

California Environmental Quality Act

NOTICE OF PREPARATION OF DRAFT ENVIRONMENTAL IMPACT REPORT FOR ADOPTION OF DISTRICT REGULATION 6: PARTICULATE MATTER, RULE 3: WOOD-BURNING DEVICES

Interested Agencies, Organizations and Individuals:

Subject: Notice is hereby given that the Bay Area Air Quality Management District (Bay Area AQMD or District) will be the lead agency and will prepare an Environmental Impact Report (EIR) in connection with the project described in this notice. This Notice of Preparation is being prepared pursuant to California Public Resources Code § 21080.4 and CEQA Guidelines Section 15082.

Project Title: Bay Area AQMD proposed Regulation 6: Particulate Matter, Rule 3: Wood-Burning Devices.

Project Location: The rule will apply within the Bay Area AQMD, 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 is proposing to adopt a new rule, Regulation 6: Particulate Matter, Rule 3: Wood-Burning Devices. The proposed rule will apply to residences and commercial establishments (hotels, restaurant, etc.) with wood-burning devices. The rule will limit visible emissions to 20% opacity, except for a start-up period; prohibit the burning of garbage, treated or unseasoned wood, plastics or other non-wood products; require labeling of the health hazards of breathing particulate matter on firewood and manufactured solid fuel products sold in the Bay Area and provide instructions on how to find information on the burn status of any day; require seasoned wood sold in the Bay Area to have a moisture content of 20% or less and require sellers to provide seasoning instructions if unseasoned wood is sold; prohibit the sale, transfer or installation of woodburning devices unless they are EPA Phase II certified or wood pellet stoves; allow woodburning devices only if they are EPA Phase II certified or pellet stoves in new construction; and prohibit burning under one of two options during days when the District predicts that the concentration of fine particulate matter (particulate matter less than 2.5 microns in diameter) in ambient air would exceed 35 micrograms per cubic meter. Under the first option, no burning in any wood-burning device would be allowed. Under the second option, burning would only be allowed in EPA Phase II certified wood-burning devices or pellet stoves.

In addition, the District is proposing to amend Regulation 5: Open Burning and Regulation 1: General Provisions and Definitions. The amendment to Regulation 5 would prohibit outdoor recreational fires when the concentration of fine particulate matter standard was predicted to exceed 35 micrograms per cubic meter. The amendment to Regulation 1 deletes an exclusion from District standards for residential heating, enabling adoption of the standards in proposed Regulation 6, Rule 3.

Probable Environmental Impacts: Adoption of a new rule to limit particulate matter emissions from wood-burning devices is intended to and expected to benefit public health and the environment. However, the District has chosen to prepare an EIR to ensure a comprehensive evaluation of any potential impacts. Attached to this notice is an Initial Study. The Initial Study outlines the areas of potential environmental impact that will be further reviewed in the draft Environmental Impact Report.

Response: This notice provides information on the above project and provides you an opportunity to submit comments on potential environmental effects that should be considered in the EIR. 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 must 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 Eric Pop, via the contact information below.

Eric Pop, Air Quality Specialist Bay Area Air Quality Management District 939 Ellis Street San Francisco, CA 94109 Phone: (415) 749-5172 Fax: (415) 928-0338

Email: epop@baaqmd.gov
Date: March 10, 2008

Chapter 1

Description of the Proposed Rule

Prior Control Efforts in the Bay Area

The Bay Area Air Quality Management District (District) is proposing adoption of Regulation 6, Rule 3 (Rule 6-3): Wood-Burning Devices. This proposed rule would control air pollution from wood-burning stoves, fireplaces, heaters, including wood pellet stoves. The District proposes adoption of Regulation 6, Rule 3 to reduce emissions of fine particulate matter (PM_{2.5}, or particulate matter with a diameter less than 2.5 microns), particularly on winter nights when fine particulate matter concentrations could exceed 35 μ /m³ (micrograms/cubic meter), which is the basis for the national health-based air quality standard. The national 24-hour standard for fine particulate matter in ambient air was lowered from 65 μ /m³ to 35 μ /m³ in December, 2006.

Currently, fireplaces and wood stoves used to heat residences are exempt from District rules by Regulation 1, Section 110.4. However, from time to time the District receives air pollution complaints about residential wood-burning devices, such as excessive smoke and odor. Because the District's regulations of general applicability, such as Regulation 6: *Particular Matter and Visible Emissions*, and Regulation 7: *Odorous Substances*, and the public nuisance standard in Regulation 1 do not apply, the District has been responding to such complaints with informational literature advising residents of the dangers of particulate matter and how to burn with a minimum of smoke.

The District also has a voluntary program to minimize particulate matter emissions from wood-burning devices, Spare the Air Tonight (STAT). The STAT program asks residents, via e-mail, the District website and press releases to radio and TV, not to burn on days when the concentration of $PM_{2.5}$ in ambient air is predicted to exceed 35 μ/m^3 . The STAT season runs from mid-November through mid-February, and has been active since 1991. Typically, there are between 20 and 30 STAT nights. The 2007-2008 season was a-typical because there were only six. During the STAT season, the District conducts random telephone surveys to gauge the success of the voluntary program, the public's practices for burning to refine the emission inventory, and public attitudes and behaviors associated with wood burning.

