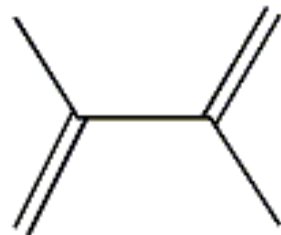
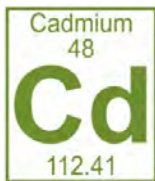
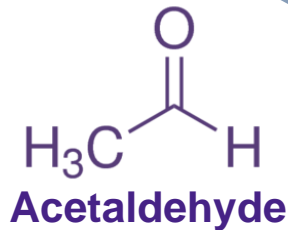
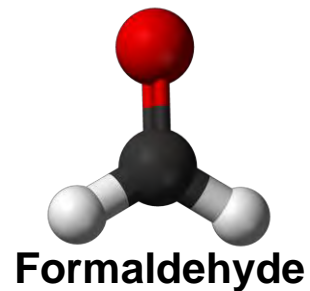


FINAL STAFF REPORT
Proposed Amendments to
Regulation 11: Hazardous Pollutants,
Rule 18: Reduction of Risk from Air Toxic Emissions at
Existing Facilities



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LEAD

June 2026

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FINAL STAFF REPORT

Proposed Amendments to Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities

Table of Contents

ACKNOWLEDGEMENTS	3
Table of Contents.....	4
I. EXECUTIVE SUMMARY	6
A. Summary of Proposed Amendments and Updates.....	6
1. Rule Amendments	6
2. Implementation Procedures.....	7
3. Future Amendments	8
B. Public Process and Stakeholder Engagement	8
C. Economic Impacts and CEQA Requirements.....	9
D. Recommendation.....	10
II. BACKGROUND.....	11
A. Industry Description	11
B. Pollutants.....	11
C. Regulatory History	12
1. Bay Area Air District.....	13
2. State Regulation	15
3. Federal Regulation	16
4. Air Toxics Control Programs in Other Jurisdictions	16
III. PROPOSED AMENDMENTS TO RULE 11-18.....	17
A. Definitions.....	17
B. Standards	18
C. Administrative Requirements	19
D. Monitoring and Records.....	24
E. Manual of Procedures.....	25
IV. PROPOSED UPDATES TO RULE 11-18 IMPLEMENTATION PROCEDURES	25
A. Introduction.....	27
B. Purpose	27
C. Definitions.....	27
D. Procedures	27
E. Dispute Resolution Panel.....	30

- F. Stakeholder Meetings31
- V. EMISSIONS AND EMISSIONS REDUCTIONS31
- VI. ECONOMIC IMPACTS32
 - A. Cost-effectiveness and Incremental Cost-effectiveness32
 - B. Socioeconomic Impacts32
 - 1. Proposed Amendments to Rule 11-1832
 - 2. Rule 11-18 Adopted in 201733
 - C. Air District Impacts34
- VII. REGULATORY IMPACTS34
- VIII. CEQA REQUIREMENTS37
- IX. RULE DEVELOPMENT / PUBLIC PARTICIPATION PROCESS37
 - A. Concept Paper and 2024 Updates to Implementation Procedures37
 - B. Draft Amendments38
 - C. Other Stakeholder Engagement.....39
 - D. Proposed Amendments39
- X. CONCLUSION / RECOMMENDATIONS40
 - A. Necessity40
 - B. Authority41
 - C. Clarity41
 - D. Consistency41
 - E. Non-Duplication41
 - F. Reference41
 - G. Recommendations42

APPENDIX A: Proposed Amendments to Regulation 11: Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities

APPENDIX B: Proposed Updates to Rule 11-18 Implementation Procedures

APPENDIX C: Final Socioeconomic Impact Analysis of Proposed Amendments to Rule 11-18

APPENDIX D: Final Addendum to the Environmental Impact Report for Rule 11-18

APPENDIX E: Environmental Impact Report for Rule 11-18

APPENDIX F: Mitigation Monitoring and Reporting Program for Rule 11-18

APPENDIX G: Response to Comments Summary: Proposed Amendments to Rule 11-18

I. EXECUTIVE SUMMARY

The Bay Area Air District (“Air District”) staff is proposing amendments to Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Rule 11-18) and updates to the Rule 11-18 Implementation Procedures. These amendments aim to expedite the Health Risk Assessment (HRA) approval step, as well as to make other changes that would improve the implementation efficiency of this Rule. These amendments focus on measures aimed at accelerating risk reduction and on improving program efficiency to implement the requirements of the Rule as soon as feasible. The proposed amendments are expected to expedite not only the overall implementation of the Rule but also the reduction of toxic emissions and health risks from affected facilities.

Rule 11-18 was adopted by the Air District in 2017 to address facilities whose emissions of toxic air contaminants (TACs) pose an elevated risk to nearby residents and workers. The purpose of Rule 11-18 is to prioritize existing facilities with the highest health impacts across the Bay Area and require them to reduce those impacts. Rule 11-18 requires existing facilities with health risks above specified risk action level (RAL) thresholds to either reduce those health risks below the Rule’s risk action thresholds or implement Best Available Retrofit Control Technology for Toxics (TBARCT) on all significant sources¹ of health risks.

Air District Stationary Source Committee members and environmental groups have raised concerns regarding delays in Rule 11-18 implementation, including the finalization of HRAs and the development, submission, and approvals of Risk Reduction Plans (RRPs). These concerns were raised at multiple Committee meetings, and community members voiced similar concerns at Assembly Bill (AB) 617 Community Steering Committee meetings. Additionally, the Richmond-North Richmond-San Pablo Path to Clean Air (PTCA) and the East Oakland Community Air Justice Plan (Right to Breathe) Community Emissions Reduction Plans contain strategies to improve Rule 11-18, including rule amendments to improve efficiency and transparency.

To address these concerns, Air District staff is developing amendments to Rule 11-18 in two phases:

- **Phase 1** (current): focused on procedural improvements and implementation efficiency;
- **Phase 2** (future): focused on evaluating and potentially increasing rule stringency.

This Final Staff Report provides background information, regulatory context, and a detailed description of the Phase 1 proposed amendments to Rule 11-18.

A. Summary of Proposed Amendments and Updates

1. Rule Amendments

For Phase 1, Air District staff is proposing amendments to Rule 11-18 that would expedite the HRA process, as well as other changes that would improve the implementation efficiency of this Rule and accelerate the implementation of risk reduction measures. The key components of the proposed amendments to Rule 11-18 include the following:

¹ Per the Rule 11-18 definition, a significant source is a source of toxic air contaminants or health risk that poses a risk equal to or greater than a significant risk threshold at any maximally exposed individual (MEI) location at which all sources at the facility, taken together, pose a health risk equal to or greater than a risk action level.

Health Risk Assessments (HRAs)

- Requiring facilities to prepare preliminary HRAs using Air District-approved modeling protocols. The protocols would apply standardized methods customized with site-specific information, allowing for greater efficiency by leveraging facility-specific knowledge and resources and enabling more preliminary HRAs to move forward simultaneously;
- Giving the Air District authority to review, correct, and approve HRA inputs and results;
- Establishing specific deadlines for facilities to respond to Air District comments and corrections;
- Formalizing the current practice of holding a public comment period on the preliminary HRA concurrent with the existing 90-day comment period for the facility; and
- Outlining what happens when additional testing or emissions data may affect the facility's HRA results and RAL status.

Risk Reduction Plans (RRPs)

- Revising the terminology and timeline associated with the Air District's review of draft RRP prior to public comment; and
- Clarifying the circumstances under which extensions to the implementation of an RRP or risk reduction measure may be granted.

The proposed amendments would provide considerable Air District staff time and resource savings for implementing the Rule 11-18 risk reduction program, particularly in setting up the air dispersion model and entering input parameters, including toxic emissions data, source locations, stack parameters, meteorological data, terrain data, and receptor locations. The amendments also allow the Rule 11-18 risk reduction program to process more HRAs concurrently by requiring facilities to submit HRA modeling protocols and preliminary HRA results for Air District review, rather than being constrained by the modeling bandwidth of Air District staff. This shift is expected to significantly accelerate implementation timelines across the program.

2. Implementation Procedures

Staff has developed proposed updates to the Rule 11-18 Implementation Procedures. The Implementation Procedures are a set of non-binding procedural guidelines developed to support consistent and transparent application of Rule 11-18. The current Implementation Procedures were published in 2024 after a public comment period but have not been formally adopted by the Board of Directors. The proposed updates to the Implementation Procedures include additional procedures necessary to align with the proposed amendments to Rule 11-18, as well as administrative corrections and clarifications.

Additionally, the proposed updates to the Implementation Procedures would revise the requirements and procedures for the Dispute Resolution Panel (DRP) established to ensure that disputes arising between the Air District and refineries during Rule 11-18 implementation can be resolved expeditiously. The revised procedures would provide a clear process for refineries to address technical issues that remain unresolved after the public comment period, while also encouraging transparent use of the public comment process to streamline implementation. The proposed updates to the Dispute Resolution Panel procedures include the following:

- **Eligibility:** Convening the DRP would only be allowed for disputes involving HRAs or RRP for facilities defined as refineries under Regulation 8, Rule 1.

- **Submission Content:** Requests would be required to identify specific disagreements with an Air District determination, propose specific remedies, and include supporting materials.
- **Timeliness and Prior Participation:** Only issues, remedies, or materials raised during the public comment period would be allowed to be included, unless they address post-comment period changes made to the HRA or RRP.
- **Scope of Disputes:**
 - After Air District staff responds to comments on preliminary HRAs, disputes would be limited to inventory and methodology issues.
 - After Air District staff responds to comments on draft RRP, disputes would be limited to technological feasibility, economic burden, TBARCT determinations, or updated inventories.
- **Limits on Requests:**
 - Only one request per facility per plan (HRA/RRP) would be allowed, each covering up to three distinct issues (each with a specific disagreement and proposed remedy).
 - There would be additional requirements placed on request submissions to ensure that disputes can be resolved within a reasonable timeframe.

3. Future Amendments

These proposed amendments represent the first of the two phases of planned amendments to Rule 11-18. Phase 2 is anticipated to include potential increased stringency measures and additional rule improvements. This may include efforts such as reexamining RALs, additional measures to further limit or reduce health impacts on communities near Rule 11-18 facilities, or other changes to improve rule clarity, transparency and implementation of existing risk reduction requirements for reducing facility-wide health risks below RALs or installing all feasible risk reduction measures and TBARCT. The development of Phase 2 of the amendments to Rule 11-18 is planned to be initiated after the proposed Phase 1 amendments are adopted. Phase 2 has not yet been initiated, as its timing will depend on the ongoing prioritization of upcoming rulemaking projects and schedules.

B. Public Process and Stakeholder Engagement

In developing these amendments, staff reviewed similar rules from other air districts, reviewed current processes, and engaged with interested and affected stakeholders.

In December 2023, the Air District released draft updates to the Rule 11-18 Implementation Procedures and a Rule 11-18 Amendments Concept Paper for public review and comment and hosted a public workshop. Staff presented an update on the Rule 11-18 Implementation Procedures updates and the Rule 11-18 amendment concepts to the Air District Stationary Source Committee.

In August 2025, the Air District released draft amendments to Rule 11-18 and updates to the Rule 11-18 Implementation Procedures for public comment and hosted a public workshop. Staff presented updates on the draft amendments to Rule 11-18 and updates to the Rule 11-18 Implementation Procedures to the Air District Stationary Source Committee.

Staff conducted additional engagement throughout the continued development of the Rule 11-18 amendments and met with Communities for a Better Environment (CBE), Bay Area Clean Water

Agencies (BACWA), Chevron Richmond Refinery, California Council for Environmental and Economic Balance (CCEEB), and the Path to Clean Air Community Steering Committee for the Richmond-North Richmond-San Pablo Community.

Air District staff released an earlier version of this Staff Report, proposed amendments to Rule 11-18, and proposed updates to the Rule 11-18 Implementation Procedures for public review and comment on March 18, 2026. Air District staff considered the comments submitted and prepared a summary of comments and responses document, which is included as Appendix G to this Final Staff Report. In response to comments received, Air District staff made minor administrative clarifications to this Final Staff Report and to the proposed updates to the Implementation Procedures. BAE Urban Economics also added additional references to the socio-economic analysis report in response to comments received. These clarifications are discussed in Appendix G to this Final Staff Report.

Air District staff made administrative clarifications to the proposed rule language after the proposed rule materials comment period that began on March 18, 2026. The discussion of these administrative clarifications is included in Section III to this Final Staff Report, and this proposed rule language is included in Appendix A to this Final Staff Report. These administrative clarifications were not made in response to comments received and are not expected to alter the requirements of the proposed rule amendments.

