

AIR QUALITY

MANAGEMENT

DISTRICT

California Environmental Quality Act

NOTICE OF PREPARATION – DRAFT ENVIRONMENTAL IMPACT REPORT TO: San Francisco County Clerk's Office FROM: Bay Area Air Quality

TO: San Francisco County Clerk's Office City Hall, Room 168 1 Dr. Carlton B. Goodlett Place San Francisco, CA 94102-4678 Bay Area Air Quality Management District 939 Ellis Street San Francisco, CA 94109 nent District

LEAD AGENCY: Bay Area Air Quality Management District Contact: Marc Nash Phone: 415-749-4677

SUBJECT: NOTICE OF PREPARATION OF DRAFT ENVIRONMENTAL IMPACT REPORT

Project Title: Proposed Amendments to Regulation 11, Rule 16: Perchloroethylene and Synthetic Solvent Dry Cleaning Operations.

Project Location: The rule and proposed amendments apply within the Bay Area Air Quality Management District ("District"), which includes all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara counties, and the southern portions of Solano and Sonoma counties.

Project Description: The District has regulatory authority over stationary sources of air pollution in the San Francisco Bay Area. Regulation 11, Rule 16 limits emissions of perchloroethylene (Perc), a toxic air contaminant, and other synthetic solvents from commercial dry cleaning operations. On March 4, 2009, the District Board of Directors adopted amendments to Rule 11-16, which, among other things, incorporated into the District rule a state law phase out schedule that would eliminate the use of Perc in dry cleaning operations by January 1, 2023. The Board of Directors expressed concern, however, that the state law phase out schedule would not adequately protect the health of Bay Area residents and requested that District staff study whether additional restrictions on the use of Perc would be appropriate. After considering a number of alternatives, including no further amendments to Rule 11-16. District staff recommends accelerating the Perc phase out schedule. Under the proposed amendments, beginning on July 1, 2011, all existing Perc machines must cease operation and be retired upon reaching 12 years of age, rather than 15 years of age as under the existing schedule. Perc use in dry cleaning in the District would be eliminated by January 1, 2020 under the new schedule, rather than 2023. The proposed change would not affect facilities until July 1, 2011; until that date, the existing phase out schedule would still apply.

Probable Environmental Impacts: The proposed amendments to Rule 11-16 would require a portion of District dry cleaners ("affected facilities") to retire their Perc dry cleaning machines up to three years sooner than they would have under the current rule. Although there are a number of non-smog-forming, Perc-alternative dry cleaning solvents on the market, District research indicates that most affected facilities likely will switch from Perc to hydrocarbon solvents. Increased hydrocarbon solvent usage may cause a temporary increase between July 1, 2011, and January 1, 2023, in volatile organic compound (VOC) emissions that contribute to the formation of photochemical smog, or ozone, in the District. In some years, the increase in VOC emissions could exceed 15 tons per year, the District's CEQA significance threshold for any new project. An environmental impact report is needed to evaluate the air quality impacts of the proposed amendments and to address any impacts that the District finds to be significant.

Response: This notice provides information on the above project and provides you an opportunity to submit comments on potential environmental impacts that should be considered in the Environmental Impact Report. If the proposed project has no bearing on you or your agency, no action on your part is necessary. Due to the time limits mandated by State law, your response much be sent at the earliest possible date but *not later than 30 days after receipt of this notice*. If you or your agency wishes to submit comments, they may be sent to:

Marc Nash, Air Quality Specialist Bay Area Air Quality Management District 939 Ellis Street San Francisco, California, 94109.

Comments also can be sent by fax to (415) 749-4949 or by e-mail to mnash@baaqmd.gov.

Date: December 16, 2009

Chapter 1

Description of the Proposed Rule

The Bay Area Air Quality Management District (District) is proposing amendments to Regulation 11, Rule 16 (Rule 11-16): *Perchloroethylene and Synthetic Solvent Dry Cleaning Operations*.

The District last amended the rule on March 4, 2009. Among other things, the amendments incorporated into the District rule a state law phase out schedule that would eliminate the use of Perchloroethylene (Perc) in dry cleaning by January 1, 2023.

The proposed amendments would accelerate the existing phase out schedule, eliminating the use of Perc by January 1, 2020, rather than 2023. The proposed change would not affect facilities until July 1, 2011. Until that date, the existing phase out schedule would apply.

Perc Phase Out Under the Current Rule

District Rule 11-16's current phase out schedule for Perc dry cleaning was derived from the state law phase out schedule contained in the California Air Resources Board's (CARB's) amended *Airborne Toxic Control Measure for Emissions of Perchloroethylene from Dry Cleaning and Water-Repelling Operations*, which became effective on December 27, 2007 (17 Cal. Code Regs. sec. 93109 *et seq.*). Under the existing schedule, new Perc machines are prohibited on and after January 1, 2008,¹ and existing converted Perc machines and Perc machines at co-residential facilities must cease operation and be retired by July 1, 2010. All remaining existing Perc machines must be phased out on July 1, 2010, or when the machine reaches 15 years of age from the date of manufacture, whichever is later. Under this schedule, the use of Perc in dry cleaning would be eliminated within the District by January 1, 2023.

CARB's detailed analysis of the impacts of the Perc phase out, including expected public health benefits, can be found at: <u>http://www.arb.ca.gov/toxics/dryclean/dryclean.htm</u>.

Harmful Effects of Perc Exposure

Perc, also known as Tetrachloroethylene, is a synthetic solvent that has been in widespread use in dry cleaning operations in the United States since the early 20th century. It currently is the most widely used dry cleaning solvent in the District (used by approximately 56% of all District dry cleaners). Because of its long history, Perc has been carefully studied and researched by federal and state regulatory authorities for a

¹ The amended ATCM provides that: "No person shall sell, offer for sale, or initiate a new lease of any Perc dry cleaning machine for use in California on or after January 1, 2008." 17 Cal. Code Regs. §93109(e)(1). Further, "[n]o person shall install or operate any Perc dry cleaning machine or engage in Perc water-repelling operations at a new facility on or after January 1, 2008." *Id.* at §93109(f).

long period of time. Based on their respective intensive studies, the United States Environmental Protection Agency (USEPA) designated Perc a Hazardous Air Pollutant (HAP) in 1990, and CARB designated Perc a Toxic Air Contaminant (TAC) in 1991.

One of the primary health risks of concern due to exposure to toxic air contaminants is the risk of contracting cancer. While the precise carcinogenicity classification of Perc has been debated within the scientific community, all major government agencies list Perc as a possible or probable carcinogen including the International Agency for Research on Cancer (IARC), California's Office of Environmental Health Hazard Assessment (OEHHA), CARB, and USEPA.

Perc is also known to cause acute (short term) non-cancer health effects such as skin and eye irritation, irregular heart rhythm, respiratory irritation and central nervous system effects (headaches, intoxication, drowsiness and dizziness). Non-cancer effects of chronic (long term) exposure include liver and kidney dysfunction and more serious central nervous system effects such as diminished cognitive ability.

