

Draft

**Initial Study/Mitigated Negative Declaration
for the Amendments to Bay Area Air Quality
Management District Regulation 8, Rule 16
(Solvent Cleaning Operations)**

Prepared for:

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Contents

Chapter 1	Introduction	1-1
	Purpose of This Document	1-1
	Scope of This Document.....	1-1
	Impact Terminology.....	1-2
	Organization of This Document	1-2
Chapter 2	Description of Proposed Amendments.....	2-1
	Background	2-1
	Proposed Amendments	2-2
	Affected Area.....	2-2
Chapter 3	Environmental Checklist.....	3-1
	Aesthetics.....	3-3
	Setting	3-3
	Discussion of Impacts	3-3
	Agricultural Resources.....	3-4
	Setting	3-4
	Discussion of Impacts	3-4
	Air Quality.....	3-5
	Setting	3-5
	Discussion of Impacts	3-7
	Biological Resources.....	3-8
	Setting	3-8
	Discussion of Impacts	3-9
	Cultural Resources.....	3-10
	Setting	3-10
	Discussion of Impacts	3-11
	Geology and Soils.....	3-12
	Setting	3-12
	Discussion of Impacts	3-13
	Hazards and Hazardous Materials.....	3-14
	Setting	3-15
	Discussion of Impacts	3-18
	Hydrology and Water Quality.....	3-20
	Setting	3-21
	Discussion of Impacts	3-21
	Land Use and Planning.....	3-23
	Setting	3-23
	Discussion of Impacts	3-23

Mineral Resources.....	3-24
Setting	3-24
Discussion of Impacts	3-24
Noise.....	3-25
Setting	3-25
Discussion of Impacts	3-26
Population and Housing.....	3-28
Setting	3-28
Discussion of Impacts	3-28
Public Services.....	3-29
Setting	3-29
Discussion of Impacts	3-30
Recreation.....	3-31
Setting	3-31
Discussion of Impacts	3-31
Transportation/Traffic.....	3-32
Setting	3-32
Discussion of Impacts	3-33
Utilities and Service Systems.....	3-34
Setting	3-34
Discussion of Impacts	3-35
Mandatory Findings of Significance.....	3-36
Discussion of Impacts	3-36
Chapter 4 References Cited	4-1

Purpose of This Document

This initial study/mitigated negative declaration (IS/MND) is a public document that assesses the environmental effects (impacts) of the proposed amendments to Bay Area Air Quality Management District (BAAQMD) Regulation 8, “Organic Compounds,” Rule 16, “Solvent Cleaning Operations,” (Rule 16) as required by the California Environmental Quality Act (CEQA) and in compliance with the State CEQA Guidelines (14 California Administrative Code 1400 et seq.). An IS/MND serves as an informational document to be used in the local planning and decision-making process; it does not recommend approval or denial of the project analyzed therein. BAAQMD, the state lead agency under CEQA, must consider the impacts of the proposed amendments when determining whether to approve the amendments. BAAQMD has prepared this IS/MND because all significant impacts resulting from the proposed amendments would be reduced to less-than-significant levels through the implementation of mitigation measures.

Scope of This Document

This document evaluates the proposed amendment’s impacts on the following resource areas:

- aesthetics,
- agricultural resources,
- air quality,
- biological resources,
- cultural resources,
- geology and soils,
- hazards and hazardous materials,
- hydrology and water quality,
- land use planning,
- mineral resources,

- noise,
- population and housing,
- public services,
- recreation,
- transportation/traffic, and
- utilities and service systems.

The impacts on these resource areas are evaluated using the initial study checklist in chapter 3; each resource area is divided into several topics designated by letter. The level of significance of an impact on a resource topic is indicated through the use of the terms discussed below.

Impact Terminology

The following terminology is used in this IS/MND to describe the levels of significance of impacts that would result from the proposed amendments.

- A conclusion of *no impact* is appropriate when the analysis concludes that there would be no impact on a particular resource topic.
- An impact is considered *less than significant* if the analysis concludes that an impact on a particular resource topic would not be significant (i.e., would not exceed certain criteria or guidelines established by BAAQMD).
- An impact is considered *less than significant with mitigation incorporated* if the analysis concludes that that an impact on to a particular resource topic would be significant (i.e., would exceed certain criteria or guidelines established by BAAQMD) but would be reduced to a less-than-significant level through the implementation of mitigation.

Organization of This Document

The content and format of this document, described below, are designed to meet the requirements of CEQA.

- Chapter 1, “Introduction,” identifies the purpose, scope, and terminology of the document.
- Chapter 2, “Description of the Proposed Amendments,” provides background information on Rule 16, describes the proposed amendments, and describes the area and facilities that would be affected by Rule 16 and the amendments.
- Chapter 3, “Environmental Checklist,” presents the checklist responses for each resource topic. This chapter includes a brief setting description for each resource area and identifies the proposed amendment’s impacts on the resources topics listed in the checklist.

- Chapter 4, “References Cited,” identifies all printed references and personal communications cited in this report.

Description of Proposed Amendments

Background

The original intent of Rule 16 was to reduce emissions of volatile organic compounds (VOCs), which are ozone precursors, from solvent cleaning operations. Ozone, a criteria pollutant, is formed from a reaction of VOCs and oxides of nitrogen (NO_x) in the presence of ultraviolet light (sunlight). Rule 16 seeks to reduce VOC emissions by establishing operating requirements and equipment standards for solvent cleaning operations that include cleaning or drying metal or nonmetal surfaces using cold, vapor, or conveyORIZED solvent cleaners; solvent cleaners emit VOCs as they evaporate. Facilities to which Rule 16 applies include those that use organic solvents for removing uncured coatings, inks, adhesives, dust, oils, and other contaminants; for maintaining application equipment, spray booths, and other materials used in the coating process; and for preparing substrate prior to coating, usually by wipe cleaning. Examples of affected commercial and manufacturing facilities (i.e., those that conduct repair and maintenance cleaning operations that use cold cleaners) include facilities that conduct automotive repair (e.g., automotive exhaust systems, tires, automotive glass, transmissions), including motorcycles and industrial trucks; and machine shops.