C. Economic Impacts and CEQA Requirements

A socioeconomic analysis conducted by BAE Urban Economics found that the proposed amendments to Rule 11-18 may result in compliance cost impacts for some facilities. In particular it identified 8 facilities, all small businesses, that would face significant impacts. For facilities that lack resources to conduct the HRA, the Air District may use an HRA prepared in whole or in part by the Air District in accordance with proposed amended Section 11-18-402.6. For Air District-prepared HRAs, facility costs would be expected to remain the same as currently required by the existing Rule 11-18 provisions. As a result of the socioeconomic analysis results, the Air District is committing to completing the HRAs for these small businesses. Therefore, these facilities would not be expected to incur any increased costs from the proposed rule amendments, and the socioeconomic impacts from the proposed rule amendments would be mitigated at these facilities.

Staff has also reviewed the amendments and determined that they are subject to environmental review under the California Environmental Quality Act (CEQA). The Air District determined an Addendum to the Environmental Impact Report (EIR) that was certified in 2017 with adoption of Rule 11-18 by the Board of Directors² is the appropriate CEQA document to be prepared for evaluating potential environmental impacts of these proposed amendments. The CEQA analysis performed by Environmental Audit, Inc. found the proposed amendments to Rule 11-18 would neither increase the severity of these significant adverse impacts nor result in new significant adverse impacts beyond those previously identified in the EIR.

Air District staff also contracted with Environmental Audit, Inc., to prepare a Mitigation Monitoring and Reporting Program for Rule 11-18 under CEQA. The Mitigation Monitoring and Reporting

² Environmental Impact Report for the Bay Area Air District for Rule 11-18 from November 2017 can be accessed at the following link: https://www.baaqmd.gov/~/_media/dotgov/files/rules/regulation-11-rule-18/documents/20171115_rfeir_1118-pdf.pdf?rev=055e56fae4e0474dbbc1393e5252f22e&sc_lang=en

Program provides information regarding monitoring and enforcement of the mitigation measures imposed to address the potentially significant impacts identified in the EIR.

D. Recommendation

Air District staff recommends that the Air District Board of Directors adopt (1) a resolution to amend Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Rule 11-18); (2) make findings of necessity, authority, clarity, consistency, non-duplication, and reference for the Rule 11-18 amendments; (3) update the Rule 11-18 Implementation Procedures; (4) adopt an Addendum to the previously certified Environmental Impact Report for Rule 11-18 pursuant to the California Environmental Quality Act; and (5) adopt a Mitigation Monitoring and Reporting Program for Rule 11-18 pursuant to the California Environmental Quality Act.

II. BACKGROUND

A. Industry Description

With some narrow exceptions, Rule 11-18 applies to all facilities whose emissions of toxic air contaminants (TACs or air toxics) may result in an elevated risk to nearby receptors. These include a broad range of commercial, industrial, and municipal facilities, including refineries, chemical plants, wastewater treatment facilities, foundries, forges, landfill operations, hospitals, crematoria, power plants, colleges and universities, and military installations. These facilities operate diverse sources of TAC emissions, such as diesel-fueled internal combustion engines, wastewater treatment processes, combustion sources, and evaporative and fugitive emissions.³ Applicability under Rule 11-18 is determined annually using prioritization score calculations. Currently, approximately 350 facilities are estimated to have emissions that may pose potentially elevated health risks.⁴ Implementation of Rule 11-18 for these facilities will be phased in over several years.

B. Pollutants

Rule 11-18 aims to reduce health impacts from exposure to emissions of TACs from affected facilities. California Health and Safety Code Section 39655 defines a toxic air contaminant as “an air pollutant which may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health.”⁵ Additionally, TACs include substances classified as federal hazardous air pollutants under Section 112 of the Clean Air Act (Section 7412 of Title 42 of United States Code).⁶ The California Air Resources Board (CARB) lists over 200 TACs. For the purposes of Rule 11-18, TACs include air pollutants that are identified in Table 2-5-1 of Regulation 2: Permits, Rule 5: New Source Review of Toxic Air Contaminants. The Air District periodically updates Table 2-5-1 to include new health effect values for TACs and new TACs that are identified by the California Office of Environmental Health Hazard Assessment.

TACs are emitted by a wide range of sources and industrial operations. Common sources of TAC emissions include:

- Combustion processes (e.g., diesel particulate matter from diesel fuel combustion or power generation);
- Industrial processes (e.g., toxic metals from metal plating or petroleum refining operations);
- Fugitive emissions (e.g., leaks from gas station equipment and equipment leaks from joints or connections);
- Off-gassing (e.g., emissions or releases of organic compounds from materials slowly over time); and
- Natural sources (e.g., wildfires and naturally occurring asbestos).

³ Bay Area Air District, 2017. Regulation 11, Rule 18 Final Staff Report. Table 3 - Summary of Toxic Air Contaminant Emitting Facilities and Sources. https://www.baaqmd.gov/~media/dotgov/files/rules/regulation-11-rule-18/documents/20171115_fsr_1118-pdf.pdf?rev=6da6a14f5e7647c3a22743effd5844e7&sc_lang=en

⁴ The list of facilities subject to Rule 11-18 is updated annually. The most up-to-date list can be accessed at the following link: <https://www.baaqmd.gov/community-health/facility-risk-reduction-program/facility-risk-reduction-list>

⁵ The text of Section 39655 of California Health and Safety Code can be accessed at the following link: https://leginfo.ca.gov/faces/codes_displaySection.xhtml?sectionNum=39655&lawCode=HSC

⁶ The text for Clean Air Act Section 112 (42 U.S.C. section 7412) can be accessed at the following link: <https://www.law.cornell.edu/uscode/text/42/7412>

Among facilities permitted by the Air District, Figure 1 highlights the industries with the highest aggregate prioritization scores, categorized by standard industrial classification (SIC). Each SIC source category in Figure 1 includes multiple facilities. The prioritization score for a facility is a conservative, preliminary indicator of its relative potential to impact public health. It is based on the quantity of TACs emitted, the relative toxicity of those TACs, and the facility’s proximity to potential receptors.

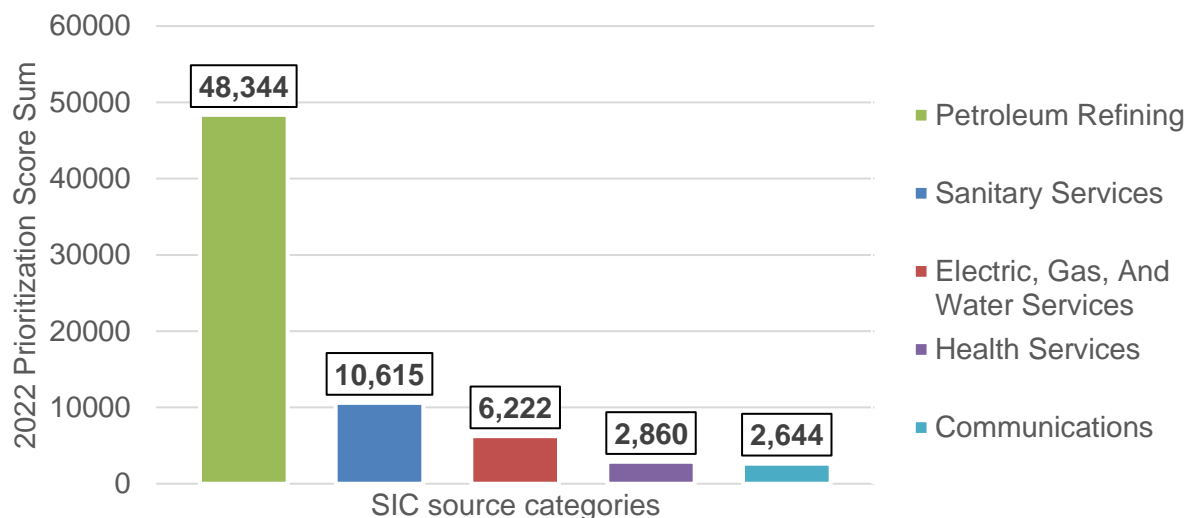


Figure 1 – 2022 Prioritization Score from Air District-Permitted Facilities, Largest SIC Source Categories.

Previous research by the Air District found that acrolein, benzene, 1,3-Butadiene, diesel particulate matter, and formaldehyde account for more than 90 percent of all toxicity-weighted toxic air contaminant emissions⁷ from all sources, including area sources,⁸ point sources,⁹ on-road mobile sources, non-road mobile sources, and biogenic sources in the Bay Area.¹⁰ The toxicity-weighted TAC emissions varies by facility to facility, which leads to different impacts in different communities.

C. Regulatory History

⁷ Toxicity-weighted emissions are a means of comparing the relative toxicity of TAC emissions in an inventory by multiplying the mass emissions of a specific TAC by the corresponding health values related to its toxic potency.

⁸ “Area sources are small-scale industrial, commercial, and residential activities that individually emit relatively small amounts of air pollutants but collectively contribute significantly to overall emissions inventories.”

<https://ww2.arb.ca.gov/area-source-inventory-methodologies>

⁹ “Stationary point sources are most often individual facilities that have specific locations. These sources are typically permitted by Air Districts.” <https://ww2.arb.ca.gov/emission-sources>

¹⁰ Refer to pg. 2 of Bay Area Air District, 2019. Air Toxics Data Analysis and Regional Modeling in the San Francisco Bay Area to Support AB617, which can be accessed at the following link: https://www.baaqmd.gov/~media/files/ab617-community-health/west-oakland/baaqmd_2016_toxics_modeling_report-pdf.pdf?la=vi-vn

1. Bay Area Air District

Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities

The Air District adopted Rule 11-18 in 2017 to reduce health risks from existing facilities. Rule 11-18 requires any existing facility that equals or exceeds the risk action level (RAL), as defined in Section 11-18-218 of the current Rule, to take action to reduce its risk. The RAL is defined as a cancer risk of 10 per million (10/M), an acute hazard index of 1.0, or a chronic hazard index of 1.0. Cancer risk is an estimate of the chance that an individual will develop cancer during their lifetime. A cancer risk of 10 in a million indicates that a person has an additional risk of 10 chances in a million (0.001%) of developing cancer during their lifetime as a result of the air pollution scenario being evaluated. Affected facilities must either:

1. Reduce facility-wide health risks below all RALs; or
2. If the facility-wide health risk cannot be reduced below the RAL, install Best Available Retrofit Control Technology for Toxics (TBARCT) on all significant sources, which are defined as specific air toxics sources within the facility that exceed a cancer risk of 1 in one million (1/M) or a chronic or acute hazard index of 0.2.

Rule 11-18 is currently implemented in four key steps:

1. The Air District identifies facilities that are potentially subject to Rule 11-18 Health Risk Assessment (HRA) requirements based on prioritization scores.¹¹
2. The Air District updates TAC emissions inventories and assesses health impacts from TAC emissions through a facility-wide HRA.
3. The facility develops a Risk Reduction Plan (RRP) that they must get approved by the Air District if the HRA results indicate that the facility meets or exceeds any of the RALs in Rule 11-18.
4. The facility must implement the approved RRP if subject to the Rule 11-18 RRP requirements.

The first two steps are essential in identifying health risks from facilities, and both steps rely on an accurate emissions inventory to inform Air District decisions.

In the third step, the Air District compares the estimated health risk from the facility-wide HRA to the RALs contained in Rule 11-18. If any health risk from the HRA equals or exceeds any of the RALs, the facility is required to develop and have the Air District approve an RRP. The RRP must outline how the facility will implement risk reduction measures to comply with the Rule.

The final step of this process is the implementation of the approved RRP. Once the RRP is approved, the facility must submit annual reports to the Air District detailing emissions reductions achieved until the RRP is fully implemented or the facility demonstrates compliance with the RRP.

Litigation

On December 15, 2017, the Western States Petroleum Association and its members Valero Refining Company, Tesoro Refining and Marketing Company, and Phillips 66 Company, filed a

¹¹ Prioritization scores 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 proximity of the facility to possible receptors.

lawsuit against the Air District challenging the adoption of Rule 11-18. The petitioners ultimately dismissed their lawsuit pursuant to a settlement entered into in March 2019.¹² The settlement outlined provisions for emission factors used in the development of the TAC emissions inventory, HRA procedures and presentation of results, the Dispute Resolution Panel process, and TBARCT determination for sources of significant risk.

