

APPENDIX B

NOTICE OF PREPARATION AND INITIAL STUDY

October 27, 1998

**SUBJECT: NOTICE OF PREPARATION OF A DRAFT
SUBSEQUENT ENVIRONMENTAL ASSESSMENT**

**PROJECT TITLE: PROPOSED AMENDMENTS TO RULE 1113:
ARCHITECTURAL COATINGS**

In accordance with the California Environmental Quality Act (CEQA), the South Coast Air Quality Management District (SCAQMD) is the Lead Agency and will prepare a subsequent environmental assessment (SEA) for the project identified above pursuant to its certified regulatory program (SCAQMD Rule 110). This project was previously considered in the SCAQMD's 1997 AQMP and associated Program Environmental Impact Report (EIR) as well as the 1990 Environmental Assessment (EA) for amended Rule 1113. The proposed amended rule will reduce VOC emissions from certain architectural coatings. The purpose of this Notice of Preparation (NOP) is to inform appropriate government agencies that a Draft SEA is being prepared, and to solicit comments on the environmental areas within each agency's jurisdiction.

In conjunction with the development of the proposed amended rule, it is necessary to address the affects of the proposed amended rule on the environment. The SCAQMD is preparing appropriate environmental analyses consistent with CEQA. This NOP serves two purposes: to solicit information on the scope of the environmental analysis for the proposed project and notify the public that the SCAQMD will prepare a Draft SEA to the 1997 AQMP EIR and 1990 EA to assess potential environmental impacts that may result from implementing the proposed amended rule. If potential adverse impacts are identified, the Draft SEA will also discuss feasible mitigation measures to reduce potential significant adverse environmental impacts. The Draft SEA will also include a discussion of all other topics required by CEQA.

The attached materials are not SCAQMD applications or forms requiring a response from you. Their purpose is simply to provide information to you on the above project. If the proposed project has no bearing on you or your organization, no action on your part is necessary.

The project's description, location, and potential environmental impacts are described in the Initial Study for the proposed project that is attached to this NOP. This NOP and Initial Study are available for a 30-day review and comment period. Comments focusing on your area of expertise, your agency's area of jurisdiction, or scope of the project alternatives should be addressed to Mr. Darren W. Stroud (c/o Office of Planning, Transportation and Information Management) at the address shown above, or sent by FAX to (909) 396-3324. Comments must be received no later than 5:00 PM on December 1, 1998. Please include the name and phone number of the contact person for your agency.

Project Applicant: N/A

Date: October 27, 1998

Signature: Steve Smith

Steve Smith

Title: Program Supervisor

Telephone: (909) 396-3054

Reference: California Code of Regulations, Title 14, Sections 15082(a), 15103, and 15375

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

INITIAL STUDY FOR THE DRAFT SUBSEQUENT ENVIRONMENTAL ASSESSMENT FOR:

PROPOSED AMENDED RULE (PAR) 1113 - ARCHITECTURAL COATINGS

October 27, 1998

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CHAPTER 1

PROJECT DESCRIPTION

Introduction

Project Location

Background

Project Description

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INTRODUCTION

The proposed amended Rule (PAR) 1113 – Architectural Coatings, is a "project" as defined by the California Environmental Quality Act (CEQA). California Public Resources Code §21080.5 allows public agencies with regulatory programs to prepare a plan or other written document in lieu of an environmental impact report once the Secretary of the Resources Agency has certified the regulatory program. The South Coast Air Quality Management District's (SCAQMD) regulatory program was certified by the Secretary of the Resources Agency on March 1, 1989, and is codified as SCAQMD Rule 110. Pursuant to Rule 110 (the rule which implements the SCAQMD's certified regulatory program), SCAQMD is preparing a Draft Subsequent Environmental Assessment (SEA) to evaluate potential adverse impacts from amending Rule 1113.

CEQA requires that the potential adverse environmental impacts of proposed projects be evaluated and that methods to reduce or avoid identified significant adverse environmental impacts of these projects be implemented if feasible. The purpose of the Draft SEA is to inform the SCAQMD's Governing Board, public agencies, and interested parties of potentially significant adverse environmental impacts that could result from implementing the proposed project.

This Initial Study is intended to provide information about the proposed project to other public agencies and interested parties prior to the release of the Draft SEA. The Initial Study is being released for a 30-day review period. Written comments on the scope of the environmental analysis and possible project alternatives received by the SCAQMD during the 30-day review period will be considered when preparing the Draft EA.

The SCAQMD was created by the California legislature in 1977¹ as the public agency responsible for developing and enforcing air pollution control regulations in the areas within its jurisdiction. By statute, the SCAQMD is required to adopt or amend and enforce rules that will reduce air pollutant emissions in order to attain and maintain federal and state ambient air quality standards. If the area within SCAQMD's jurisdiction is to comply with the state and federal ambient air quality standards for ozone, further reductions from sources that generate volatile organic compounds (VOCs) are required.

Unlike primary criteria pollutants that are emitted directly from an emission source, ozone is a secondary pollutant. It is formed in the atmosphere through photochemical reactions of VOC, NO_x, and other hydrocarbon materials with sunlight. Ozone is a deep lung irritant, causing air passages to become inflamed and swollen. Exposure to ozone produces alterations in respiration, the most characteristic of which is shallow, rapid

¹

The Lewis-Presley Air Quality Management Act, 1976 Cal. Stat. ch. 324 (codified at H & S Code, Sections 40400 - 40540).

breathing and a decrease in pulmonary performance. Ozone reduces the respiratory system's ability to fight infection and to remove foreign particles. People who suffer from respiratory diseases such as asthma, emphysema, and chronic bronchitis are more sensitive to ozone's effects. In severe cases, ozone is capable of causing death from pulmonary edema. Early studies suggested that long-term exposure to ozone results in adverse effects on morphology and function of the lung and acceleration of lung-tumor formation and aging. Ozone exposure also increases the sensitivity of the lung to bronchoconstrictive agents such as histamine, acetylcholine, and allergens.