In addition, the District has promoted a model ordinance to cities and counties that contains various elements that can reduce particulate matter from wood smoke. The model ordinance serves as a guidance document for cities and counties that wish to regulate sources of particulate matter in their communities. The model ordinance includes options for mandatory burning curtailments on STAT nights, for requiring that new or re-modeled homes contain only EPA Phase II certified devices, for prohibiting gas to wood heating conversion and for limiting fuel that can be burned. Enforcement of the model wood smoke ordinance typically occurs through the permit process at local

building departments. Residents must provide documentation that the device to be installed is allowed by the ordinance. To date, 41 Bay Area cities and eight counties have adopted aspects of this model ordinance, including a mix of voluntary and mandatory standards.

The District also co-sponsored and managed a financial incentive, or "wood stove change-out" program in Santa Clara County as part of an air quality mitigation program required by the California Energy Commission. Rebates were offered to residents to remove non-EPA-certified wood-burning devices, install only EPA-certified devices, or to retrofit wood-burning fireplaces with natural gas fireplaces. The District's Cleaner Burning Technology Incentives Program offered a similar District-wide incentive program in 2007.

Harmful Effects of Wood Smoke

Wood-burning devices generate particulate matter. Combustion of wood also creates carbon dioxide, water vapor, carbon monoxide and volatile organic compounds, including toxic compounds. Partial or incomplete combustion, or burning wood that is not seasoned and dry, or burning garbage or other materials generates more particulate matter, carbon monoxide, and increases toxic compounds.

Residential wood combustion is an important contributor to ambient fine particle levels in the United States. District staff has identified wood smoke as the single greatest contributor on wintertime peak days (33%) to $PM_{2.5}$ in the Bay Area, as shown in Figure 2-1.

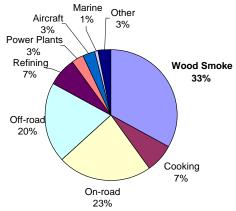


Figure 2-1. PM_{2.5} Concentration on Peak Days by Constituent in the Bay Area.

Other studies find results and trends that support emission inventory estimates derived from the District data. The California Air Resources Board found that residential wood combustion makes up 20 percent to 35 percent of wintertime PM.

To estimate the amount of PM coming from wood-burning devices, including fireplaces, District staff used data from survey sample results from Bay Area residents. These results were then correlated with projected demographic trends from the Association of Bay Area Governments (ABAG), which were based on U.S. Census data, and used to arrive at the estimated number of devices. These data, along with an annual through-put (fuel load), also derived from survey results, and an emission factor were then used to generate a PM_{10} estimate for each county in the Bay Area. These data are summarized in Table 2-1 in tons per day (tpd) and tons per year (tpy), for both PM_{10} (particulate matter 10 microns and below in diameter) and $PM_{2.5}$.

County	Wood Stove PM ₁₀ (tpd)	Fireplace PM ₁₀ (tpd)	Wood Stove PM _{2.5} (tpd)	Fireplace PM _{2.5} (tpd)
Alameda	0.03	2.28	0.03	2.19
Contra Costa	0.76	4.32	0.73	4.15
Marin	1.03	0.37	0.99	0.36
Napa	0.33	0.41	0.32	0.39
San Francisco	0.03	0.28	0.03	0.27
San Mateo	0.38	0.70	0.36	0.67
Santa Clara	0.65	3.11	0.62	2.99
Solano	0.05	0.89	0.05	0.85
Sonoma	1.27	1.43	1.22	1.37
Total Emissions Bay Area (tpd)	4.54	13.80	4.36	13.25
Total Emissions Bay Area (tpy)	1657	5037	1591	4836

Table 2-1. Summary of PM emissions from wood-burning devices by county.

Because the category of PM_{10} also includes $PM_{2.5}$, a large portion of PM_{10} particles are also $PM_{2.5}$ particles. Therefore, the majority of PM from wood smoke are fine particles. It is these fine particles that are of greatest concern to public health.

Objectives

The objective of Rule 6-3 is to reduce particulate matter and visible emissions from wood-burning devices and thereby reduce ambient levels of particulate matter in the Bay Area, and to reduce wintertime peak concentrations, with the goal of attaining the federal $PM_{2.5}$ standard. The Bay Area is also not in attainment with the State particulate matter standards, so further reductions in emissions of PM are needed for that purpose as well.

The Bay Area attains the federal annual PM_{10} (particulate matter of less than 10 microns in diameter) standard, but is not in attainment of the California annual PM_{10} or $PM_{2.5}$ or the California 24-hour PM_{10} standard. The Bay Area is unclassified for the national 24-hour PM_{10} and new 24-hour $PM_{2.5}$ standard.

The BAAQMD is not required to produce an attainment plan for particulate matter. However, under the requirements of Senate Bill 656 (SB 656, Sher), adopted in 2003, the District was required to develop a Particulate Matter Implementation Schedule in order to make progress toward attaining state and federal PM standards. That plan was adopted in November, 2005. The District's wood burning program was identified in the District's PM Implementation Schedule as one of the measures for enhancement and amendment. Rule 6-3 responds to that commitment.