On October 25, 2022, Communities for a Better Environment (CBE) filed a lawsuit against the Air District challenging the adoption of the Rule 11-18 Implementation Procedures. The Air District engaged in negotiations with CBE and worked cooperatively to identify ways to improve transparency and public participation in the Air District programs as an alternative to litigation. CBE ultimately dismissed its lawsuit against the Air District pursuant to a settlement agreement entered into in September 2023.¹³ To build better transparency with community members and the public, the Air District agreed to hold a public comment period regarding the 2024 revisions to the Implementation Procedures, and to provide additional information on the Air District's website regarding the status of health risk evaluation and reduction at the most impactful facilities. The Air District also agreed, among other things, to meet regularly with CBE and other community-based environmental justice organizations to discuss the implementation of this program and other issues of concern.

Regulation 2: Permits, Rule 5: New Source Review of Toxic Air Contaminants

The Air District adopted its Air Toxics New Source Review (NSR) program in 1987. In 2005, the Air District codified the procedures and policies of the Air Toxics NSR Program by adopting a new Air District rule – Regulation 2: Permits, Rule 5: New Source Review of Toxic Air Contaminants (Rule 2-5). The primary purpose of Rule 2-5 was to (1) evaluate and mitigate potential increases in public health risks resulting from new and modified sources emitting TACs; and (2) provide net health risk benefits by improving the level of control when existing sources are modified or replaced. Rule 2-5 differs from Rule 11-18 in that Rule 2-5 only applies to new or modified sources of TACs. Together, Rules 2-5 and 11-18 are intended to minimize health risks from TACs at both new and existing facilities

Rule 2-5 contains various limits and thresholds on project health risks. In general, a project may not result in a cancer risk exceeding 10/M; additionally, a project located within an Overburdened Community may not result in a cancer risk exceeding 6/M. All projects are also subject to a limit of 1.0 for chronic or acute hazard index. In addition, any new or modified source with an individual source risk that exceeds a cancer risk of 1/M, or an acute or chronic hazard index of 0.2, is required to install Best Available Control Technology for Toxics (TBACT). New or modified sources applying for an air permit must comply with the health risk requirements in this rule prior to construction. Moreover, Regulation 2: Permits, Rule 1: General Requirements contains public noticing requirements for projects located in Overburdened Communities that are subject to Rule 2-5 HRA requirements.

¹² The settlement agreement can be accessed on the [Penalties and Settlements page](https://www.baaqmd.gov/~media/files/communications-and-outreach/news-and-events/penalties-and-assessments/2023/final-executed-settlement-agreement-rule-11_18-litigation-pdf.pdf?rev=c76427b1dfd14bbb99a94aed35610046&sc_lang=en) at the following link: https://www.baaqmd.gov/~media/files/communications-and-outreach/news-and-events/penalties-and-assessments/2023/final-executed-settlement-agreement-rule-11_18-litigation-pdf.pdf?rev=c76427b1dfd14bbb99a94aed35610046&sc_lang=en

¹³ The settlement agreement can be accessed on the [Penalties and Settlements page](https://www.baaqmd.gov/~media/files/communications-and-outreach/news-and-events/penalties-and-assessments/2023/cbe-vs-baaqmd-acsc-no-22cv020451-settlement-agreement-090223-pdf.pdf?rev=2542c1b92eb447e89336e211f5e28169&sc_lang=en) at the following link: https://www.baaqmd.gov/~media/files/communications-and-outreach/news-and-events/penalties-and-assessments/2023/cbe-vs-baaqmd-acsc-no-22cv020451-settlement-agreement-090223-pdf.pdf?rev=2542c1b92eb447e89336e211f5e28169&sc_lang=en

2. State Regulation

California Assembly Bill (AB) 2588 Air Toxics “Hot Spots” (ATHS) Program

Rule 11-18 currently works in conjunction with CARB’s statewide Air Toxics “Hot Spots” program to address risk from existing facilities. The program is also referred to as the “AB 2588 Program,” named after the Air Toxics “Hot Spots” Information and Assessment Act of 1987 (AB 2588).¹⁴

The program focuses on reducing risks from stationary sources that emit TACs. It requires the development of emissions inventories, allows air districts to require risk assessments, and, for facilities that exceed risk levels set by local air districts, requires notification of exposed individuals and the implementation of risk reduction plans. Additionally, the program mandates air toxics inventory updates every four years and requires facilities to pay fees to support Air District and CARB inventory efforts.

In accordance with the California Air Toxics “Hot Spots” Information and Assessment Act of 1987, most facilities must regularly report routine and predictable air toxics emissions from stationary sources to their local air district. The Bay Area Air District utilizes these data, along with the toxicity of each TAC and the type of associated health impacts (cancer versus non-cancer), and the proximity of receptors to the facility to generate facility prioritization scores. These scores help identify facilities requiring further inventory review and determine the order in which HRAs are conducted, if necessary.

Under AB 2588, the Air District established public notification risk levels at 10/M for cancer risk and 1.0 for chronic and acute hazard indices. Facilities exceeding these thresholds must notify all exposed individuals, either through direct letters to neighbors or public notices in newspapers. For mandatory risk reduction, Air District policy sets action levels at 100/M for cancer risk and 10 for chronic and acute hazard indices. Currently, there is no facility in the Bay Area air basin for which an HRA shows an exceedance of these mandatory risk reduction levels. Under AB 2588, facilities with health risk less than 100/M for cancer risk and 10 for chronic and acute hazard indices, but greater than 10/M for cancer risk and 1.0 for chronic or acute hazard index, are not required to reduce health risk. Under existing Rule 11-18, however, these facilities are required to either reduce facility-wide health risks below all RALs; or install TBARCT on all significant sources, if the health risk for the facility cannot be reduced below the RAL.

AB 2588 also requires the Air District to prepare and publish an annual report. This report outlines the priorities and categories designated under AB 2588 for HRAs, ranks and identifies facilities based on health risk, and details progress in developing control measures to reduce TAC emissions.

Concurrently, with the establishment of AB 2588 in 1987, the Air District’s Board of Directors adopted the Air District’s Toxic Control Program. In November 1990, under Board Resolution No. 1986, the Board adopted a revised version of the program, requiring the implementation of AB 2588 and the Air District’s Toxic Program. In addition to these requirements, the resolution required the publication of an annual report that included additional elements beyond the AB 2588 reporting requirements. These additional elements include providing updates on the Air District’s

¹⁴ The Air Toxics “Hot Spots” Information and Assessment Act (AB 2588, 1987, Connelly): <https://ww2.arb.ca.gov/our-work/programs/ab-2588-air-toxics-hot-spots>

Toxic Program, Air Toxics New Source Review, facility risk reduction, TAC control measures, TAC emissions inventory, air toxics ambient air monitoring, and community health protection.

California Airborne Toxic Control Measures (ATCM)

Under the Toxic Air Contaminant Identification and Control (AB 1807) Program,¹⁵ CARB is responsible for developing and adopting airborne toxic control measures (ATCMs) to reduce emissions of TACs from specific industrial sources and sectors, such as stationary diesel engines or perchloroethylene from dry cleaning operations. The Bay Area Air District and other local air quality agencies are required to implement and enforce these ATCMs, and may adopt local rules and regulations that are equivalent to or more stringent than the ATCMs.

3. Federal Regulation

National Emission Standards for Hazardous Air Pollutants (NESHAPs), developed by U.S. EPA in accordance with Section 112 of the Clean Air Act, are also considered ATCMs in California. These regulations generally focus on larger “major source” facilities and require that emissions of HAPs be reduced by requiring sources to meet Maximum Achievable Control Technology (MACT). The focus of recent NESHAP development has shifted to rules that apply to smaller “area source” facilities. Under State law, the Air District must ensure that all permitted sources meet federal MACT Standards, or rules that are at least as stringent.

4. Air Toxics Control Programs in Other Jurisdictions

South Coast Air Quality Management District (South Coast AQMD) - Rule 1402: Control of Toxic Air Contaminants from Existing Facilities

South Coast AQMD Rule 1402 (“Control of Toxic Air Contaminants from Existing Facilities”) was adopted in April 1994. The rule establishes facility-wide risk requirements for existing facilities that emit TACs and implements the State AB 2588 Air Toxics “Hot Spots” program. The rule includes requirements for TAC emissions inventories, Health Risk Assessments, public notification, and risk reduction. The rule requires facilities that exceed the Notification Risk Level (a cancer risk of 10/M or an acute or chronic hazard index of 1.0) as demonstrated by an approved Health Risk Assessment to issue a public notification. If the health risk posed by the facility exceeds the Action Risk Level (a cancer risk of 25/M, a cancer burden of 0.5, or an acute or chronic hazard index of 3.0), the facility is required to reduce its facility-wide risk. Any facility whose TAC emissions result in an exceedance of the Significant Risk Level (a cancer risk of 100/M or an acute or chronic hazard index of 5) must implement risk reduction measures to bring the health risk level below the Significant Risk Level within three years of submitting the initial risk reduction plan. Additionally, the rule includes a Voluntary Risk Reduction Program that encourages facilities to reduce their risk below the Notification Risk Level. Facilities participating in this program are not subject to the standard emissions inventory, Health Risk Assessment, and Risk Reduction Plan requirements of the rule. The rule also requires facilities to prepare the facility-wide Health Risk Assessments.

¹⁵ The Toxic Air Contaminant Identification and Control Act (AB 1807, Tanner 1983): [https://www2.arb.ca.gov/resources/documents/ab-1807-toxics-air-contaminant-identification-and-control#:~:text=The%20Toxic%20Air%20Contaminant%20Identification,%2C%20and%20\)%20risk%20management](https://www2.arb.ca.gov/resources/documents/ab-1807-toxics-air-contaminant-identification-and-control#:~:text=The%20Toxic%20Air%20Contaminant%20Identification,%2C%20and%20)%20risk%20management)

III. PROPOSED AMENDMENTS TO RULE 11-18

The proposed amendments focus on measures aimed at accelerating risk reduction and improving program efficiency to implement the requirements of the Rule as soon as feasible. The key components of the proposed amendments include the following:

Health Risk Assessments (HRAs)

- Requiring facilities to prepare preliminary HRAs using Air District-approved modeling protocols. The protocols would apply standardized methods customized with site-specific information, allowing for greater efficiency by leveraging facility-specific knowledge and resources and enabling more preliminary HRAs to move forward simultaneously;
- Giving the Air District authority to review, correct, and approve HRA inputs and results;
- Establishing specific deadlines for facilities to respond to Air District comments and corrections;
- Formalizing the current practice of holding a public comment period on the preliminary HRA concurrent with the existing 90-day comment period for the facility; and
- Outlining what happens when additional testing or emissions data may affect the facility's HRA results and RAL status.

Risk Reduction Plans (RRPs)

- Revising the terminology and timeline associated with the Air District's review of draft RRP prior to public comment; and
- Clarifying the circumstances under which extensions to the implementation of an RRP or risk reduction measure may be granted.

These proposed amendments are described in greater detail in the following subsections.

Administrative clarifications to the proposed rule language were made after the proposed amendments were published on March 18, 2026, after additional Air District staff review. Deletions are indicated as ~~red strikethrough~~ and additions are indicated as blue underline.

A. Definitions

Proposed amendments to this section of the Rule (Section 11-18-200) would remove obsolete requirements that are no longer applicable. The section would also be renumbered to reflect the changes associated with added and deleted definitions, and references to section numbers would be updated throughout the Rule. The abbreviations for some definitions would be formatted to maintain consistency throughout the section. Several definitions would also be updated or modified, which are described in detail below.

The following administrative clarifications were made after the proposed amendments were published on March 18, 2026, after additional Air District staff review:

- Section 11-18-206: "Chronic Hazard Index (~~HI~~), or Chronic HI:"
- Section 11-18-207: "Chronic Hazard Quotient (~~HQ~~), or Chronic HQ:"

Section 11-18-208 – Exposed Individual (EI): The proposed amendment updates this definition to clarify and explicitly state, an exposed individual is a "person who is exposed to TACs emitted from a toxic risk facility who is not an employee or contractor of the facility."

Section 11-18-212 – Health Risk Assessment, or (HRA): The proposed amendment updates this definition to reference proposed amended Section 11-18-602, replacing the reference to Regulation 2, Rule 5 Section 2-5-603. Both sections state that each HRA be prepared in accordance with the Air District’s Health Risk Assessment Guidelines. The section would also be updated to include the distinction between an HRA and HRA report. These administrative clarifications in proposed amended Section 11-18-212 were made after the proposed amendments were published on March 18, 2026 after additional Air District staff review.

Section 11-18-215 – Owner/Operator: The proposed amendment removes the reference to “building, structure, installation, or source” from this definition due to redundancy. This language is redundant because these terms are already encompassed within the definition of “facility,” and all provisions of Rule 11-18 apply specifically to facility owner/operators. As a result, the deleted terms do not affect the scope of applicability.