It should be noted that there are no state or federal ambient air quality standards for VOCs because they are not classified as criteria pollutants. VOCs are regulated, however, because a reduction in VOC emissions reduces certain chemical reactions that contribute to the formation of ozone. VOCs are also transformed into organic aerosols in the atmosphere, contributing to higher PM10 and lower visibility levels.

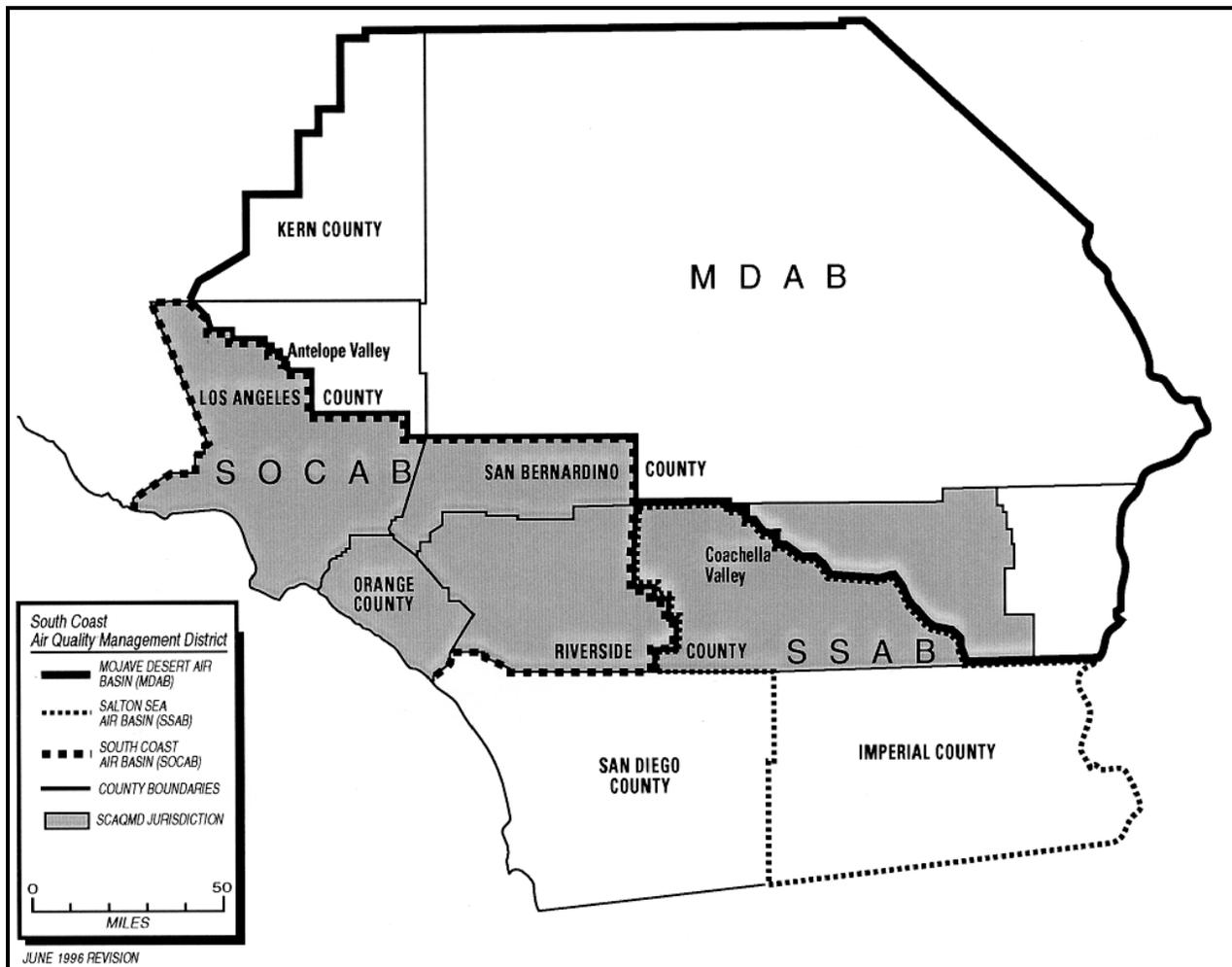
Although health-based standards have not been established for VOCs, health effects can occur from exposures to high concentrations of VOC because of interference with oxygen uptake. In general, ambient VOC concentrations in the atmosphere are suspected to cause coughing, sneezing, headaches, weakness, laryngitis, and bronchitis, even at low concentrations. Some hydrocarbon components classified as VOC emissions are thought or known to be hazardous. Benzene, for example, one hydrocarbon component of VOC emissions, is known to be a human carcinogen.

PROJECT LOCATION

The district has one of the worst air quality problems in the nation. Though there have been significant improvements in air quality in the district over the last decade and a half, some air quality standards are still exceeded frequently and by a wide margin.

The SCAQMD has jurisdiction over an area of approximately 10,743 square miles (referred to hereafter as the district), consisting of the four-county South Coast Air Basin (Basin), the Riverside County portions of the Salton Sea Air Basin (SSAB), and the Mojave Desert Air Basin (MDAB) (both formerly part of the Southeastern Desert Air Basin). The Basin, which is a subarea of the district, is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto mountains to the north and east. The Basin includes all of Orange County and the nondesert portions of Los Angeles, Riverside, and San Bernardino counties. The Riverside county portion of the SSAB and MDAB are bounded by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley. The federal nonattainment area (known as the Coachella Planning Area) is a subregion of Riverside County and the SSAB that is bounded by the San Jacinto Mountains to the west and the eastern boundary of the Coachella Valley to the east (Figure 1-1).