A "Unit Risk Value" (URV) is the estimated probability that a person will contract cancer from an ambient exposure to $1 \mu g/m^3$ of any given substance over a projected 70-year lifetime. OEHHA has determined the URV for Perc to be 5.9 E-06 ($\mu g/m^3$)⁻¹.

Reference exposure levels (RELs) are used as indicators of potential non-cancer effects. A concentration below the REL would not be expected to exhibit adverse non-carcinogenic health effects. The acute REL is compared to the expected one-hour maximum concentration and the chronic REL is compared to the expected annual average concentration to determine the potential for non-carcinogenic health effects. OEHHA's acute and chronic RELs for Perc are 20,000 μ g/m³ and 35 μ g/m³, respectively. For comparison purposes, District Rule 2-5, Table 2-5-1 lists URVs and RELs for all of the TACs that are regulated by the District.

Objectives

The objective of the proposed amendments to Rule 11-16 is to phase out the use of Perc in District dry cleaning three years sooner than under the existing rule. An accelerated phase out schedule would reduce Perc emissions within the District and lower the risks to Bay Area workers and residents of health impacts posed by Perc exposure. At the Board hearing on March 4, 2009 (during which the District Board of Directors approved incorporating the state law phase out schedule into District Rule 11-16), the Board expressed concern that the state law phase out schedule would not adequately protect the health of Bay Area residents and requested that District staff study whether additional restrictions on the use of Perc would be appropriate.

The District's monitoring data show that dry cleaners produced 95 percent of the District's inventory of Perc emissions in 2002. Thus, tightening District regulation of Perc dry cleaning is the most effective way to reduce Perc concentrations in the Bay Area.

The proposed rule would be more stringent than the *National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities* (NESHAP) set by USEPA and the *Airborne Toxic Control Measure for Emissions of Perchloroethylene from Dry Cleaning and Water-Repelling Operations* adopted by CARB. It would also be more stringent than any existing air district regulation in California. Accordingly, the proposed rule would be more effective at limiting lifetime Perc solvent exposure of Bay Area residents than any existing federal, state or district law or regulation in California. The District is not required to adopt control strategies that are more stringent than federal, state or district law, but to do so is within the sound discretional authority of the District Board of Directors. Adoption of a more stringent District standard will also assure implicit compliance with all less stringent federal and state standards.

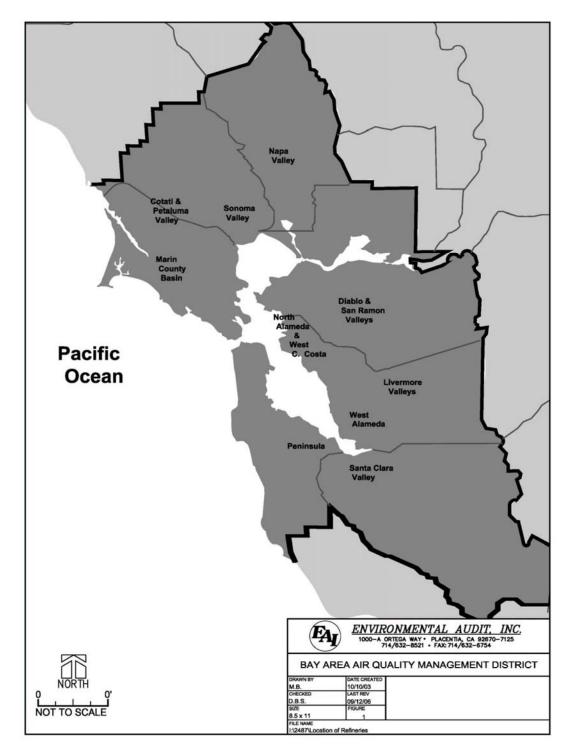
Proposed Rule

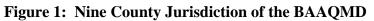
The District is proposing to accelerate the existing Perc solvent dry cleaning phase out schedule in District Rule 11-16. Beginning on July 1, 2011, any existing Perc machine (that was not already required to be retired) would be required to cease operation and be retired once the machine reaches 12 years of age from the date of manufacture, rather than 15 years of age as under the existing rule. Until July 1, 2011, the existing phase out schedule would apply. Under the proposed amendments, the use of Perc in dry cleaning would be eliminated within the District by January 1, 2020, rather than January 1, 2023.

The District expects that most facilities will replace their retired Perc equipment with alternative solvent technology such as hydrocarbon solvent technology. Other facilities are expected to become "drop shops" that no longer conduct dry cleaning on the premises, but rather: (1) contract with other facilities that operate newer Perc equipment (until those facilities must phase out their Perc equipment); and/or (2) contract with facilities that operate alternative technology. Alternate technology includes petroleum-based cleaning solvents, the most commonly utilized replacement for Perc cleaning; solvents based on glycol ethers and methylated siloxanes; wet cleaning, where garments are cleaned with water and various detergents; and systems that utilize carbon dioxide as a cleaning agent. Still other facilities may choose to shut down rather than comply with an accelerated phase out schedule.

Affected Area

The facilities affected by the proposed rule amendments are located within the jurisdiction of the Bay Area Air Quality Management District (see Figure 1). The BAAQMD's jurisdiction includes 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). 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. The basin is bounded by the Pacific Ocean to the west and includes complex terrain consisting of coastal mountain ranges, inland valleys, and bays.





Chapter 2 **Environmental Checklist**

ENVIRONMENTAL CHECKLIST FORM

1.	Project Title:	Bay Area Air Quality Management District (BAAQMD or District) Proposed Amendments to Regulation 11, "Hazardous Pollutants," Rule 16 "Perchloroethylene and Synthetic Solvent Dry 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:	Marc Nash, Engineering Division, 415/749-4677 or mnash@baaqmd.gov
4.	Project Location:	The proposed amendments to Rule 11-16 apply to certain Perchloroethylene dry cleaners ("affected facilities") located 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. The affected facilities are located throughout the area under BAAQMD jurisdiction.
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" in Chapter 1
9 .	Surrounding Land Uses and Setting:	See "Affected Area" in Chapter 1
10.	Other Public Agencies Whose Approval Is Required:	None
Initial Propo	Study osed Amendments to BAAQMD Regulation 11,	December, 2009 2-1

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", "Less Than Significant With Mitigation Incorporated", or "Less-than-Significant Impact"), as indicated by the checklist on the following pages.

Aesthetics	Agricultural Resources	Х	Air Quality
Biological Resources	Cultural Resources		Geology/Soils
Hazards and Hazardous Materials	Hydrology/Water Quality		Land Use/Planning
Mineral Resources	Noise		Population/Housing
Public Services	Recreation		Transportation/Traffic
Utilities/Service Systems	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, so that an ENVIRONMENTAL IMPACT REPORT will be prepared.