Section 11-18-216 – Prioritization Score: The proposed amendment would clarify that Appendix A contains the calculation methodology for multiple prioritization scores. A cancer prioritization score and a non-cancer prioritization score are calculated for a facility. Similar clarifications would be updated throughout the Rule.

Section 11-18-217 – Priority Community (Removed): Prior to January 1, 2020, the existing Rule allowed the application of the more stringent risk action levels (RALs) in Section 11-18-218.2 to facilities in Priority Communities. As the less stringent RALs in former Section 11-18-218.1 expired on January 1, 2020, the more stringent RALs are currently applicable to all facilities. This definition would therefore be removed as it is no longer referenced in the Rule.

Section 11-18-217 (Previously 218) – Risk Action Level: The less stringent RALs contained in former Section 11-18-218.1 would be removed because they expired as of January 1, 2020, and are no longer applicable.

Section 11-18-219 – Risk Reduction Plan (RRP): The proposed amendment would align the definition’s language with language in other Rule sections specifying that health risk equal to or greater than one or more risk action levels in Section 11-18-217 would require an RRP. The proposed amendment would also change the abbreviation of Risk Reduction Plan from “Plan” to “RRP.” This abbreviation would also be updated throughout the Rule.

Section 11-18-222 – Site-Specific Modeling Protocol: The proposed amendments to this section would add a definition for a document – “Site-Specific Modeling Protocol” – that facility owner/operators are required to submit to the Air District, for review, correction (if needed), and approval before facility owner/operators can prepare and submit an HRA.

Section 11-18-225 – Toxic Air Contaminant (TAC), or Air Toxic: The proposed amendment to this section would clarify that terms “TACs” and “air toxics” are equivalent.

B. Standards

The proposed amendments to this section of the Rule (Section 11-18-300) would include minor changes to the structure of this section for clarity. References to section numbers have been updated throughout.

Section 11-18-301 – Compliance with Risk Reduction Plan: The proposed amendments to this

section would include a reorganization of text for clarity and moving the RRP submittal requirements to amended Section 11-18-403 – Risk Reduction Plan Procedures.

C. Administrative Requirements

Proposed amendments to the Administrative Requirements section of the Rule (Section 11-18-400) would include revisions that would require affected facility owner/operators to prepare and submit preliminary facility-wide HRAs, as well as a 90-day public comment period for the preliminary HRA. The proposed amendments to this section would include a restructuring of the section to improve readability and clarity given the updated process. References to section numbers would be updated throughout.

Section 11-18-401 – Health Risk Assessment Procedures - Legacy (Formerly titled – Health Risk Assessment Information Requirement): The proposed amendments to Section 11-18-401 would introduce language that includes a deadline for the facilities that are subject to the current HRA procedures (henceforth referred to as “legacy” procedures). Facilities that have been notified that a site-specific modeling protocol is approved by the Air District before the adoption date of the proposed amended Rule would follow the legacy HRA procedures in this section.

The proposed amendments to this section would also incorporate procedures from Section 11-18-403 of the current Rule, including provisions for public comments on the preliminary HRA, as well as the approval process for the preliminary HRA and final HRA. These procedures would apply to the facilities that are subject to the legacy HRA procedures or that have been notified that a site-specific modeling protocol is approved before the adoption date of the amended Rule. Additionally, the proposed amendments would formalize the current practice of holding a single 90-day public and facility comment period after the preliminary HRA results are made available.

These administrative clarifications were made after the proposed amendments were published on March 18, 2026, after additional Air District staff review:

- Section 11-18-401: “For a facility owner/operator that has received notification ~~by~~from the APCO that the site-specific modeling protocol has been finalized by the APCO...”
- Section 11-18-401.3: “The APCO shall notify the facility owner/operator ~~if~~whether the final, APCO-approved HRA indicates a facility health risk equals or exceeds one or more of the risk action levels set forth in Section 11-18-217.”

Former Section 11-18-402 – Early Application of Risk Action Levels (Removed): This entire section would be removed because it is only relevant to the expired RAL deadlines in former Section 11-18-218, which is proposed for deletion in the proposed amendments. The RALs in former Section 11-18-218.1 became obsolete on January 1, 2020, and the more stringent RALs are currently applicable to all facilities.

Section 11-18-402 – Health Risk Assessment Procedures: The proposed amendments to this section would outline the updated HRA procedures and include provisions regarding their effective date. Facilities that have not received a notification that their site-specific modeling protocol is approved as of the adoption date must follow the updated HRA procedures in this section.

Although existing Rule 11-18 is silent as to who must conduct HRAs, the Air District generally prepares the HRAs under the existing Rule 11-18 Implementation Procedures. Under the proposed amendments to Section 11-18-402, the facility owner/operator would generally be

responsible for conducting the preliminary HRA using the following steps outlined in Sections 11-18-402.1 through 402.6.

1. Notification: The Air District would notify the facility owner/operator that the facility must prepare the HRA, and the Air District would provide an Air District-approved TAC emissions inventory. The procedure to determine which facilities may require an HRA is described in Section 4.1 of the Implementation Procedures. In short, the Air District uses prioritization scores to rank facilities based on health impact potential and to determine when facilities should undergo further review. The three criteria used to calculate prioritization scores are: (1) annual toxic emissions, (2) health effects values for toxic compounds, and (3) proximity adjustment factors related to the location of receptors.
2. Site-Specific Modeling Protocol: After the facility owner/operator has been notified to prepare the HRA, they must submit a site-specific modeling protocol to the Air District within 60 days. Facility owner/operators may request additional time (up to 60 additional days) to provide the site-specific modeling protocol if they demonstrate additional time is necessary. If revisions are required, they must address all Air District comments and suggestions in a single revision and resubmit the protocol within 30 days of receiving the Air District comments.
3. Preliminary HRA Review: After Air District approval of the site-specific modeling protocol, the facility owner/operator must provide a draft preliminary HRA report based on the approved site-specific modeling protocol within 90 days, along with all additional information necessary to reproduce the draft preliminary HRA report. This additional information includes, at a minimum, the TAC emissions inventory, documentation of any changes to the emissions inventory, TAC release data, details related to the facility and its surroundings, sources of TAC emissions, air dispersion modeling, and any electronic files that are required to reproduce the HRA results. Facility owner/operators may request additional time (up to 30 additional days) to provide the draft preliminary HRA report if they demonstrate additional time is necessary.

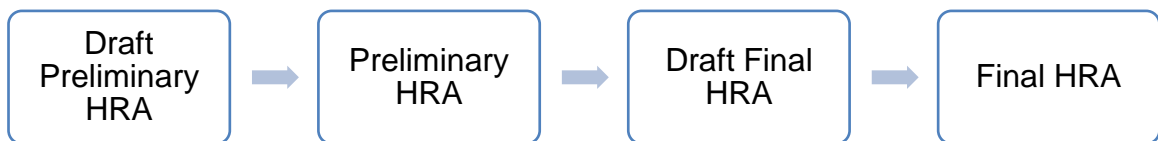
The Air District then reviews the draft preliminary HRA report submitted by the facility owner/operator. If any revisions to the draft preliminary HRA report are necessary, the Air District will provide a list of necessary revisions to the facility owner/operator. If revisions are required, the facility owner/operator must address all Air District comments and suggestions in a single revision and resubmit the draft preliminary HRA report within 30 days. Facility owner/operators may request additional time (up to 30 additional days) to resubmit the preliminary HRA report if they demonstrate additional time is necessary.

4. Public Comment: The proposed amendments to Section 11-18-402.4 include a single 90-day public and facility comment period after the preliminary HRA report is published.
5. Approval and Comparison to Risk Action Levels: The proposed amendments to Section 11-18-402.5 outline the procedures for the review, correction (if needed), and approval of the final HRA for facilities that are subject to the updated HRA procedures. After the comment period, the Air District considers any written comments received during the comment period. If revisions to the preliminary HRA report are necessary before the Air District publishes the final HRA report, the facility owner/operator must address all Air District comments and suggestions in a single revision and submit the draft final HRA report within 30 days. Facility owner/operators may request additional time (up to 30 additional days) to provide the draft final HRA report if they demonstrate additional time is necessary.

Once the final HRA report has been approved, the Air District will publish the final HRA report and notify the facility owner/operator if the final HRA indicates a facility health risk that equals or exceeds one or more of the RALs set forth in Section 11-18-217 (previously Section 11-18-218).

6. Air District-Prepared HRAs: Lastly, a proposed provision allowing the Air District not to use a facility-prepared HRA was added to Section 11-18-402.6 when it is more expedient to do so or when the facility owner/operator lacks the resources to conduct the HRA. Instead, the Air District may use an HRA and/or HRA report prepared by the Air District to determine whether the facility's health risk meets or exceeds one or more of the RALs specified in amended Section 11-18-217 (previously Section 11-18-218).

These steps introduce four terms associated with approval phases of the HRA development:



These phases distinguish between facility-submitted drafts, Air District review steps, and the points at which an HRA becomes an official determination:

- **Draft Preliminary HRA**: The initial analysis prepared and submitted by the facility, based on an Air District-approved site-specific modeling protocol. This draft is subject to Air District review and revision.
- **Preliminary HRA**: The revised analysis approved and published by the Air District for a 90-day public comment period. This document represents the Air District's preliminary determination of facility risk but remains open to further revision based on comments or new information.
- **Draft Final HRA**: A revised version of the preliminary analysis prepared by the facility after the comment period, incorporating any required changes identified by the Air District. This draft serves as the facility's submission pending final Air District approval.
- **Final HRA**: The Air District-approved analysis following all review, revisions, and public comment. This analysis is the official record of the facility's health risk determination and is used to evaluate whether the facility exceeds one or more RALs.

The proposed amendments to this section would provide considerable Air District time and resource savings for implementing the Rule 11-18 program, particularly in setting up the air dispersion model and entering input parameters, including toxic emissions data, source locations, stack parameters, meteorological data, terrain data, and receptor locations. Additionally, by requiring facility owner/operators to submit HRA modeling protocols and preliminary HRA reports for Air District review, the amendments would allow the Rule 11-18 program to process many HRAs concurrently rather than being constrained by the modeling bandwidth of Air District staff. This shift is expected to significantly accelerate implementation timelines across the program. These changes—requiring the facility owner/operator to submit HRA modeling protocols and preliminary HRA reports for Air District review and approval (or disapproval)—also align the Rule 11-18 program with common practices used in similar programs in other air districts (such as South Coast AQMD Rule 1402).

These submittals would be required to adhere to established and standardized guidelines (including the Air District Air Toxics Control Program HRA Guidelines¹⁶ and the Air District Modeling Protocol¹⁷) that provide strict, prescriptive procedures that limit discretion in the analysis. Lastly, the facility submittals would still be subject to strict oversight from the Air District. Air District staff would review submittals for accuracy and errors to ensure that they meet the guidelines. The Air District would maintain the authority to approve or correct as appropriate. The Air District would continue to evaluate potential improvements to the Air District HRA review process that can be implemented to ensure that the preliminary HRAs prepared and submitted by facilities meet the applicable guidelines and requirements to accurately reflect the toxic impacts of the facilities.

The following administrative clarifications were made after the proposed amendments were published on March 18, 2026, after additional Air District staff review:

- Section 11-18-402.3.2: "...the APCO shall notify the facility owner/operator of the specific alterations to the draft preliminary HRA report that are required, unless the APCO elects to proceed under Section 11-18-402.3.4."
- Section 11-18-402.3.4: "The APCO may also, pursuant to Section 11-18-402.6, ~~take over finalization of~~ finalize the preliminary HRA and preliminary HRA report..."
- Section 11-18-402.5.1: "~~After the comment period, the APCO may notify the facility owner/operator that alterations to the preliminary HRA report are required. If, after the public comment period, the APCO determines that alterations to the preliminary HRA report are required, the APCO shall notify the facility owner/operator of the specific alterations to the preliminary HRA report that are required, unless the APCO elects to proceed under Section 11-18-402.5.3.~~"
- Section 11-18-402.5.2: "~~The facility owner/operator shall implement all alterations and submit a draft final HRA report within 30 days of receiving the notification from the APCO. Upon receiving notice from the APCO that alterations to the preliminary HRA report are required, the facility owner/operator shall implement all alterations and submit a draft final HRA report within 30 days of receiving the notification from the APCO.~~"
- Section 11-18-402.5.3: "The APCO may also, pursuant to Section 11-18-402.6, ~~take over finalization of~~ finalize the final HRA and final HRA report ..."

Section 11-18-403 – Risk Reduction Plan Procedures (Previously Section 11-18-404, Formerly titled – Risk Reduction Plan Content Requirements and Section 11-18-405, Formerly titled – Review and Approval of Risk Reduction Plans): The proposed amendments to this section would incorporate an existing provision, previously located in Section 11-18-403, requiring facilities that have been notified that they have a health risk that equals or exceeds one or more of the RALs to submit a draft RRP within 180 days of notification. Additionally, former Section 11-18-405 Review and Approval of Risk Reduction Plans would be incorporated into Section 11-18-403 as sections 11-18-403.3 through 11-18-403.6.