**Figure 1-1
South Coast Air Quality Management District**



BACKGROUND

VOC emissions from architectural coating operations are regulated by SCAQMD Rule 1113. Under this Rule, emissions are controlled by limiting the VOC content, measured in grams per liter, of the architectural coatings sold and applied in the district. Architectural coatings are defined by their application and use and include coatings which are applied to stationary structures including residential and commercial buildings; billboards; curbs and roads; and mobile homes. VOCs are emitted to the atmosphere from the evaporation of organic solvents used in industrial maintenance coatings, nonflats, flats, primers/sealers/undercoaters, waterproofing sealers, varnishes, wood preservatives, lacquers, fire retardant coatings, etc. The current Rule and PAR 1113 apply to those persons who supply, sell, apply, solicit the application of, and manufacture such coatings.

Rule 1113 was originally adopted September 2, 1977 to regulate the VOC emissions from the application of architectural coatings, and has been amended several times since the date of adoption, mostly to exempt certain coating categories from the 250 grams per liter (g/l) exterior coating VOC limit and 350 g/l interior coating VOC limit. In contrast to the earlier amendments, the rule was amended on February 2, 1990 to further reduce VOC emissions from certain, previously exempted coating categories. The February 2, 1990 limits were based primarily on the California Air Resources Board (CARB) Suggested Control Measure (SCM) for architectural and industrial maintenance coatings. A consortium of California air pollution control districts, the CARB, U. S. Environmental Protection Agency Region IX, and paint manufacturers developed the provisions in the SCM. Upon adoption of the lower VOC limits, coating manufacturers sued the District, along with other air districts, over issues that they felt were not adequately addressed in the staff report or in the CEQA document. The suit stayed portions of the February 1990 amendments, as specified in the Superior Court judgment. Subsequent rule amendments adopted November 1990, December 1990, and September 1991 were not subject to the court judgment. The most recent amendments to Rule 1113 were adopted on November 8, 1996, and resulted in a net emission reduction of 10.3 tons per day of VOC. Subsequently, industry filed three separate lawsuits, questioning the validity of the proposed future limits for the lacquer and flat coating categories. The District has prevailed in all three cases.

In an effort to better understand the state of coating technology for industrial maintenance coatings, non-flats, and other coatings, the SCAQMD in Spring 1996 contracted with Eastern Michigan University (EMU) to conduct an informational study. The EMU study generally found that high-VOC, low-VOC, and zero-VOC coatings were commercially available for industrial maintenance; non-flats; primers, sealers, and undercoaters; water-proofing sealers; and stains coatings. Unfortunately, the EMU study found that durability information for the low- and zero-VOC coatings in these coating categories was not widely available. This finding was to a certain extent based on the fact that coatings manufacturers did not supply durability information on their low- and zero-VOC coatings. As a result, the EMU study recommended that side-by-side comparisons be made between low- and zero-VOC coatings with high-VOC coatings.

Due to the lack of durability information contained in the EMU study, the District has contracted with National Technical Systems (NTS) to conduct a comparative study that will evaluate the durability and application characteristics of the following coating categories: industrial maintenance; non-flats; primers, sealers, and undercoaters; water-proofing sealers; and stains. The final report will provide side-by-side comparisons for the aforementioned coatings and discuss results pertaining to overall performance. A total of 114 coatings will be included in the study. Preliminary laboratory data is expected by late November 1998.

In addition to the NTS study, CARB is currently in the process of refining their architectural coatings inventory for the state of California. The current inventory is based on 1990 industry sales data. The current inventory update would be based on 1996 industry sales data. CARB has requested not only the 1996 sales information for various coating categories, but also speciation profiles for each coating category. This updated inventory will assist staff in evaluating the current emissions inventory from use of architectural coatings, as well as providing a more accurate estimate of the emission reductions that can be achieved from each of the coating categories affected by the proposed amendments. The CARB 1998 architectural emissions inventory is expected to be completed by late November 1998.

PROJECT DESCRIPTION

The primary objective of PAR 1113 is to readopt portions of the definitions and lower VOC limits that were originally adopted on February 2, 1990, and overturned by the Superior Court on August 21, 1990. Additionally, PAR 1113 seeks to implement, in part, the 1997 AQMP control measure CTS-07, which calls for a 50 percent reduction in VOC emissions from architectural coatings by 2010 and the federally enforceable 1994 AQMP, which calls for a 75 percent reduction. This represents a 30 tons per day VOC reduction by 2010 from this area source category and is one of the largest emission reduction control measures in the 1997 AQMP. The November 1996 amendments to Rule 1113, which lowered the VOC content limits from lacquers, flats (interior and exterior), traffic coatings, and multi-color coatings, are projected to reduce VOC emissions by 10.3 tons per day by 2010. Based on the current inventory, PAR 1113 is projected to reduced VOC emissions by an additional 19.7 tons per day by 2010.

To achieve the additional 19.7 tons per day of VOC emission reductions called for in control measure CTS-07, PAR 1113 would lower the allowable VOC content per liter of coating from industrial maintenance (IM) coatings, non-flats, primers, sealers, and undercoaters, quick-dry enamels, and waterproof sealers. PAR 1113 would also delete the current exemption for quick-dry primers, sealers, and undercoaters. Although not included in the proposed amendments, staff is currently evaluating the feasibility of expanding the existing Rule 1113 averaging provision to include additional coating categories.

Additionally, PAR 1113 will expand the "Averaging Provision" to include the coating categories that will be impacted. However, this proposed change has not yet been included in the proposed rule language because staff would like to discuss if averaging is feasible. For a complete description of PAR 1113, the reader is referred to Appendix A of this Initial Study.