Proposed Rule

The District is proposing Regulation 6, Rule 3 to reduce particulate matter and visible emissions from wood-burning devices in order to reduce ambient levels of particulate matter in the Bay Area, and to reduce wintertime peak concentrations to attain the national $PM_{2.5}$ standard.

Visible Emissions: Proposed Rule 6-3 would limit visible emissions from wood-burning devices, except 6 minutes during any hour period, to 20% visible emissions (equivalent to 1 on a Ringelmann Scale), except for 6 minutes during any hour. This opacity limit would not apply during a 20 minute start-up period for any wood fire. This opacity standard is required of other District operations from stationary sources, including dust from construction sites and any other regulated source. Failure to meet a visible emissions standard is indicative of poor ventilation to a fire, or poorly seasoned or wet wood. Based on District inspection staff observations, this standard is not difficult to meet for properly maintained and operated fireplaces and wood stoves.

Prohibit Burning of Garbage: Proposed Rule 6-3 would prohibit the burning of garbage, treated wood, non-seasoned wood, used or contaminated wood pallets, plastic products, rubber products, waste petroleum products, paints and paint solvents, coal, animal carcasses, glossy and/or colored paper, salt water driftwood, particle board, and any material not intended by a manufacturer for use as a fuel in a wood-burning device at any time. These materials produce volatile organic compounds, particulate matter and toxic compounds.

Labeling: Proposed Rule 6-3 would require a label be placed on firewood for sale, including manufactured wood products such as artificial logs and wood pellets. The label would address the health impacts from burning wood and how to find out when burning is prohibited. In addition, the label would have information on how to find out if burning is allowed on any given day. Unseasoned wood (moisture content of greater than 20%) would be required to be labeled as such and contain a notification that burning unseasoned wood is not allowed and provide instructions for seasoning.

Seasoned wood: Proposed Rule 6-3 would require that wood burned in a wood-burning device must be seasoned, meaning that it must have a moisture content of 20% or less. Only seasoned wood can be burned in a wood burning device. Unseasoned firewood may be sold, but must include a warning that it is not legal to burn before seasoning and instructions must be provided for seasoning.

Sale, transfer or installation: Federal law already requires newly manufactured wood stoves to meet EPA Phase II certification standards. Proposed Rule 6-3 would require that wood stoves sold, transferred or installed in the District meet these standards. Stoves sold as part of a house or other real estate transaction would not be affected by this prohibition.

New Construction: Proposed Rule 6-3 would allow only EPA certified wood-burning devices or pellet stoves in new construction. This would, among other things, prohibit conventional wood-burning fireplaces in new housing developments.

Burning Curtailment: Proposed Rule 6-3 would require one of two options that will limit the ability to burn on STAT nights, defined as a night when the ambient concentration of particulate matter is forecast to exceed $35 \,\mu/m^3$. Option 1 would not allow any burning in a wood-burning device on STAT nights. Option 2 would allow burning in EPA Phase II certified stoves and pellet stoves on STAT nights, but not allow the use of other conventional fireplaces and non-EPA certified stoves. An exemption would be provided for either option if wood burning was the only source of heat for a home. This initial study evaluates both options.

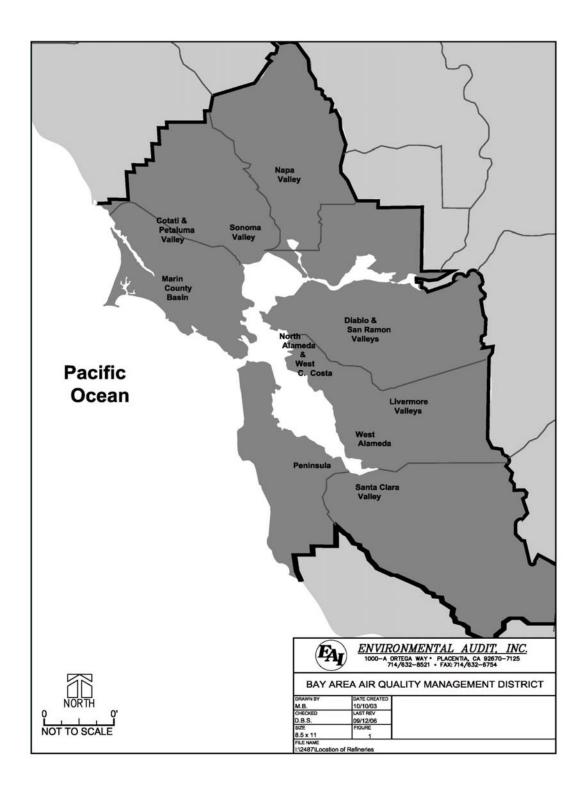
Proposed Regulation 6, Rule 3 is intended to be considered by the Bay Area Air Quality Management District Board of Directors in conjunction with proposed amendments to District Regulation 1: General Provisions and Definitions and Regulation 5: Open Burning. The purpose of the amendments to the Regulation 1 is to remove an exclusion from District regulations for fires used for residential heating. The purpose of the amendment to Regulation 5 is to remove an exemption for outdoor recreational fires on proposed curtailment days. These amendments, however, do not create any potential environmental impacts beyond those discussed herein. This Regulation 6, Rule 3 analysis discusses the potential environmental impacts of the proposed rule with these adjunctive amendments.