The amendments would clarify that the second option for RRP certification would be an individual who is responsible for the operations of the "facility," replacing the current language of "source" to align with other similar certifications.

¹⁶ 2021 Bay Area Air District Air Toxics Control Program HRA Guidelines can be accessed at the following link: https://www.baaqmd.gov/~media/dotgov/files/rules/reg-2-permits/2021-amendments/documents/20211215_hraguidelines-pdf.pdf?rev=eb18ff83f96049fa84d54552b58baee3

¹⁷ 2020 Bay Area Air District Health Risk Assessment Modeling Protocol can be accessed at the following link: https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol-pdf.pdf?la=en

The amendments would revise the timeline and terminology associated with the Air District's review of draft RRP. Specifically, references to "completeness review" have been revised to "review" to better reflect the depth and intent of the Air District's evaluation of draft RRP prior to public comment. The amendments also would remove references to timeframes around Air District RRP review, which better aligns with other Air District review processes throughout Rule 11-18.

The amendments would also clarify that any extensions granted for compliance through application of Best Available Retrofit Control Technology for Toxics (TBARCT) will be limited to the specific source or group of sources requiring the extension for the implementation of the risk reduction measure and not the entire RRP. Any extension for facilities that can feasibly comply with the RALs would be limited to the specific risk reduction measure for which the extension is required.

The amendments in this section would resolve several terminology issues in the current Rule. The first resolves an inconsistency in terminology, where the terms "technologically feasible," "technically feasible," and "feasible" were used interchangeably. The amendments standardize usage to "technologically feasible" throughout the Rule to ensure consistency and clarity. Secondly, Section 11-18-403.2.6.1 is revised to clarify that the RRP must reduce the health risk below the RALs at *each* location of the Maximum Exposed Individual (MEI). In the original language, the requirement stated the risk must be below the action level at *any* MEI, which could be misread to allow compliance if risk was reduced at one MEI location but remained above the action level at another.

Two sections would also update expired or recodified references. Section 11-18-403.6 updates a citation to the Public Records Act which was recodified to Section 7924.510 of the Government Code (formerly Section 6245.7). Section 11-18-403.2.8 would remove references to Health and Safety Code 25570.3, which has been repealed.

Section 11-18-404 – Reconsideration of Prioritization Scores: The proposed amendments would establish a process for a facility owner/operator to request a reevaluation of the facility's prioritization scores, which determines whether an HRA may be required, after the facility owner/operator has been notified by the Air District to prepare an HRA. Within 30 days of receiving the HRA notification, the facility owner/operator may submit a request for reconsideration based on a revised TAC emissions inventory.

More information and details on the reconsideration of prioritization scores are provided in the sections of this report on proposed amendments to the Rule 11-18 Implementation Procedures (see discussion in Section IV.D. Procedures under *Section 4.1.4 Requests to Reconsider Prioritization Scores* and *Section 4.2.3 Procedures for Implementing Health Risk Assessments*).

The following administrative clarification was made after the proposed amendments were published on March 18, 2026, after additional Air District staff review:

- *Section 11-18-404.1:* "In order to request such reconsideration, the facility [owner/operator](#) shall recalculate the prioritization scores in accordance with Appendix A."

Section 11-18-405 – Additional Emissions Data: The proposed amendments to this section would include a provision that would allow facility owner/operators to request that the Air District consider additional testing or studies before finalizing emissions data for specific sources. As part of the draft preliminary HRA report submission, the facility owner/operator must include a table listing

the sources, the currently estimated emissions for each source, and details about the testing and/or studies it proposes to conduct. If the Air District agrees to consider such additional data, all updated emissions data obtained from the testing or studies must be submitted for review and approval no later than the date the facility owner/operator submits its draft RRP pursuant to proposed amended Section 11-18-403.1. If the Air District has agreed to consider additional data and the facility owner/operator submits those data, the Air District may revise the final HRA to reflect the new information and may, if warranted, rescind its notification under proposed amended Sections 11-18-401.3 or 11-18-402.5.4 that the facility's health risk equals or exceeds one or more of the RALs outlined in Section 11-18-217.

Additional provisions are being proposed for Sections 11-18-405.3 through 405.5 to clarify the procedural steps following the submission of updated emissions data.

- **If the new emissions data show the facility risk is reduced below all RALs:**
Section 11-18-405.3 would require that if, based on the new emissions data, the Air District determines that a facility no longer exceeds a RAL and rescinds its notification, it must issue a revised preliminary HRA report for public comment and finalize a revised HRA accordingly.
- **If the new emissions data show the facility risk remains above an RAL:**
Section 11-18-405.4 would address situations where updated data result in a revised HRA report but the facility's risk remains above an RAL. In such cases, the revised HRA report must be released alongside the draft RRP for public review, and the Air District must consider any comments on the revised HRA report before finalizing the RRP.
- **If the new emissions data have not been reviewed yet:**
Section 11-18-405.5 would specify that if a facility owner/operator submits a draft RRP before the Air District has reviewed the new emissions data, the facility owner/operator must submit two versions of the RRP—one assuming the data are accepted and one assuming they are not—ensuring that RRP development continues without delay, while maintaining flexibility depending on the outcome of the emissions data review.

These provisions are intended to ensure that updated emissions data can be applied to RRP obligations and, where appropriate, incorporated into revised HRAs without significant delay. However, the original final HRA remains valid as a record of the facility's risk based on the information available at the time of its preparation. The availability of newer emissions data does not render the original HRA "incorrect," but rather reflects the ongoing refinement of facility-specific data. This approach preserves the integrity of the HRA process as both a record of past risk and a tool for planning future risk reduction.

Section 11-18-406 – Updated Risk Reduction Plan: The proposed amendments to this section would clarify that when a facility updates its RRP based on newly available information, the update must not significantly delay implementation of the emission reductions in the original plan. The facility's original plan remains in effect until the Air District approves the update. In addition, the amendment specifies that the Air District may disapprove an updated plan if it would not result in a greater health risk reduction than the original plan.

D. Monitoring and Records

There are no substantive amendments to Rule Section 11-18-500.

References to revised Rule 11-18 section numbers would be updated in this section.

E. Manual of Procedures

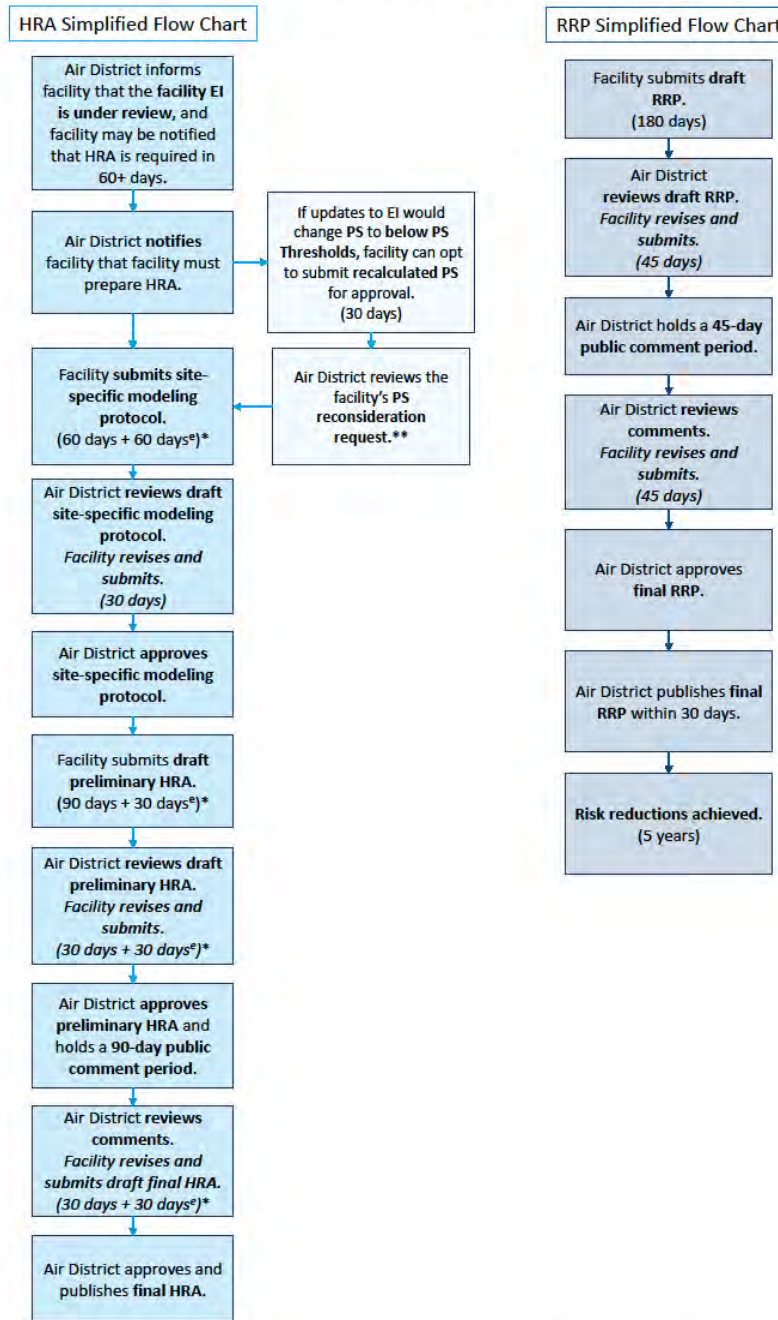
This section would be added to provide technical references for items that were formerly done by the Air District but the amendments would now require facilities to complete. This includes the HRA guidelines (Section 11-18-602) and the prioritization score calculation procedures (Section 11-18-601). While the prioritization score calculation is still initially conducted by the Air District, this procedure reference is included as proposed amendments to Section 11-18-405 would allow facility owner/operators the option to recalculate their prioritization scores using the same methodology to request reconsideration of the prioritization score.

IV. PROPOSED UPDATES TO RULE 11-18 IMPLEMENTATION PROCEDURES

The Implementation Procedures are a set of non-binding procedural guidelines developed to support consistent and transparent application of Rule 11-18. They provide additional detail on the procedural steps the Air District and affected facilities follow during key phases of rule implementation, such as Health Risk Assessment (HRA) preparation, Risk Reduction Plan development, and dispute resolution. The current Implementation Procedures were published in 2024 after a public comment period, but they have not been formally adopted by the Board of Directors.

The proposed updates to the Implementation Procedures are intended to ensure alignment with the proposed rule amendments and to further improve program clarity and efficiency. The proposed updates to the Rule 11-18 Implementation Procedures include additional procedures necessary to align with the proposed amendments to Rule 11-18, as well as administrative corrections and clarifications. Additionally, the requirements and procedures associated with the Dispute Resolution Panel (DRP) in the Implementation Procedures would be amended to ensure disputes arising between the Air District and a facility during Rule 11-18 implementation can be resolved expeditiously. These proposed updates to the Implementation Procedures have been provided as Appendix B and are described in greater detail below. References to revised Rule 11-18 section numbers and Implementation Procedures section numbers would also be updated throughout. Figure 2 includes a flowchart of the primary steps of the proposed Rule 11-18 process, including the updates to the Implementation Procedures.

Figure 2 – Rule 11-18 Milestones Flowchart



This flowchart is intended for demonstrative purposes only; the text of Rule 11-18, and not this flowchart, will govern the Air District's actions in implementing Rule 11-18. Further, this flowchart describes the Air District's anticipated procedures, and the Air District may not follow the steps outlined here precisely in every instance.

Timelines do not capture total potential timeline, as flowchart is simplified to not show Air District review timelines.

Italicized text indicates step and timeline are contingent.

*Number of days in parentheses are:

(facility deadline + maximum extension time facilities can request*).

**The timelines for the facility to submit a site-specific modeling protocol and, optionally, a prioritization score reconsideration request run concurrently.

EI: Emissions Inventory; HRA: Health Risk Assessment; PS: Prioritization Score; RRP: Risk Reduction Plan

A. Introduction

Table 1. Overview of Key Documents Available would be added to include several relevant documents to support implementation of the Air District's air toxics programs.

B. Purpose

Section 2.4 Health Risk Assessments: This section would be updated to reflect that facilities prepare the facility-wide HRA.

There are no other substantive updates to the purpose section of the Rule 11-18 Implementation Procedures.

C. Definitions

Section 3.1 Rule 11-18 Definitions (removed): This entire section would be removed due to redundancy, as this section only contained definitions directly from Section 200 of the rule language. The removal was intended to improve the readability and organization of this section.