PROJECTED EMISSIONS REDUCTIONS

The implementation of PAR 1113 is currently estimated to result in 19.7 tons per day of VOC emission reductions on an annual average inventory basis and 23.3 tons per day on the summer planning inventory basis by the year 2010. The table below summarizes the current proposed changes in VOC limits and the associated projected emission reductions. However, the results and information provided by the NTS study and the CARB 1998 architectural emissions inventory could change the emission limits and reduction estimates listed in Table 1-1.

**Table 1-1
PAR 1113 Proposed Emission Limits and Projected Emission Reductions
for Affected Coating Categories**

Coating Category	Current Limit¹ (g/l)	Proposed Limit¹ (g/l)	Annual Average Emission Reductions (tons/day)	Summer Planning Emission Reductions (tons/day)
Industrial Maintenance Coatings	420	100 (effective 07/01/2001) 50 (effective 07/01/2005)	5.3	6.3
Non-Flats	250	100 (effective 07/01/2001) 50 (effective 07/01/2005)	8.9	10.5
Quick-Dry Enamel	400	100 (effective 07/01/2001) 50 (effective 07/01/2005)	TBD	TBD
Primers, Sealers, Undercoaters (PSU)	350	100 (effective 07/01/2001) 50 (effective 07/01/2005)	4.0	4.7
Quick-Dry PSU	Exempt ²	100 (effective 07/01/2001) 50 (effective 07/01/2005)	1.5	1.8
Stains	350	250 (effective 07/01/2001)	TBD ³	TBD
Water-Proofing Sealers	400	250 (effective 7/1/2001)	TBD	TBD
		Total	19.7⁴	23.3

¹ Grams of VOC per liter of coating, less water and less exempt compounds

² Currently exempt if manufacturers reports sales data

³ TBD – To be determined upon completion of the NTS study and CARB 1998 architectural emissions inventory survey.

⁴ Estimated emission reductions based on 1990 sales info. (1994 CARB Survey).

ALTERNATIVES

The Draft SEA will discuss and compare alternatives to the proposed project pursuant to SCAQMD Rule 110 and CEQA Guidelines §15252, which require discussion of reasonable alternatives to avoid or reduce potentially significant effects and that feasibly attain the basic objectives of the proposed project. The purpose of the discussion of alternatives is to foster informed decision making and public participation. A CEQA document need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative.

Some alternatives that are currently under consideration for inclusion in the Draft SEA are summarized below.

- Low Vapor Pressure Exemption - VOC emission limits would be based on the volatility of affected coatings' VOC compounds rather than the VOC content of the coating. Thus, under this alternative, VOC compounds with low vapor pressures may be exempted as a VOC from the overall VOC content of the coating.
- Performance-based standards – Emission standards would be based on VOC emissions per area covered per year rather than VOC content of the coatings.
- Reactivity – VOC emission limits would be based on the ozone reactivity of affected coatings' VOC compounds rather than the VOC content of the coating.
- Product Line Averaging – Rather than a coating manufacturer having to meet a specific VOC content limit for each specific product line, this alternative would allow averaging for all product lines.
- Regional Deregulation – Areas in the district that do not have an ozone problem or contribute to the SCAQMD's ozone problem would be exempted from the VOC content requirements of the proposed amendments. Since the district has high NO_x levels that contribute to the district's ozone problems, this alternative is not currently applicable. However, as NO_x levels decrease in the future and the district reaches attainment for ozone, this alternative may be feasible. Thus, this alternative will be analyzed for its future applicability.
- Seasonal Approach – Low-VOC content limits for various coatings would only be in effect during the “high ozone season” (i.e., typically the summer months). During the “low ozone season” (i.e., typically the winter months), affected coatings with higher VOC content limits could be used.

- VOC Content Limits / Final Compliance Deadlines – As a result of information obtained from industry or through various studies and surveys, the proposed VOC content limits and/or final compliance deadlines as shown above in Table 1-1 may be modified.

SCAQMD Rule 110 (the rule that implements the SCAQMD's certified regulatory program) does not impose any greater requirements for a discussion of project alternatives in an environmental assessment than is required for an EIR under CEQA.

Written suggestions on project alternatives received during the comment period for the NOP will be considered when preparing the Draft SEA.

INITIAL ENVIRONMENTAL EVALUATION

Chapter 2 of this Initial Study contains an environmental checklist that was prepared to identify potentially significant adverse environmental impacts, and will determine the scope of the analysis in the Draft EA. Items checked as having a "Potentially Significant Impact" will be analyzed further in the Draft EA.

CHAPTER 2

ENVIRONMENTAL CHECKLIST

Introduction

General Information

Environmental Factors Potentially Affected

Determination

Evaluation of Environmental Impacts

INTRODUCTION

The environmental checklist provides a standard evaluation tool to identify a project's adverse environmental impacts. A sample checklist form is provided in the State CEQA Guidelines, Appendix I. The SCAQMD has slightly modified the Appendix I checklist, but it still addresses all areas identified in the Appendix I checklist. This checklist identifies and evaluates potential adverse environmental impacts that may be created by the proposed project.

GENERAL INFORMATION

Name of Project Proponent: South Coast Air Quality Management District
Address of Proponent: 21865 E. Copley Drive
Diamond Bar, CA 91765
Lead Agency: South Coast Air Quality Management District
Name of Project: Proposed Amended Rule 1113

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental areas marked with an "✓" (checkmark) have the potential to be adversely affected by the proposed project. A checkmark of potentially significant impact does not mean the proposed project will have a significant impact but requires further evaluation, which may lead to an ultimate determination of no significant impact. An explanation relative to the determination of each of the areas can be found in the expanded checklist that follows.