Rule 16 was written based on the standards described in the U.S. Environmental Protection Agency's (EPA's) 1977 *Control of Volatile Organic Emissions from Solvent Metal Cleaning* and the California Air Resources Board's (CARB's) 1991 *Organic Solvent Cleaning and Solvent Cleaning Operations*. Since its adoption in 1979, the rule has been amended to correct deficiencies that were identified by EPA during the post-1987 State Implementation Plan review, and to clarify its applicability. Amendments in 1998 were based in part on South Coast Air Quality Management District (SCAQMD) Rule 1171.

The current proposed amendments are based on rules already adopted by the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) and SCAQMD. One of the steps involved in modifying an existing regulation within the program is to conduct a CEQA analysis to determine whether a rule or amendment might have any unanticipated adverse environmental impacts; this IS/MND has been prepared for this purpose.

Proposed Amendments

BAAQMD is proposing to amend Rule 16 to reduce emissions of VOCs by eliminating cold cleaners that use organic solvent in targeted industries and by requiring the use of aqueous solutions containing no more than 50 grams per liter (0.42 pound per gallon) of organic solvent. To accommodate changes in technology (i.e., new cleaning materials and equipment), new language is also proposed to clarify the specific applicability of the rule sections. The proposed amendments are intended to implement control measure SS-14 from the *Revised 2001 San Francisco Bay Area Ozone Attainment Plan for the 1-Hour National Ozone Standard* (Revised 2001 OAP) (Bay Area Air Quality Management District 2001a).

In developing the draft rule, BAAQMD staff conducted a preliminary analysis of the proposed amendments to Rule 16 and prepared a staff report describing the findings (Bay Area Air Quality Management District 2002). BAAQMD also held a public workshop to review and discuss the proposed amendments. The workshop was held on Tuesday, June 18, 2002, in Alameda, California, and focused on the use of low-VOC solvents in parts cleaners in repair and maintenance cleaning operations, and on the implementation of SS-14.

Affected Area

Rule 16 applies within the areas under BAAQMD jurisdiction—all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties (approximately 5,600 square miles). In terms of physiography, the San Francisco Bay Area is characterized by a large, shallow basin surrounded by coastal mountain ranges tapering into sheltered inland valleys. The combined climatic and topographic factors result in increased potential for the accumulation of air pollutants in the inland valleys and reduced potential for buildup of air pollutants along the coast. Most operations affected by the rule take place within existing commercial and industrial buildings and facilities.

EPA has set primary national ambient air quality standards (NAAQS) for ozone and other air pollutants to define the levels considered safe for human health. CARB has set a similar standard (i.e., state ambient air quality standard [SAAQS]) for ozone. The federal and state standards are 12 and 9 parts per hundred million (pphm), respectively. The BAAQMD is designated as an unclassified nonattainment area for the 1-hour NAAQS for ozone and as a nonattainment area for the 1-hour SAAQS. Under the requirements of both the federal and California Clean Air Acts (CAA and CCAA), areas that do not comply with the state standard must prepare plans to reduce ozone (e.g., the 2001 OAP).

Chapter 3

Environmental Checklist

ENVIRONMENTAL CHECKLIST FORM

- 1. Project Title:** Amendments to Bay Area Air Quality Management District Regulation 8, “Organic Compounds,” Rule 16, “Solvent Cleaning Operations”
- 2. Lead Agency Name and Address:** Bay Area Air Quality Management District
939 Ellis Street
San Francisco, California 94109
- 3. Contact Person and Phone Number:** M. K. Carol Lee, Senior Air Quality Engineer
415/749-4689 or clee@baaqmd.gov
- 4. Project Location:** This rule applies to the area within the jurisdiction of the BAAQMD, which encompasses all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties.
- 5. Project Sponsor’s Name and Address:** (same as above)
- 6. General Plan Designation:** N/A
- 7. Zoning:** N/A
- 8. Description of Project:** See “Background” and “Proposed Amendments” in Chapter 2
- 9. Surrounding Land Uses and Setting:** See “Affected Area” in Chapter 2
- 10. Other Public Agencies Whose Approval Is Required:** None

Environmental Factors Potentially Affected:

The environmental factors checked below would potentially be affected by this project (i.e., the project would involve at least one impact that is a “Potentially Significant Impact”), as indicated by the checklist on the following pages.

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agricultural Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology/Soils |
| <input type="checkbox"/> Hazards and Hazardous Materials | <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning |
| <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing |
| <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation/Traffic |
| <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Mandatory Findings of Significance | |

Determination:

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have an impact on the environment that is “potentially significant” or “potentially significant unless mitigated” but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards and (2) has been addressed by mitigation measures based on the earlier analysis, as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the project, nothing further is required.

Signature

Date

Printed Name

For

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
I.	AESTHETICS.				
	Would the project:				
a.	Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b.	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c.	Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d.	Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara Counties, and portions of western Solano and southern Sonoma Counties. In terms of physiography, the Bay Area is characterized by a large, shallow basin surrounded by coastal mountain ranges. Because the area of coverage is so vast (approximately 5,600 square miles), land uses vary greatly and include commercial, industrial, residential, and agricultural uses.

Discussion of Impacts

- a-c. Cleaning solvents are typically used within existing buildings. No building alterations that could affect scenic resources or degrade the visual character or quality of a site are anticipated as a result of the proposed amendments. Therefore, there is no impact.
- d. No additional sources of light would be required for the facilities under the proposed amendments. Affected facilities are generally located in industrial/commercial areas, and existing light sources are expected to be sufficient. Therefore, there is no impact.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
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II. AGRICULTURAL RESOURCES.

