

**REGULATION 11
HAZARDOUS POLLUTANTS
RULE 18
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REGULATION 11
HAZARDOUS POLLUTANTS
RULE 18
REDUCTION OF RISK FROM AIR TOXIC EMISSIONS AT EXISTING FACILITIES
(ADOPTED [DATE])

11-18-100 GENERAL

11-18-101 Description: The purpose of this rule is to ensure that facilities that emit toxic air contaminants do not pose an unacceptable health risk to nearby residents, workers, or students.

11-18-200 DEFINITIONS

11-18-201 Acute Hazard Index, or Acute HI: Acute hazard index is the sum of the individual acute hazard quotients for toxic air contaminants identified as affecting the same target organ or organ system. [Source: Rule 2-5, Section 2-5-201]

11-18-202 Acute Hazard Quotient, or Acute HQ: Acute hazard quotient is the ratio of the estimated short-term average concentration of the toxic air contaminant to its acute reference exposure level (estimated for inhalation exposure). [Source: Rule 2-5, Section 2-5-202]

11-18-203 Airborne Toxic Control Measure, or ATCM: A recommended method and, where appropriate, a range of methods, established by the California Air Resources Board (CARB) pursuant to the Tanner Act, California Health and Safety Code beginning at Section 39650, that reduces, avoids, or eliminates the emissions of a toxic air contaminant. [Source: Rule 2-5, Section 2-5-203]

11-18-204 Best Available Retrofit Control Technology for Toxics, or TBARCT: For any existing source of toxic air contaminants, except cargo carriers, the most stringent of the following retrofit emission controls, provided that under no circumstances shall the controls be less stringent than the emission control required by any applicable provision of federal, State or District laws, rules, regulations or requirements:

204.1 The most effective retrofit emission control device or technique that has been successfully utilized for the type of equipment comprising such a source; or

204.2 The most stringent emission limitation achieved by a retrofit emission control device or technique for the type of equipment comprising such a source; or

204.3 Any retrofit control device or technique or any emission limitation that the APCO has determined to be technologically feasible for the type of equipment comprising such a source, while taking into consideration the cost of achieving health risk reductions, any non-air quality health and environmental impacts, and energy requirements; or

204.4 The most stringent emission control for a source type or category specified as MACT by U.S. EPA, or specified in an ATCM by CARB.

11-18-205 Cancer Risk: An estimate of the chance that an individual may develop cancer as a result of exposure to emitted carcinogens at a given receptor location, and considering, where appropriate, Age Sensitivity Factors to account for inherent increased susceptibility to carcinogens during infancy and childhood. [Source: Rule 2-5, Section 2-5-206]

11-18-206 Chronic Hazard Index, or Chronic HI: Chronic hazard index is the sum of the individual chronic hazard quotients for toxic air contaminants identified as affecting the same target organ or organ system. [Source: Rule 2-5, Section 2-5-208]

11-18-207 Chronic Hazard Quotient, or Chronic HQ: Chronic hazard quotient is the ratio of the estimated annual average exposure of the toxic air contaminant to its chronic reference exposure level (estimated for inhalation and non-inhalation exposures). [Source: Rule 2-5, Section 2-5-209]