Affected Area

The proposed rule amendments would apply to residences and commercial businesses (hotels, restaurants, etc. with a fireplace or wood-burning device) within the BAAQMD jurisdiction. The BAAQMD 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.

The facilities affected by the proposed rule amendments are located within the jurisdiction of the Bay Area Air Quality Management District (see Figure 1).

M;DBS:2519:2519-R6R2Ch2-ProjDesc.doc



Chapter 2 Environmental Checklist

ENVIRONMENTAL CHECKLIST FORM

1. Project Title: Bay Area Air Quality Management District (BAAQMD)

Proposed New Regulation 6, "Particulate Matter," Rule

3, "Wood-Burning Devices"

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: Eric Pop, Compliance and Enforcement Division

415/749-5172 or epop@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. The constituents affected by the rule are located in the entire area under

Bay Area Air Quality Management District 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

Environmental Factors Potentially Affected:

Sig	ject would involve at least one imp nificant With Mitigation Incorporal checklist on the following pages.						
	Aesthetics		Agricultural Reso	ources	X	Air Quality	
	Biological Resources		Cultural Resourc	es		Geology/Soils	
	Hazards and Hazardous Materials		Hydrology/Water	r Quality		Land Use/Planning	
	Mineral Resources		Noise			Population/Housing	
	Public Services		Recreation			Transportation/Traffic	
	Utilities/Service Systems		Mandatory Findi	ngs of Significance	÷		
Det	ermination:						
On	the basis of this initial evaluation:						
	I find that the proposed project COULD NO be prepared.)T ha	ve a significant effect o	on the environment, and	laN	EGATIVE DECLARATION will	
	I find that although the proposed project co in this case because revisions to the project NEGATIVE DECLARATION will be prepare	t hav	•			<u> </u>	
X	I find that the proposed project MAY have a REPORT will be prepared.	a sigi	nificant effect on the er	nvironment, so that an E	IVVII	RONMENTAL IMPACT	
	I find that the proposed project MAY have a unless mitigated" but at least one effect (1) standards and (2) has been addressed by An ENVIRONMENTAL IMPACT REPORT	has mitig	been adequately analy ation measures based	zed in an earlier docum on the earlier analysis,	nent as d	pursuant to applicable legal escribed on attached sheets.	
	I find that although the proposed project coeffects (a) have been analyzed adequately pursuant to applicable standards, and (b) hREPORT or NEGATIVE DECLARATION, if urther is required.	in ar ave	n earlier ENVIRONMEI been avoided or mitiga	NTAL IMPACT REPOR ited pursuant to that ear	T or I	NEGATIVE DECLARATION ENVIRONMENTAL IMPACT	
Sig	nature			Date			
Prin	Printed Name For						

The environmental factors checked below would potentially be affected by this project (i.e., the

		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?				
b.	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?				
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. Regulation 6, Rule 3 (Rule 6-3) is designed to limit emissions of particulate matter and visible emissions from wood-burning devices, through the requirement to use compliant wood-burning devices and prevent the use of non-compliant wood-burning devices during curtailment periods.

Rule 6-3 would restrict installation of wood-burning devices in new construction of buildings or structures to United States Environmental Protection Agency (U.S. EPA) Phase II certified wood-burning devices, pellet-fueled devices, or low mass fireplaces of a make and model that meets U.S. EPA low mass fireplace emission targets and has been approved in writing by the Air Pollution Control Officer (APCO) from the BAAQMD. In new developments, the installation of compliant wood-burning devices is expected to look essentially the same as non-

compliance devices, so no change in the visual character of the environment is expected.

Rule 6-3 would establish criteria for the sale and installation of wood-burning devices. These requirements would control the type of indoor wood-burning devices that can be installed or used to replace existing devices. The Rule 6-3 compliant devices are similar in size and structure to the non-compliant devices, therefore this requirement is not expected to have an effect on the visual character of the environment. Proposed Rule 6-3 would reduce emissions of particulate matter, which can impact visibility, as well as air quality. A reduction in particulate matter emissions is expected to generate better visibility in the Bay Area.

Rule 6-3 would not require any new development, and compliant devices appear similar to non-compliant devices, therefore, obstruction of scenic resources or degrading the visual character of a site, including but not limited to: trees, rock outcroppings, or historic buildings, is not expected.

Rule 6-3 does 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 Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
II.	AGRICULTURAL RESOURCES.				
a.	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: 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?				
b.	Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?				
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?				Ø

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. Rule 6-3 is designed to limit emissions of particulate matter and visible emissions from wood-burning devices. The proposed rule would not require conversion of existing agricultural land to other uses. The proposed rule is not expected to conflict with existing agriculture-related zoning designations or Williamson Act contracts. Williamson Act lands within the boundaries of the BAAQMD would not be affected. No effects on agricultural resources are expected because the proposed rule would not required any new development, but would require compliant wood-burning devices in new development areas. Therefore, there is no

potential for conversion of farmland to non-agricultural use or conflicts related to agricultural uses or land under a Williamson Act contract.