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?				\checkmark
b.	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?				Ø
c.	Substantially degrade the existing visual character or quality of the site and its surroundings?				Ø
d.	Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?				Ø

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-d. The proposed amendments to Regulation 11, Rule 16 (Rule 11-16) are designed to accelerate the phase-out of Perchloroethylene (Perc) in commercial dry cleaning operations in the District. Current Rule 11-16, as amended on March 4, 2009, requires dry cleaners in the District to phase out their use of Perc between July 1, 2010, and January 1, 2023. The phase out schedule was derived from the California Air Resources Board's (CARB's) amended *Airborne Toxic Control Measure for Emissions of Perchloroethylene from Dry Cleaning and Water-Repelling Operations*, which became state law on December 27, 2007 (17 Cal. Code Regs. sec. 93109 *et seq.*) The proposed accelerated phase out schedule would require affected facilities to switch from Perc dry cleaning to a non-Perc alternative up to three years sooner than under the existing schedule.

The proposed rule amendments would not require or bring about new development. The proposed amendments will allow affected facilities to install an alternative solvent machine in place of their existing Perc machine; contract with other facilities to have the dry cleaning performed off-site (see discussion below regarding "drop shops"); or shut down. Facilities that opt to switch to a Perc-alternative dry cleaning method will have their choice of which alternative to adopt. Currently, the most popular alternative is petroleum-based solvent cleaning. The vast majority of Perc-alternative solvent machines, including petroleum-based solvent machines, are of similar size and shape to Perc machines and installing them in place of Perc machines would not require any additional chimneys, flues or other external structures or devices to be attached to a building that would impair visual resources. Wet cleaning requires additional equipment such as tensioning equipment, and thus may require more floor space than Perc dry cleaning. The District expects, however, that most facilities can accommodate the extra equipment, and those that cannot are expected to choose another Perc alternative. Finally, due to their increased weight, carbon dioxide machines may require the floor of a facility to be reinforced, but such reinforcement is not expected to affect the external structure of any building. Accordingly, no obstruction of scenic resources or degradation of the visual character of a site, including but not limited to trees, rock outcroppings or historic buildings, is expected.

Facilities that do not replace their Perc machines are expected to become "drop shops" that no longer conduct dry cleaning on the premises, but rather: (1) contract with other facilities that operate newer Perc equipment (until those facilities must phase out their Perc equipment); and/or (2) contract with facilities that operate alternative solvent technology. Still other facilities may choose to shut down rather than comply with an accelerated phase out schedule. None of these options would change or degrade the visual character of the environment either.

Rule 11-16 would not require any light generating equipment for compliance, so no additional light or glare would be created to affect day or nighttime views in the District.

Based on these considerations, significant adverse aesthetic impacts are not anticipated and will not be further analyzed in a Draft EIR. Since no significant aesthetic impacts were identified, no mitigation measures are necessary or required.

		Potentially	Less than Significant with	Less-than-	
		Significant Impact	Mitigation	Significant Impact	No Impact
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?				Ŋ
b.	Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?				Ø
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?				

As described under "Aesthetics," land uses within the jurisdiction of the BAAQMD vary greatly and include agricultural lands. Some of these agricultural lands are under Williamson Act contracts.

Discussion of Impacts

a-c. The impact of the proposed amendments to Rule 11-16 will be limited to requiring certain existing dry cleaning facilities to switch from Perc to a non-Perc dry cleaning alternative on an accelerated timetable. The proposed amendments will not require any new development. They will not require conversion of existing agricultural land to commercial or other non-agricultural uses. Accordingly, no effects on agricultural resources, including Williamson Act lands within the boundaries of the BAAQMD, are expected. No conflict with existing agriculture-related zoning designations or Williamson Act contracts is expected.

Based on these considerations, significant adverse impacts to agricultural resources are not anticipated and will not be further analyzed in a Draft EIR. Since no significant agricultural were identified, no mitigation measures are necessary or required.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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?				
b.	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				
с.	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)?	V			
d.	Expose sensitive receptors to substantial pollutant concentrations?				Ø
e.	Create objectionable odors affecting a substantial number of people?				

The BAAQMD covers all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara Counties, and potions of western Solano and southern Sonoma Counties. 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. Rule 11-16 would apply to all areas within the BAAQMD's jurisdiction.

The pollutants of greatest concern in the BAAQMD are various components of photochemical smog (ozone and other pollutants), particulate matter less than or equal to 10 microns in diameter (PM10), and particulate matter less than or equal to 2.5 microns in diameter (PM2.5). Ozone, a criteria pollutant, is formed from a reaction of volatile organic compounds (VOC) and oxides of nitrogen (NOx) in the presence of ultraviolet light (sunlight).

The Bay Area is classified as a non-attainment area for both the California and federal ozone standards. Though the Bay Area currently has an attainment record for the federal standard, it has not applied for redesignation to attainment and is still subject to occasional violations of the federal standard. Violations of the California standard occur with greater frequency because of the greater stringency of that standard.

Discussion of Impacts

a., b. The proposed amendments to Rule 11-16 are not part of an air quality control plan.

The proposed amendments would accelerate the phase-out of Perc dry cleaning in the District, meaning that affected facilities would be required to retire their Perc machines up to three years earlier than they would have under the existing phase out schedule. Most Perc machines are expected to be replaced with non-Perc dry cleaning machines. Despite having many drawbacks (mostly stemming from the fact that Perc is a TAC that may pose serious health risks), the use of Perc in dry cleaning has an advantage from an air quality standpoint of being considered non-smog forming. Perc has been found by the United States Environmental Protection Agency (EPA) to be negligibly photochemically reactive and consequently has been exempted by the EPA from the list of volatile organic compounds (VOC), those compounds which contribute to the formation of photochemical smog, or ozone. By contrast, most (though not all) non-Perc dry cleaning methods such as petroleum-based solvent cleaning emit photochemically reactive compounds (mostly from evaporative losses of the solvent). In a worstcase scenario from a smog-formation standpoint, should all affected facilities replace their Perc machines with petroleum-based machines (up to three years earlier than under the existing phase out schedule), the District would see an increase in VOC emissions for a temporary period of 12 years. During that period, the increase in VOC would likely exceed 86 lbs/day or 15 ton/year in at least one year compared to emissions under the existing phase-out schedule.

At the same time, however, based on BAAQMD regulations that reduce emissions from stationary sources, transportation control measures put in place by the Metropolitan Transportation Commission and cities and counties in the Bay Area, and from mobile source emission reduction measures put in place by CARB and the EPA, VOC emissions in the District are projected to decrease by 37 tons per day between 2010 and 2020 (Table 1: Bay Area Baseline Emission Inventory Projections: 2000-2020 Planning Inventory; BAAQMD 2005 Ozone Strategy).