- | | | |
|--|---|---|
| <input type="checkbox"/> Land Use and Planning | <input type="checkbox"/> Population and Housing | <input type="checkbox"/> Geophysical |
| <input checked="" type="checkbox"/> Water | <input checked="" type="checkbox"/> Air Quality | <input type="checkbox"/> Transportation/Circulation |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Energy and Mineral Resources | <input type="checkbox"/> Hazards |
| <input type="checkbox"/> Noise | <input checked="" type="checkbox"/> Public Services | <input type="checkbox"/> Solid/Hazardous Waste |
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Recreation |
| <input checked="" type="checkbox"/> Mandatory Findings of Significance | | |

DETERMINATION

On the basis of this initial evaluation:

- I find the proposed project, in accordance with those findings made pursuant to CEQA Guideline § 15252, could NOT have a significant effect on the environment, and that an ENVIRONMENTAL ASSESSMENT with no significant impacts will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will NOT be significant effects in this case because the mitigation measures described on an attached sheet have been added to the project. A MITIGATED ENVIRONMENTAL ASSESSMENT with no significant impacts will be prepared.
- I find that the project MAY have a significant effect(s) on the environment, and an ENVIRONMENTAL ASSESSMENT will be prepared.

Date: August 21, 1998

Signature: Steve Smith
Steve Smith, Ph.D.
Program Supervisor

EVALUATION OF ENVIRONMENTAL IMPACTS

	Potentially Significant Impact	No Impact
I. LAND USE AND PLANNING. <i>Would the proposal:</i>		
a) Conflict with general plan designation or zoning?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with applicable environmental plans or policies adopted by agencies with jurisdiction over the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Affect agricultural resources or operations (e.g. impacts to soils or farmlands, or impacts from incompatible land uses)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disrupt or divide the physical arrangements of an established community (including a low-income or minority community)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Implementation of the proposed amendments to Rule 1113 will not cause significant adverse impacts to land uses or land use planning in the district. It is anticipated that any increased activities will occur at existing facilities or sites. Thus, no new resources or facilities are expected to be constructed which would result in any land use impacts.

No new development or alterations to existing land use designations will occur as a result of the implementation of the proposed amended Rule (PAR) 1113. It is not anticipated that the use of compliant Rule 1113 coatings in the district would require additional land to continue current operations or require rezoning. Therefore, no significant adverse impacts affecting existing or future land uses are expected.

	Potentially Significant Impact	No Impact
II. POPULATION AND HOUSING. <i>Would the proposal:</i>		
a) Cumulatively exceed official regional or local population projections?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Induce substantial growth in an area either directly or indirectly (e.g. through projects in an undeveloped area or extension of major infrastructure)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace existing housing, especially affordable housing?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Human population in the district is anticipated to grow regardless of implementing PAR 1113. The proposed amendments will primarily affect the formulation of architectural coatings and are not anticipated to generate any significant effects, either direct or indirect on the district's population as no additional workers are anticipated to be required to comply with the proposed amendments. Further, PAR 1113 is not expected to cause a relocation of population within the district. As a result, housing in the district is expected to be unaffected by the proposed amendments. New housing construction is not expected to be affected by the use of lower-VOC coatings.

Additionally, adoption of PAR 1113 is not expected to contribute to any significant housing cost increases because reformulated coatings are currently being sold at comparable prices as "traditional" higher-VOC coatings. Direct economic impacts are not required to be analyzed pursuant to CEQA unless they also have a significant, direct effect on physical environmental parameters. Cost impacts associated with implementation of PAR 1113 will be discussed in the District's Socioeconomic Impact Assessment (under separate cover).

	Potentially Significant Impact	No Impact
III. GEOPHYSICAL. <i>Would the proposal result in or expose people to potential impacts involving:</i>		
a) Seismicity: fault rupture, ground shaking, seiche or tsunami?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Landslides or mudslides?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Erosion, changes in topography or unstable soil conditions from excavation, grading or fill?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Subsidence of land?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion:		
Architectural coatings are applied to buildings, stationary structures, roads, etc. The proposed amendments affect coating formulators and have no effects on geophysical formations in the district. Additionally, since add-on control equipment will not be used to reduce VOC emissions from architectural coatings, PAR 1113 is not expected to result in additional exposure of people to potential impacts involving seismicity, landslides, mudslides or erosion as no new development is anticipated.		

	Potentially Significant Impact	No Impact
IV. WATER. <i>Would the proposal result in:</i>		
a) Changes in adsorption rates, drainage patterns, or the rate and amount of surface runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exposure of people or property to water related hazards such as flooding?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

c) Discharge into surface waters or other alteration of surface water quality (e.g. temperature, dissolved oxygen or turbidity)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Changes in the amount of surface water in any water body?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Changes in currents, or the course or direction of water movements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?	<input type="checkbox"/>	<input type="checkbox"/>
g) Altered direction or rate of flow of groundwater	<input type="checkbox"/>	<input type="checkbox"/>
h) Impacts to groundwater quality?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) A need for new water treatment, distribution, sewer or storm water drainage systems?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

Many architectural coatings manufacturers are expected to meet the lower VOC limits in PAR 1113 by reformulating or substituting VOC-containing materials with other substances (e.g., water-based, non-toxic, and/or VOC-free materials). The expanded use of reformulated materials to replace VOC-containing materials has the potential to adversely affect both water demand and water quality (e.g., surface water and groundwater). As the production of water-based materials increases, for example, there could be a greater demand for water from those industries that manufacture the water-based materials. In addition, use of water based coatings may generate increased amounts of wastewater from coating applications. Water used for equipment cleanup and unused product may contain hazardous materials in excess of levels permitted in wastewater discharges. This wastewater may be discharged into storm drains and sanitary sewers and may, therefore, alter surface water quality. Additionally, wastewater from clean-up activities could be dumped on the ground, which may infiltrate into the water table, thus, affecting groundwater quality. These water impacts will be evaluated in more detail in the Draft SEA.