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?			Ø	
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)?				Ø
d.	Expose sensitive receptors to substantial pollutant concentrations?			Ø	
e.	Create objectionable odors affecting a substantial number of people?				Ø
f.	Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollution?	Ø			

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 6-3 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 (PM_{10}), and particulate matter less than or equal to 2.5 microns in diameter ($PM_{2.5}$). Ozone, a criteria pollutant, is formed from a

reaction of volatile organic compounds and oxides of nitrogen in the presence of ultraviolet light (sunlight). Particulate matter is made up of particles that are emitted directly, such as products of combustion and fugitive dust, as well as secondary particles that are formed in the atmosphere from reactions involving precursor pollutants such as oxides of nitrogen, sulfur oxides, volatile organic compounds, and ammonia. Secondary PM and combustion particles tend to be fine particles ($PM_{2.5}$), whereas fugitive dust is mostly coarse particles.

The Bay Area is classified as a non-attainment area for both the California and national ozone standards. The California standards are more stringent than the national standard. The Bay Area attains the national annual PM_{10} standard, but is not in attainment of the California annual PM_{10} or $PM_{2.5}$ or the California 24-hour PM_{10} standard. The Bay Area is unclassified for the national 24-hour PM_{10} and 24-hour $PM_{2.5}$ standard. There is no national annual PM_{10} standard or California 24-hour $PM_{2.5}$ standard. As with ozone, the California standards are more stringent. Particulate matter can cause serious health effects such as aggravated asthma, nose and throat irritation, bronchitis, lung damage, and premature death.

Discussion of Impacts

a., c. Rule 6-3 is being proposed as part of an air quality control plan. In 2005 the BAAQMD published the "Particulate Matter Implementation Schedule", pursuant to Senate Bill 656 (SB656), and wood smoke reduction was identified in that Schedule as a priority. Subsequently, the Air District Advisory Council examined wood smoke impacts on PM_{2.5} levels and issued recommendations to the Air District Board of Directors. The recommendations were accepted by the Air District Board of Directors and staff began work on a wood smoke reduction strategy. Rule 6-3 is one of many measures that, collectively, will reduce emissions of particulate matter and progress towards meeting the applicable federal and state air quality standards. The measures are not contingent on each other. Consequently, the rule is part of, and will not interfere with the implementation of an air quality plan.

The criteria pollutants are defined by the US EPA. They are ozone, carbon monoxide, particulate matter, sulfur dioxide, lead, and nitrogen oxide. Rule 6-3 would limit emissions of particulate matter by requiring that new and replacement wood-burning devices meet EPA emissions criteria, restricting the installation of wood-burning devices that do not meet EPA emissions criteria in new construction, and by limiting the use of the existing devices under one of two options on certain nights as described in Chapter 1. None of these measures could result in the increase of any of the criteria pollutants.

b., d. The primary purpose of Regulation 6, Rule 3 is to limit emissions of particulate matter and visible emissions from wood-burning devices as

part of an overall wood smoke reduction program within the jurisdiction of the BAAQMD. Wood smoke has been a concern in the District since scientific research began establishing a stronger connection between public health and emissions from wood smoke. Combustion processes, including the combustion of wood in wood-burning devices, are a major source of manmade air pollution, including particulate matter. Carbon monoxide, hydrocarbons, nitrogen oxides and toxic compounds are additional dangerous byproducts from the combustion of wood.

- e. Rule 6-3 will result in a decrease in particulate emissions from wood burning devices. Wood burning devices can generate smoke that has a distinctive odor. Affected devices are not expected to create objectionable odors affecting a substantial number of people because the installation of compliant wood burning devices are expected to result in more efficient combustion, reducing particulate matter emissions and the related odors. Further, Rule 6-3 would prohibit the burning of garbage, treated wood, non-seasoned wood, used or contaminated wood pallets, plastic products, rubber products, waste petroleum products, paints and paint solvents, coal, animal carcasses, colored paper, salt water driftwood, particle board, and any material not intended by a manufacturer for use as a fuel in a wood-burning device. This requirement should also reduce odors.
- f. Even though the proposed rule is expected to result in a decrease in particulate matter emissions providing an air quality benefit, the proposed project may result in an increase in greenhouse gas emissions generating a potential impact on global climate change. This is because wood, a renewable resource, is considered "carbon neutral" whereas natural gas combusted to produce heat is not renewable and produces carbon dioxide, the primary contributor to global climate change. Therefore, there is the potential for cumulative greenhouse gas impacts which will be evaluated in a Draft EIR. Therefore, an EIR will be prepared to address air quality impacts associated with greenhouse gas emissions.

Based on these considerations, the cumulative increase in greenhouse emissions are 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?				Ø
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?				Ø
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?				☑
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?				Ø
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				Ø
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?				Ø

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 6-3 would apply to all areas within the BAAQMD's jurisdiction.

Discussion of Impacts

a-f Rule 6-3 is designed to limit emissions of particulate matter and visible emissions from wood-burning devices. The proposed rule would not require or bring about new residential or commercial development, but would restrict the installation of wood-burning devices in new development. Installation of new compliant devices is expected to be similar to installation of non-compliant devices. Therefore, installing compliant devices in new development or in existing structures is not expected to create additional impacts. Any new development that must comply with Rule 6-3 are constructed for business reasons other than to comply with Rule 6-3. Such projects may or may not have adverse impacts on biological resources. However, these projects would be built regardless of whether or not Rule 6-3 is in effect. As a result, the proposed rule would not directly or indirectly affect riparian habitat, federally protected wetlands, or migratory corridors.