In determining whether impacts on agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation. Would the project:

a.	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b.	Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c.	Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting

As described under “Aesthetics,” land uses in the affected area vary greatly and include agricultural lands. Some of these agricultural lands are under Williamson Act contracts.

Discussion of Impacts

a–c. The proposed amendments would not require conversion of existing agricultural land to other uses. The proposed amendments would not conflict with existing agriculture-related zoning designations or Williamson Act contracts. Williamson Act lands within the BAAQMD would not be affected. No effects on agricultural resources are expected because the proposed amendments apply to existing operations involving use of cleaning solvents. Because no changes in manufacturing locations or facilities are expected, there is no potential for conversion of farmland or conflicts related to agricultural uses or land under a Williamson Act contract. Therefore, there is no impact.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
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III. AIR QUALITY.

When available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

Would the project:

a.	Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b.	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d.	Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e.	Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting

Existing Conditions

The pollutants of greatest concern in the BAAQMD are various components of photochemical smog (ozone and other pollutants), and particulate matter less than or equal to 10 microns in diameter (PM10). Ozone, a criteria pollutant, is formed from a reaction of VOCs and NO_x in the presence of ultraviolet light (sunlight). Ozone problems arise primarily from vehicle traffic associated with urban development. However, stationary source activities also contribute to the emission inventory. Sensitive land uses typically include residences, hospitals, schools, and motels/hotels. These land uses are considered sensitive to air pollutants because people are often situated in these areas for extended periods of time.

The primary purpose of Rule 16 is to limit the emissions of VOCs. Some solvent cleaning operations lead to the creation of VOCs through the evaporation of

cleaning solutions. BAAQMD staff estimate that there are approximately 6,000 facilities within the BAAQMD that engage in solvent cleaning operations that include the process of cleaning or drying metal and nonmetal surfaces using cold, vapor, or conveyORIZED solvent cleaners. Such facilities include those that perform automotive exhaust systems repair, tire retreading and repair, automotive glass replacement, automotive transmission repair, general automotive repair, motorcycle repair, and industrial truck repair.

The federal and state governments have established standards (NAAQS and SAAQS, respectively) for these and other criteria pollutants. The BAAQMD is designated as a nonattainment area for the 1-hour NAAQS and SAAQS for ozone.

Regulatory Setting

At the federal level, the federal CAA Amendments of 1990 give EPA additional authority to require states to reduce emissions of ozone precursors and PM10 in nonattainment areas. The amendments set new attainment deadlines based on the severity of problems. At a state level, CARB has traditionally established SAAQS, maintained oversight authority in air quality planning, developed programs for reducing emissions from motor vehicles, developed air emission inventories, collected air quality and meteorological data, and approved state implementation plans. At a more local level, California's air districts (e.g., BAAQMD) are responsible for overseeing stationary source emissions, approving permits, maintaining emissions inventories, maintaining air quality stations, overseeing agricultural burning permits, and reviewing air quality-related sections of environmental documents required by CEQA.

Bay Area Air Quality Management District

BAAQMD regulates air contaminants from stationary sources. BAAQMD is governed by a 21-member Board of Directors composed of publicly elected officials apportioned according to the population of the represented counties. The board has the authority to develop and enforce regulations for the control of air pollution within its jurisdiction. BAAQMD is responsible for implementing emissions standards and other requirements of federal and state laws. (Bay Area Air Quality Management District 2001b.)

BAAQMD's most recent plan for the California ozone standard, the 2000 Clean Air Plan, was prepared by BAAQMD in cooperation with the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG), and was adopted by the BAAQMD Board of Directors on December 20, 2000. The plan's main objective is to attain the SAAQS for ozone. It presents a comprehensive strategy to reduce emissions from stationary, area, and mobile sources, and includes a specific measure that encourages cities and counties to develop and implement local plans, policies, and programs to

reduce auto use and improve air quality. The CCAA requires regions to update their (state) air quality plans every 3 years.

The proposed rule amendments implement control measure SS-14 from BAAQMD's most recent plan for the federal ozone standard, the 2001 OAP. The 2001 OAP was developed in response EPA's partial disapproval of the 1999 OAP and finding of failure to attain the NAAQS for ozone of the 2001 OAP. In response to EPA's findings, BAAQMD, MTC, and ABAG prepared the Revised 2001 OAP, which includes a strategy to meet applicable federal CAA planning requirements, to address deficiencies in the 1999 OAP, and to attain the 1-hour NAAQS for ozone in the Bay Area. Part of the strategy is to adopt control measures, such as SS-14. SS-14 would remove exemptions for a single solvent cleaner per facility and for solvent cleaners with permits, and would require Bay Area adoption of general and specialty cleaning requirements. The proposed amendments will eliminate cold cleaners using organic solvent in targeted industries and require the use of aqueous solutions that contain not more than 50 grams per liter of organic solvent.

The proposed amendments are also based in part on SCAQMD Rule 1117 and rules recently adopted by the SJVUAPCD and by the Sacramento Metropolitan Air Quality Management District.

Discussion of Impacts

- a–e. The proposed amendments would result in the reduction of 2.2 tons of VOCs (which are ozone precursors) per day in the BAAQMD. These emission reductions are an air quality benefit. Therefore, there is no impact.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES.					
	Would the project:				
a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c.	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f.	Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara Counties, and portions of western Solano and southern Sonoma Counties. The land uses and affected environment vary substantially throughout the area. Rule 16 applies to the use of solvent cleaners at stationary sources within the BAAQMD. The majority of affected stationary

sources occur in areas zoned for industrial or commercial land use. Typically, these facilities are surrounded by other commercial and industrial facilities. Because this is a rule revision and affected sources have been previously identified, BAAQMD has an inspection and tracking program that monitors compliance at the affected facilities.

