

**MONTEREY BAY AIR RESOURCES DISTRICT  
REGULATION X  
TOXIC AIR CONTAMINANTS**

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RULE 1003 AIR TOXICS EMISSIONS INVENTORY AND RISK ASSESSMENTS  
*(Adopted 11/9/88; revised 1/18/89, 2/16/94, 11/23/94, 4/26/95, 6/18/97, and  
2/15/17)*

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**PART 1 GENERAL**

**1.1 Purpose**

The purpose of this Rule is to comply with the California Health & Safety Code Part 6, Section 44300 et seq., by establishing and implementing a program to inventory air toxics emissions, to assess the risk to public health from exposure to these emissions, to notify the public of any known significant health risk associated with toxic emissions from any facility, and to prepare Risk Reduction Audits and Plans to effect risk reductions.

**1.2 Applicability**

The provisions of this Rule shall apply to any facility which manufactures, formulates, uses or releases any substances listed by the California Air Resources Board pursuant to Section 44321 of the California Health and Safety Code, or any other substance which reacts to form a substance listed pursuant to Section 44321.

**1.3 Exemptions**

Any facility described as exempt according to the Emissions Inventory Criteria and Guidelines Report adopted by the California Air Resources Board and determined by the District to meet those criteria shall be exempt from the requirements of this Rule.

**1.4 Effective Dates**

This Rule has been in effect since November 9, 1988. The Rule in its present form is effective on February 15, 2017.

**1.5 References**

The requirements of this rule arise from the provisions of:

1.5.1 California Health and Safety Code, Part 6, Air Toxics "Hot Spots" Information And Assessment, Sections 44300 to 44394.

1.5.2 Amendments to Titles 17 and 26, California Code of Regulations, Subchapter 7.6, Emissions Inventory Criteria and Guidelines Report, Sections 93300 to 93355.

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**PART 2 DEFINITIONS**

This rule shall utilize the definitions contained in the current version of the Emissions Inventory Criteria and Guidelines Report as adopted by the California Air Resources Board.

**2.1 Cancer Risk**

The added risk (probability) of cancer that results from lifetime continuous exposure. This risk is given in terms of the additional probability that cancer will occur in a person remaining at a single location for 70 years. This risk is the risk over and above existing risks from other causes. For example, a risk of 10 in one million indicates the individual's added risk of cancer (due to exposure to this source) is ten chances in one million.

**2.2 Non-Cancer Risk (Hazard Index)**

The non-cancer risk (hazard index) is an indicator of the potential health hazard of a substance with regard to its non-cancer effects. The underlying assumption is that there is a threshold for these effects and they will not occur if exposure remains below a reference exposure limit (REL). RELs describe acute and chronic exposure limits, i.e., one hour maximum and annual average concentrations. RELs are generally based on the most sensitive adverse health effect reported in the medical and toxicological literature. Additionally, RELs are designed to protect the most sensitive individuals in the population by the inclusion of margins of safety.

An exposure equal to the REL equates to a hazard index score of 1. A hazard index score of 2 means that the concentration of toxics in the air is 2 times more than the exposure level that causes adverse health effects. Substances that cause adverse health effects to the same organs are added together to determine hazard index scores.

**2.3 Significant Cancer Risk or Significant Health Risk**

A cancer risk greater than 10 in one million and hazard index scores greater than one.

**PART 3 REQUIREMENTS**

**3.1 Risk Assessments**

**3.1.1 Health Risk Assessment Prioritization**

Within 90 days of completion of the review of all emissions inventory data, the

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Air Pollution Control Officer shall, based on examination of the emissions inventory data and in consultation with the State Air Resources Board and the Office of Environmental Health Hazard Assessment, prioritize and then categorize those facilities for the purposes of health risk assessment. This determination shall be made using the formulas listed in Subsections 3.1.1.1 through 3.1.1.3.

Facilities with a total score (St) of ten or more in any category (carcinogen, acute or chronic) shall prepare a Risk Assessment. The prioritization method shall be based on the California Air Pollution Control Officers Association (CAPCOA) Air Toxics "Hot Spots" Program most recent Facility Prioritization Guidelines or other method approved by the Air Pollution Control Officer.

**3.1.2 Health Risk Assessment Submittal Deadline**

Within 150 days of the determination that a facility must prepare a Risk Assessment pursuant to Section 3.1, the operator of every facility that must prepare a Risk Assessment shall prepare and submit to the Air Pollution Control Officer a Health Risk Assessment pursuant to Section 44361 of the Health and Safety Code. A 30-day extension for the submittal of the Health Risk Assessment may be allowed if arranged prior to the due date.

**3.1.3 Identical Facilities Risk Assessments**

The Air Pollution Control Officer shall, except where site specific factors may affect the results, allow the use of a single Health Risk Assessment for two or more substantially identical facilities.

