, the most recent version is July 2019 and is available here: https://www.baaqmd.gov/~media/files/engineering/refinery-emissions-inventory-guidelines/draft-refinery-emissions-inventory-guidelines.pdf?rev=3a8ff253965d441a89c25d54a8634714&sc_lang=en

2. Purpose

The main purpose of this document is to describe the procedures the Air District intends to follow to implement Rule 11-18. These procedures are presented in Section 4 of this document. The following gives a brief overview of other Air District air toxic programs and explains how current procedures for these programs are integrated into and used by the Facility Risk Reduction Program.

2.1 Annual Toxic Air Contaminant Emissions Inventories

In accordance with the California AB 2588 Air Toxics “Hot Spots” Information and Assessment Act of 1987, most facilities that have the potential to emit TACs are required to report routine and predictable toxic emissions from stationary sources located at the facility to their local air district on a regular basis. In the Bay Area, the Air District integrates this TAC emission reporting requirement into the annual permit renewal process for the facility. The Air District stores information about each facility, their sources, control equipment, process data, stack data, and emission rates in a computer database. On an annual basis, the Air District requires that facilities report throughput rates, material usage data, and other information to the Air District.

For most facilities, with the exception of the refineries, the Air District uses this “annual update information” in conjunction with stored emission factors to calculate an annual emission inventory for each permitted facility in the Air District. For refineries, annual emissions data are collected in accordance with Regulation 12: Miscellaneous Standards of Performance, Rule 15: Refining Emissions Tracking (Rule 12-15) requirements, which allows for direct emissions reporting from the facility or estimates using a similar procedure as described above for the annual update process. This annual facility inventory includes criteria pollutants, greenhouse gases, and toxic air contaminants. The annual TAC emission rates determined through this process constitute the annual TAC emissions inventory for the facility. The Air District reports the TAC emission inventories for all permitted facilities to the California Air Resources Board (CARB) on an annual basis.

2.2 Annual Prioritization Scores

The Air District uses prioritization scores to rank facilities based on health impact potential. Prioritization scores⁸ represent the relative potential for health impacts from a facility based on the amount of TACs emitted from a facility, the relative toxicity of the TACs emitted, and the distance from the sources at the facility to people who are exposed to the emissions.

⁸ For more information about prioritization scores, see the Air District’s Prioritization Score Procedures: https://www.baaqmd.gov/~/_media/dotgov/files/rules/regulation-11-rule-18/documents/20171003_priorproc_1118-pdf.pdf?rev=14cd7841f4b64710907d28122806c45e

In the Bay Area, the Air District's prioritization scoring process occurs automatically during the annual permit renewal process described above (Section 2.1). After the annual TAC emissions inventory is generated, the Air District applies the prioritization score calculation procedures to produce an annual prioritization score for each facility. As described in Section 4 below, the Facility Risk Reduction Program uses these annual prioritization scores to identify facilities that need further inventory review and to help inform the order in which HRAs are conducted for these facilities if HRAs are required.

2.3 Further Review of Toxic Air Contaminant Inventories

If further review is triggered under the Facility Risk Reduction Program, the Air District may re-evaluate the TAC emissions inventory. The Air District reviews the data used to create the annual TAC emissions inventory to ensure that it is based on complete and correct information about the TACs that are emitted from the facility. It is the Air District's intention to use the most accurate TAC emissions data available. Section 4 describes the procedures that need to be followed when preparing or updating TAC emissions inventories for the Facility Risk Reduction Program.

2.4 Health Risk Assessments

If the facility exceeds the prioritization score thresholds described in Section 4, the Air District may notify a facility that a facility-wide HRA is required. The facility will prepare or have a contractor prepare an HRA. The Air District has the authority to review, correct, and approve HRA inputs and results. Existing HRA information that has been previously prepared and approved for the facility to determine if a new or updated facility-wide HRA may be necessary. This existing HRA information may include past HRAs prepared for "Hot Spots" Program purposes. Section 4 describes the procedures that need to be followed when preparing new or updated HRAs to determine Rule 11-18 RRP requirements.

2.5 Risk Reduction Plans

The requirement to submit an RRP is determined based on the results of an Air District-approved HRA. If an Air District-approved HRA indicates that a facility's health risk meets or exceeds one of Section 11-18-217 risk action levels, the facility must submit a draft RRP, obtain and maintain Air District approval of an RRP, and implement the risk reduction measures in accordance with the RRP. The RRP must demonstrate (a) how the facility will reduce health risks below all risk action levels within the required timeframe or (b) that it is not feasible to reduce health risk below the risk action levels and that the facility has installed or will install best available retrofit controls for toxics (TBARCT)⁹ on all significant sources of health risk. Section 4 describes the procedures that need to be followed when submitting, reviewing, and approving RRP.

⁹ Section 11-18-204 defines Best Available Retrofit Control Technology for Toxics (TBARCT).

3. Definitions

Many terms or phrases that are used in this document are defined in Rule 11-18. Please see the Rule for those definitions. Additional terms or phrases used in this document are defined below:

CARB means California Air Resources Board.

High-Priority Facility means any facility that has a facility cancer risk prioritization score of 10 or higher or a facility non-cancer prioritization score of 1 or higher. High-priority facilities are potentially subject to Rule 11-18 HRA and RRP requirements, unless the facility meets one of the exemption criteria in Sections 11-18-103 or 11-18-104.

OEHHA means Office of Environmental Health Hazard Assessment.

Potentially Subject Facility means a facility that may be subject to Rule 11-18 HRA and/or RRP requirements. The Air District will conduct a detailed review of the toxic air contaminant emissions inventory for this facility, and the facility may conduct an HRA to assess the applicability of Rule 11-18 RRP requirements.

Proximity Adjustment Factor is a multiplication factor that is used in the calculation of a prioritization score for a facility. Proximity Adjustment Factors represent the potential reduction in ground level concentration of a toxic air contaminant that may occur at increasing distances from the facility emitting the toxic air contaminant. Proximity adjustment factors are determined in accordance with California Air Pollution Control Officers Association procedures based on the distance from the facility to the nearest residence or off-site worker.

REL means Reference Exposure Level. The air concentration or exposure level for a specified exposure duration at or below which adverse non-cancer health effects are not anticipated to occur in the general human population.