- 11-18-208 Community Air Risk Evaluation (CARE) Designated Area:** An area where levels of toxic air contaminants are higher than other areas and where people may be particularly vulnerable and may bear disproportionately higher adverse health effects. [Source: Rule 2-5, Section 2-5-227: Priority Community]. The boundaries of the CARE Areas are shown in the March 2014 version of the Air District Document entitled “Identifying Areas with Cumulative Impacts from Air Pollution in the San Francisco Bay Area.” [For illustrative purposes only, the CARE areas are shown on the following map:
<http://www.baaqmd.gov/plans-and-climate/community-air-risk-evaluation-care-program.>]
- 11-18-209 Facility:** Any property, real or personal, which may incorporate one or more plants all being operated or maintained by a person as part of an identifiable business on contiguous or adjacent property, and shall include, but not be limited to manufacturing plants, refineries, power generating plants, ore processing plants, construction material processing plants, automobile assembly plants, foundries and waste processing sites. [Source: Regulation 1, Section 1-215]
- 11-18-210 Health Risk:** The potential for adverse human health effects resulting from exposure to emissions of toxic air contaminants and ranging from relatively mild temporary conditions, such as eye or throat irritation, shortness of breath, or headaches, to permanent and serious conditions, such as birth defects, cancer or damage to lungs, nerves, liver, heart, or other organs. Measures of health risk include cancer risk, chronic hazard index, and acute hazard index. [Source: Rule 2-5, Section 2-5-210]
- 11-18-211 Health Risk Assessment, or HRA:** An analysis that estimates the potential for increased likelihood of health risk for individuals in the affected population that may be exposed to emissions of one or more toxic air contaminants, determined in accordance with Rule 2-5, Section 2-5-603. [Source: Rule 2-5, Section 2-5-211]
- 11-18-212 Maximum Achievable Control Technology, or MACT:** An emission standard promulgated by U.S. EPA pursuant to Section 112(d) of the Clean Air Act.
- 11-18-213 Owner/Operator:** Any person who owns, leases, operates, controls, or supervises a facility, building, structure, installation, or source which directly or indirectly results or may result in emissions of any air pollutant. [Source: Regulation 1, Section 1-241]
- 11-18-214 Risk Action Levels:** Any of the following health risk levels:
214.1 A cancer risk of 10 per million (10/M);
214.2 A chronic hazard index of 1.0; or
214.3 An acute hazard index of 1.0.
- 11-18-215 Risk Reduction Plan or Plan:** A document meeting the requirements of Section 11-18-403 that identifies, among other things, sources, quantities, and causes of emissions responsible for exceedance of any of the risk action levels set forth in Section 11-18-214 and details measures that will be implemented to reduce risk below that threshold.
- 11-18-216 Risk Reduction Measures:** Changes to production processes, feedstocks, product formulations, emission point locations, emissions capture and dispersion mechanisms, and other practices that reduce toxic air contaminant emissions or that reduce health risks at the facility being evaluated.
- 11-18-217 Significant Risk Threshold:** Any of the following toxic health risk levels:
217.1 A cancer risk of 1.0 per million (1.0/M); or
217.2 A chronic hazard index of 0.20; or
217.3 An acute hazard index of 0.20.
- 11-18-218 Source:** Any article, machine, equipment, operation, contrivance or related groupings of such that may produce and/or emit air pollutants.

11-18-219 Toxic Air Contaminant or TAC: An air pollutant that may cause or contribute to an increase in mortality or in serious illness or that may pose a present or potential hazard to human health. For the purposes of this rule, TACs consist of the substances listed in the most recent health risk assessment guidelines adopted by the Office of Environmental Health Hazard Assessment (OEHHA). [Source: Rule 2-5, Section 2-5-222]

11-18-220 Toxic Risk Facility: A facility for which the APCO has determined that a health risk may equal or exceed one or more of the Risk Action Levels.

11-18-300 STANDARDS

11-18-301 Risk Reduction Plan Requirements: Upon notification by the APCO that a facility health risk, as determined by an APCO-approved HRA, equals or exceeds one or more of the risk action levels set forth in Section 11-18-214, the facility owner/operator shall:

301.1 Obtain and maintain an APCO approval of a Risk Reduction Plan (Plan) in accordance with Sections 11-18-402 and 403; or

301.2 Demonstrate to the satisfaction of the APCO that all sources of risk at the facility either:

- 2.1 Are controlled with current TBARCT, or
- 2.2 Do not pose a health risk that equals or exceeds of one or more of the significant risk thresholds set forth in Section 11-18-217.

11-18-302 Risk Reduction Plan Implementation Requirement: A owner/operator of a toxic risk facility shall implement all risk reduction measures identified in an approved Plan prepared in accordance with Sections 11-18-402 and 403.

11-18-400 ADMINISTRATIVE REQUIREMENTS

11-18-401 Health Risk Assessment Information Requirement: Within 30 days of a request from the APCO, a facility owner/operator shall submit to the APCO any information necessary to complete an HRA of the facility.

11-18-402 Risk Reduction Plan Submission Requirements: Unless a facility operator has complied with Subsection 11-18-301.2, within 180 days of notification from the APCO that an APCO-approved HRA indicates a facility health risk exceeds one or more of the risk action levels set forth in Section 11-18-213, the notified facility owner/operator shall submit a draft Plan to the APCO in accordance with Section 11-18-403 that details risk reduction measures that will reduce the health risk from the facility to a level below the risk action level as soon as feasible, but by no later than three (3) years from the date of submission:

402.1 The APCO may extend this time period up to three (3) additional years if the facility owner/operator demonstrates to the APCO that requiring implementation of the Plan within three (3) years places an unreasonable economic burden on the facility operator or is not technically feasible;

402.2 The APCO may shorten the time period proposed by the facility owner/operator for Plan implementation to less than three years if the APCO finds that:

2.1 It is technically feasible and economically practicable to implement the Plan to reduce emissions below the Risk Action Level more quickly; or

2.2 That the toxic risk facility impacts a CARE designated area at a level that exceeds one of the significant risk thresholds.

402.3 Progress on Emissions Reductions: The facility owner/operator shall report annually to the APCO progress on the emission reductions achieved by the Plan until:

3.1 The Plan is fully implemented; or

3.2 The facility owner/operator can demonstrate to the APCO compliance with Subsection 11-18-301.2.

Draft

The report shall be made no later than the anniversary date of the approval date of the Plan pursuant to Subsection 11-18-404.3 and shall be made in a manner consistent with a format developed by the APCO.