Exceedances of the California or national ozone standard occur in summer, when the Bay Area is dominated by a high pressure system and

temperatures in the inland valleys can exceed 100 degrees F. In 2009, there were 11 days during which the California one-hour ozone standard (0.09 ppm) was exceeded, 13 days during which the California eighthour ozone standard (0.070 ppm) was exceeded, and eight days during which the federal eight-hour ozone standard (0.075 ppm) was exceeded. Anthropogenic VOC emissions are estimated to total 339 tons/day (2010 estimate, BAAQMD 2005 Ozone Strategy). The projected increase in emissions from an accelerated phase-out schedule is 86 lbs/day in one year, or 0.0126% of the inventory. Ozone concentrations are related to a variety of factors, including temperature and wind conditions, but ozone modeling for one-hour concentrations in the Bay Area has shown that to effect a 1 ppb (0.001 ppm) difference in ozone requires a reduction of between 2.82% and 3.65% of the VOC inventory on an ozone-conducive day, or between 9.6 and 12.4 tons VOC per day. Modeling for eighthour concentrations has shown that to effect a 1 ppb difference in ozone requires a reduction of between 3.89% and 6.13% of the VOC inventory on an ozone-conducive day, or between 13.2 and 20.8 tons VOC per day. Consequently, an increase of 86 lbs per day will not create a significant impact to an air quality standard or projected violation. In spite of the expected temporary increase in VOC emissions, the proposed amendments to Rule 11-16 will not interfere with the implementation of an air quality plan, nor will the proposed amendments violate any existing or projected air quality standard.

- c. BAAQMD has established CEQA project thresholds of significance to assist local jurisdictions and agencies in complying with the requirements of CEQA regarding potentially adverse impacts to air quality. The project threshold for VOC emissions is currently 15 tons per year.¹ As the potential exists for the proposed amendments to increase VOC emissions cumulatively by more than 15 tons per year, albeit temporarily, a Draft EIR will evaluate the potential impacts on air quality of the increase in VOC emissions.
- d., e. The proposed amendments to Rule 11-16 will result in Perc dry cleaning machines being phased out on an accelerated schedule. Consequently, the exposure of sensitive receptors to Perc, a TAC, is likely to be reduced, not increased. Although Perc and non-Perc alternatives all have characteristic odors, non-Perc dry cleaning is not more odorous than Perc dry cleaning. Consequently, no increase in odor due to the proposed amendments to Rule 11-16 is anticipated.

¹ CEQA projects thresholds of significance are currently listed for ROG, NOx (oxides of nitrogen) and PM10 (particulate matter 10 microns in diameter or less). ROG, reactive organic gases, is used for planning and modeling purposes. The term describes those organic gases that react in the atmosphere to form photochemical smog, or ozone. VOC, volatile organic compounds, is used for regulatory purposes to describe organic compounds that would evaporate into the atmosphere and become ROG. Organic compounds used as dry cleaning solvents, except those that are negligibly photochemically reactive, such as Perc, are VOC. Excepting wet cleaning and CO₂ cleaning, non-Perc solvents are VOC, the emitted amount are ROG.

Based on these considerations, the cumulative increase in VOC emissions is potentially significant and will be further analyzed in a Draft EIR.

		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?				V
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?				V
с.	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?				V
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?				V
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				
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?				V

The BAAQMD covers all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara Counties, and potions of western Solano and southern Sonoma Counties. 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. Rule 11-16 would apply to all areas within the BAAQMD's jurisdiction.

Discussion of Impacts

a–f. Rule 11-16 is designed to limit emissions of and exposure to Perc, a TAC. The proposed rule amendments would not require or bring about new development, but simply would require existing Perc machines to be replaced with non-Perc machines up to three years sooner than under the current rule.

Installing non-Perc machines in existing structures on an accelerated schedule is not expected to directly or indirectly affect riparian habitat, federally protected wetlands, or migratory corridors. Nor are the proposed rule amendments expected to conflict with any local policies or ordinances protecting biological resources or any local, regional, or state conservation plans. Similarly, the proposed rule will also not conflict with any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or any other relevant habitat conservation plan.

Any development of a new dry cleaning operation that could have significant adverse effects on biological resources would go through the same approval and construction process regardless of whether or not the proposed Rule 11-16 were in effect.

In sum, the proposed rule neither requires nor is likely to result in activities that would affect biological resources. Therefore, no significant adverse impacts on biological resources are expected.

Based on these considerations, significant adverse impacts to biological resources are not anticipated and will not be further analyzed in a Draft EIR. Since no significant impacts to biological impacts were identified, no mitigation measures are necessary or required.

		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?				V
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?				V
c.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				V
d.	Disturb any human remains, including those interred outside of formal cemeteries?				V

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)" (California 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 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. 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. Rule 11-16 would apply to all areas within the BAAQMD's jurisdiction.

Discussion of Impacts

a–d. The proposed rule amendments would not require or bring about new development, but simply would require existing Perc machines to be replaced with non-Perc machines up to three years sooner than under the current rule. Installing non-Perc machines in existing structures on an accelerated schedule is not expected to affect cultural resources.

The District is not aware of any dry cleaning facilities that are located in historic buildings. To the extent there are any, the proposed amendments are not expected to require construction of any support equipment, chimneys, flues or any other changes or additions to the buildings that would affect cultural resources. *See also* discussion in Section I, Aesthetics.

Since no physical changes to the environment are expected as a result of the proposed amendments, it follows that no disturbance to any paleontological or archaeological resources is expected. The proposed amendments would affect only existing Perc dry cleaning facilities, which are located either in areas where there is a void in cultural resources, or where cultural resources have been previously disturbed.

Any development of a new dry cleaning operation that could have significant adverse affects on cultural resources would go through the same approval and construction process regardless of whether or not the proposed Rule 11-16 were in effect.

Based on these considerations, significant adverse impacts to cultural resources are not anticipated and will not be further analyzed in a Draft EIR. Since no significant impacts to cultural resources were identified, no mitigation measures are necessary or required.

		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:				
	 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. 				Ŋ
	2. Strong seismic groundshaking?				\square
	3. Seismic-related ground failure, including liquefaction?				Ø
	4. Landslides?				\checkmark
b.	Result in substantial soil erosion or the loss of topsoil?				V
с.	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?				V
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?				Ø
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?				V

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Regional basement rocks consist of the highly deformed Great Valley Sequence, which include massive beds of sandstone interlaced with siltstone and shale. Unconsolidated alluvial deposits, artificial fill, and estuarine deposits (including Bay Mud) underlie the low-lying region along the margins of the Carquinez Straight and Suisun Bay. The estuarine sediments found along the shorelines of Solano County are soft, water-saturated mud, peat and loose sands. The organic, soft, clay-rich sediments along the San Francisco and San Pablo Bays are referred to locally as Bay Mud and can present a variety of engineering challenges due to inherent low strength, compressibility and saturated conditions. Landslides in the region occur in weak, easily weathered bedrock on relatively steep slopes.

The San Francisco Bay Area is a seismically active region, which is situated on a plate boundary marked by the San Andreas Fault System. Several northwest trending active and potentially active faults are included in this fault system. Under the Alquist-Priolo Earthquake Fault Zoning Act, Earthquake Fault Zones were established by the California Division of Mines and Geology along "active" faults, or faults along which surface rupture occurred in Holocene time (the last 11,000 years). In the Bay area, these faults include the San Andreas, Hayward, Rodgers Creek-Healdsburg, Concord-Green Valley, Greenville-Marsh Creek, Seal Cove/San Gregorio and West Napa faults. Other smaller faults in the region classified as potentially active include the Southampton and Franklin faults.