4. Procedures

This section describes the procedures the Air District follows to implement Rule 11-18. There are typically four major steps to implementing this rule:

1. Identifying and notifying facilities that are potentially subject to Rule 11-18 HRA requirements based on prioritization scores.
2. Updating TAC emissions inventories and assessing health risks from TAC emissions through a facility-wide HRA.
3. Determining if the HRA results indicate that the facility meets or exceeds any of the RALs in Rule 11-18 and, if so, ensuring an RRP is developed and approved.
4. Implementing approved RRP for facilities subject to Rule 11-18 RRP requirements.

The first step is to determine which facilities may require an HRA under Rule 11-18 based on prioritization scores, which are calculated using an Air District-approved TAC emissions inventory. After the facilities potentially subject to Rule 11-18 HRA requirements are identified, the Air District may notify them of their obligation to prepare an HRA, and, if an HRA is required, the Air District will provide a copy of the Air District-approved TAC emissions inventory and TAC emissions release data.

In the second step, the HRA results are provided by the facility. The Air District will review and correct, if needed, the HRA results and TAC emissions inventory before approving the HRA results. The adoption of Rule 11-18 and other recent state legislation (AB 197 and AB 617) has resulted in a renewed emphasis on improving the Air District's TAC emissions inventory data. Many facilities have requested to review and to update their TAC emissions inventory data and other facility information that would be used for Air District decisions during these first two steps. The Air District concurs that a current and accurate TAC emissions inventory is a key consideration for this process. Therefore, inventory and facility data improvements have been incorporated into the procedures (Section 4.1.5).

In the third step, the results from the HRA will be compared against the risk action levels to determine whether the facility will be required to submit an RRP. In this step, facilities that exceed any risk action levels are required to develop and submit an RRP for the Air District's review and approval.

Step 4 involves the implementation of the approved RRP, which includes meeting the applicable risk reduction requirements of Rule 11-18 within the specified timeline. This step includes the development, submittal, review, and approval of RRP.

Procedures and criteria for the typical implementation steps are listed below.

4.1 Identify Potentially Subject Facilities

With minor exceptions, Rule 11-18 applies to any facility that is required to report a TAC emissions inventory to the Air District pursuant to the Air Toxics "Hot Spots" Information and Assessment Act of 1987, California Health and Safety Code, Section 44300 *et seq.* The Air District generally follows CARB's emission inventory, prioritization score, and HRA procedures that were developed for the "Hot Spots" Program when determining Rule 11-18 HRA and RRP applicability. Any deviations from these CARB procedures or clarifications to these CARB procedures are explained in Air District guidance documents or the procedures below.

4.1.1 Rule 11-18 Toxic Air Contaminant Emissions Inventories

For the purposes of Rule 11-18, toxic air contaminant (TAC) emission inventories will generally be consistent with the California Air Resources Board's Emission Inventory Criteria and Guidelines (EICG) for the "Hot Spots" Program. The EICG, last amended

August 18, 2021,¹⁰ describes the types of facilities that must provide TAC emissions inventories to the Air District and what must be included in those inventories. The EICG requires that facilities report routine and predictable TAC emissions from stationary sources at a facility. Emissions from emergency operations are excluded from “Hot Spots” reporting requirements and from Rule 11-18 TAC emissions inventories. Tailpipe emissions from motor vehicles are also excluded from “Hot Spots” Program reporting requirements and Rule 11-18 TAC emissions inventories.

“Hot Spots” Program TAC emissions reporting requirements apply to the full list of compounds identified in Appendix A of the EICG.¹¹ Since Rule 11-18 requirements depend on health risk thresholds, the Air District is only including in Rule 11-18 TAC emissions inventories compounds that have health risk values listed in Table 2-5-1 of Rule 2-5.¹² This is in accordance with the definition of a toxic air contaminant in Section 11-18-225. The Office of Environmental Health Hazard Assessment (OEHHA) routinely updates the health effects values for toxic compounds that are required to be used for the “Hot Spots” Program. Although the Air District periodically updates Table 2-5-1 of Rule 2-5 to include any new toxic compounds or updated health effects values approved by OEHHA, there will be a lag between OEHHA approval of a new health effect value and Air District adoption of that new health effects value. Thus, Table 2-5-1 may not include all of the compounds with OEHHA-approved health effects values.

The Air District updates the TAC emissions inventory for a facility on an annual basis,¹³ and this is consistent with the reporting requirements under EICG/CARB Criteria Pollutant and Toxics Emissions Reporting (CTR) guidelines.¹⁴

The TAC emissions inventory is generally based on throughput rates, which are updated on an annual basis; toxic air contaminant emission factors, which are updated on an as-needed basis; and emission calculation algorithms specific to each source type.¹⁵ Fugitive equipment sources may also contribute significantly to facility risk but are not directly tied to throughput rates. Emissions from these sources are estimated using protocols appropriate to the source type and incorporated into the inventory to ensure that the HRA reflects all relevant risk drivers. The necessary data for each source are collected and entered into the Air District’s database during the permit application process. TAC emission factors are determined in accordance with the Air District’s Toxic Air Contaminant Emission Factor Guidelines and the EICG.

For example, a boiler burning natural gas would have a set of TAC emission factors that would include the pounds of formaldehyde generated per thousand cubic feet of natural

¹⁰ California Air Resources Board’s Emissions Inventory Criteria and Guidelines for the Air Toxic “Hot Spots” Program is available online here: <https://ww2.arb.ca.gov/sites/default/files/2022-10/EICG%20Report.pdf>

¹¹ Appendix A of the EICG is available here: <https://ww2.arb.ca.gov/sites/default/files/2022-10/Appendix%20A.pdf>

¹² Regulation 2, Rule 5 and Table 2-5-1 are available here: https://www.baaqmd.gov/~media/dotgov/files/rules/reg-2-permits/2021-amendments/documents/20211215_rg0205-pdf.pdf?rev=ddf72e12b699400e953b9b8dc24d2c34

¹³ Toxic Air Contaminant Special Reports and Emissions Inventories for each facility are available here: <https://www.baaqmd.gov/en/about-air-quality/emission-inventory/toxic-air-contaminants>

¹⁴ <https://ww2.arb.ca.gov/our-work/programs/criteria-and-toxics-reporting>

¹⁵ Petroleum refineries and support facilities must report emissions including emissions of toxic air contaminants pursuant to the requirements and procedures in Rule 12-15.

gas burned in the boiler. The facility reports the amount of natural gas (in thousand cubic feet) burned in the boiler each year. The Air District's computer system multiplies the formaldehyde emission factor by the annual reported throughput rate to calculate the amount of formaldehyde generated at that boiler during the inventory year. Sources equipped with emission control devices would also have abatement factors that are incorporated into this calculation procedure.