Section 3.2 Additional Definitions and Acronyms (removed): This entire section would be removed and the definitions and acronyms under this section would be moved to Section 3 of this document. This revision is intended to improve the readability and organization of this section.

Section 3 Definitions: The proposed updates to this section include removing acronyms and definitions that would no longer be referenced in the document, clarifying the definition of High-Priority Facility, and adding a definition for Reference Exposure Limit.

D. Procedures

Proposed updates to this section of the Implementation Procedures have been made to reflect the revised requirements and procedures described in the proposed amendments to Rule 11-18. References to revised Rule 11-18 section numbers and Implementation Procedures section numbers would also be updated throughout.

Section 4.1.1 Rule 11-18 Toxic Air Contaminant Emissions Inventories: The proposed updates to this section would clarify that the toxic air contaminant (TAC) emissions inventories used in Rule 11-18 implementation are limited to the pollutants listed in Table 2-5-1 of Rule 2-5. This is consistent with the Rule 11-18 definition of TACs in Section 11-18-225. TACs in Rule 11-18 are limited to the pollutants listed in Table 2-5-1 of Rule 2-5.

Section 4.1.2 Prioritization Scores: The proposed updates to this section would align the procedures associated with the proximity adjustment factor with the procedures in the California Air Pollution Control Officers Association (CAPCOA) Air Toxics "Hot Spots" Program - Facility Prioritization Guidelines document.¹⁸

Section 4.1.3 Prioritization Score Thresholds: The proposed updates to this section would remove references to the less stringent risk action level (RAL) in proposed amended Section 11-18-217

¹⁸ California Air Pollution Control Officer Association (CAPCOA) Air Toxic "Hot Spots" Program - Facility Prioritization Guideline document can be accessed at the following link: <https://capcoa.org/capcoa-prioritization-guidelines>

(previously Section 11-18-218.1), which expired in 2020, and to the application of the more stringent RAL in proposed amended Section 11-18-217 (previously Section 11-18-218.2). The RAL in proposed amended Section 11-18-217 would apply to all facilities subject to the Rule.

Section 4.1.4: Requests to Reconsider Prioritization Scores: The proposed updates to this section would provide additional information on the proposed provisions for requests to reconsider prioritization scores pursuant to proposed amended Section 11-18-404, including examples of reasons a facility may submit a request to reconsider prioritization scores and guidance on what facilities may include in a request.

Section 4.1.5 Toxic Air Contaminant Emissions Inventory and Toxic Air Contaminant Emissions Release Data Review and Correction Process (previously Inventory Review and Correction Process): The proposed updates to this section include additional language on how maximum hourly emissions data may be estimated for the toxic emissions inventory, as well as changes reflecting the updated HRA procedures. Additionally, the proposed updates outline provisions that would allow a facility owner/operator to request the Air District to consider additional testing or studies for specific sources before finalizing the toxic emissions inventory data.

Section 4.2 Assessing Health Impacts: The proposed updates to this section would align with the proposed changes in Section 11-18-402, which would require facility owner/operators to submit a site-specific modeling protocol for review and approval by the Air District, as well as a preliminary HRA report along with all supporting materials necessary to reproduce those results. This section would also provide examples of the type of documentation that are typically required to reproduce the results of the HRA and should be submitted with the preliminary HRA report.

Additionally, the proposed updates to this section would clarify that the Air District may prioritize HRAs for facilities located in Overburdened Communities, as defined in Regulation 2: Permits, Rule 1: General Requirements, Section 2-1-243, and in communities selected by the California Air Resources Board for additional resources under AB 617 pursuant to Health and Safety Code sections 42705.5(c)–(d) or 44391.2(c). This reflects the current practice for conducting HRAs for Rule 11-18 facilities. Lastly, the reference to applying RALs to a subset of sources within these communities has been removed consistent with the proposed rule language updates to remove the obsolete provision in current Section 11-18-218.1.

Section 4.2.1 Vendors for Health Risk Assessment Services (Removed): This section on the Air District's use of vendors for HRAs would be removed to align with the proposed amendments to Rule 11-18, as under the proposed amendments the facility owner/operator would be required to submit the preliminary HRA report for their facility. The current language in this section of the Implementation Procedures would therefore no longer be applicable and would be removed.

Section 4.2.1 (previously Section 4.2.3) Guidelines for Health Risk Assessments: The proposed update to this section would remove references to procedures associated with lists of authorized vendors and contractors.

Section 4.2.2 Modeling Protocol for Health Risk Assessments: The proposed update to this section would remove references to procedures associated with the Air District preparing site-specific modeling protocol for large facilities since these procedures would be replaced with amended Section 4.2.3.

Section 4.2.3 Procedures for Implementing Health Risk Assessments: This proposed update would replace the procedures associated with HRAs (previously in Section 4.2.4 and Section 4.2.5) with procedures consistent with the proposed amendments to Rule 11-18. Additionally, the corresponding Rule sections would be referenced in parentheses in the procedure steps, if appropriate.

The section would include an overview of Legacy Procedures in which the Air District prepares the HRA as described in proposed amended Section 11-18-401.

This section would also include Current Procedures, which would apply to facilities not subject to the Legacy Procedures. The revision of the procedures for HRAs conducted by facilities, vendors, or contractors reflect the proposed changes to Rule Section 11-18-402 and would outline the detailed steps for the review and approval process of preliminary HRA reports submitted by the facility owner/operator. The proposed amendments include a first step where the Air District informs the facility that the Air District has started reviewing the facility's TAC emission inventory; this initial communication would occur at least 60 days prior to the Air District issuing a notification pursuant to amended Rule Section 11-18-402.1. This initial communication from the Air District to the facility is intended to provide the facility with additional time to plan for the Rule 11-18 HRA process. The section would also specify the public noticing process for the preliminary HRA report, the process for revising of the preliminary HRA report after the public comment period, and the publication of the Air District-approved final HRA. In addition, the proposed updates to this section outline procedures for the review, correction (if needed), and approval of both the preliminary and final HRAs.

The proposed update to this section would specify that the response to comments for refinery HRAs would be released with a preliminary determination regarding approval or deficiencies requiring alteration of the draft final HRA, after which the refinery will have an opportunity to request to convene the Dispute Resolution Panel. For facilities subject to Legacy Procedures, this step would be after amended Section 11-18-401.2 and before amended Section 11-18-401.3. For facilities subject to Current Procedures, this step would be after proposed amended Section 11-18-402.4 and before proposed amended Section 11-18-402.5.

Section 4.2.4 Procedures for HRAs Conducted by the Air District (Removed): This entire section would be removed and is no longer applicable under the proposed rule amendments. The proposed rule amendments require that preliminary HRAs be prepared and submitted for review by facility owner/operators instead of the Air District conducting the HRAs. An overview of legacy procedures where the Air District still prepares the HRA, as described in Section 11-18-401, would be included in Section 4.2.3 of the Implementation Procedures.

Section 4.2.5 Procedures for HRAs Conducted by Vendors or Contractors (Removed): This entire section would be removed, and the procedures associated with HRAs conducted by the vendors or contractors previously in this section would be moved to Section 4.2.3 and revised (as described above).

Section 4.3 Implementing Risk Reduction Plan Requirements: The proposed amendment to this section would specify that the response to comments for refinery Risk Reduction Plans (RRPs) would be released with a preliminary determination regarding approval or deficiencies requiring alteration of the draft RRP, after which the refinery will have an opportunity to request to convene the Dispute Resolution Panel. This step would be after Section 11-18-403.4 and before Section 11-18-403.5. Additionally, the corresponding Rule sections would be referenced in parentheses in the procedure steps, if appropriate.

E. Dispute Resolution Panel

The proposed updates to this section would add additional requirements and procedures associated with implementation of a Dispute Resolution Panel (DRP) to ensure technical disputes that arise between the Air District and a facility during Rule 11-18 implementation can be addressed expeditiously, while still offering certain facilities a clear process to resolve technical issues that remain unresolved after the public comment period. The following proposed updates have been made to this section:

Timeline for the DRP: The proposed updates to this section would include that if the DRP did not pose any questions after reviewing the case, the DRP makes its recommendations to the Air District within 30 days of receipt of the case materials, consisting of the facility comments regarding the technical dispute and Air District responses to comments.

Limit the usage of DRP to refineries and matters related to refineries: The current Implementation Procedures allow a DRP to be convened for matters related to any Rule 11-18 facility, whether requested by the public or industry. To minimize delays in Rule 11-18 implementation and reduce the staff resources required to convene a DRP, the proposed update to this section would limit the use of DRPs to matters specifically related to HRAs and RRs for refineries and requests to convene a DRP to refineries, as defined in Regulation 8: Organic Compounds, Rule 1: General Provisions, Section 8-1-211. The public and other industries would still have the opportunity to resolve disputed matters during other steps in the process (such as the comment period or Air District review and facility resubmittal process).

The Air District agreed, in its above-mentioned settlement with the Western States Petroleum Association, to afford refineries "the opportunity to be heard (in writing) by the DRP on technical disputes arising under Rule 11-18." The complexity and number of operations at refineries make estimates of emissions for these facilities particularly challenging to determine. For this reason, and to balance between refined emissions estimates and Air District resources, these facilities were identified to be in the greatest potential need of the DRP process to provide additional guidance on especially complex technical issues. The Air District anticipates that limiting DRP access to the refineries will result in time and resource savings by restricting the DRP process to only the most complex facilities, where additional expertise and support are most needed.

In addition, in its settlement with the Western States Petroleum Association, the Air District agreed that the DRP shall make its recommendations to the Air District prior to the publication of a final HRA. The implementation of this provision is included in Section 4.2.3 of the Implementation Procedures.

Additional requirements and procedures associated with convening a DRP: The proposed updates to this section would incorporate additional requirements for submitting a request to convene a DRP, as well as criteria related to the types of disputes that may be submitted for DRP review. The following requirements and procedures would be included in the DRP process:

- A DRP may only be convened for disputes related to HRAs and RRs.
- 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.

- 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 issue in a comment submitted during the preliminary HRA or draft RRP public comment period and relied on the documents or materials to make the comment, or (2) the issue involves a dispute regarding a change to a preliminary HRA or draft RRP after the corresponding comment period, in which case the DRP requestor may submit additional documents and materials if they are relevant to the issue and are not unduly burdensome to review.
- After the Air District responds to comments on preliminary HRAs, the types of matters that may be raised are limited to the emissions inventory and the methodology used in 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.
- After the Air District responds to comments on draft Risk Reduction Plans, 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.
- Each entity is limited to one request to convene a DRP for the HRA and one request for the RRP. In addition, each request is limited to a total of three issues.
- A request related to matters that have been previously resolved by the DRP without new substantive information will not be reconsidered.

Requests on disputed matters that cover multiple issues, are overly burdensome, or outside the scope of the DRP: The proposed updates to this section would also add language that allows the Air District to reject a specific issue in the request if a disputed matter covers multiple issues, is overly burdensome, or falls outside the appropriate scope of the DRP.

These additional requirements would be included to ensure that the DRP and Air District staff are not overburdened by broad, repetitive, or out-of-scope requests for review of Air District decisions. Furthermore, the restrictions on the number of requests per entity and the number of topics per request are intended to encourage requestors to resolve disputed matters during other steps in the process (such as the comment period or Air District review and facility resubmittal process), rather than relying solely on the DRP process.

F. Stakeholder Meetings

There are no substantive updates to the stakeholder meetings section of the Rule 11-18 Implementation Procedures.

V. EMISSIONS AND EMISSIONS REDUCTIONS

Proposed amendments to Rule 11-18 are limited to procedural aspects associated with implementation of the Rule, and the amendments are not expected to directly impact emissions for the affected facilities beyond the existing Rule 11-18 requirements. Although there are no emissions changes expected with the proposed amendments, proposed amendments may lead to an expedited implementation of risk reduction measures, which may lead to emissions reductions and health risk reductions from the Rule 11-18 facilities being realized sooner.

VI. ECONOMIC IMPACTS

This section discusses the estimated costs and economic impacts associated with the proposed amendments.

A. Cost-effectiveness and Incremental Cost-effectiveness

When a proposed rule or amendment will significantly affect air quality or emissions limitations, the Air District analyzes the cost-effectiveness of the proposed rule or amendment and of potential alternatives. Cost-effectiveness refers to an evaluation of the relative cost of compliance compared to the expected benefits of a proposed regulatory change, such as emissions reductions. These proposed amendments are limited to procedural aspects associated with implementation of an existing rule, and the amendments do not significantly impact emissions limitations in the currently adopted rule. Therefore, the cost-effectiveness of the amendments and alternatives to the amendments were not evaluated, as emissions reduction is a key input of the evaluation.