11-18-403 Risk Reduction Plan Content Requirements: A facility owner/operator subject to Section 11-18-402 shall submit to the APCO a Plan that includes all of the following:

- 403.1** The name and address of the facility.
- 403.2** The North American Industry Classification System (NAICS) code for the facility.
- 403.3** A source characterization including:
 - 3.1 Summary data from the applicable APCO-approved air toxic emission inventory.
 - 3.2 Summary data from the related health risk assessment.
 - 3.3 Identification of the processes/emission points contributing to the facility health risks.
- 403.4** An evaluation of the risk reduction measures to be implemented including:
 - 4.1 Identification of risk reduction measure(s),
 - 4.2 Anticipated emission reductions,
 - 4.3 Anticipated health risk reduction.
- 403.5** A schedule for implementing the risk reduction measures as expeditiously as feasible, but no later than the timeframes established in Section 11-18-402, including:
 - 5.1 Dates for filing applications for permits to construct.
 - 5.2 Dates equipment will be installed (if applicable).
 - 5.3 Dates process changes will be completed (if applicable).
 - 5.4 Dates for demonstrating the effectiveness of risk reduction measures.
- 403.6** An estimate of residual health risk following implementation of the risk reduction measure(s) specified in the Plan. If the health risk cannot be reduced to below the risk action level within three years, the Plan shall also include the following:
 - 6.1 A demonstration that all sources of risk at the facility are either controlled with TBARCT, or do not pose a health risk in excess of the significant risk threshold, or
 - 6.2 A demonstration of technical infeasibility or unreasonable economic burden associated with reducing the facility health risk below the risk action level or controlling all significant sources with TBARCT within three years and
 - 6.3 Identification of activities to identify or develop additional risk reduction measures to enable the operator to comply by the specified date.
- 403.7** A certification that the Plan meets all requirements. The person who makes this certification shall be one of the following:
 - 7.1 An engineer who is registered as a professional engineer pursuant to Section 6762 of the Business and Professions Code;
 - 7.2 An individual who is responsible for the operations of the source; or
 - 7.3 An environmental assessor registered pursuant to Section 25570.3 of the Health and Safety Code.

11-18-404 Review and Approval of Risk Reduction Plans (Plan): The procedure for determining whether a draft Plan submitted pursuant to Section 11-18-402 or meets the applicable requirements of this Rule is as follows:

- 404.1 Completeness Review:** Within 20 business days of receipt of the draft Plan, the APCO will conduct a completeness review of the draft Plan. The APCO will notify the facility owner/operator in writing if the submitted Plan is lacking information necessary to make an approval determination. The facility owner/operator shall submit a complete draft Plan within 45 days of receipt of this notification. If the APCO determines that the resubmitted draft Plan is still incomplete, the APCO may disapprove the Plan or may notify the facility owner/operator that the draft Plan continues to lack necessary information and provide another opportunity to submit a complete draft Plan in 45 or fewer days.

404.2 Public Comment: The draft Plan, including any revisions made to correct deficiencies, will be made available to the public for 45 days (with exception of confidential information). The APCO will consider any written comments received during this period prior to approving or disapproving the final draft Plan.

404.3 Final Action:

3.1 The APCO will approve the draft Plan if the APCO determines that the draft Plan meets the requirements of Section 11-18-402 and will provide written notification to the facility owner/operator.

3.2 If the APCO determines that the draft Plan does not meet the requirements of Section 11-18-402, the APCO will notify the facility owner/operator in writing and will specify the basis for this determination. Upon receipt of such notification, the facility owner/operator shall correct the identified deficiencies and resubmit the draft Plan within 45 days.

3.3 If the APCO determines that the facility owner/operator failed to correct any deficiency identified in the notification, the APCO will determine that the facility owner/operator has failed to meet the requirements of Section 11-18-402, and will disapprove the draft Plan.

404.4 Public Inspection: Within 30 days of the approval of a Plan under Subsection 11-18-404.3, the APCO shall post the Plan on the Air District's website, and shall notify any member of the public, who submitted comments under Subsection 11-18-404.2, or who otherwise requested such notification of this action in writing. In making information available for public inspection, the confidentiality of trade secrets, as designated by the refinery owner/operator, shall be handled in accordance with Section 6254.7 of the Government Code.

11-18-405 Updated Risk Reduction Plan: If information becomes available after the initial APCO approval of a Plan regarding health risks posed by a facility or emissions reduction technologies that may be used by a facility that would significantly impact health risks to exposed persons, the APCO may require a facility owner/operator to update the Plan to reflect the information and resubmit the Plan to the APCO for approval pursuant to Section 11-18-401.