For Rule 11-18 purposes, the TAC emissions inventory includes the best estimate of actual annual routine TAC emissions (pounds per year) and not the maximum permitted or maximum potential annual emissions rate for each source, abatement device, or emission point. For hourly emissions, the Rule 11-18 TAC emissions inventory includes the best estimate of the maximum hourly emission rate (pounds per hour) for each TAC.

The TAC emissions inventory that is used for a facility-wide HRA is generally based on a single, representative emissions inventory year and it will usually, but not always, be based on the most recently available inventory year. The inventory year refers to the submission of required data for the 12-month period occurring prior to the year in which the annual permit renewal occurs. For example, a 2022 inventory year would include data pertinent to emissions in a consecutive 12-month period submitted in the annual update for a June 2023 permit renewal. Additionally, for example, as of December 2023, emissions data reported for calendar year 2022 are the most recent available inventory year for many facilities. The Rule 11-18 TAC emissions inventory would generally include 2022 inventory data for all sources at the facility, and not 2021 data for some sources and 2022 data for other sources, unless – due to the transition to annual reporting described above – a single inventory year of data is not available for all sources at a facility. In the latter case, emissions updated for a previous year would be considered to be part of the current inventory year for Rule 11-18.

When determining if an inventory year is representative of normal operations, the Air District intends to consider reported throughput data and other recent or planned changes to the facility that could have a major impact on future TAC emissions, such as new source or control equipment installations, source shutdowns, or material changes. For example, year 2020 is likely not a representative inventory year for many facilities due to very low throughput rates reported by many facilities during the COVID pandemic.

4.1.2 Prioritization Scores

Prioritization scores represent the relative potential for cancer and non-cancer health impacts from a facility. The Air District uses prioritization scores to rank facilities based on health impact potential and to determine when facilities should undergo further review. As described in Section 2, the facility's annual prioritization score (maximum of cancer and non-cancer prioritization scores) is calculated during annual permit renewal. During review and update of the TAC emissions inventory that will be used for a Rule 11-18 applicability determination, the Air District may need to review and revise TAC emissions or proximity adjustment factors and recalculate the prioritization score for a facility. Any

recalculation of the prioritization score for a facility shall follow the Air District's Prioritization Score Procedures.¹⁶

As explained in the Air District's Prioritization Score Procedures, the three criteria used to calculate prioritization scores are: 1) annual TAC emissions, 2) health effects values for toxic compounds, and 3) proximity adjustment factors. Proximity adjustment factors are intended to account for reductions in health impact potential that normally occur when the distance between a facility and a receptor increases. Most facilities in the Bay Area have a proximity adjustment factor of 1, which means that no reduction in health impact potential is being applied, because most facilities have receptors located less than 100 meters (328 feet) from the facility. Table 2 of the Air District's Prioritization Score Procedures identifies the proximity adjustment factors that may be applied when receptors (residents or off-site workers) are located at least 100 meters away from a facility.

Prioritization scores are conservative screening tools used to rank the relative potential for health impacts from different facilities based on the amount of TACs emitted from a facility, the relative toxicity of the TACs emitted, and the proximity of the facility to possible receptors. The Air District evaluates three categories of health impacts: cancer risk, chronic non-cancer impacts, and acute non-cancer impacts.

As discussed in the Air District's Prioritization Score Procedures, there are two types of prioritization scores: a cancer risk-based prioritization score and a non-cancer-based prioritization score. For Rule 11-18 reviews, the Air District considers both prioritization scores when determining the need for further review.

4.1.3 Prioritization Score Thresholds

In accordance with CARB guidance for the Hot Spots Program, any facility with a facility prioritization score of 10 or higher ($PS \geq 10$) is considered a high-priority facility and should undergo further review for health risks. Any facility with a facility prioritization score of less than 1 ($PS < 1$) is considered a low-priority facility that is unlikely to result in significant health impacts and generally requires no further review. Any facility with a facility prioritization score between 1 and 10 ($PS \geq 1$ but $PS < 10$) is an intermediate-priority facility that may potentially warrant further review.

For Rule 11-18, the Air District generally follows this "Hot Spots" Program guidance when determining if further review, such as a facility-wide HRA, is necessary. Under Rule 11-18, high-priority facilities are assessed based on both their cancer and non-cancer prioritization scores (see Table 2 below), and the Air District intends to require an updated facility-wide HRA for these facilities. Facilities with only emergency-use stationary diesel-fired engines (EDE Only Facilities) and facilities with only retail gasoline dispensing facilities (GDF Only Facilities) are potentially exempt from Rule 11-18 per Sections 11-

¹⁶ The Air District's Prioritization Score Procedures for AHS Program and Rule 11-18 can be found online here: https://www.baaqmd.gov/~media/dotgov/files/rules/regulation-11-rule-18/documents/20171003_priorproc_1118-pdf.pdf?rev=14cd7841f4b64710907d28122806c45e&sc_lang=en

18-103 and 11-18-104. However, these exemptions do not apply if the cancer prioritization score is 250 or higher. The Air District intends to require an HRA for intermediate-priority facilities if the non-cancer prioritization score is greater than 1. Low-priority facilities (facility PS <1) are generally not subject to Rule 11-18 HRA requirements.

Due to the large number of facilities that meet the thresholds above for further review, the Air District split the inventory update and HRA review for these facilities into several phases. Phase I includes facilities with the highest potential for health risks. Phase II facilities have a lower potential for elevated health risks but are still considered high-priority facilities.

Prioritization score thresholds and associated actions for facilities that are potentially subject to Rule 11-18 HRA requirements are summarized in Table 2 below.