	Potentially Significant Impact	No Impact
V. AIR QUALITY. <i>Would the proposal:</i>		
a) Violate any air quality standard or contribute to an existing or projected air quality violation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Expose sensitive receptors to pollutants?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Alter air movement, moisture, or temperature, or cause any change in climate?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- | | | |
|--|-------------------------------------|--------------------------|
| d) Create Objectionable odors? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s). | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Discussion:

During promulgation of past amendments to Rule 1113 in which the VOC content limits of various coating categories were lowered, the SCAQMD received comments that estimated emission reductions would not be as great as originally anticipated for eight reasons, which are summarized.

More Thickness

Coating manufacturers and coating contractors assert that reformulated compliant water- and solvent-based coatings are very viscous (e.g., high-solids content) and difficult to handle during application, tending to produce a thick film when applied directly from the can. A thicker film indicates that a smaller surface area is covered with a given amount of material, thereby increasing VOC emissions per unit of area covered.

More Thinning

Because reformulated compliant water- and solvent-based coatings are more viscous (e.g., high-solids content), coating manufacturers and coating contractors assert that painters have to adjust the properties of the coatings to make them easier to handle and spread. Especially, for solvent-based coatings this adjustment consists of thinning the coating as supplied by the manufacturer by adding solvent to change the viscosity of the coating. The added solvent increases VOC emissions back to or sometimes above the level of older formulations. With water-based coatings, thinning is not an issue because water is the solvent used to thin these coatings.

More Priming

Coating manufacturers and coating contractors assert that reformulated compliant water- and low-VOC solvent-based topcoats do not adhere as well as higher-VOC solvent-based topcoats to unprimed substrates. Therefore, the substrates must be primed with typical solvent-based primers to enhance the adherence quality. Additionally, water-based sealers do not penetrate and seal porous substrates like wood, as well as traditional solvent-based sealers. This results in three or four coats of the sealer per application compared to one coat for a high-quality solvent-based sealer.

More Topcoats

Coating manufacturers and coating contractors assert that reformulated compliant water- and low-VOC solvent-based topcoats may not cover, build, or flow-and-level as well as the solvent-based formulations. Therefore, more coats are necessary to achieve equivalent cover and coating build-up.

More Touch-Ups and Repair Work

Coating manufacturers and coating contractors assert that reformulated compliant water- and low-VOC solvent-based formulations dry slowly, and are susceptible to damage such as sagging, wrinkling, alligating, or becoming scraped and scratched. The high-solids solvent-based enamels tend to yellow in dark areas. Water-based coatings tend to blister or peel, and also result in severe blocking problems.

All of these problems require additional coatings for repair and touch-up.

More Frequent Recoating

Coating manufacturers and coating contractors assert that the durability of the reformulated compliant water- and low-VOC solvent-based coatings is inferior to the durability of the traditional solvent-based coatings. Durability problems include cracking, peeling, excessive chalking, and color fading, which all typically result in more frequent recoating.

More Reactivity

Different types of solvents have different degrees of "reactivity", which is the ability to accelerate the formation of ground-level ozone. Coating manufacturers and coating contractors assert that the reformulated compliant water- and low-VOC solvent-based coatings contain solvents that are more reactive than the solvents used in higher-VOC solvent-based formulations. Furthermore, water-based coatings perform best under warm, dry weather conditions, and are typically recommended for use between May and October. Since ozone formation is also dependent on the meteorological conditions, use of waterborne coatings during this period increases the formation of ozone.

Substitution

Coating manufacturers and coating contractors assert that since reformulated compliant water- and low-VOC solvent-based coatings are inferior in durability and are more difficult to apply, consumers and contractors will substitute better performing coatings in other categories for use in categories with low compliance limits. An example of this substitution could be the use of a non-flat coating (currently with a higher compliance limit) in place of a low-VOC, flat coating on interior drywall.

All of these issues will be analyzed in more detail in the Draft SEA.

Regarding secondary emissions from power plants providing power to special spray equipment used to apply reformulated coatings, it is expected that current district baseline emissions will not increase. Currently, almost 75 percent of the electricity used in the district is imported from out-of-state power plants. Any additional electricity needed to power special spray equipment would most likely be provided by out-of-state power plants. Furthermore, any in-district power generation would be provided by facilities subject to the requirements of SCAQMD Regulation XX - Regional Clean Air Markets (RECLAIM) or Rule 1135 - Emission of Oxides of Nitrogen From Electric Power Generating Systems. These rules cap emissions from power generating facilities and require the emissions to be reduced over time. Therefore, secondary emissions from power plants are not expected to be significant and will not be evaluated further.

Toxics

The SCAQMD has also received comments in the past that compliant low-VOC coatings are often formulated with toxic compounds. As a result, material replacement or reformulation to reduce the use of high-VOC solvent-based coatings has the potential to result in health risks associated with exposure to both carcinogenic and noncarcinogenic toxic air contaminants. Material reformulation or substitution may result in increased use of acetone, a compound that has been delisted as a VOC by EPA, and will not be regulated by the AQMD. Increased application of acetone-based coatings has the potential to increase objectionable odors. The toxic air impacts and potential odor impacts will be evaluated in more

detail in the Draft SEA.

	Potentially Significant Impact	No Impact
VI. TRANSPORTATION/CIRCULATION. <i>Would the proposal result in:</i>		
a) Increased vehicle trips or traffic congestion?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Hazards to safety from design features (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Inadequate emergency access or access to nearby uses?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Insufficient parking capacity on-site or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Hazards or barriers for pedestrians or bicyclists?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflicts with adopted policies supporting alternative transportation (e.g. bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Rail, waterborne or air traffic impacts?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion:		
<p>The proposed amendments will not substantially increase the amount of businesses or equipment in the district. The main effect of the proposed amendments will be to alter the way certain architectural coatings are manufactured. PAR 1113 will not result in a substantial increase in vehicle trips throughout the entire district from the transportation of compliant water-based or low-VOC solvent-based coatings. Even if more frequent application of complaint coatings may occur as a result of the implementation of PAR 1113, the frequency and concentration of daily trips to and from any one location in the district (e.g., manufacturer to distribution center, manufacturer to retail painting store, contractor to retail painting store, or do-it-yourselfer to retail painting store) is not expected to cause significant traffic impacts. Therefore, potential increases in traffic or alterations of traffic patterns are not anticipated from the manufacture, delivery, and use of compliant PAR 1113 coatings.</p>		
<p>Coating performance and durability issues will be discussed relative to potential indirect air quality impacts in the Air Quality Impacts section of the Draft SEA.</p>		