Discussion of Impacts

- a-f. No effects on biological resources are anticipated because the proposed amendments apply to existing operations involving the use of cleaning solvents, most of which take place within existing facilities. No construction outside existing facilities is expected. The proposed amendments neither require nor are likely to result in activities that would affect sensitive biological resources. The solvent cleaners currently being used may contain air toxics, including benzene, xylene, terpenes, and glycol ethers. Numerous aqueous cleaning solutions are currently available for use as a substitute for solvent cleaners. These solutions may be used in one of five types of cleaning systems offered by vendors in the Bay Area. The formulation and chemical properties of aqueous cleaners vary depending on the cleaning application and type of solution. Properties can be divided into groups of solutions that include neutral solutions, acid solutions, alkaline solution, and enzyme formulations. In addition, depending on the cleaning application, solutions may have additives for emulsifying oils, and solution with surfactants to separate oil. The substitution of aqueous solutions has been studied as a pollution prevention method for over 15 years. EPA has developed the SAGE computer program to help industries to identify viable cleaning alternatives. This program is available on the EPA web site (<http://www.epa.gov/TTN/CATC>).

Based on the review of a wide variety of Material Safety Data Sheets and other health information related to aqueous solutions, the substitution of aqueous solutions would not generate an increase in emissions of air toxics. Health risks and emissions of air toxics would be reduced when compared to existing solvent cleaners such as mineral spirits. In a report developed by the Institute of Research and Technical Assistance (1997), the environmental effects and toxicity of aqueous cleaners were compared to solvent cleaners and chlorinated solvents. The report found that there were no increases in air toxics associated with the conversion to aqueous solutions. A study of aqueous cleaner substitution conducted on behalf of EPA and the Santa Barbara County Air Pollution Control District found that the use of aqueous cleaning solutions reduced human health risk compared to the use of solvent cleaners. Water-based cleaners were found to reduce the exposure of workers and the surrounding community to VOCs and air toxics (Institute of Research and Technology 1998a). Therefore, there is no impact.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
V. CULTURAL RESOURCES.					
Would the project:					
a.	Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d.	Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting

Cultural resources are defined as buildings, sites, structures, or objects that might have historical, architectural, archaeological, cultural, or scientific importance. The State CEQA Guidelines define a significant cultural resource as a “resource listed or eligible for listing on the California Register of Historical Resources [CRHR]” (Public Resources Code Section 5024.1). A project would have a significant impact if it would cause a substantial adverse change in the significance of a historical resource (State CEQA Guidelines Section 15064.5[b]). A substantial adverse change in the significance of a historical resource would result from an action that would demolish or adversely alter the physical characteristics of the historical resource that convey its historical significance and that qualify the resource for inclusion in the CRHR or in a local register or survey that meets the requirements of Public Resources Code Sections 5020.1(k) and 5024.1(g).

The majority of affected stationary sources occur in areas zoned for industrial or commercial land use. Typically, these facilities are surrounded by other commercial and industrial facilities. Because this is a rule revision and affected sources have been previously identified, BAAQMD has an inspection and tracking program that monitors compliance at the affected facilities.

Discussion of Impacts

- a–d. No effect on cultural resources is expected because the proposed amendments apply to existing operations involving the use of cleaning solvents, most of which take place within existing facilities. No construction outside existing facilities is expected. The proposed amendments neither require nor are likely to result in activities that would affect cultural resources. Therefore, there is no impact.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
VI. GEOLOGY AND SOILS.					
Would the project:					
a.	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	2. Strong seismic groundshaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	4. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b.	Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c.	Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and potentially result in an onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d.	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e.	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara Counties, and portions of western Solano and southern Sonoma Counties. The land uses and affected environment vary substantially throughout the area. Rule 16 applies to the use of solvent cleaners

at stationary sources within the boundaries of the BAAQMD. BAAQMD has identified approximately 6,000 facilities within the district that engage in solvent cleaning operations that include the process of cleaning or drying metal and nonmetal surfaces using cold, vapor, or conveyORIZED solvent cleaners. The majority of affected stationary sources occur in areas zoned for industrial or commercial land use. Typically, these facilities are surrounded by other commercial and industrial facilities. Because this is a rule revision and affected sources have been previously identified, BAAQMD has an inspection and tracking program that monitors compliance at the affected facilities.

Discussion of Impacts

- a-e. No effect on geology or soils is expected because the proposed amendments apply to existing operations involving the use of solvents, most of which take place within existing facilities. No construction outside existing facilities is expected. The proposed amendments neither require nor are likely to result in activities that would affect geology or soils. Therefore, there is no impact.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
VII. HAZARDS AND HAZARDOUS MATERIALS.					
Would the project:					
a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c.	Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d.	Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e.	Be located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f.	Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h.	Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting

As stated under “Air Quality,” BAAQMD regulates air contaminants from stationary sources. It is governed by a 21-member Board of Directors composed of publicly elected officials apportioned according to the population of the represented counties. The board has the authority to develop and enforce regulations for the control of air pollution within its jurisdiction. (Bay Area Air Quality Management District 2001b.)

The Inspection Program of the Compliance and Enforcement Division routinely conducts inspections and audits to ensure compliance with applicable federal, state, and BAAQMD regulations. Source categories include refineries, chemical plants, semiconductor manufacturing facilities, dry cleaners, ink and coating operations, gasoline dispensing facilities, and asbestos demolition and renovation. BAAQMD also regulates any other activities that result in the emission of air contaminants that interfere with attainment and maintenance of health-based air quality standards or may cause a public nuisance. (Bay Area Air Quality Management District 1999.)

In addition to the inspection and compliance programs of the BAAQMD, hazards and hazardous materials are regulated by a variety of agencies under various laws and regulations. Brief descriptions of the applicable regulations for hazards and hazardous materials are listed below.