Table 2. Prioritization Score Thresholds for Rule 11-18 Applicability Determinations

Site Type	Cancer Risk Prioritization Score		Non-Cancer Prioritization Score	Review Phase	Anticipated Next Steps
All Facility Types	≥ 250	OR	≥ 10	Phase I	Facility-Wide HRA Required, Compare Results to: 11-18-217 Risk Action Levels
All Facility Types, Except EDE Only or GDF Only	≥ 10 and < 250	OR	≥ 1 and < 10	Phase II	Facility-Wide HRA Required, Compare Results to: 11-18-217 Risk Action Levels
EDE Only (Meets 11-18-103)	< 250	AND	< 10	NA	None (Exempt)
GDF Only (Meets 11-18-104)	< 250	AND	< 10	NA	None (Exempt)
All Site Types	< 10	AND	< 1	NA	None

During development of Rule 11-18, the Air District evaluated prioritization scores for all facilities and developed lists of potentially subject facilities. The Air District annually reviews prioritization scores for all facilities to ensure that any new facilities or changes to existing facilities are included and that facilities are categorized into the appropriate review phase. Current facility lists are posted here: <https://www.baaqmd.gov/community-health/facility-risk-reduction-program/facility-risk-reduction-list>.

4.1.4 Requests to Reconsider Prioritization Scores

A facility may choose to request that the Air District reconsider the facility prioritization scores pursuant to Section 11-18-404. The Air District intends to consider such requests

only if the facility can demonstrate that a reevaluation, provided sufficient documentation and justification, would result in a cancer prioritization score lower than 10 and a non-cancer prioritization score lower than 1. After reviewing the request, the Air District may notify the facility that the HRA requirement is withdrawn. Otherwise, the facility must submit the draft site-specific modeling protocol pursuant to Section 11-18-402.2.1. After reviewing the request, the Air District may notify the facility that the HRA requirement is withdrawn. Otherwise, the facility must submit the draft site-specific modeling protocol pursuant to Section 11-18-402.2.1.

As noted, the Air District anticipates reviewing requests only if the resultant recalculated prioritization scores would result in the facility no longer meeting the thresholds at or above which the Air District would generally require an HRA, as described in Section 4.1.3 Prioritization Score Thresholds, based on routine emissions. The Air District anticipates that requests may be submitted for issues including, but not limited to, objective errors in the emissions inventory (e.g., incorrect units, data entry mistakes, or source misidentification) or justified use of a different inventory year that is more representative of emissions. This pathway is not intended to be a forum for deliberation on emissions inventory methodology disagreements.

The Air District anticipates that requests would include all information necessary to sufficiently demonstrate the need for a prioritization score reconsideration including spreadsheets with formulas preserved to allow recalculation and verification. For example, requests regarding corrections of objective errors or use of a different inventory year may include the following:

1. If the facility proposes changes to the emissions inventory due to an objective error in the emission inventory, the submission should include, at a minimum:
 - Recalculated prioritization scores (cancer and non-cancer), demonstrating the facility is below the thresholds that would require an HRA described in Section 4.1.3, based on the inventory year selected by the Air District.
 - A revised emissions inventory based on the inventory year, and
 - Documentation of the changes to the emissions inventory, including, at a minimum:
 - All proposed changes with clear references to the original data,
 - A description of the nature of each proposed change (e.g., correction, addition, deletion), and
 - The justification or basis for each proposed change.
2. If the facility proposes a different inventory year as more representative of its emissions, the submission should include, at a minimum:
 - A justification explaining why the proposed year was chosen and addressing why the Air District–selected inventory year is not representative, including an explanation of significant increases or

decreases on a source and pollutant level between the Air District-selected inventory year and proposed year,

- Recalculated prioritization scores (cancer and non-cancer) based on the proposed inventory year, demonstrating that it is below the thresholds that would require an HRA described in Section 4.1.3, and

A revised emissions inventory based on the proposed inventory year.

Detailed instructions on how to calculate the prioritization scores can be found in the Prioritization Score Procedures hosted on the Air District's Facility Risk Reduction Program web page.

4.1.5 Toxic Air Contaminant Emissions Inventory and Toxic Air Contaminant Emissions Release Data Review and Correction Process

This section describes the emissions inventory review and correction process that occurs during the Rule 11-18 implementation process.

The Air District intends to use the TAC emissions inventory and TAC emission release data that are best available and most representative of routine operations to determine the applicability of Rule 11-18 requirements. The Air District's TAC emission factors and TAC emissions release data, which include, but are not limited to, source-specific information such as source location and stack parameters, were initially entered when a source was first permitted. These data may have undergone limited updates since that time and may therefore be outdated. To ensure that the TAC emissions inventory is accurate, the Air District provides facilities with an opportunity to review and update their TAC emission factors based on source test data or other on-site measurements, updated pooled source test data, new CARB or AP-42 emission factors or other available literature when the facility submits the preliminary HRA report and TAC emissions inventory utilized for the HRA model. The facilities are also given the opportunity to correct and/or provide any missing source-specific data at this time. The Air District also reviews emissions factors and source-specific data, and updates data where appropriate.

The Air District has developed TAC emissions calculation guidance for specific types of sources that will improve the Air District's TAC emissions inventories for many source categories.¹⁷

In addition to annual emissions, HRAs will require maximum one-hour TAC emissions data. The Air District does not currently maintain short-term TAC emissions data. Therefore, the Air District intends to estimate maximum hourly emissions for each source based on the Air District's best judgement. The maximum one-hour emissions data may

¹⁷ The Air District's Toxic Air Contaminant Emission Factor Guidelines can be found online here: https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/tac_emission_factor_guidance_august_2020-pdf.pdf?rev=1917e6634bb34bbfa28a0644119384c0

be used to estimate health risks from any toxic air contaminants that have acute reference exposure levels. Some of the common TACs that have acute RELs are: ammonia, benzene, 1,3 butadiene, chloroform, formaldehyde, hydrochloric acid, hydrogen sulfide, isopropyl alcohol, mercury compounds, methanol, methyl ethyl ketone, methylene chloride, nickel compounds, nitric acid, perchloroethylene, sulfuric acid, toluene, vinyl chloride, and xylene. See Table 2-5-1 in Rule 2-5 for a complete list of TACs with acute RELs.