Ground movement intensity during an earthquake can vary depending on the overall magnitude of the earthquake, distance to the fault, focus of earthquake energy, and type of geological material. Areas that are underlain by bedrock tend to experience less ground shaking than those underlain by unconsolidated sediments such as artificial fill. Earthquake ground shaking may have secondary effects on certain foundation materials, including liquefaction, seismically induced settlement, and lateral spreading.

Discussion of Impacts

a–e. The proposed rule amendments would not require or bring about new development or major construction, but simply would require existing Perc machines to be replaced with non-Perc machines up to three years sooner than under the current rule. No structural alterations to existing facilities will be required or are expected. Installing non-Perc machines in existing structures on an accelerated schedule is not expected to impact the geology or soils in the District.

Any development of a new dry cleaning operation that could have significant adverse affects on geology or soils would go through the same approval and construction process regardless of whether or not the proposed Rule 11-16 were in effect. Any new structures in the area must be designed to comply with the Uniform Building Code Zone 4 requirements since the Bay Area is located in a seismically active area. The local cities or counties are responsible for assuring that the proposed project complies with the Uniform Building Code as part of the issuance of the building permits and can conduct inspections to ensure compliance. The Uniform Building Code is considered to be a standard safeguard against major structural failures and loss of life. The goal of the code is to provide structures that will: (1) resist minor earthquakes without damage; (2) resist moderate earthquakes without structural damage, but with some non-structural damage; and (3) resist major earthquakes without collapse, but with some structural and non-structural damage.

The Uniform Building Code bases seismic design on minimum lateral seismic forces ("ground shaking"). The Uniform Building Code requirements operate on the principle that providing appropriate foundations, among other aspects, helps to protect buildings from failure during earthquakes. The basic formulas used for the Uniform Building Code seismic design require determination of the seismic zone and site coefficient, which represent the foundation conditions at the site.

Any new commercial operations will be required to obtain building permits, as applicable, for all new structures. New development or commercial operations must receive approval of all building plans and building permits to assure compliance with the latest Building Code prior to commencing construction activities. The issuance of building permits from the local agency will assure compliance with the Uniform Building Code requirements which include requirements for building within seismic hazard zones. No significant impacts from seismic hazards are expected since the project will be required to comply with the Uniform Building Codes.

The proposed amendments to Rule 11-16 would affect only existing commercial operations in the area, and non-Perc machines are similar in size, shape and weight to Perc machines. It is not expected that the soil types present in and around affected facilities would be made any further susceptible to expansive soils or liquefaction merely by the installation of a non-Perc machine in place of a Perc machine on an accelerated schedule. Additionally, subsidence is not expected to occur because grading and filling would not be necessary to replace one dry cleaning machine with another.

The proposed project has no effect on the installation of septic tanks or alternative wastewater disposal systems. Waste from Perc and from non-Perc machines alike are prohibited from being disposed of in sewers, septic or alternative wastewater systems. Consequently, no impacts from failures of septic systems related to soils incapable of supporting such systems are anticipated.

Based on these considerations, significant adverse geology and soil impacts are not anticipated and will not be further analyzed in a Draft EIR. Since no significant geology and soils impacts were identified, no mitigation measures are necessary or required.

		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?				Ø
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?			V	
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?				Ø
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?				V
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?				V
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?				Ø
g.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				Ø
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?				V

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Facilities and operations within the District handle and process substantial quantities of flammable materials and acutely toxic substances. Accidents involving these substances can result in worker or public exposure to fire, heat, a blast from an explosion, or airborne exposure to hazardous substances.

Fires can expose the public or workers to heat. The heat decreases rapidly with distance from the flame and therefore poses a greater risk to the workers at specific facilities where flammable materials and toxic substances are handled than to the public. Explosions can generate a shock wave, but the risks from explosion also decrease with distance. Airborne releases of hazardous materials may affect workers or the public, and the risks depend upon the location of the release, the hazards associated with the material, the winds at the time of the release, and the proximity of receptors.

For all facilities and operations handling flammable materials and toxic substances, risks to the public are reduced if there is a buffer zone between process units and residences or if prevailing winds blow away from residences. Thus, the risks posed by operations at a given facility or operation are unique and determined by a variety of factors.

Discussion of Impacts

The proposed amendments to Rule 11-16 accelerate the replacement of a. Perc dry cleaning machines with non-Perc machines. Perc is a TAC. Alternatives to Perc dry cleaning include petroleum-based solvent cleaning; dry cleaning using synthetic solvents such as methylated siloxanes and glycol ethers; wet cleaning, where garments are cleaned with water and various detergents; and carbon dioxide cleaning. The alternative methods do not use any more cleaning solvents, nor do they create any more waste than Perc dry cleaning. Perc and Perc-containing wastes must be treated as hazardous substances for transportation purposes. However, some alternatives that may be adopted by affected facilities in place of Perc dry cleaning, such as wet cleaning or carbon dioxide cleaning, do not generate any hazardous waste. Consequently, an accelerated schedule for the phase-out of Perc would not require any more, but instead likely would require less transportation of hazardous materials and disposal of hazardous wastes.

b. Although Rule 11-16 would require the phase-out of Perc with or without the proposed amendments, under the proposed amendments Perc would be phased out sooner, meaning that more non-Perc solvent likely will be used in the District than under the current rule. Non-Perc dry cleaning solvents include petroleum-based solvents, synthetic solvents, glycol ethers, water and detergents (for wet cleaning), and carbon dioxide. The most commonly used of these is petroleum-based solvents. Perc is non-flammable, whereas petroleum-based solvents are Class IIIA liquids (flash point between 140 and 200 degrees Fahrenheit). Synthetic solvents and glycol ethers are Class IIIB liquids (flash point greater than 200 degrees Fahrenheit). Consequently, there is a greater risk of fire danger from the use of non-Perc solvents than from the use of Perc. However, existing building codes and manufacturing codes minimize fire danger by mandating that certain flammable material storage, use and waste disposal procedures be followed for each type of solvent.

National Fire Prevention Association (NFPA) regulations require machines using solvent that is combustible to be equipped with either a fire suppressant or prevention system. A fire suppressant system injects an inert gas (e.g. nitrogen or argon) to displace available oxygen to keep the concentration of oxygen present below eight percent by volume, the Lower Explosive Limit of the solvent. A fire prevention system maintains the operating equipment under a vacuum to remove oxygen so that its concentration is maintained below eight percent by volume to eliminate a condition that could result in fire or an explosion. Also, the systems do not allow the machines to be opened until the solvent is cooled to below its flashpoint. Consequently, these systems, as required by the NFPA regulations and enforced by local city and county fire inspectors, reduce the likelihood that a fire would occur at a non-Perc establishment.