Regulatory Setting

A hazardous material is defined by the California Department of Toxic Substances Control (DTSC) as a material that poses a significant present or potential hazard to human health and safety or the environment if released because of its quantity, concentration, or physical or chemical characteristics (26 California Code of Regulations [CCR] 25501). For the purposes of this analysis, hazardous materials include raw materials, and hazardous waste includes waste generated by facilities and businesses or waste material remaining onsite as a result of past activities. Regulations and policies considered relevant to the proposed amendments are summarized below.

Federal Regulations

The principal federal regulatory agency responsible for the safe use and handling of hazardous materials is EPA. Two key federal regulations pertaining to hazardous wastes are described below. Other applicable federal regulations are contained primarily in 29, 40, and 49 Code of Federal Regulations.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act enables EPA to administer a regulatory program that extends from the manufacture of hazardous materials to disposal, thus regulating the generation, transportation, treatment, storage, and disposal of hazardous waste at all facilities and sites in the nation.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act, also known as Superfund, was passed to facilitate the cleanup of the nation's toxic waste sites. In 1986, Superfund was amended by the Superfund Amendment and Reauthorization Act Title III (community right-to-know laws). Title III states that past and present owners of land contaminated with hazardous substances can be held liable for the entire cost of the cleanup, even if the material was dumped illegally when the property was under different ownership.

State Regulations

California regulations are equal to or more stringent than federal regulations. EPA has granted the state primary oversight responsibility to administer and enforce hazardous waste management programs. State regulations require planning and management to ensure that hazardous wastes are handled, stored, and disposed of properly to reduce risks to human health and the environment. Several key laws pertaining to hazardous wastes are discussed below.

Hazardous Materials Release Response Plans and Inventory Act

The Hazardous Materials Release Response Plans and Inventory Act, also known as the Business Plan Act, requires businesses using hazardous materials to prepare a plan that describes their facilities, inventories, emergency response plans, and training programs. Hazardous materials are defined as raw or unused materials that are part of a process or manufacturing step. They are not considered to be hazardous waste. Health concerns pertaining to the release of hazardous materials, however, are similar to those relating to hazardous waste.

Hazardous Waste Control Act

The Hazardous Waste Control Act created the state hazardous waste management program, which is similar to, but more stringent than, the federal Resource Conservation and Recovery Act program. The act is implemented by regulations

contained in 26 CCR, which describes the following required aspects for the proper management of hazardous waste:

- identification and classification;
- generation and transportation;
- design and permitting of recycling, treatment, storage, and disposal facilities;
- treatment standards;
- operation of facilities and staff training; and
- closure of facilities and liability requirements.

These regulations list more than 800 materials that may be hazardous and establish criteria for identifying, packaging, and disposing of such waste. Under the Hazardous Waste Control Act and 26 CCR, the generator of hazardous waste must complete a manifest that accompanies the waste from the generator to the transporter to the ultimate disposal location. Copies of the manifest must be filed with DTSC.

Emergency Services Act

Under the Emergency Services Act, the state developed an emergency response plan to coordinate emergency services provided by federal, state, and local agencies. Rapid response to incidents involving hazardous materials or hazardous waste is an important part of the plan, which is administered by the California Office of Emergency Services. The office coordinates the responses of other agencies, including EPA, the California Highway Patrol, regional water quality control boards, air quality management districts, and county disaster response offices.

Other Laws, Regulations, and Programs

Various other state regulations have been enacted that affect hazardous waste management, including:

- Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65), which requires labeling of substances known or suspected by the state to cause cancer; and
- California Government Code Section 65962.5, which requires the Office of Permit Assistance to compile a list of possible contaminated sites in the state.

State and federal regulations also require that hazardous materials sites be identified and listed in public records. These lists include:

- Comprehensive Environmental Response, Compensation, and Liability Information System;

- National Priorities List for Uncontrolled Hazardous Waste Sites;
- Resource Conservation and Recovery Act;
- California Superfund List of Active Annual Workplan Sites; and
- lists of state-registered underground and leaking underground storage tanks.

Discussion of Impacts

- a–c. The proposed amendments include an increase in the use of aqueous solutions containing no more than 50 grams per liter of organic solvent. Some such aqueous solvent formulations contain chemicals that are considered hazardous materials or acutely hazardous materials (Bay Area Air Quality Management District 1998). The aqueous solution resulting after the cleaning process would be considered a hazardous waste if it contained materials that were cleaned, such as uncured coatings, inks, adhesives, dust, oils, and other contaminants. This resulting hazardous waste cannot legally be discharged into the publicly owned treatment works (POTWs), but must be disposed of properly after its useful life. Proper disposal may be accomplished by the use of a clarifier, incinerator, or transport to a waste site that accepts hazardous materials. These hazardous materials and waste represent a potential hazard to the public through their use, transport, disposal, and potential release into the environment through accident.

A study of aqueous solution conversion (Institute of Research and Technology 1997) found that most spent aqueous cleaning baths were classified as hazardous waste in California, and were therefore prohibited from discharge to POTWs. The baths were typically contaminated with toxic concentrations of metals including lead, cadmium, zinc, and copper. The concentrations of hazardous materials and the life of the aqueous cleaning baths depends largely on the type of operation and frequency of use. Most spent cleaning solutions from solvent cleaning units currently in service in the Bay Area are treated as a hazardous material and are hauled off-site for treatment and disposal. The spent cleaning solvent does not meet the requirements for discharge to sanitary sewer systems or POTWs. Most of the market in the Bay Area is serviced by vendors that provide waste handling services for spent cleaning solutions. Spent cleaning solvent is picked up and treated by the vendor as part of the contract for service. The vendors also provide aqueous cleaning systems and would provide the same waste handling services for spent aqueous solutions. A study that was conducted after the adoption of Rule 1171 (which required the use of aqueous cleaning solutions) by the South Coast AQMD indicated that two-thirds of the baths were classified as hazardous wastes. On-site treatment of baths was an option that rendered the baths sewerable, but this was likely because of relatively small bath quantities (20–30 gallons) being diluted by water in the clarifier (1,500-gallon) (Institute of Research and Technology 1998b). Disposal requirements for POTW would typically

require testing before discharge. Because of the cost of testing, many smaller facilities, including auto repair shops, continue to treat the material as hazardous waste and use a full-service vendor. The proposed changes to Rule 16 requiring the use of aqueous cleaning solution would have a less-than-significant impact on water quality.