The proposed rule would not conflict with local policies or ordinances protecting biological resources nor local, regional, or state conservation plans because it will only affect or restrict wood-burning devices in new development or prevent non-compliant wood-burning devices during curtailment periods. The proposed rule will also not conflict with any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or any other relevant habitat conservation plan.

Therefore, the proposed rule neither requires nor is likely to result in activities that would affect sensitive 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?				☑
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?				✓
c.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				
d.	Disturb any human remains, including those interred outside of formal cemeteries?				Ø

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 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 6-3 would apply to all areas within the BAAQMD's jurisdiction.

Discussion of Impacts

a.-d. The proposed rule is not expected to have an effect on cultural resources because the proposed rule would not cause any new development. Rule 6-3 does not require any changes to existing fireplaces or other wood-burning devices. Therefore, Rule 6-3 is not expected to have significant impacts to historic buildings or require that wood-burning devices in historic buildings be removed or replaced.

The proposed rule would require that any new wood-burning devices installed be compliant with Rule 6-3. The removal and installation of non-compliant and compliant devices is not expected to require the use of heavy construction equipment, therefore, no impacts to historical resources are expected as a result of implementing Rule 6-3. No physical changes to the environment are expected to be required preventing disturbance to any paleontological or archaeological resources, nor would the rule require any physical changes that could disturb human remains. Any new residential or commercial 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 6-3 were in affect.

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

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 6-3 would apply to all areas within the BAAQMD's jurisdiction.

Regional basement rocks consist of the highly deformed Great Valley Sequence, which include massive beds of sandstone interfingered 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 with 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, 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. No impacts on geology and soils are anticipated from the proposed rule that would apply to existing residential and commercial operations. The wood-burning devices to be regulated as part of this new rule will not create new development in the area. The proposed rule does not directly require structural alterations to existing structures.

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 residential or 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. No major construction activities are expected from the proposed rule. Therefore, no significant adverse impacts on geology and soils are expected.

Since Rule 6-3 would mostly affect new residential and commercial operations in the area, it is expected that the soil types present in the affected facilities and residences would not be further susceptible to expansive soils or liquefaction due to adoption of the proposed rule. Additionally, subsidence is not expected to occur because grading, or filling activities at affected facilities and residences despite adoption of the proposed rule that would only restrict the installation of woodburning devices.

The proposed project has no affect on the installation of septic tanks or alternative wastewater disposal 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?			abla	
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?			Ø	
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?				\square
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?				
g.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
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?				Ø

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 6-3 would apply to all areas within the BAAQMD's jurisdiction.

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, 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 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

a., b. Since wood, pellet-fuel, and wood ash are not considered hazardous materials, use of compliant wood-burning devices would not require the routine transport, use, or disposal of hazardous materials. The restriction of compliant wood-burning devices in new development and commercial operations, or prohibition of non-compliant wood-burning devices during curtailment periods, would not create a significant hazard to the public or environment through a reasonable foreseeable upset and accident conditions involving hazardous materials. The use of electrical heaters as an alternative to wood-burning devices would not result in potentially significant adverse impacts because the use of hazardous materials would not be required.

While natural gas devices substituted for wood-burning devices could introduce greater explosive risk, the majority of residences and facilities in the District already have natural gas service. Natural gas is flammable, can be explosive under certain conditions, and a release of

natural gas may result in potentially significant hazards and risk of upset to people. The majority of facilities that would be affected by the proposed rule already have natural gas pipeline infrastructure for natural gas delivery. Natural gas burning devices must meet American National Standards Institute (ANSI) standards. Compliance with applicable federal, state and local regulatory requirements for the design and installation of natural gas devices would make the risk of accidental release less than significant. Further, Rule 6-3 includes an exemption from Rule 6-3 for wood-burning devices in areas where natural gas service is not available; therefore, Rule 6-3 will not require the installation of new natural gas utility lines or increase the hazards related to the use of natural gas.

c. The proposed rule would not generate hazardous emissions, handling of hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school. The use of compliant wood-burning devices in new development and during curtailment periods would not generate as many hazardous emissions as non-compliant wood-burning devices. Replacement of wood-burning devices with electric devices would reduce hazardous emissions or hazardous materials associated with wood burning.

Replacement of wood-burning devices with natural gas devices could increase risk of explosion. However, since natural gas devices would require building permits, compliance with federal, state, and local regulatory requirements for the design and installation of natural gas devices would limit the risk of accidental release to the degree that the risk would be expected to be less than significant regarding schools.

- d. The proposed rule would restrict the type of wood-burning devices at new residences and commercial operations. Government Code §65962.5 is related to hazardous material sites at industrial facilities. The proposed rule would affect residences and commercial facilities such as hotels, restaurants, lodges, etc., which are typically not associated with hazardous waste sites. Therefore, commercial facilities and residences would not normally be included on the list of hazardous material sites compiled pursuant to Government Code §65962.5. As a result, Rule 6-3 is not expected to affect any facilities included on a list of hazardous material sites and, therefore, would not 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. The use of compliant wood-burning, or alternative, devices in new development would not generate as many hazardous emissions as non-compliant wood-burning devices. Replacement of wood-burning devices with electric devices would reduce hazardous emissions or hazardous materials from wood burning.