The proposed rule amendments would not affect equipment fire suppressant or prevention system specifications. Equipment would continue to comply with NFPA requirements. Neither would the proposed rule amendments interfere with or alter local governments' and fire departments' approval process for installing and operating dry cleaning machines. Local fire departments regularly inspect dry cleaning facilities before and during operation to ensure that their equipment and cleaning process comply with applicable fire codes and regulations. City, county and regulatory agencies usually adopt the Uniform Fire Code, which outline these fire codes, and facilities are required to make design or process changes to satisfy the local fire prevention authorities before operating.

c. The proposed amendments would not generate additional hazardous emissions or handling of hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school. Some dry cleaning establishments are located within one-quarter of a mile of existing schools. Perc is a hazardous material and TAC.

The proposed amendments would accelerate replacement of Perc machines with alternatives. Some alternatives that may be adopted by affected facilities in place of Perc dry cleaning, such as wet cleaning or carbon dioxide cleaning, are considered non-toxic and do not generate hazardous waste. Consequently, the proposed amendments would, if anything, reduce hazardous emissions and handling of hazardous materials and waste in the vicinity of existing schools.

- d. The California Department of Toxic Substances Control (DTSC) maintains a list of hazardous material sites pursuant to Government Code §65962.5. Although dry cleaners with both Perc and non-Perc machines may generate hazardous waste, they are not considered hazardous waste sites for purposes of this list. As a result, the proposed amendments to Rule 11-16 are not expected to affect or create any facilities that are included on DTSC's list of hazardous material sites, and therefore are not expected to create a significant hazard to the public or environment.
- e., f. The proposed rule would not result in a safety hazard for residents or workers within two miles of a public airport, a public use airport, or a private air strip. Dry cleaning establishments exist within these areas, but there is no additional risk of explosion posed by non-Perc as compared to Perc dry cleaning machines, provided that the equipment is properly maintained in accordance with the manufacturer's guidelines and solvent stored outside the machine is in compliance with the local fire code. There is the potential for operator negligence, but this type of potential hazard exists for all operational and maintenance procedures employing the use of solvents. Additionally, it should be noted although the flashpoints of the solvent alternatives are higher (greater than 140 degrees F) than Avgas (100.4 degrees F), a similar hazard potential could exist under exposure to fire. Perc solvent would burn under similar conditions. Thus, the proposed amendments to Rule 11-16 would not create any additional safety hazards either inside or outside of these areas.
- g. No impacts on emergency response plans are anticipated from the proposed rule. Dry cleaning machines are not major components of any evacuation or emergency response plan, regardless of what dry cleaning solvent is used. The proposed rule neither requires nor is likely to result in activities that would impact the emergency response plan. No major construction activities are expected from the proposed rule. Therefore, no significant adverse impacts on emergency response plans are expected.
- h. No increase in hazards related to wildfires is anticipated from the proposed Rule 11-16 amendments. The proposal will not create new land use projects. It is not anticipated that the proposed amendments would create any new dry cleaning establishments beyond what may be built with or without the amendments. Consequently, any new development that might occur in the District would occur for reasons

other than the proposed rule. Any new land use project would require a CEQA analysis that would evaluate wildfire risks. Mitigation measures would be required to reduce impacts to the maximum extent possible if the analysis determined such risks to be significant.

Based on these considerations, significant adverse hazards and hazardous materials are not anticipated and will not be further analyzed in a Draft EIR. Since no significant hazard and hazardous materials impacts were identified, no mitigation measures are necessary or required.

		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?				V
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)?				
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?				Ŋ
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?				M
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?				V
f.	Otherwise substantially degrade water quality?				\checkmark
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?				Ŋ
h.	Place within a 100-year flood hazard area structures that would impede or redirect floodflows?				V
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?				
				<u> </u>	

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
j.	Contribute to inundation by seiche, tsunami, or mudflow?				

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Reservoirs and drainage streams are located throughout the area and discharge into the Bays. Marshlands incised with numerous winding tidal channels containing brackish water are located throughout the area under BAAQMD jurisdiction.

Discussion of Impacts

a—j. The amendments to Rule 11-16 accelerate the replacement of Perc dry cleaning machines with non-Perc machines. Perc and non-Perc solvent dry cleaning machines do not use water, nor do they generate wastewater, however, some dry cleaners may choose wet cleaning, which does use water, as their non-Perc alternative. Studies of individual wet cleaning facilities (see, e.g., "The Viability of Professional Wet Cleaning as a Pollution Prevention Alternative to Perchloroethylene Dry Cleaning" (Sinsheimer, et al. and Latif, 2007) and "Pollution Prevention in the Garment Care Industry, Assessing the Viability of Professional Wet Cleaning" (Sinsheimer, et al. and Gottleib, 1997)) have found that they meet wastewater discharge requirements. In addition, one study, "Results and Conclusions from Wet Cleaning Demonstration Projects" (Patton, undated) has shown that wastewater from wet cleaning is pH neutral, phosphate levels are approximately one-tenth as much as an average resident's wastewater, biochemical demand was no higher than for a resident, and there were no significant metals or toxic chemicals in the discharge.

No impacts on hydrology/water quality resources are anticipated from the proposed amendments. There are limited data available to evaluate

whether wet cleaning uses a significant amount of water, but one study, Sinsheimer, et al. and Latif, *ibid*, found that the amount of water used was about equal to that used by dry cleaners. There are two reasons for this: first, because garments marked "Dry Clean Only" are wetted with only enough water and detergent to remove stains during wet cleaning, as opposed to being completely immersed in a water solution; and second, because some dry cleaning establishments use evaporative coolers that consume a fair amount of water. Another study conducted in the South Coast Air Quality Management District, Sinsheimer, et al. and Gottleib, *ibid*, found that if every dry cleaning establishment in the South Coast's jurisdiction switched to wet cleaning, it would increase water demand by only 0.021% (from an estimated South Coast population of 1700 dry cleaners). Based on the low number of existing wet cleaners in the District (35), the District projects that only an additional 18 dry cleaners would switch to wet cleaning to comply with the proposed amendments. This would not have a significant impact on water usage, so the proposed rule amendments would not require construction of additional water resource facilities, create the need for new or expanded water entitlements, of necessitate alteration of drainage patterns. The commercial operations affected by the proposed rule are required to comply with wastewater discharge regulations. The proposed amendments will not have a significant impact on wastewater discharges, alter drainage patterns, create additional water runoff, place any additional structures within 100-year flood zones or other areas subject to flooding, or contribute to inundation by seiche, tsunami or mudflow. No major construction activities are expected from the proposed rule and no new structures are required. Therefore, no significant adverse impacts on hydrology/water quality are expected.

Based on these considerations, significant adverse hydrology and water quality impacts are not anticipated and will not be further analyzed in a Draft EIR. Since no significant hydrology and water quality impacts were identified, no mitigation measures are necessary or required.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
IX.	LAND USE AND PLANNING.			mpaor	mpaar
	Would the project:				
a.	Physically divide an established community?				\checkmark
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?				Ŋ
c.	Conflict with any applicable habitat conservation plan or natural community conservation plan?				V

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Discussion of Impacts

a-c. The proposed rule amendments would not require or bring about new development or major construction, but simply would require existing Perc machines to be replaced with non-Perc machines up to three years sooner than under the current rule.