Exposure to hazardous materials during the cleaning process is controlled in the proposed amendment by mandating proper equipment use and operating cleaning procedures be used. In addition, proper implementation of the federal and state regulations described in the preceding setting would ensure that potential impacts resulting from the use, transport, disposal, and potential release of hazardous materials or waste into the environment through accident are less than significant.

- d-h. No effect on these resource topics is expected because the proposed amendments apply to existing operations involving the use of solvents, most of which take place within existing facilities. No construction outside existing facilities is expected. The proposed amendments neither require nor are likely to result in activities that would affect these resource topics. Therefore, there is no impact.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
VIII. HYDROLOGY AND WATER QUALITY.					
Would the project:					
a.	Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b.	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e.	Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f.	Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g.	Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h.	Place within a 100-year flood hazard area structures that would impede or redirect floodflows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i.	Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
j. Contribute to inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara Counties, and portions of western Solano and southern Sonoma Counties. The land uses and affected environment vary substantially throughout the area. Rule 16 applies to the use of solvent cleaners at stationary sources within the BAAQMD. BAAQMD has identified approximately 6,000 facilities within the district that engage in solvent cleaning operations that include the process of cleaning or drying metal and nonmetal surfaces using cold, vapor, or conveyORIZED solvent cleaners. The majority of affected stationary sources occur in areas zoned for industrial or commercial land use. Typically, these facilities are surrounded by other commercial and industrial facilities. Because this is a rule revision and affected sources have been previously identified, BAAQMD has an inspection and tracking program that monitors compliance at the affected facilities. In addition, many facilities are already inspected by county health departments or local fire departments.

Discussion of Impacts

a, e, f. Disposal of aqueous cleaning solutions in storm drain sewage systems could potentially adversely affect water quality and wastewater systems (Bay Area Air Quality Management District 2001a). Although disposal of spent cleaning solutions in storm drain and sanitary sewer systems is currently prohibited and future disposal would also be prohibited, users of aqueous cleaners may be more likely than organic solvent cleaner users to illegally discharge spent solutions into wastewater systems. (Bay Area Air Quality Management District 2001a), due in part to some aqueous cleaners being labeled as “sewer safe” by the manufacturer. Such labels relate only to the aqueous cleaner itself, not to spent cleaning solutions.

Although some aqueous solutions are biodegradable, some aqueous solvent formulations contain chemicals that are considered hazardous (Bay Area Air Quality Management District 1998). In addition, during the process of removing the contaminants from surfaces, the solutions accumulate uncured coatings, inks, adhesives, dust, oils, and other contaminants. Because of the prevalence of cleaning solutions that advertise that the cleaners could be disposed safely in the sewer,

aqueous-based cleaning could lead to impacts on water quality if the solutions and spent solutions are not handled properly.

The volume and concentration of spent cleaning solutions will vary by facility and will depend on the size of facility, cleaning application, and frequency of use. There are a number of technologies and cleaning systems available that extend the life of the bath and reduce waste volumes. Based on a field study conducted in southern California, typical hazardous volumes for auto repair facilities would require the disposal of one drum of waste every 18 months (Institute of Research and Technology 1998b). Pretreatment options such as oil skimming and filtration, and on-site recycling options are available for larger facilities. Through proper use and treatment, waste volumes from aqueous solutions can be minimized effectively and would not represent a significant increase in hazardous waste volumes. Therefore, the impact is less than significant.

POTWs within the SCAQMD have not detected any significant change in water quality resulting from the increased use of aqueous cleaning solutions in that district (South Coast Air Quality Management District 2001). Regardless, to mitigate the potential impacts to water quality, BAAQMD recommends that no spent baths be discharged into the sewer.

These impacts are considered potentially significant, but implementing the following mitigation measure would reduce these impacts to a less-than-significant level.

Mitigation Measure 1: Educate Users on Proper Handling and Disposal of Aqueous-Based Solutions

BAAQMD will implement a compliance assistance outreach program, through pamphlets and coordination with county health departments and POTWs, to educate the users of the proper handling and disposal of aqueous-based solutions. Extensive public education to prevent disposal of all solutions down the drain or sewer should negate the potential for the violation of water quality standards and discharge requirements or the degradation of water quality.

b-d,
g-i.

No effect on these resource topics is expected because the proposed amendments apply to existing operations involving the use of solvents, most of which take place within existing facilities. No construction outside existing facilities is expected. The proposed amendments neither require nor are likely to result in activities that would affect these resource topics. Therefore, there is no impact.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
IX.	LAND USE AND PLANNING.				
	Would the project:				
a.	Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b.	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c.	Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara Counties, and portions of western Solano and southern Sonoma Counties. The land uses and affected environment vary substantially throughout the area. Rule 16 applies to the use of solvent cleaners at stationary sources within the BAAQMD. BAAQMD has identified approximately 6,000 facilities within the district that engage in solvent cleaning operations that include the process of cleaning or drying metal and nonmetal surfaces using cold, vapor, or conveyORIZED solvent cleaners. The majority of affected stationary sources occur in areas zoned for industrial or commercial land use. Typically, these facilities are surrounded by other commercial and industrial facilities. Because this is a rule revision and affected sources have been previously identified, BAAQMD has an inspection and tracking program that monitors compliance at the affected facilities.