B. Socioeconomic Impacts

Section 40728.5 of the California Health and Safety Code requires an air district to assess the socioeconomic impacts of the adoption, amendment, or repeal of a rule if the proposed rule, amendments, or repeal “will significantly affect air quality or emissions limitations.” The proposed amendments to Rule 11-18 are limited to procedural aspects associated with implementation of the Rule, and the amendments do not significantly impact emissions limitations in the currently adopted rule. A socioeconomic assessment therefore is not required per Health and Safety Code Section 40728.5, but an analysis was conducted to provide additional information to the Air District Board of Directors and stakeholders.

1. Proposed Amendments to Rule 11-18

Staff evaluated the potential compliance costs associated with the proposed amendments, including additional expenses incurred by the affected facilities related to HRAs conducted by third parties or vendors compared to HRAs conducted by the Air District.

Currently, the Air District performs HRAs for facilities undergoing compliance assessments under Rule 11-18; these facilities are required to pay a fee in accordance with Regulation 3: Fees, Section 3-342 (“Fee for Facility-wide Health Risk Assessment”). This section establishes a fee based on the number of hours required to conduct or review an HRA, at an hourly rate of \$281. The maximum cost to a facility for the Air District to conduct a Rule 11-18 HRA is approximately \$200,000 for the most complex facilities. Under the proposed rule amendments, the Air District estimates a facility could incur an additional cost up to \$200,000 for the facility or a contractor to prepare the HRA instead of the Air District. The Air District estimates facilities would also incur additional fees for Air District review of Rule 11-18 HRAs, at a maximum review fee of approximately \$20,000. Therefore, the Air District estimates that total compliance costs would increase by up to \$220,000 for an affected facility under the proposed amendments. Assuming an interest rate of six percent and a five-year useful life period of the HRA, this results in a maximum annualized compliance cost of approximately \$52,000. This annualized cost is a conservative estimate, as it is unlikely that a facility would perform a Rule 11-18 HRA every five

years, considering the timelines to develop the HRA and RRP and implement the RRP risk reduction measures.

Staff estimates the probable annualized compliance costs to industry or business from the proposed amendments could range between \$10,000 and \$52,000, depending on primarily the number of Air District-permitted sources at a given facility and the complexity of the HRA.

Air District staff contracted with an independent consultant, BAE Urban Economics (BAE), to develop estimates of potential socioeconomic impacts for the proposed amendments. The full report of the socioeconomic impact analysis is available in Appendix C.

BAE evaluated the 342 facilities that were on the Air District's Facility Risk Reduction Program Phase I and Phase II Facility Lists published in 2024. The analysis included 231 private-sector establishments, including 24 small businesses. BAE estimated the profits for each private-sector facility and the impact on each of these facilities. A facility would be considered impacted by the proposed amendments if the cost of the proposed amendments would exceed ten percent of the facility's profit. Based on this analysis, an estimated three percent of privately-operated facilities (8 individual facilities, all identified as small businesses), could be impacted if these facilities contracted third parties or vendors to conduct the HRAs.

As a result of this analysis, the Air District has made adjustments to implementation plans to avoid these impacts on small businesses and is committing to completing the HRAs for these small businesses. The proposed rule amendments include provisions that the Air District may use an HRA and/or report prepared in whole or in part by the Air District pursuant to proposed amended Section 11-18-402.6. For Air District-prepared HRAs, facility costs would be expected to remain the same as currently required by the existing Rule 11-18 provisions. Therefore, these facilities would not be expected to incur any increased costs from the proposed rule amendments, and the socioeconomic impacts from the proposed rule amendments would be mitigated at these facilities.

BAE also evaluated the impact of the proposed amendments on employment and the economy of the region. BAE estimates an impact of \$6.3 million with a related annual loss of 21.7 jobs due to compliance costs associated with the proposed Rule 11-18 amendments. As context, the economic model used for this analysis estimates the gross annual regional product for the nine-county Bay Area at approximately \$1.4 trillion; the reduction associated with the Rule 11-18 amendments is equivalent to less than 0.001 percent of this total. However, this impact would likely be lower due to the provision that the Air District may use an HRA and/or HRA report prepared in whole or in part by the Air District for facilities that lack resources to conduct the HRA pursuant to proposed amended Section 11-18-402.6. In addition, the analysis assumes that the additional expenditures associated with purchasing needed HRA services would not circulate through the local economy, although some of the needed services will likely be purchased locally, which would generate benefits for the businesses providing these services in the region.

No additional costs are expected to be incurred due to the other RRP proposed amendment items.

2. Rule 11-18 Adopted in 2017

For the Rule 11-18 adopted in 2017, staff completed a socioeconomic analysis and contracted BAE to develop estimates of the potential socioeconomic impacts. The 2017 Rule 11-18 Final

Socioeconomic Analysis Report¹⁹ and Final Staff Report²⁰ discuss different worst-case scenarios of the number of impacted facilities, including that no more than 27 percent of the privately-operated facilities should have their profits significantly impacted by Rule 11-18 adopted in 2017.

C. Air District Impacts

Concerns regarding delays in Rule 11-18 implementation and risk reduction progress have been raised by committee members, community members and representatives, and environmental groups at multiple Air District Stationary Source Committee meetings and at AB 617 Community Steering Committee meetings. Numerous factors have contributed to these delays, including lack of sufficient staff resources to perform HRAs, increases in the number of permit applications, impacts due to the COVID-19 pandemic, extensive discussions with facilities on technical issues, and the diversion of modeling staff resources to other projects, including high-visibility permit applications, public meetings, rulemaking efforts, and enforcement actions. The proposed amendments to Rule 11-18 are intended to prevent further delays and expedite implementation of Rule 11-18. With the vast majority of facilities conducting the facility-wide HRA, and the Air District focusing on the review of Rule 11-18 deliverables, the amendments would allow more efficient and effective use of Air District staff resources for Rule 11-18 implementation and would reduce the amount of staff resources that would be necessary to implement the Rule in full.

VII. REGULATORY IMPACTS

Section 40727.2 of the California Health and Safety Code generally requires an air district, in adopting, amending, or repealing an air district regulation, to identify existing federal and district air pollution control requirements for the equipment or source type affected by the proposed change in district rules. The district must then note any differences between these existing requirements and the requirements imposed by the proposed change.

However, pursuant to Section 40727.2(g), an air district need not take these steps if a district's proposed new or amended rule or regulation does not impose a new emission limit or standard, make an existing emission limit or standard more stringent, or impose new or more stringent monitoring, reporting, or recordkeeping requirements. Because these rule amendments do not impose a new emission limit or standard, make an existing emission limit or standard more stringent, or impose new or more stringent monitoring, reporting, or recordkeeping requirements, no analysis is required under Section 40727.2.

Regardless, to ensure the Board and stakeholders have all relevant information, Table 1 provides the Air District's regulatory impacts analysis of the proposed amendments to Rule 11-18. This table, combined with Table 16 in the 2017 Staff Report for Rule 11-18, summarizes the relevant regulatory overlap of the proposed rule as a whole.

Note that Rule 11-18 implicates an extremely broad array of equipment and source types, so the realm of existing federal and district air pollution control requirements having some degree of

¹⁹ Bay Area Air District, 2017. Final Socioeconomic Impacts of Proposed Rule 11-18: Reduction of Risk from Air Toxic Emissions at Existing Facilities. https://www.baaqmd.gov/~media/dotgov/files/rules/regulation-11-rule-18/documents/20171115_socio_1118-pdf.pdf?rev=c86f357c04de4c04859a98b84134387e&sc_lang=en

²⁰ Bay Area Air District, 2017. Regulation 11, Rule 18 Final Staff Report. Section V: Economic Impacts. https://www.baaqmd.gov/~media/dotgov/files/rules/regulation-11-rule-18/documents/20171115_fsr_1118-pdf.pdf?rev=6da6a14f5e7647c3a22743effd5844e7&sc_lang=en

overlap with Rule 11-18 is effectively limitless. The table below identifies differences between existing air toxics requirements and the requirements proposed by the amendments.

**Table 1
Regulatory Impacts Analysis Pursuant to H&SC Section 40727.2**

Proposed Rule Amendment	Comparable State / Air District Rule or Program	Discussion
<p><u>Sections 11-18-200s, Definitions:</u> Removed some definitions, added site-specific modeling protocol definition, and added clarifications to definitions.</p>	N/A	N/A
<p><u>Section 11-18-401, Health Risk Assessment Procedures – Legacy:</u></p> <ul style="list-style-type: none"> • Affected facilities must provide requested information necessary to complete an HRA within 60 days of Air District request. • 90-day public comment period • Approval and comparison to risk action levels 	N/A	<p>The AB 2588 Hot Spots Program process lacks similar requirements:</p> <ul style="list-style-type: none"> • The affected facilities are responsible for conducting the HRAs. • The program has no equivalent provisions because the affected facilities are responsible for conducting their HRAs and notifying the public, if applicable.
<p><u>Section 11-18-402: Health Risk Assessment Procedures:</u></p> <ul style="list-style-type: none"> • Facilities provide a draft site-specific modeling protocol within 60 days of Air District notification. Air District reviews, facilities revise (if necessary), and Air District finalizes. • Facilities provide draft preliminary HRA report within 90 days of Air District approval of modeling protocol. Air District reviews, facilities revise (if necessary), and Air District finalizes. • 90-day public comment period • Approval and comparison to risk action levels • Air District can prepare HRAs if more expedient or facilities lack the resources 	<p><u>AB 2588 Hot Spots Program - HS&C §44360(c)</u> Facilities prepare and submit HRAs.</p>	<p>The AB 2588 Hot Spots Program provision states the district may require a facility to prepare and submit an HRA but does not outline the procedures to do so.</p>

Proposed Rule Amendment	Comparable State / Air District Rule or Program	Discussion
<p><u>Section 11-18-404, Reconsideration of Prioritization Scores:</u> Facilities can request Air District reconsider prioritization scores within 30 days of notification of requirement to prepare HRA. Air District can withdraw the HRA requirement.</p>	<p><u>AB 2588 Hot Spots Program</u> - HS&C §§44344.4, 44344.6 Prioritization Score requirement</p>	<p>The Air District uses the same prioritization scores for purposes of both AB 2588 and Rule 11-18, so changes to the Rule 11-18 prioritization score will also implicate AB 2588. AB 2588 requires that prioritization scores be calculated every four years.</p>
<p><u>Section 11-18-405, Additional Emissions Data:</u> Facility can request to consider additional future testing or studies in draft preliminary HRA report submission. Depending on if and when the Air District approves the testing, as well as how the testing affects the HRA results, the HRA may be updated and published for public comment, the RALs may affect the RRP requirements, and what needs to be prepared/submitted and when.</p>	<p>N/A</p>	<p>N/A</p>
<p><u>Section 11-18-406, Updated Risk Reduction Plan:</u> If an updated RRP is submitted for approval, clarifications on when the updated RRP would become effective if it is approved. Clarification on why an RRP may be disapproved.</p>	<p>N/A</p>	<p>N/A</p>
<p><u>Sections 11-18-600s: Manual of Procedures:</u> Prioritization Score Calculation Procedures and Health Risk Assessment Procedures</p>	<p><u>AB 2588 Hot Spots Program</u> - HS&C §44360(c) Facilities prepare and submit HRAs. - HS&C §§44344.4, 44344.6 Prioritization Score requirement</p>	<p>AB 2588 does not dictate how the HRA must be performed or how the prioritization score must be calculated.</p>

VIII. CEQA REQUIREMENTS

The California Environmental Quality Act (CEQA) (Public Resources Code section 21000 et seq., and the CEQA Guidelines, 14 CCR 15000 et seq.) requires a government agency that undertakes or approves a discretionary project to consider the potential impacts of that project on all environmental media.

As part of the rule development process, Air District staff evaluates potential environmental impacts as required by CEQA, Public Resources Code Section 21000 et seq., as well as the CEQA Guidelines that help implement the statutory provisions of CEQA. Air District staff determined that an addendum to the Environmental Impact Report (EIR) that was certified in 2017 with adoption of Rule 11-18 by the Board of Directors²¹ is the appropriate type of CEQA document to be prepared for evaluating potential environmental impacts of these proposed amendments since the rule amendments only involve minor technical changes or additions and none of the conditions described in CEQA Section 21166 (Cal. Public Resources Code section 21166) or CEQA Guidelines section 15162 calling for the preparation of a subsequent or supplemental Environmental Impact Report is expected to occur.