The Air District notifies facilities in writing that an HRA is required in accordance with Section 11-18-401 or 11-18-402. For facilities subject to Section 11-18-402 (current HRA procedures), the Air District intends to first inform the facility that the Air District has started reviewing the facility's TAC emissions inventory; this initial communication will generally be made at least 60 days prior to the Air District providing notification (pursuant to Section 11-18-402.1) that the facility must prepare an HRA. This latter notification initiates the HRA procedures outlined in Section 4.2.3. The notification will generally include the most recent TAC emissions inventory data, which will include both annual emissions and maximum one-hour TAC emissions data, TAC emissions release data for the facility plus information about the facility, source emission rates and emission point data. Facilities may also request additional information from the Air District—such as emission factors, abatement factors, and the basis for the current TAC emissions data—if needed to support the facility's review process.

- For facilities subject to Section 11-18-401 (legacy HRA procedures), facilities are asked to review these data and submit corrected information, if necessary, within 60 days.
- For facilities subject to Section 11-18-402 (current HRA procedures), any necessary corrections to information are submitted with the preliminary HRA, which is due to the Air District within 90 days of receiving the final site-specific modeling protocol, pursuant to Section 11-18-402.2.3.

During the Air District review of TAC emissions inventory data, if the Air District does not agree with a proposed emission factor or TAC emissions inventory rate, the Air District will notify the facility. However, the Air District may move forward with Air District authorized emission factors, without reaching an agreement on emission factors, and approve and publish the preliminary HRA report for public comment pursuant Section 11-18-401.2 or Section 11-18-402.4.

For facilities subject to Section 11-18-402 that would like to request reconsideration of the determination that an HRA is required using a revised TAC emissions inventory in accordance with Section 11-18-404, please see Section 4.1.4 Requests to Reconsider Prioritization Scores.

For facilities that would like to request the Air District consider additional testing or studies before finalizing the emissions data for specific sources, a request may be submitted to conduct additional testing or perform studies in accordance with Section 11-18-405. This provision allows the facility to submit site-specific emissions data and provides the Air

District an opportunity to consider all available data to ensure that the data used for the HRA represent the best available TAC emissions information.

4.2 Assessing Health Impacts

Rule 11-18 is a health risk-based rule. As described in Sections 11-18-401 and 11-18-402, a facility becomes subject to the risk reduction requirements in Rule 11-18 after the Air District notifies the facility that an Air District-approved HRA results in a facility health risk equal to or greater than a risk action level listed in Section 11-18-217. Thus, the Air District will usually determine which facilities are required to undergo HRA review and then review these HRAs to assess the applicability of RRP requirements.

The Air District may inform a facility based on the facility's Air District-approved TAC emissions inventory and the resulting prioritization score if there are any changes to the Rule 11-18 status of the facility. Section 11-18-402 requires facilities to submit a site-specific modeling protocol within 60 days of the notification by the Air District to prepare an HRA, and requires the facility to provide a preliminary HRA report within 90 days of receiving the final site-specific modeling protocol pursuant to Section 11-18-402.2.3.

Section 11-18-402.3 requires facilities to provide all additional information needed for reproducing the results of the HRA with the submission of the preliminary HRA report. The Air District anticipates requiring at least the following:

- Modeling files, so the HRA can be rerun if necessary,
- Annual and hourly source-specific TAC emissions inventory data,
- Source and stack locations,
- Stack parameter data,
- Building parameter data,
- Meteorological data,
- Terrain data,
- Receptor locations, and
- Documentation of changes to the TAC emissions inventory data.¹⁸

The Air District plans to initiate the TAC emissions inventory and HRA review processes for groups of facilities in small, manageable batches. The Air District has initiated this review for the first batch of facilities: Phase 1 facilities with cancer risk prioritization scores (cancer PS) of 250 or higher or non-cancer prioritization scores (non-cancer PS) of 10 or higher. After the review of Phase I facilities is complete, the Air District intends to initiate the review of the remaining facilities in the following order: Phase II facilities with cancer PS of 100 or higher, Phase II facilities with cancer PS of 50 or higher, Phase II facilities with cancer PS of 25 or higher, Phase II facilities with cancer PS of 10 or higher, and finally Phase II facilities with non-cancer PS greater than one.

¹⁸ The documentation of the emissions inventory changes should include, but is not limited to: all proposed changes with clear references to the original data, a description of the nature of each proposed change (e.g. correction, addition, deletion), and the justification or basis for each proposed change.

Although the Air District generally plans to review facilities in the batches described above, the Air District may prioritize review of TAC emissions inventories and HRAs for Rule 11-18 facilities that are located in Overburdened Communities as defined in Regulation 2: Permits, Rule 1: General Requirements, Section 2-1-243 and the communities selected by the California Air Resources Board for additional resources under Assembly Bill 617 (AB 617) pursuant to Health and Safety Code sections 42705.5(c)-(d) or 44391.2(c). The Air District may also elevate a facility located within an Overburdened Community or AB 617 Community from a future review batch to the current review batch.

The status of the Air District’s inventory and HRA review process can be found on the Rule 11-18 Risk Reduction Facilities web page by searching the action level in the facility tables located at:

<https://www.baaqmd.gov/community-health/facility-risk-reduction-program/facility-risk-reduction-list>

Lists of facilities that are categorized into each phase will also be posted on this page and updated annually. The searchable table shown below currently includes Phase I facilities. The Air District will add the next batch of facilities to this table upon Air District initiation of review for that batch.