Discussion of Impacts

- a-c. The project would occur in an already developed commercial and industrial areas. The activities affected by the proposed amendments take place within existing facilities, and the amendments neither require nor are likely to result in construction inside or outside those facilities. Therefore, there is no impact.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
X.	MINERAL RESOURCES.				
	Would the project:				
a.	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b.	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara Counties, and portions of western Solano and southern Sonoma Counties. The land uses and affected environment vary substantially throughout the area. Rule 16 applies to the use of solvent cleaners at stationary sources within the BAAQMD. BAAQMD has identified approximately 6,000 facilities within the district that engage in solvent cleaning operations that include the process of cleaning or drying metal and nonmetal surfaces using cold, vapor, or conveyORIZED solvent cleaners. The majority of affected stationary sources occur in areas zoned for industrial or commercial land use. Typically, these facilities are surrounded by other commercial and industrial facilities. Because this is a rule revision and affected sources have been previously identified, BAAQMD has an inspection and tracking program that monitors compliance at the affected facilities.

Discussion of Impacts

a–b. The proposed amendments are not associated with any action that would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state, or of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. The proposed amendments are not expected to result in construction outside any existing facility. In addition, the amendments are not expected to result in the use of any mineral resource in water-based cleaners. Therefore, there is no impact.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
XI.	NOISE.				
	Would the project:				
a.	Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b.	Expose persons to or generate excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c.	Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d.	Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e.	Be located within an airport land use plan area, or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f.	Be located in the vicinity of a private airstrip and expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting

BAAQMD has identified approximately 6,000 facilities within the district that engage in solvent cleaning operations that include the process of cleaning or drying metal and nonmetal surfaces using cold, vapor, or conveyORIZED solvent cleaners. These facilities operate their cleaning systems within the confines of buildings, buffering noise from surrounding receptors. The facilities are primarily located in areas zoned for commercial or industrial uses, and are not commonly adjacent to noise-sensitive land uses, which are generally defined as locations where people reside or locations where the presence of unwanted sound could adversely effect the use of the land. Noise-sensitive land uses typically include residences, hospitals, schools, libraries, and certain types of recreational uses. Noise levels associated with the operation of the solvent cleaning operations are not considered significant.

The Institute for Research and Technical Assistance, with funding from EPA's Environmental Justice Pollution Prevention Program, conducted a developmental study of water-based cleaners as alternatives to mineral spirits in 1995 and 1996. It also conducted case studies in southern California that represent a range of repair and maintenance cleaning needs at different maintenance and repair facilities. There are five generic types of cleaning systems, described briefly below, available for use with water-based cleaners. (Bay Area Air Quality Management District 2002.)

- **Sink-on-a-drum parts washer:** This unit consists of a sink mounted on a drum that has a fluid capacity ranging from about 15–40 gallons. It contains a heater, pump, faucet, and brush applicator.
- **Enzyme system:** Enzyme systems are generally modified sink-on-a-drum units and are commonly made of plastic. They contain a specifically formulated surfactant-based emulsifying neutral enzyme cleaner. Microbes are added to the system either in an impregnated filter or directly into the cleaning formulation. The cleaner emulsifies the oil and grease and the microbes break down the contaminants into carbon dioxide and water. Like the sink-on-a-drum unit, the enzyme system has a heater and pump. Units generally have a liquid capacity of 15–30 gallons.
- **Immersion parts washer:** The difference between this unit and a sink-on-a-drum is that the immersion system has a removable false sink and a reservoir that is accessible for cleaning or soaking. The unit also contains a heater and pump and has a liquid capacity of 30–60 gallons. It can be constructed of metal or plastic.
- **Spray cabinet:** This type of unit operates by spraying and/or flushing high-pressure cleaning formulation in an enclosed cabinet. The parts are placed inside the cabinet, generally on a platform, and the door is closed. The spray nozzles are positioned to target specific areas of the parts. The mechanical action provided by the worker for the other units is automated in the case of the spray. Spray cabinets are made of metal, and some have plastic tops. They can be classified as top or front loaders. The liquid capacity of the smaller units for use in this sector ranges from 20–100 gallons. These units are generally heated to a higher temperature than the other types of units because workers' hands do not come in contact with the fluid.

Discussion of Impacts

- a. Implementation and use of some of the recommended aqueous cleaning systems have potential to result in exposure of persons in the vicinity of the cleaning system to levels of noise considered in excess of applicable Occupational Health and Safety Administration occupational health standards. However, if cleaning system components, including noise buffering devices, are used and installed properly and proper safety equipment is used, this impact would be less than significant.

- b-f. Implementation of some of the proposed amendments and recommended aqueous cleaning systems may require minor modifications to existing industrial and commercial facilities. Any such modifications would be located within the confines of existing industrial and commercial facilities, and are not expected to result in the creation of excessive or permanent noise levels. Implementation of the proposed amendments is not expected to cause excessive groundborne vibration, or create a substantial temporary or permanent increase in ambient noise levels. Therefore, there is no impact.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
XII. POPULATION AND HOUSING.					
Would the project:					
a.	Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b.	Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c.	Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara Counties, and portions of western Solano and southern Sonoma Counties. The land uses and affected environment vary substantially throughout the area. Rule 16 applies to the use of solvent cleaners at stationary sources within the BAAQMD. BAAQMD has identified approximately 6,000 facilities within the district that engage in solvent cleaning operations that include the process of cleaning or drying metal and nonmetal surfaces using cold, vapor, or conveyORIZED solvent cleaners. The majority of affected stationary sources occur in areas zoned for industrial or commercial land use. Typically, these facilities are surrounded by other commercial and industrial facilities. Because this is a rule revision and affected sources have been previously identified, BAAQMD has an inspection and tracking program that monitors compliance at the affected facilities.