Air District staff contracted with an independent consultant, Environmental Audit, Inc., to prepare the Addendum to the EIR certified in 2017. An analysis of the proposed amendments to Rule 11-18 indicates that none of the triggers for additional environmental review in CEQA Guidelines Section 15162 are met. Most notably, no new significant adverse impacts would be created for any environmental areas analyzed in the EIR, nor would the modifications make substantially more severe any existing significant adverse impacts. The Air District published the draft addendum along with the proposed rule amendment materials for public comment and review. The final addendum was updated to specify that applicable air quality mitigation measures and recordkeeping requirements listed in the Mitigation Monitoring and Reporting Program would be included in Air District permit conditions (rather than land use authority). The purpose of this change was to simplify and ensure adequate monitoring and enforcement of the mitigation measures. Appendices D and E provide the full details of the environmental analyses.

Air District staff also contracted with Environmental Audit, Inc., to prepare a Mitigation Monitoring and Reporting Program for Rule 11-18 under CEQA. The Mitigation Monitoring and Reporting Program provides information regarding monitoring and enforcement of the mitigation measures imposed to address the potentially significant impacts identified in the EIR. The potentially significant impacts identified in the EIR relate to air quality, greenhouse gases, hazards and hazardous materials, and hydrology and water quality. Appendix F provides the full details of the program.

IX. RULE DEVELOPMENT / PUBLIC PARTICIPATION PROCESS

A. Concept Paper and 2024 Updates to Implementation Procedures

In December 2023, the Air District published draft updates to the Rule 11-18 Implementation Procedures and a Rule 11-18 Amendments Concept Paper to solicit comments on these

²¹ Environmental Impact Report for the Bay Area Air District for Rule 11-18 from November 2017 can be accessed at the following link: https://www.baaqmd.gov/~/_media/dotgov/files/rules/regulation-11-rule-18/documents/20171115_rfeir_1118-pdf.pdf?rev=055e56fae4e0474dbbc1393e5252f22e&sc_lang=en

materials. A public workshop was held virtually on February 15, 2024, to discuss the materials and gather additional comments from the interested public. Thirty-six attendees, including representatives from the affected facilities, community-based organizations, and the public, participated in the workshop.

The Air District received 12 written comment letters and seven oral comments during the workshop on the draft updates to the Rule 11-18 Implementation Procedures and Rule 11-18 Amendments Concept Paper. Comments were submitted by the Bay Area Clean Water Agencies (BACWA), Benicia Community Air Monitoring Program (BCAMP), CCEEB, the Chevron Products Richmond Refinery, Communities for a Better Environment (CBE), Tesla, and 12 individuals. The written and oral comments on the Rule 11-18 amendment concepts addressed topics such as the combined facility review and public comment periods, Dispute Resolution Panel process, Health Risk Assessment (HRA) procedures, toxic air contaminant emissions inventories, and the requirement for facilities to conduct and submit HRAs.

In March 2024, staff presented an update on the Rule 11-18 Implementation Procedures updates and the Rule 11-18 amendment concepts to the Air District Stationary Source Committee. During the meeting, five public comments were made, raising concerns about facilities conducting and submitting HRAs, the prioritization score for high-risk (Phase 1) facilities, and the use of HRAs instead of health impact assessments. The Air District published the Rule 11-18 Final Implementation Procedures in April 2024 and continued with the rule development effort for amendments to Rule 11-18.

B. Draft Amendments

In August 2025, a draft rule package, including draft amendments to Rule 11-18, draft updates to the Rule 11-18 Implementation Procedures, and a preliminary staff report was released to the public along with a request for comments. A public workshop was held virtually on October 2, 2025, to discuss the materials and gather additional comments from the public. Fifty-seven attendees, including representatives from the affected facilities, consultants, community-based organizations, and the public, participated in the workshop. Comments and questions were received by seven commenters at the workshop.

The Air District received eight written comment letters on the draft amendment materials. Written comments were submitted by CBE, Western States Petroleum Association (WSPA), CCEEB, Bay Area Clean Water Agencies, Air Liquide, Trinity Consultants, and two members from the PTCA. The written and workshop comments received covered topics related to concerns about facilities conducting and submitting HRAs and alternatives to facility-prepared HRAs; facilities potentially needing additional technical assistance; additional comment period on the draft final HRA if there are substantial changes after the comment period on the preliminary HRA; additional detail on limits to Risk Reduction Plan (RRP) submission extensions and the requirement for interim risk reduction goals in the RRP; emissions inventory methodology suggestions; timelines to revise deliverables; workload planning; concerns with finalizing emissions inventories after preliminary HRAs are submitted; desire for clearer, documented Air District decision-making; and requests to change the Dispute Resolution Panel (DRP) scope and constraints.

In November 2025, staff presented an update to the Air District Stationary Source Committee on the rule development effort, including a summary of the draft amendments and public engagement, including seven of the written comments. During the meeting, one public comment was made by CCEEB in support of the draft amendments. In December 2025, staff presented a

summary of the written comments from CBE on the draft amendments to the Air District Stationary Source Committee. During the meeting, three public comments were made, with CBE and an individual raising concerns about facilities conducting and submitting HRAs, and the WSPA suggesting a facility-only comment period on the preliminary HRA before the public comment period.

C. Other Stakeholder Engagement

Staff conducted additional engagement throughout the continued development of the Rule 11-18 amendments. Staff met with CBE and others in accordance with the 2023 settlement agreement to provide an update on the implementation progress on Rule 11-18 and the rule development effort in February 2024, June 2024, December 2024, July 2025, and January 2026. Staff has provided updates on the Rule 11-18 amendment effort to the BACWA at quarterly BACWA-Bay Area Air District Implementation Workgroup meetings starting in February 2024. Staff also met with representatives from the Chevron Richmond Refinery in August 2024 and with CCEEB in September 2024 to discuss items related to Rule 11-18, including implementation progress, emissions inventory, Rule 11-18 Implementation Procedures, and rule amendment concepts. Staff met with CBE in January 2026 to discuss items related to Rule 11-18, including the HRA process in the draft rule amendments to Rule 11-18.

Staff also provided an informational update to the Path to Clean Air Community Steering Committee for the Richmond-North Richmond-San Pablo Community during its regular meetings in January and February 2025, providing an overview of Rule 11-18 and updates on its implementation and amendment progress.

D. Proposed Amendments

In March 2026, Air District staff published the proposed amendment materials, including proposed amendments to Rule 11-18, proposed updates to the Rule 11-18 Implementation Procedures, and the associated Staff Report, for public review and comment on these materials from March 18, 2026 through April 19, 2026. Air District staff received eight written comment letters on the proposed amendment materials. Written comments were submitted by CBE and five additional community-based organizations (CBE et al.), WSPA, CCEEB, Bay Area Clean Water Agencies, Chevron, Phillips 66, one member from the PTCA Community Steering Committee, and one other Bay Area resident.

Of the commenters, the two individuals expressed general support of the proposed amendments. CBE et al. expressed general opposition to the proposed amendments due to concerns that the HRAs initially prepared by the facilities would present a conflict of interest that could undermine the trustworthiness of the HRA results. The other comments received had mixed support and opposition, and covered topics including but not limited to:

- Differences between Air District and facility-prepared HRAs;
- Differences between the legacy procedures and the new procedures to prepare HRAs;
- An additional public comment period before the final HRA report is published;
- An additional facility-only review period before the preliminary HRA report is published;
- Timelines to draft, revise, review, and approve deliverables;
- Workload planning;
- Emissions inventories, particularly finalizing after preliminary HRAs are submitted and incorporating refinery data from Rule 12-15;

- DRP scope and constraints;
- Consistency with the WSPA settlement agreement;
- Cost of the proposed amendments; and
- Scope of the CEQA analysis.

Air District staff considered the comments submitted and prepared a summary of comments and responses document, which is included as Appendix G to this Final Staff Report. In response to comments received, Air District staff made minor administrative clarifications to this Final Staff Report and to the proposed updates to the Implementation Procedures. BAE Urban Economics also added additional references to the socio-economic analysis report in response to comments received. These clarifications are discussed in Appendix G to this Final Staff Report.

Air District staff made administrative clarifications to the proposed rule language after the proposed rule materials comment period that began on March 18, 2026. The discussion of these administrative clarifications is included in Section III to this Final Staff Report, and this proposed rule language is included in Appendix A to this Final Staff Report. These administrative clarifications were not made in response to comments received and are not expected to alter the requirements of the proposed rule amendments.

X. CONCLUSION / RECOMMENDATIONS

Pursuant to the California Health and Safety Code Section 40727, before adopting, amending, or repealing a rule the Board of Directors must make findings of necessity, authority, clarity, consistency, non-duplication, and reference. This section addresses each of these findings.

A. Necessity

As stated in California Health and Safety Code Section 40727(b)(1), “‘Necessity’ means that a need exists for the regulation, or for its amendment or repeal, as demonstrated by the record of the rulemaking authority.”

Rule 11-18 was adopted by the Air District in 2017 to address facilities whose emissions of toxic air contaminants (TACs) pose an elevated risk to nearby residents and workers. Air District Stationary Source Committee members and environmental groups have raised concerns regarding delays in Rule 11-18 implementation, including the finalization of Health Risk Assessments (HRAs) and the development, submission, and approvals of Risk Reduction Plans (RRPs). These concerns about Rule 11-18 were raised at multiple Stationary Source Committee meetings, and community members voiced similar concerns at AB 617 Community Steering Committee meetings.

These proposed amendments focus on measures aimed at accelerating risk reduction and improving program efficiency to implement the requirements of the Rule. The proposed amendments to Rule 11-18 would expedite the HRA approval step and establish other changes that would improve implementation efficiency of this rule. They are expected to expedite not only the overall implementation of the Rule but also the reduction of air toxic emissions and health risks from affected facilities.

The proposed amendments would provide considerable Air District time and resource savings for implementing the Rule 11-18 program, particularly in setting up the air dispersion model and

entering input parameters, including toxic emissions data, source locations, stack parameters, meteorological data, terrain data, and receptor locations. The proposed amendments also allow the Rule 11-18 program to process more HRAs concurrently by requiring facilities to submit HRA modeling protocols and preliminary HRA results for Air District review, rather than being constrained by the modeling bandwidth of Air District staff. This shift is expected to significantly accelerate implementation timelines across the program.

B. Authority

The California Health and Safety Code Section 40727(b)(2) states that “‘Authority’ means that a provision of law or of a state or federal regulation permits or requires the regional agency to adopt, amend, or repeal the regulation.”

The Air District has the authority to adopt these rule amendments under Sections 40000, 40702, and 40725 through 40728.5 of the California Health and Safety Code.

C. Clarity

The California Health and Safety Code Section 40727(b)(3) states that “‘Clarity’ means that the regulation is written or displayed so that its meaning can be easily understood by the persons directly affected by it.”

The proposed amendments to Rule 11-18 are written so that their meaning can be easily understood by the persons directly affected by them. Further details in this report describe the proposals, delineate the affected industry, compliance options, and administrative requirements for the industries and persons subject to these rules.

D. Consistency

The California Health and Safety Code Section 40727(b)(4) states that “‘Consistency’ means that the regulation is in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or state or federal regulations.”

The proposed amendments to Rule 11-18 are consistent with other Air District rules and not in conflict with state or federal law.

E. Non-Duplication

The California Health and Safety Code Section 40727(b)(5) states that “‘Nonduplication’ means that a regulation does not impose the same requirements as an existing state or federal regulation unless a district finds that the requirements are necessary or proper to execute the powers and duties granted to, and imposed upon, a district.”

The proposed amendments to Rule 11-18 are non-duplicative of other statutes, rules, or regulations.

F. Reference

The California Health and Safety Code Section 40727(b)(6) states that “‘Reference’ means the statute, court decision, or other provision of law that the district implements, interprets, or makes specific by adopting, amending, or repealing a regulation.”

By adopting the proposed amendments to Rule 11-18, the Air District Board of Directors will be implementing, interpreting or making specific the provisions of California Health and Safety Code Sections 40000, 40702, and 40727.

G. Recommendations

The proposed amendments to Rule 11-18 have met or will meet all legal noticing requirements, have been discussed with the regulated community and other interested parties, and reflect consideration of the input and comments of many affected and interested stakeholders.

Air District staff recommends that the Air District Board of Directors adopt (1) a resolution to amend Regulation 11: Hazardous Pollutants, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities (Rule 11-18); (2) make findings of necessity, authority, clarity, consistency, non-duplication, and reference for the Rule 11-18 amendments; (3) update the Rule 11-18 Implementation Procedures; (4) adopt an Addendum to the previously certified Environmental Impact Report for Rule 11-18 pursuant to the California Environmental Quality Act; and (5) adopt a Mitigation Monitoring and Reporting Program for Rule 11-18 pursuant to the California Environmental Quality Act.