Phase I Facilities

SEARCH & FILTERS ▲ Collapse to hide search or filter options					
Search <input type="text"/>					
Action Level <input type="text"/>		Type <input type="text" value="Select..."/>			
Notifications <input type="text"/>		City <input type="text"/>			
County <input type="text"/>					
CLEAR SEARCH & FILTERS					
+	Number ▲	Name	Action Level	Type	!
+	10	Chevron Products Company	Inventory Review in Progress	Petroleum Refinery	
+	23	Chemtrade West US LLC	HRA in Progress	Chemical Plant	
+	148	Ball Metal Beverage Container Corp	Inventory Review in Progress	Manufacturing	
+	208	Schnitzer Steel Products Company	Inventory Review in Progress	Metal Shredding	
+	705	Vulcan Materials, Western Division	Inventory Review in Progress	Manufacturing	
+	1179	Redwood Landfill Inc	Inventory Review in Progress	Landfill	
+	1427	Applied Materials	Inventory Review in Progress	Manufacturing	
+	1812	Kirby Canyon Recycling and Disposal Facility	Inventory Review in Progress	Landfill	

4.2.1 Guidelines for Health Risk Assessments

HRAs that will be used to determine applicability of Rule 11-18 risk reduction requirements will be conducted in accordance with the Air District's HRA Guidelines, which are published on Facility Risk Reduction Program web page at:

<https://www.baaqmd.gov/community-health/facility-risk-reduction-program>.¹⁹

4.2.2 Modeling Protocol for Health Risk Assessments

The Air District has prepared a general HRA modeling protocol that describes how sources should be modeled and how health impacts should be calculated. It is available on the Facility Risk Reduction Program web page at:

<https://www.baaqmd.gov/community-health/facility-risk-reduction-program>.²⁰

4.2.3 Procedures for Implementing Health Risk Assessments

Two different procedures are described in this section. Legacy Procedures apply to facilities that have received a notification from the Air District that the site-specific modeling protocol has been finalized before the adoption of the 2026 amendments to Rule 11-18. Current Procedures apply to all other facilities. To the extent these procedures go beyond the specific language in Rule 11-18, they represent the Air District's intent but are subject to change where warranted.

Legacy Procedures (Section 11-18-401)

1. The Air District develops an initial emissions inventory and provides it to the facility for review. The Air District may request information to complete an HRA for the facility.
2. The facility reviews and responds with comments and requested information within 60 days. (Section 11-18-401.1)
3. The Air District reviews the facility's comments and submitted information and may adopt proposed alterations as appropriate. The Air District prepares a site-specific modeling protocol and performs the preliminary HRA. (Section 11-18-401.2)
4. The Air District publishes the preliminary HRA report and notifies the public and facility that the preliminary HRA report is open for comment for 90 days. (Section 11-18-401.2)

¹⁹ HRAs should be conducted in accordance with the most recently approved version of the Bay Area Air District Air Toxics Control Programs HRA Guidelines. As of preparation of this document, the most recent version is December 2021 and is available here: https://www.baaqmd.gov/~media/dotgov/files/rules/reg-2-permits/2021-amendments/documents/20211215_hraquidelines-pdf.pdf?rev=eb18ff83f96049fa84d54552b58baee3

²⁰ HRA modeling should be conducted in accordance with the most recently approved version of the Bay Area Air District HRA Modeling Protocol. As of preparation of this document, the most recent version is December 2020 and is available here: https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol-pdf.pdf?rev=0d07ca2f01de4c36a3a22f411c8b8f6f

5. For refinery HRAs, the Air District publishes the following, after which the refinery has an opportunity within 15 days to request to convene the Dispute Resolution Panel. (Between Sections 11-18-401.2 and 11-18-401.3)
 - a. Response to comments on the preliminary HRA report,
 - b. Preliminary determination regarding (1) approval OR (2) deficiencies requiring alteration, and
 - c. Preliminary list of identified alterations (if applicable).
6. The Air District reviews comments and may adopt proposed alterations as appropriate. The Air District finalizes and publishes the final HRA report. For non-refinery RRP, the response to comments is published at the same time as the final HRA report. (Section 11-18-401.3)

Current Procedures (Section 11-18-402)

The Air District requires facilities receiving notifications pursuant to Section 11-18-402.1 to submit HRA results to the Air District. The Air District authorizes the use of a contractor to conduct an HRA.

Although the Air District requires facilities to conduct HRAs and submit HRA reports, it may, under certain circumstances, use an HRA and/or HRA report prepared by the Air District pursuant to Section 11-18-402.6. For example, the Air District anticipates it may prepare HRAs and HRA reports for certain small facilities that lack resources to prepare an HRA. In addition, the Air District also may take over the finalization of the HRA deliverables, including the site-specific modeling protocol, HRAs, and HRA reports.

During Air District review of the HRA deliverables, the Air District has the authority to require the facility to modify the deliverables, including, but not limited to, changing the TAC emissions inventory and TAC emissions release data.

The Air District charges HRA fees pursuant to Regulation 3, Section 3-342 for developing the HRA, including the site-specific modeling protocol. The Air District also charges HRA review fees pursuant to Regulation 3, Section 3-342 for reviewing HRAs, including the site-specific modeling protocol.

If a facility can establish to the Air District's satisfaction that additional time is necessary to complete certain steps of the process, as stated in specific Rule sections, the Air District may choose to approve the request. The facility may request an extension of up to the designated amount of days in each Rule section. If the facility requests additional time, the facility should assume that the provided timelines stand until the facility receives a notification of approval or disapproval for additional time.

Below are the procedures the Air District anticipates following for facilities subject to Section 11-18-402.

1. The Air District informs the facility that the Air District has started reviewing the facility's emissions inventory.
2. No less than 60 days following the start of the Air District's review of the facility's emission inventory, the Air District provides the facility with the notification to prepare an HRA in accordance with Section 11-18-402.1, along with an Air District-approved TAC emissions inventory and TAC emissions release data for the facility. (Section 11-18-402.1)
3. The facility notifies the Air District if the facility plans to use a contractor for the HRA.
4. Within 30 days of receiving a notification to prepare an HRA, a facility may recalculate the facility's prioritization scores using a revised TAC emissions inventory pursuant to Section 11-18-404 and request reconsideration from the Air District of whether an HRA is required. Based on the recalculated prioritization scores, the Air District may send the facility a notification withdrawing the requirement that the facility prepare an HRA. Section 4.1.4 Requests to Reconsider Prioritization Scores includes more details on this process. (Section 11-18-404)
5. The facility submits a draft site-specific modeling protocol that follows the Air District's HRA Modeling Protocol within 60 days of the notification by the Air District to prepare an HRA in accordance with Section 11-18-402.2.1. (Section 11-18-402.2.1)
6. The Air District reviews the draft site-specific modeling protocol. If any revisions to the draft modeling protocol are necessary, the Air District provides a list of necessary revisions to the facility. The facility must implement all revisions and resubmit the protocol within 30 days of receiving the notification with the list of required revisions from the Air District in accordance with Section 11-18-402.2.2. (Sections 11-18-402.2.2 and 11-18-402.2.3)
7. If issues remain in the revised draft modeling protocol, the Air District may reject the draft modeling protocol and use the Air District's HRA Modeling Protocol with default parameters, or make alterations as deemed necessary. After making any alterations, the Air District sends the facility a final modeling protocol. (Section 11-18-402.2.4)
8. The facility or the contractor conducts a preliminary HRA. (Section 11-18-402.3.1)
9. The facility submits to the Air District (1) the draft preliminary HRA report that follows the HRA report template approved by the Air District and (2) all supporting materials within 90 days of the approval of the site-specific modeling protocol by the Air District in accordance with Section 11-18-402.3.1. The draft preliminary HRA submission includes the TAC emissions inventory, documentation of any changes to the emissions inventory data, TAC emissions release data, and any other assumptions and information required to reproduce the HRA results. The documentation should include editable versions of all documents including, but not limited to, Microsoft Word versions of the draft report and supporting material and