Replacement of wood-burning devices with natural gas devices could increase risk of explosion. However, since natural gas devices would require building permits, compliance with federal, state, and local regulatory requirements for the design and installation of natural gas devices would limit the risk of accidental release to the degree that the risk would be expected to be less than significant regarding public airports or private air strip.

- g. No impacts on emergency response plans are anticipated from the proposed rule. Wood-burning devices or their alternatives are not typically major components of any evacuation or emergency response plan. 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 is expected.
- h. No increase in hazards related to wildfires is anticipated from the proposed rule that would apply to existing structures utilizing compliant wood-burning devices. The proposed rule will not create new residential or commercial land use projects. Any new development that might occur in the District would occur for reasons other than the proposed rule. New land use project would require a CEOA 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. Proposed Rule 6-3 is not expected to reduce the amount of brush cleared in wildfire hazard areas as the brush clearing is generally required for compliance with fire codes. The burning of brush in wood burning devices under proposed Rule 6-3 could still be accomplished, as long as the brush is seasoned and not burned on prohibited days. Most wood brush from private property that would be burned is seasoned before burning to produce a desirable (hot) fire. As Rule 6-3 would only provide minor and sporadic delays in burning, no significant impacts are expected.

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?				\square
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)?				V
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?				Ø
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?				Ø
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?				$\overline{\checkmark}$
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?				Ø
h.	Place within a 100-year flood hazard area structures that would impede or redirect floodflows?				\square
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?				☑

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

The BAAQMD covers 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 area of coverage is vast (about 5,600 square miles) so that land uses and affected environment vary substantially throughout the area and include commercial, industrial, residential, agricultural, and open space uses. Rule 6-3 would apply to all areas within the BAAQMD's jurisdiction.

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

Rule 6-3 would limit the installation of new, and replacement of existing wood-burning devices in the District to compliant wood-burning devices. Compliant wood-burning devices do not use water for any reason, nor do they generate wastewater. Any construction activities regarding replacement of non-compliant wood-burning devices would be minor and would not require heavy equipment, so there would be no soil disturbance attributed to the proposed rule.

No impacts on hydrology/water quality resources are anticipated from the proposed rule. Because compliant wood-burning devices do not use water for any reason, the proposed rule 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 residences and commercial operations affected by the proposed rule are required to comply with wastewater discharge regulations. The requirement to utilize compliant wood-burning devices will have no 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.				
	Would the project:				
a.	Physically divide an established community?				\square
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?				☑
c.	Conflict with any applicable habitat conservation plan or natural community conservation plan?				\square

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 6-3 would apply to all areas within the BAAQMD's jurisdiction.

Discussion of Impacts

a-c. Rule 6-3 would not create any new development, but would restrict installation of wood-burning devices to compliant devices in new development and prohibit burning of non-compliant devices during curtailment periods. Thus, Rule 6-3 does not include any components that would mandate physically dividing an established community or generate additional development.

The proposed rule has no components which would affect land use plans, policies, or regulations. Regulating PM10 and PM2.5 emissions from wood-burning devices will not require local governments to alter land use and other planning considerations due to the proposed rule. Habitat conservation or natural community conservation plans, agricultural resources or operations, would not be affected by Rule 6-3, and divisions of existing communities would not occur. Therefore, current or planned

land uses with the District will not be significantly affected as a result of Rule 6-3.

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?				V
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

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 6-3 would apply to all areas within the BAAQMD's jurisdiction.

Discussion of Impacts

a-b. The proposed rule is 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 Rule 6-3.

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?				Ø
b.	Expose persons to or generate excessive groundborne vibration or groundborne noise levels?				
c.	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

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 6-3 would apply to all areas within the BAAQMD's jurisdiction.

Discussion of Impacts

a. Rule 6-3 would restrict installation of wood-burning devices in new development and prohibit use of non-compliant wood

burning devices during curtailment periods. Since no heavy-duty equipment is required to install compliant devices, noise impacts associated with the proposed rule are expected to be minimal. Operation of compliant wood-burning devices may require the addition of blowers or exhaust fans. Blowers and exhaust fans would be regulated by local building permits and are similar in some respects to those used in household water heaters. Noise from these systems, both indoors and outdoors, is expected to be limited to acceptable levels by the building permit process. Therefore, residences and commercial operations affected by the proposed rule are not expected to have a significant adverse affect on local noise control laws or ordinances.

- b. Rule 6-3 is not expected to generate or expose people to excessive groundborne vibration or groundborne noise. Equipment used to install wood-burning devices in new or existing residences or commercial operations are not in any way expected to generate vibrations.
- c. Rule 6-3 is not expected to result in a substantial permanent increase in ambient noise levels in the District. The proposed rule would not create new development. Compliant equipment and non-compliant equipment operate at similar noise levels, and are designed to be operated in residences and commercial facilities (e.g., hotels, restaurants, etc.), where operators are protected by noise regulations, and residences will not tolerate excessive noise levels. Permanent increases in noise levels are not anticipated as a result of the proposed rule.
- d. Rule 6-3 is not expected to increase periodic or temporary ambient noise levels to levels existing prior to the proposed rule. The installation or replacement of wood-burning devices in new facilities would require minor construction activities and would not require the use of heavy equipment. Operational noise levels are expected to be equivalent to existing noise levels as discussed earlier.
- e., f. Implementation of Rule 6-3 would require only minor construction in existing facilities, and does not require the use of heavy equipment for installation in new or existing residences or commercial operations. No new noise impacts are expected from any existing facilities during construction or operation 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)?				☑
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

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 6-3 would apply to all areas within the BAAQMD's jurisdiction.