The proposed amendments do not include any components that would mandate physically dividing an established community or generate additional development. Neither do the proposed amendments have any components which would affect land use plans, policies, or regulations. Requiring a phase-out of Perc dry cleaning machines on an accelerated schedule will not require local governments to alter land use and other planning considerations. Affected facilities are already restricted to commercial (and in some cases, industrial) zones. Finally, habitat conservation or natural community conservation plans, agricultural resources or operations, would not be affected by the proposed amendments. Therefore, current or planned land uses with the District will not be significantly affected as a result of Rule 11-16.

Based on these considerations, significant adverse land use impacts are not anticipated and will not be further analyzed in a Draft EIR. Since no significant land use impacts were identified, no mitigation measures are necessary or required.

		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?				Ø
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?				Ø

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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 rule is not expected to create new development or result in construction outside any existing facility. Therefore, no significant impact to mineral resources is anticipated as a result of the proposed amendments to Rule 11-16.

Based on these considerations, significant adverse impacts to mineral resources are not anticipated and will not be further analyzed in a Draft EIR. Since no significant mineral resources impacts were identified, no mitigation measures are necessary or required.

		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?				V
b.	Expose persons to or generate excessive groundborne vibration or groundborne noise levels?				V
с.	Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				
d.	Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			Ø	
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?				
f.	Be located in the vicinity of a private airstrip and expose people residing or working in the project area to excessive noise levels?				Ø

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Discussion of Impacts

a. The amendments to Rule 11-16 would require Perc dry cleaning machines to be replaced on an accelerated schedule compared to the

existing rule. Most non-Perc machines are approximately the same size and shape as Perc machines. *See* discussion in Section I, Aesthetics. While heavy-duty moving equipment such as trucks and cranes may be required to install replacement machines, the installation can be completed within one day and noise impacts would be consistent with deliveries of any other type of equipment in a commercial district. Similarly, to the extent affected facilities choose to switch from Perc to carbon dioxide cleaning, any reinforcement work that is needed to support the increase weight of a carbon dioxide machine would be expected to result in only modest and temporary noise impacts. Noise from the machines themselves, both within and outside of a dry cleaning establishment, is limited by the building permit process to acceptable levels. Therefore, the proposed amendments are not expected to affect local noise control laws or ordinances.

- b. The proposed Rule 11-16 amendments are not expected to generate or expose people to excessive groundborne vibration or groundborne noise. The Perc-alternative machines that are expected to replace existing Perc machines in commercial operations are not expected to generate additional vibrations above already existing noise levels.
- c. The amendments to Rule 11-16 would not expected to result in an increase in ambient noise levels in the District. The proposed rule would not create new development. Non-Perc machines that replace Perc machines operate at similar noise levels, and are designed to be operated in commercial facilities where operators and commercial and residential neighbors are protected by noise regulations. Permanent increases in noise levels are not anticipated as a result of the proposed rule amendments.
- d. The proposed amendments are not expected to cause a significant increase in periodic or temporary ambient noise levels to levels existing prior to the proposed rule amendments. The replacement of Perc dry cleaning machines with non-Perc machines may require minor construction activities, such as removal and replacement of windows to remove old equipment and to install new equipment, which may require the use of heavy equipment. However, installation of the major parts of a new machine can be completed in one day, so noise impacts associated with the proposed rule amendments are expected to be minimal. Based on the anticipated phase-out schedule, additional machines will be required to be replaced in some years but fewer machines will required to be replaced in others. Operational noise levels are expected to be equivalent to existing noise levels as discussed earlier.
- e., f. Implementation of the proposed amendments to Rule 11-16 would require only minor, temporary construction in existing facilities on an accelerated schedule, and may require the use of heavy equipment for installation of new machines in existing commercial operations. Except for less than significant temporary noise during replacement of dry

cleaning machines, as described above, there will be no noise impacts from any dry cleaning facilities regardless of their proximity to a public/private airport. Thus, people residing or working in the vicinities of public/private airports are not expected to be exposed to excessive noise levels due to the proposed project.

Based on these considerations, significant adverse noise impacts are not anticipated and will not be further analyzed in a Draft EIR. Since no significant noise impacts were identified, no mitigation measures are necessary or required.

		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)?				V
b.	Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?				Ø
c.	Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?				Ø

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Discussion of Impacts

a-c. The proposed rule amendments are not expected to result in the construction of new facilities or the displacement of housing or people. Implementation of the proposed rule amendments will require that existing commercial dry cleaning operations retire existing Perc machines on an accelerated schedule. It is expected that they will be replaced with non-Perc machines. The amendments would not induce growth or displace housing or people in any way. The proposed rule is not expected to result in significant adverse affects on population or housing.

Based on these considerations, significant adverse impacts on population and housing are not anticipated and will not be further analyzed in a Draft EIR. Since no significant population and housing impacts were identified, no mitigation measures are necessary or required.

	Less than		
	Significant		
Potentially	with	Less-than-	
Significant	Mitigation	Significant	No
Impact	Incorporated	Impact	Impact
	Significant	Significant Potentially with Significant Mitigation	Significant Potentially with Less-than- Significant Mitigation Significant

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?		\checkmark
	Police protection?		\checkmark
	Schools?		V
	Parks?		
	Other public facilities?		

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara Counties, and potions of western Solano and southern Sonoma Counties. 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. Rule 11-16 would apply to all areas within the BAAQMD's jurisdiction.

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 are 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., b. The facilities affected by the proposed amendments are not expected to require any new or additional public services. As discussed in Section VII, Hazards and Hazardous Material of this Initial Study, the use of non-Perc dry cleaning machines is not expected to generate significant explosion or fire hazard impacts so no increase in fire protection services is expected. The proposed amendments are not expected to have any adverse effects on local police departments and require additional police services since they would only require the installation of non-Perc dry cleaning machines in place of existing Perc machines on an accelerated schedule compared to the existing rule. Rule 11-16 amendments would not require new development and any new development projects would be built regardless of whether or not the amendments to Rule 11-16 were in effect. Therefore, no significant adverse fire and police protection impacts from the proposed rule are expected.
- c., d. As discussed in Section XII, Population and Housing, implementing the proposed amendments to Rule 11-16 would not induce population growth. Since no increase in local population is anticipated, no additional demand for new or expanded schools or parks is anticipated either. As a result, no significant adverse impacts are expected to local schools or parks.
- e. Besides building permits, there is no other need for government services. The proposal would not result in the need for new or physically altered government facilities in order to maintain acceptable service ratios, response times, or other performance objectives. There will be no increase in population as a result of implementing the proposed amendments to Rule 11-16; therefore, there will be no need for physically altered government facilities.