	Potentially Significant Impact	No Impact
VII. BIOLOGICAL RESOURCES. <i>Would the proposal result in impacts to:</i>		
a) Locally designated natural communities (e.g. oak forest, coastal habitat, etc.)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Wildlife dispersal or migration corridors?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion:		
<p>PAR 1113 is not expected to adversely affect existing plant or animal species or communities, unique or endangered plant or animal species, or agricultural crops. Improvements in air quality from PAR 1113 are expected to provide health benefits to plant, animal species as well as the human residents in the district. No significant adverse impacts to biological resources are expected to result from the proposed rule amendments because PAR 1113 is expected to affect facilities in residential, industrial or commercial areas where biological resources are already severely disturbed.</p>		

	Potentially Significant Impact	No Impact
VIII. ENERGY AND MINERAL RESOURCES. <i>Would the proposal:</i>		
a) Conflict with adopted energy conservation plans?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Use non-renewable resources in a wasteful and inefficient manner?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion:		
<p><i>Electricity</i></p> <p>Because add-on control equipment is not expected to be used to comply with the provisions of PAR 1113, no additional energy use is expected to be required. Additionally, PAR 1113 will not substantially increase the number of businesses or amount of equipment in the district. Furthermore, energy usage associated with providing power for special spray equipment used to apply reformulated coatings, is expected to be negligible. Currently, almost 75 percent of the electricity used in the district is imported from out-of-state power plants. Thus, there is a substantial amount of unused generating capacity in the basin. Any additional electricity needed to power special spray equipment would most likely be provided by out-of-state power plants. Any incremental power generation necessary to power special spray-equipment operation would be negligible compared to overall in-district generation and could be easily met by existing in-district capacity. Therefore, no increases in energy consumption or mineral resources are expected from the implementation of PAR 1113. Consequently, energy impacts are not considered to be significant.</p>		

Natural Gas

The consumption of natural gas in the district is not expected to increase as a result of the implementation of PAR 1113. Electricity will be the primary source of energy used to power the spraying equipment operated at various sites. Consequently, natural gas energy impacts from implementing PAR 1113 are not considered to be significant.

Fossil Fuels

PAR 1113 is also expected not to substantial increase energy consumption from non-renewable resources (e.g., diesel and gasoline) above current district usage levels. Any incremental fuel usage from trips associated with more frequent application of complaint coatings are expected to be negligible. There are sufficient supplies of gasoline and diesel to meet the small fuel demands from transport trips associated with more frequent application of complaint coatings. Therefore, fossil fuel energy impacts from implementing PAR 1113 are not considered to be significant.

	Potentially Significant Impact	No Impact
IX. HAZARDS. <i>Would the proposal involve:</i>		
a) A risk of accidental explosion or release of hazardous substances (including, but not limited to: oil, pesticides, chemicals or radiation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Possible interference with an emergency response plan or emergency evacuation plan	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) The creation of any health hazards or potential health hazard?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Exposure of people to existing sources of potential health hazards?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Increased fire hazard in areas with flammable brush, grass, or trees?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion:		
<i>Risk of Upsets</i>		
<p>Some coating manufacturers may elect to comply with the VOC content limits of PAR 1113 by reformulating their coatings with the acetone (exempt solvent). During past promulgation of amendments to various SCAQMD coating and solvent rules (e.g., 102, 1107, 1113, 1136, etc.) the SCAQMD received comments that acetone could result in hazards impacts (e.g., risk of fire or explosion) because of its flammability. The SCAQMD has extensively analyzed the alleged hazards impacts associated with the reformulation of coatings with acetone in EAs for 102, 1107, 1113, and 1136 as well as the 1997 AQMP and has concluded that the reformulation of acetone will not create significant hazards impacts on a project-specific basis. Thus, the project-specific hazards impacts</p>		

associated with the implementation of PAR 1113 are also considered insignificant. Furthermore, any increase in accidental releases of compliant acetone-based coatings would be expected to result in a concurrent reduction in the number of accidental releases of existing coating materials. In addition, cumulative hazards impacts associated with the reformulation of acetone are not considered significant because in the incremental increase from the reformulation of acetone associated with the implementation of PAR 1113 are negligible.

Human Health

The SCAQMD has also received comments in the past that to meet some proposed VOC content limits, manufacturers would have to use hazardous coalescing solvents (i.e., glycol ethers -EGBE) in their water-based reformulations. This, as the argument goes, would lead to human health impacts to workers and the public from their exposure to these compounds. However, various articles and studies, indicate that this is not the case and that solvents such as ethylene glycol ethers or ethylene glycol ether acetates will be replaced with non-hazardous solvents such as propylene glycol ethers or propylene glycol ether acetates in order to comply with the 1990 CAAA. Other reports suggest that non-hazardous solvents such as texanol and propylene glycol are prevalent today in water-based reformulations and should continue to be used in the future. Furthermore, the reformulation of coatings with hazardous solvents such as propylene glycol ethers or propylene glycol ether acetates will result in a concurrent reduction in use of coatings containing hazardous solvents such as benzene, toluene, xylene, etc. Thus, the project-specific human health impacts associated with the implementation of PAR 1113 are considered insignificant. In addition, cumulative hazards impacts associated with the reformulation of hazardous solvents are not considered significant because the incremental increase from the reformulation of hazardous solvents associated with the implementation of PAR 1113 are negligible.