Discussion of Impacts

a-c. The proposed rule is not expected to result in the construction of new facilities or the displacement of housing or people. Implementation of the proposed rule will result require that new development install compliant wood-burning devices and restricts wood-burning devices during curtailment periods development. These modifications and restrictions 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.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
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?				$\overline{\checkmark}$
	Police protection?				$\overline{\checkmark}$
	Schools?				$\overline{\mathbf{A}}$
	Parks?				$\overline{\mathbf{A}}$
	Other public facilities?				

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 6-3 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 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., b. The facilities affected by the proposed rule are not expected to require any new or additional public services. As shown in Section VII Hazards and Hazardous Material of this Initial Study, the use of compliant wood burning appliances is not expected to generate significant explosion or fire hazard impacts so no increase in fire protection services is expected. Rule 6-3 is not expected to have any adverse effects on local police departments and require additional police services as it would only require the installation of compliant wood-burning devices for new development. Rule 6-3 would not require the development and these projects would be built regardless of whether or not Rule 6-3 is 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 Rule 6-3 would not induce population growth. Therefore, with no increase in local population anticipated, additional demand for new or expanded schools or parks is not anticipated. 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 Rule 6-3, therefore, 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?				☑
b.	Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?				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 6-3 would apply to all areas within the BAAQMD's jurisdiction.

Discussion of Impacts

a-b. Rule 6-3 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 Rule 6-3 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)?				✓
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?				Ø
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?				Ø
d.	Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				V
e.	Result in inadequate emergency access?				$\overline{\checkmark}$
f.	Result in inadequate parking capacity?				
g.	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				Ø

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 6-3 would apply to all areas within the BAAQMD's jurisdiction.

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. Additional traffic or significant increases of staffing at existing residential or commercial facilities that would result in changes to traffic patterns or levels is not expected. The proposed rule 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 could result in minor modifications to existing residences and commercial operations as well as restrictions on the type of wood-burning devices to be installed in new development. The proposed rule is not expected to involve the delivery of materials via air so no increase in air traffic is expected.
- d., e. The proposed rule is not expected to increase traffic hazards or create incompatible uses. No affect on emergency access to affected residences or commercial facilities is expected from adopting the proposed rule. Utilizing compliant wood-burning devices versus non-compliant devices is not expected to have a 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 Rule 6-3 only pertains to wood-burning devices. No increase in permanent workers is expected. Therefore, the proposed rule is not expected to result in significant adverse impacts on parking.
- g. The proposed rule affects wood-burning devices and is 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?				abla
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?				Ø
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?				Ø
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?				Ø
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?				

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 6-3 would apply to all areas within the BAAQMD's jurisdiction.

Discussion of Impacts

- a-e. The proposed rule is restricted to both the installation of new, and replacement of existing wood-burning devices, with compliant devices. These regulations regarding wood-burning devices will not generate or affect wastewater, stormwater or stormwater drainage, and will not require water or affect water supplies. No increases in demand for public utilities are expected as a result of the proposed rule.
- Rule 6-3 would require the installation of compliant woodf., g. burning devices and generally would not generate additional waste. Rule 6-3 could encourage the replacement of existing devices with newer compliant devices. As existing devices are replaced, their disposal is expected to be categorized as solid waste. Solid waste is either recycled or disposed of in landfills. Rule 6-3 is not expected to generate any significant increase in solid waste. Since any facilities would be replacing their noncompliant wood burning devices because of a remodel, not because of Rule 6-3, compliant wood burning devices installed during remodels and non-wood burning devices installed in new development are not expected to generate any more solid waste than non Rule 6-3 compliant devices. In fact, natural gas burning devices would not generate solid waste (e.g., wood ash). Therefore, no significant adverse impacts are expected to solid waste as a result of the proposed rule.

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?				☑
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.)	☑			
c.	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?			Ø	

Discussion of Impacts

- a. Rule 6-3 is not expected to create any new development. Because the rule will not require development, the proposed rule does 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. Even though the proposed rule is expected to result in a decrease in particulate matter emissions providing an air quality benefit, the proposed project may result in an increase in greenhouse gas emissions generating a potential impact on global climate

change. Therefore, there is the potential for cumulative greenhouse gas impacts which will be evaluated in a Draft EIR. Rule 6-3 is not expected to generate any project-specific significant environmental impacts and is not expected to cause cumulative impacts in conjunction with any other environmental resources. Therefore, an EIR will be prepared to address air quality impacts associated with greenhouse gas emissions.

c. Other than greenhouse gas impacts, Rule 6-3 is not expected to cause significant adverse effects on human beings. In fact Rule 6-3 is expected to reduce particulate matter emissions, reduce exposure to particulate matter, and reduce health impacts associated with exposure to particulate matter. Adoption of the rule is not expected to create significant adverse impacts on air quality. From 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 6-3.