all spreadsheets with formulas preserved to allow recalculation and verification. (Section 11-18-402.3.1)

- a. The documentation of the emissions inventory changes should include, but is not limited to:
 - i. all proposed changes with clear references to the original data,
 - ii. a description of the nature of each proposed change (e.g. correction, addition, deletion), and
 - iii. the justification or basis for each proposed change.
- b. In its submission, the facility may request that the Air District allow the facility to conduct additional tests or studies in the future that might result in different emission data and/or emission factors for a specific source (Section 11-18-405). The Air District may authorize the facility to conduct such testing and/or studies to obtain updated emission data or emission factors.

The facility shall make this request by including a table in the draft preliminary HRA report that identifies the sources, the Air District-approved emissions and emission factors for each source, and details regarding the tests and/or studies to be conducted. If the Air District approves the facility's request, the Air District shall continue with all the below-noted steps based on the existing, approved emissions and emission factors, but the Air District will leave open the possibility of altering the HRA should the subsequent testing and/or studies demonstrate that different emissions inputs are appropriate. All updated emission data and/or emission factors must be submitted for review and approval to the Air District prior to submittal of the draft RRP. The Air District may rescind approval of the final HRA report or otherwise alter the HRA as warranted by the data.

10. The Air District reviews the draft preliminary HRA report and supporting materials submitted by the facility. If any revisions to the draft preliminary HRA report are necessary, the Air District will provide a list of necessary revisions to the facility. The facility must implement all revisions and resubmit the HRA report and supporting materials within 30 days of receiving the revisions from the Air District in accordance with Section 11-18-402.3.3. (Sections 11-18-402.3.2 and 11-18-402.3.3)

Once the draft preliminary HRA report meets all applicable requirements and is otherwise adequate, the Air District will approve the preliminary HRA report. (Section 11-18-402.4)

11. The Air District holds a 90-day review and comment process on the preliminary HRA report pursuant to Section 11-18-402.4. (Section 11-18-402.4)
12. The Air District considers all comments on the preliminary HRA report. (Section 11-18-402.4)

13. For refinery HRAs, the Air District publishes the following, after which the refinery has an opportunity within 15 days to request to convene the Dispute Resolution Panel. (Between Sections 11-18-402.4 and 11-18-402.5)
 - a. Response to comments on the preliminary HRA report,
 - b. Preliminary determination regarding (1) approval OR (2) deficiencies requiring alteration, and
 - c. Preliminary list of identified alterations (if applicable).
14. If further revisions to the preliminary HRA report are determined to be necessary by the Air District after public comments, the Air District will provide a list of necessary revisions to the facility. The facility must implement all revisions and resubmit a draft final HRA report and supporting materials within 30 days of receiving the revisions from the Air District in accordance with Section 11-18-402.5.1. (Sections 11-18-402.5.1 and 11-18-402.5.2)

Once all applicable requirements are met and the Air District otherwise determines the HRA report is adequate, the Air District may approve the final HRA report. (Section 11-18-402.5.4)
15. The Air District notifies the facility in writing of these final HRA results and their obligations under Rule 11-18, such as submittal of a draft RRP and the due date. The Air District publishes the final HRA report on the web site along with the facility's RRP requirements, if any. (Section 11-18-402.5.4)

For non-refinery HRAs, the response to comments will be published on the web site with the final HRA report.

16. The Air District frequently updates the web site to include posts of preliminary HRA reports for comment and final HRA results that trigger risk reduction requirements.

4.3 Implementing Risk Reduction Plan Requirements

In accordance with Sections 11-18-401.3 and 11-18-402.5.4, the Air District notifies a facility, in writing, if the Air District-approved final HRA results meet or exceed a Rule 11-18 risk action level. As defined in Section 11-18-217, the risk action levels are: a cancer risk of 10 per million, a chronic hazard index of 1, and an acute hazard index of 1. In accordance with Section 11-18-403, this notification triggers the requirement for a facility to submit a draft RRP.

The Air District charges RRP review fees pursuant to Regulation 3, Section 3-341 for Risk Reduction Plan review.

The Air District intends to follow the procedures below for submittal, review, and approval of RRP:

1. Any facility that receives a notification per Sections 11-18-401.3 or 11-18-402.5.4 prepares a draft RRP that meets the requirements of Section 11-18-403.2. (Section 11-18-403.1 or 11-18-403.2)
2. The facility submits a draft RRP within 180 days of notification that a draft RRP is required. (Section 11-18-403.1)
3. The Air District follows the Section 11-18-403.3 procedures to review and approve draft RRP.
4. Draft RRP (excluding confidential information) are posted on the Air District web site for at least 45 days. (Section 11-18-403.4)
5. The Air District considers all comments and prepares a response to comments on the draft RRP. (Section 11-18-403.4)
6. For refinery RRP, the Air District publishes the following, after which the refinery has an opportunity within 15 days to request to convene the Dispute Resolution Panel. (Between Sections 11-18-403.4 and 11-18-403.5)
 - a. Response to comments on the draft RRP,
 - b. Preliminary determination regarding (1) approval OR (2) deficiencies requiring alteration, and
 - c. Preliminary list of identified deficiencies (if applicable).
7. If the Air District finds that the draft RRP meets the requirements of Section 11-18-403.2, the Air District approves the draft RRP pursuant to Section 11-18-403.5.1 and provides written notification to the facility. (Section 11-18-403.5.1)