**3.1.4 Health Risk Submittals to the District**

Each Health Risk Assessment shall be submitted to the Air Pollution Control Officer. Each Health Risk Assessment shall be prepared in accordance with the current Air Toxics "Hot Spots" Program Risk Assessment Guidelines published by the California Air Pollution Control Officers Association (CAPCOA) and the California Air Resources Board. The use of the CAPCOA Guidelines shall be superseded by the use of the risk assessment guidelines when published by the Office of Environmental Health Hazard Assessment pursuant to Health and Safety Code Section 44360.

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3.1.5 Approval of Health Risk Assessments

After receiving comments from the Office of Environmental Health Hazard Assessment, the Air Pollution Control Officer shall approve, or return for revision and resubmission and then approve, the Health Risk Assessment within 180 days of receipt. If the Health Risk Assessment has not been revised and resubmitted within 60 days of the Air Pollution Control Officer's request of the operator to do so, the Air Pollution Control Officer may modify the Health Risk Assessment and approve it as modified.

3.1.6 Public Notice of Community Risks

Upon approval of the Health Risk Assessment, the District shall provide notice to the community in accordance with Health and Safety Code Section 44362 and the current CAPCOA Air Toxic "Hot Spots" Program Public Notification Guidelines.

Facilities required to complete the public notification process must pay the District the actual cost of staff time required for the District to prepare, send, and respond to the public notices based on the staff hourly rate and the cost of the mailing.

3.2 Risk Reduction Audits and Plans

3.2.1 Risk Reduction Schedules

3.2.1.1 Five Year Risk Reduction Implementation Schedule

Whenever a Health Risk Assessment approved pursuant to Subsection 3.1.5 indicates, in the judgment of the District, that there is a significant risk associated with the emissions from a facility, the facility operator shall conduct an Airborne Toxic Risk Reduction Audit and develop a Plan to implement airborne toxic risk reduction measures that will result in the reduction of emissions from the facility to a level below the significant risk level within five years of the date the Plan is submitted to the District. The significant risk threshold established is cancer risk levels greater than ten in one million and or a hazard index scores greater than one. The facility operator shall implement measures set forth in the Plan in accordance with this Section.

3.2.1.2 Expedited Implementation Schedule

The period to implement the Plan required by Subsection 3.2.1.1 may be

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shortened by the Air Pollution Control Officer, upon finding that it is technically feasible and economically practicable to implement the Plan to reduce emissions below the significant risk level more quickly, or if it finds that the emissions from the facility pose an unreasonable health risk.

**3.2.1.3 Extended Implementation Schedule**

The period to implement the Risk Reduction Plan may be lengthened by up to an additional five years, if the Air Pollution Control Officer finds that a period longer than five years will not result in an unreasonable risk to public health and that requiring implementation of the Plan within five years places an unreasonable economic burden on the facility operator or is not technically feasible.

**3.2.2 Risk Reduction Audit and Plan Due Date**

The Risk Reduction Audit and Plan shall be submitted to the District, within 180 days of the District's determination of significant risk, for review of completeness. The District's review of completeness shall include a substantive analysis of the emission reduction measures included in the Plan, and the ability of those measures to achieve emission reduction goals as quickly as feasible.

**3.2.3 Extended Time Frame for Deficient Audits and Plans**

If the Audit and Plan does not meet the requirements for completeness, the facility shall correct the specified deficiencies identified by the District. A facility operator shall submit a revised Audit and Plan addressing the deficiencies identified by the District within 90 days of receipt of a deficiency notice.

**3.2.4 Plan Implementation Progress Reports**

Progress on the emission reductions achieved by the Plan shall be reported to the District annually.

**3.2.5 Updated Plans Required**

If new information becomes available after the initial Risk Reduction Audit and Plan, regarding either air risks posed by a facility, or emission reduction technologies that may be used by a facility that would significantly impact risks to exposed persons, the

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Air Pollution Control Officer may require the Plan to be updated and resubmitted to the District.

**3.2.6 Audits and Plans – Required Contents**

A facility operator subject to this chapter shall conduct an Airborne Toxic Risk Reduction Audit and develop a Plan which shall include at a minimum all of the following:

- 3.2.6.1 The name and location of the facility.
- 3.2.6.2 The SIC code for the facility.
- 3.2.6.3 The chemical name and the generic classification of the chemical.
- 3.2.6.4 An evaluation of the ATRRMs available to the operator.
- 3.2.6.5 The specification of, and rationale for, the ATRRMs that will be implemented by the operator. The Audit and Plan shall document the rationale for rejecting ATRRMs that are identified as infeasible or too costly.
- 3.2.6.6 A schedule for implementing the ATRRMs.

**3.2.7 Self-Conducted Audits and Checklist**

A self-conducted Audit and Checklist instead of a full Risk Reduction Audit and Plan may be submitted to the District for any industry which is comprised mainly of small businesses using substantially similar technology if a self-conducted audit protocol is developed by the California Air Resources Board and is approved by the District.

**3.2.8 Preparer's Qualifications Requirements**

Pursuant to Section 44392 of the Health and Safety Code, the Audit and Plan shall be reviewed and certified as meeting the requirements of this Rule by an engineer who is registered as a professional engineer pursuant to Section 6762 of the Business and Professions Code, by an individual who is responsible for the processes and operations of the site, or by an environmental assessor.