Based on these considerations, significant adverse impacts on public services are not anticipated and will not be further analyzed in a Draft EIR. Since no significant public services impacts were identified, no mitigation measures are necessary or required.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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?				V
b.	Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?				V

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Discussion of Impacts

a., b. Rule 11-16 has no provisions affecting land use plans, policies, or regulations. The proposed project would not increase or redistribute population and, therefore, would not increase the demand for or use of existing neighborhood and regional parks or other recreational facilities or require the construction of new or the expansion of existing recreational facilities. Therefore, implementation of the proposed amendments to Rule 11-16 is not expected to have any significant adverse impacts on recreation.

Based on these considerations, significant adverse impacts on recreation are not anticipated and will not be further analyzed in a Draft EIR. Since no significant recreation impacts were identified, no mitigation measures are necessary or required.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
XV.	TRANSPORTATION/TRAFFIC.				
	Would the project:				
a.	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)?				M
b.	Cause, either individually or cumulatively, exceedance of a level-of-service standard established by the county congestion management agency for designated roads or highways?				V
c.	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?				V
d.	Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				Ø
e.	Result in inadequate emergency access?				\checkmark
f.	Result in inadequate parking capacity?				
g.	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				Ø

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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.

Discussion of Impacts

- a., b. No additional traffic or significant increases of staffing at existing commercial facilities that would result in changes to traffic patterns or levels is expected. The proposed rule 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, no significant adverse impacts resulting in changes to traffic patterns or levels of service at local intersections are expected.
- c. The proposed rule amendments accelerate an existing schedule to phase out Perc dry cleaning machines. The amendments are not expected to involve the delivery of materials via air so no increase in air traffic is expected.
- d., e. The proposed amendments to Rule 11-16 are not expected to increase traffic hazards or create incompatible uses. No effect on emergency access to commercial facilities or nearby residences is expected from adopting the proposal. Although, as noted, Perc dry cleaning machines will have to be removed and replacement machines will need to be delivered and installed, delivery of replacement equipment is temporary and will not create significant adverse impact on traffic hazards, create incompatible uses or emergency access.
- f. No changes are expected to parking capacity at or in the vicinity of affected facilities as the proposed amendments to Rule 11-16 only impact commercial dry cleaning establishments. A change from Perc to non-Perc dry cleaning machines is not expected to increase patronage at any particular establishment. No increase in permanent workers is expected. Therefore, the proposed rule is not expected to result in any adverse impacts on parking.
- g. The proposed rule amendments affect existing dry cleaning establishments and are not expected to conflict with adopted policies, plans, or programs supporting alternative transportation modes (e.g., bus turnouts, bicycle racks).

Based on these considerations, significant adverse transportation and traffic impacts are not anticipated and will not be further analyzed in a Draft EIR. Since no significant transportation and traffic impacts were identified, no mitigation measures are necessary or required.

		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?				Ø
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?				V
с.	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?				V
d.	Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed?			Ø	
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?				V
f.	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				Ø
g.	Comply with federal, state, and local statutes and regulations related to solid waste?				Ø

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Discussion of Impacts

- a-c., e. The proposed amendments to Rule 11-16 accelerate the replacement of Perc dry cleaning machines with non-Perc machines. As previously discussed under Section VIII, Hydrology and Water Quality, to the extent that any affected facility will choose wet cleaning to replace Perc dry cleaning, wet cleaning has been shown to meet wastewater discharge requirements. The number of additional wet cleaning facilities in the District as a result of the Perc phase out is expected to be minimal—no more than 18—and these additional facilities would be expected to come into operation under either Perc phase-out schedule, albeit sooner under the proposed amendments. The number of additional facilities under either schedule will not require the construction of new water or wastewater facilities and will have not have any affect on storm-water drainage facilities.
- d. The amendments to Rule 11-16 would accelerate the phase-out of Perc machines for dry cleaning. Some existing Perc machines could be replaced with wet cleaning machines, in which garments are wetted with water and various cleaning solutions. As discussed in Section VIII, Hydrology and Water Quality, the number of wet cleaning establishments, based on the number that have replaced Perc establishments to date, is expected to be no more than 18. The amount of water used by these systems will not cause a significant impact on water supplies for two reasons. First, water and cleaning solution is applied very selectively to garments in wet cleaning; they are not immersed in water as they are when laundered. Second, the use of wet cleaning may reduce the use of cooling systems associated with hot Perc machines. It is expected that the number of wet cleaning systems will be the same under either the existing rule or the proposed amendments, although under the proposed amendments, some of the affected facilities would switch to wet cleaning sooner.
- f., g. The proposed amendments to Rule 11-16 would accelerate the phase-out schedule for Perc dry cleaning machines. Regardless of the type of dry cleaning machine that replaces a Perc machine, an increase in solid waste is not expected. Petroleum-based or synthetic solvent machines do not generate more solid waste than Perc machines, and wet cleaning and carbon dioxide cleaning probably generate less. Federal and state law regulate disposal of Perc-containing wastes. These wastes are required to be disposed of in a Class I hazardous waste facility. Under the proposed amendments Perc-containing hazardous waste will no longer be generated at dry cleaning facilities or need to be disposed of as of January 1, 2020, three years sooner than under the existing rule. Therefore, no significant adverse impacts are expected to solid waste as a result of the proposed amendments.

Based on these considerations, significant adverse utilities and service system impacts are not anticipated and will not be further analyzed in a Draft EIR. Since no significant utilities and service system impacts were identified, no mitigation measures are necessary or required.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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?				V
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.)				Ŋ
с.	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?			Ø	

Discussion of Impacts

- a. Because the proposed amendments are not expected to create any new development, the 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, no significant adverse impacts are expected as a result of the proposed rule.
- b. The proposed amendments are expected to result in a decrease in Perc solvent emissions, thereby providing an air quality health benefit. In terms of global warming, the proposed amendments are not expected to result in any increase in greenhouse gas emissions. Although one non-Perc alternative, CO₂ cleaning, does release CO₂, a greenhouse gas, Perc

machines are not expected to be converted to CO_2 machines to a significant extent. Further, the CO_2 used in CO_2 cleaning is an industrial byproduct (usually, from fertilizer production) and thus the CO_2 cleaning process does not result in any *net* greenhouse gas emissions increase. The remaining non-Perc alternative solvents do not have significant greenhouse gas impacts associated with them either. The proposed amendments are not expected to generate any project-specific significant environmental impacts and are not expected to cause cumulative impacts in conjunction with any other environmental resources.

c. The proposed amendments to Rule 11-16 are not expected to cause any significant adverse effects on human beings. In fact, Rule 11-16 is expected to reduce exposure to Perc, a toxic air contaminant, and reduce health impacts associated with exposure to Perc. Other than temporary VOC emissions increases, which will be addressed in a Draft EIR, the proposed amendments are not expected to have any potentially significant impacts on air quality. Further, as discussed in the proceeding analyses, significant adverse impacts on aesthetics, agricultural resources, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, utility and service systems, and transportation and traffic are not an expected result from adoption of Rule 11-16.