Discussion of Impacts

a-c. The proposed amendments are not expected to result in the construction of new facilities or the displacement of housing or people. Implementation of some of the recommended aqueous cleaning technology systems may, in some cases, result in very minor modifications at existing industrial and commercial facilities. These modifications would not induce substantial growth or displace housing or people. The proposed amendments will not induce population growth or related housing development. Therefore, there is no impact.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
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XIII. PUBLIC SERVICES.

Would the project:

- a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:

Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara Counties, and portions of western Solano and southern Sonoma Counties. The land uses and affected environment vary substantially throughout the area. Rule 16 applies to the use of solvent cleaners at stationary sources within the boundaries of the BAAQMD. BAAQMD has identified approximately 6,000 facilities within the district that engage in solvent cleaning operations that include the process of cleaning or drying metal and nonmetal surfaces using cold, vapor, or conveyORIZED solvent cleaners. The majority of affected stationary sources occur in areas zoned for industrial or commercial land use. Typically, these facilities are surrounded by other commercial and industrial facilities.

Given the large area covered by the BAAQMD, public services are provided by a wide range of entities. Fire protection and police protection/law enforcement services within the BAAQMD is provided by various districts, organizations, and agencies. There are several school districts, private schools, and park departments within the BAAQMD. Public facilities within the BAAQMD are managed by different county, city, and special-use districts.

Discussion of Impacts

- a. Implementation and use of some of the recommended aqueous cleaning systems has potential to result in increased fire hazards. The proper installation, maintenance, and use of cleaning system components and compliance with fire codes is expected to reduce the potential for increased fire hazard and need for fire protection services to a less-than-significant level. Otherwise, the facilities affected by the proposed amendments are not expected to require any new or additional public services. No effects on the need for public services such as police, schools, or public roadway maintenance are expected.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
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XIV. RECREATION.

Would the project:

- | | | | | | |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. | Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. | Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Setting

Given the large area covered by the BAAQMD, there are many recreation areas and districts within the affected area.

Discussion of Impacts

- a-b. No effect on recreation is expected because the proposed amendments apply to existing operations involving use of cold, vapor, or conveyorized solvent cleaners, most of which take place within existing facilities. No construction outside existing facilities is expected. The proposed amendments neither require nor are likely to result in activities that would affect recreation. Therefore, there is no impact.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
XV. TRANSPORTATION/TRAFFIC.				
Would the project:				
a.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?				
b.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cause, either individually or cumulatively, exceedance of a level-of-service standard established by the county congestion management agency for designated roads or highways?				
c.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				
d.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
e.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Result in inadequate emergency access?				
f.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Result in inadequate parking capacity?				
g.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				

Setting

Transportation infrastructure within the BAAQMD ranges from single-lane roadways to multilane interstate highways. Transportation systems between major hubs are located within and outside the BAAQMD, including railroads, airports, waterways, and highways. Localized modes of travel include personal vehicles, busses, bicycles, and walking. Transportation to and from the facilities subject to the proposed amendments varies by facility location.

Discussion of Impacts

- a-g. Implementation of the proposed amendments is not expected to result in the construction of additional facilities or construction-related modifications to existing facilities. Additional traffic or significant increases of staffing at existing facilities that would result in changes to traffic patterns or levels is not expected. The proposed amendments would not involve any activities that would alter air traffic patterns; substantially increase hazards caused by design features; result in inadequate parking capacity; or conflict with adopted policies, plans, or programs supporting alternative transportation. Therefore, there is no impact.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
XVI. UTILITIES AND SERVICE SYSTEMS.					
Would the project:					
a.	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b.	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c.	Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d.	Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e.	Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f.	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g.	Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara Counties, and portions of western Solano and southern Sonoma Counties. The land uses and affected environment vary substantially throughout the area. Rule 16 applies to the use of solvent cleaners at stationary sources within the BAAQMD. BAAQMD has identified approximately 6,000 facilities within the district that engage in solvent cleaning operations that include the process of cleaning or drying metal and nonmetal surfaces using cold, vapor, or conveyorized solvent cleaners. The majority of affected stationary sources occur in areas zoned for industrial or commercial land

use. Typically, these facilities are surrounded by other commercial and industrial facilities. Because this is a rule revision and affected sources have been previously identified, BAAQMD has an inspection and tracking program that monitors compliance at the affected facilities.

Discussion of Impacts

- a-g. No increases in demand for public utilities are expected as a result of the proposed rule amendments. Therefore, there is no impact.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
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XVII. MANDATORY FINDINGS OF SIGNIFICANCE

- | | | | | | |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. | Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. | Does the project have impacts that are individually limited but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. | Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion of Impacts

- a. Because of the lack of presence of these resources in the project area and the immediate vicinity, the proposed amendments do not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. Therefore, there is no impact.
- b. The reduction of emissions of VOCs from the use of aqueous-based cleaning solvents is part of a long-term plan to bring the Bay Area into compliance with the NAAQS and SAAQS for ozone. The proposed amendments do not have adverse environmental impacts that are limited individually, but cumulatively considerable when considered in conjunction with other regulatory control projects. The proposed

amendments do not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly. All possible construction-related effects have been reduced or eliminated by mitigation measures that have been incorporated into the project design. Therefore, there is no impact.

- c. Although it is expected that adoption of the proposed amendments will create a net positive environmental benefit from a reduction in emissions of VOCs and will reduce potential exposure of workers to some hazardous solvents, staff will examine and evaluate any potential adverse impacts of the proposed amendments. Potential adverse impacts may include the potential for the amendments to create a water quality impact should water-based cleaning solutions be disposed of into sewer systems. In terms of construction, the project would not have any known direct or indirect adverse impacts on humans because construction-related effects would be temporary and would be reduced or eliminated by mitigation measures incorporated into the project design. There would be no significant operational impacts associated with water quality and public health. Therefore, there is no impact.

Chapter 4

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