	Potentially Significant Impact	No Impact
X. NOISE. <i>Would the proposal result in:</i>		
a) Increases in existing noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exposure of people to severe noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

No significant noise impacts are anticipated by the implementation of PAR 1113. Coating manufacturers within the district potentially affected by the proposed amendments are located in existing industrial or commercial areas. It is assumed that operations in these areas are subject to and in compliance with existing community noise standards. In addition to noise generated by current operations, noise sources in each area may include nearby freeways, truck traffic to adjacent businesses, and operational noise from adjacent businesses.

In general, the primary noise source at existing facilities is generated by vehicular traffic, such as trucks transporting raw materials to the facility, trucks hauling wastes away from the facility, trucks to recycle waste or other materials, and miscellaneous noise such as spray equipment (i.e. compressors, spray nozzles) and heavy equipment use (forklifts, trucks, etc.). Noise is generated during operating hours, which generally range from 6 a.m. to 5 p.m., Monday through Friday. PAR 1113 is not expected to alter noise from existing noise generating sources.

Additionally, the implementation of PAR 1113 is not expected to result in significant noise impacts in residential areas. As with industrial or commercial areas, it is assumed that these areas are subject to local community noise standards. Contractors or do-it-yourselfers applying compliant PAR 1113 coatings in residential areas are expected to comply with local community noise standards.

	Potentially Significant Impact	No Impact
XI. PUBLIC SERVICES. <i>Would the proposal have an effect upon, or result in a need for new or altered government services in any of the following areas?</i>		
a) Fire protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Maintenance of public facilities, including roads?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other governmental service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

PAR 1113 may result in the use of acetone to reformulate lower-VOC coatings. Acetone is a volatile, flammable liquid at room temperature. Feedback received from these authorities indicates that, based upon their extensive professional experience as a result of years of regulating the use and storage of flammable materials, the use of acetone will pose no greater risks than the use of existing solvents such as MEK, toluene, butyl acetate, etc., even though acetone is slightly more flammable. Furthermore, the handling characteristics for acetone is identical to traditional solvents found existing coatings, relative to fire department procedures. Therefore, no significant public services impacts are expected as a result of reformulating current solvent-based coatings with acetone.

However, the Draft SEA will analyze whether reformulated compliant coatings could lead to more demand for maintenance at public facilities because these coatings do not perform or hold-up as well as traditional solvent-based coatings.

	Potentially Significant Impact	No Impact
XII. UTILITIES AND SERVICE SYSTEMS. <i>Would the proposal result in a need for new systems, or substantial alterations to the following utilities:</i>		
a) Power or natural gas?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Communications systems?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

c) Landfills?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Discussion:

PAR 1113 will not substantially increase the amount of businesses or equipment in the District. Since add-on control equipment is not expected to be used to comply with the provisions of PAR 1113, no additional increase on the demand for utilities (e.g., electrical, gas, and communication systems) is expected. Also, with the use of water-based coatings to comply with the proposed lower-VOC content limits, it is expected that less solid waste will be deposited into landfills because some of the excess water-based material can be recycled and reused. Impacts to utilities or service systems are, therefore, not considered to be significant.

	Potentially Significant Impact	No Impact
XIII. AESTHETICS. <i>Would the proposal:</i>		
a) Affect a scenic vista or scenic highway?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a demonstrable negative aesthetic effect?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Create light or glare?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

The proposed amendments do not require any changes in the physical environment that would obstruct any scenic vistas or views of interest to the public. In addition, no major changes to existing facilities or stockpiling of additional materials or products outside of existing facilities are expected to result. The reason for this determination is that any physical changes would occur at existing industrial or commercial sites. Therefore, no significant impacts adversely affecting existing visual resources such as scenic views or vistas, etc. are anticipated to occur.

Coating performance and durability issues will be discussed relative to potential indirect air quality impacts in the Air Quality Impacts section of the Draft SEA.

	Potentially Significant Impact	No Impact
XIV. CULTURAL RESOURCES. <i>Would the proposal:</i>		
a) Disturb paleontological resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Disturb archaeological resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have the potential to cause a physical change that would affect unique ethnic cultural values?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

There are existing laws in place that are designed to protect and mitigate potential impacts to cultural

resources. Should archaeological resources be found during the application of Rule 1113 coatings to newly constructed structures or existing structures, the application of such coating would cease until a thorough archaeological assessment is conducted. Furthermore, the application of architectural coatings, in the vast majority of situations, would occur after construction where archaeological resources would have already been disturbed. The proposed revisions to Rule 1113 are, therefore, not anticipated to result in any activities or promote any programs that could have a significant adverse impact on cultural resources in the District.

	Potentially Significant Impact	No Impact
XV. RECREATION. <i>Would the proposal:</i>		
a) Increase the demand for neighborhood or regional parks or other recreational facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Affect existing recreational opportunities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion:		
No recreational resources in the district are expected to be adversely affected by the implementation of PAR 1113. The proposed amendments will not generate additional demand for, or otherwise affect land used for recreational purposes. Further, as already discussed in the Land Use section above, the proposed amendments are not expected to have adverse affects on land uses in general. Therefore, no significant adverse effects on recreational facilities are expected from the implementation of PAR 1113.		

	Potentially Significant Impact	No Impact
XVI. MANDATORY FINDINGS OF SIGNIFICANCE.		
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Discussion:		
As a result of the possible adverse effects on air quality, water demand, water quality and public services, the proposed project has the potential to degrade the quality of the environment. Many of the impacts are individually limited, but could be cumulatively significant. There may be adverse human health impacts associated with exposure to both carcinogenic and noncarcinogenic toxic air contaminants. These potential human health impacts may occur individually, such as elevated exposure to toxic air contaminants, or cumulatively, if different environmental impacts reinforce each other.		

These impacts will be evaluated in detail in the Draft SEA.