If the Air District determines after the public comment period that the draft RRP does not meet the requirements of Section 11-18-403.2, the Air District notifies the facility in writing and specifies the basis for this determination. Upon receipt of such notification, the facility corrects the identified deficiencies and resubmits the draft RRP within 45 days. (Sections 11-18-403.5.2 and 11-18-403.5.3)

If the Air District determines that the facility fails to correct any deficiency identified in the notification or that the RRP otherwise fails to comply with Rule Section 11-18-403.2, the Air District disapproves the draft RRP. (Section 11-18-403.5.4)

For non-refinery RRP, the response to comments is released with the ultimate decision to approve or disapprove the draft RRP. (Section 11-18-403.5.1 or 403.5.4)
8. The Air District posts the approved final RRP on the web site within 30 days of approval of the RRP. (Section 11-18-403.6)
9. The facility demonstrates compliance by implementing the RRP in accordance with the time frames in the RRP pursuant to Section 11-18-403.2.5 and by submitting Section 11-18-501 Progress Reports on an annual basis. (Sections 11-18-403.2.5 and 11-18-501)

10. The Air District maintains a list of facilities that are subject to the Rule 11-18 RRP requirements on the web site and identifies plan review dates, approval dates, implementation deadlines, and status of RRP.

5. Dispute Resolution Panel

Consistent with the 2017 Air District Board Resolution originally adopting Rule 11-18 and a 2019 settlement agreement with Western States Petroleum Association and three companies that own and operate local refineries, the Air District intends to convene a panel of technical experts (Dispute Resolution Panel or DRP) to advise the Air District regarding technical disputes that may arise between industry and the Air District regarding implementation of Rule 11-18 at refineries. Refineries may request review of a disputed matter by the DRP after the Air District has considered and responded to comments on preliminary HRAs or draft RRP.

The DRP consists of at least three independent experts²¹ in the fields of toxic air contaminant inventories, HRA, or air pollution control. The DRP may select a chair for each dispute brought before the panel. The DRP may choose to rotate the chair for the different cases brought before the panel.

Per the procedures in Sections 4.2.3 and 4.3, the DRP provides its recommendations before the HRA or RRP is finalized.

Below is the timeline for the DRP:

1. Within 15 days of receiving Air District responses to comments on a preliminary HRA or draft RRP, the refinery that is the subject of the preliminary HRA or draft RRP may notify the assigned Air District contact in writing that they would like to convene the DRP in a request identifying the issues regarding which they are requesting DRP review.
2. The Air District notifies panelists of the case and technical issues and chooses three panel members from those who are available to review the case. The panel may select a chair, if necessary.
3. The Air District provides the DRP with facility comments regarding the technical dispute and Air District responses to comments.
4. The DRP reviews the case and poses any clarifying questions within 15 days of receiving the case information.
5. Each party responds in writing to questions from the DRP within 7 days.
6. The DRP considers the case and makes its recommendation in writing to the Air District within 15 days of receipt of the responses to their questions, or, if the DRP did not pose any questions, within 30 days of receipt of the facility

²¹ The DRP independent experts will not include current Air District staff but may include retired Air District staff, staff from other air quality agencies, or other persons with acknowledged expertise relevant to the issue in dispute.

comments regarding the technical dispute and Air District responses to comments.

7. The ultimate decision maker regarding any matter on which the DRP provides a recommendation is the Air District.

Submissions to the DRP are subject to the following requirements and procedures:

1. The request for convening of the DRP for disputes involving HRAs or RRP's will be limited to facilities that are defined as refineries pursuant to Regulation 8: Organic Compounds, Rule 1: General Provisions, Section 8-1-211.
2. Each DRP request must identify specific disagreements with an Air District determination and must provide specific recommended changes or remedies to resolve the disputed matter. Each DRP request must include documents or materials to support the recommended changes or remedy.
3. Each DRP requestor may only raise an issue, propose a recommended change or remedy, or rely on documents or materials if:
 - (1) the requestor raised the specific issue, proposed the specific recommended change or remedy, and relied on the specific documents or materials in a comment submitted during the comment period for the preliminary HRA pursuant to Section 11-18-402.4 or the comment period for the draft RRP pursuant to Section 11-18-403.4; or
 - (2) the issue involves a dispute regarding a change to a preliminary HRA or draft RRP made after the comment period pursuant to Section 11-18-402.4 or 11-18-403.4, in which case the DRP requestor may submit additional documents and materials, which the Air District shall accept as a valid part of the DRP request if they are relevant to the question at issue and are not unduly burdensome to review.
4. After the Air District responds to comments on preliminary HRAs, the types of matters that can be raised are limited to the inventory and the methodology used for the HRA. Refineries may not use the DRP to challenge an Air District determination not to consider additional emissions data pursuant to Section 11-18-405.1.
5. After the Air District responds to comments on draft RRP's, the types of matters that can be raised are limited to the technological feasibility or economic burden involved in a demonstration pursuant to Sections 11-18-403.2.6.1, 11-18-403.2.6.2, and 11-18-403.2.6.3, determination of TBARCT, and any updates to the inventory that have been made pursuant to Section 11-18-405.
6. A facility is limited to one request to convene a DRP for the HRA and one request for the RRP. Each request will be limited to a total of three issues, where each issue consists of an individual specific disagreement and a specific recommended change or remedy.
7. The Air District may reject an issue in the request if the Air District determines that a disputed matter covers multiple issues, is overly burdensome, or is outside the appropriate scope of the DRP.
8. Matters that have been previously resolved by the DRP without new substantive information will not be reconsidered.

6. Stakeholder Meetings

The Air District intends periodically to hold meetings with interested stakeholders to explain procedures, answer questions, and inform communities and industry about the status of the emissions inventory reviews, HRAs, RRP, and implementation of risk reduction measures. Stakeholders may also inform the Air District about educational or informational needs or public concerns about Rule 11-18 actions, facilities that are subject to Rule 11-18 or otherwise under review, and general air toxics concerns.