BOARD MEETING DATE: July 20, 2001 AGENDA NO. 40

PROPOSAL: Amend Rule 1113 – Architectural Coatings

SYNOPSIS: The proposed amendments would 1) create a new category for clear wood finish brushing lacquers with an allowable VOC content of 680 g/l effective upon date of adoption and reduced to 275 g/l effective January 1, 2005; and 2) establish labeling and reporting requirements for such brushing lacquers to ensure their proper use and thus minimize emissions.

COMMITTEE: Stationary Source May 25, 2001, Reviewed

RECOMMENDED ACTION:
Adopt the attached resolution:
1. Certifying the Final Environmental Assessment (EA) for Proposed Amended Rule 1113 – Architectural Coatings; and
2. Amending Rule 1113 – Architectural Coatings.

Barry R. Wallerstein, D.Env.
Executive Officer

EC:LL:LDY:TGL:RR

Background
Emissions of volatile organic compounds (VOCs) from stationary and mobile sources are major contributors to the formation of ozone (a key ingredient of smog) in the South Coast Air Basin. The formation of ozone occurs as VOCs react with oxides of nitrogen in the atmosphere. Ozone, a criteria pollutant, has been shown to adversely affect human health and contributes to the formation of another criteria pollutant, PM_{10}.

The use of architectural coatings (coatings applied to stationary structures and their appurtenances) in the AQMD is a major source of VOC emissions. In 1977, Rule 1113 – Architectural Coatings, was adopted to reduce VOC emissions from the use of

architectural coatings. The rule prohibits the manufacture, sale, distribution, or application of architectural coatings within the AQMD unless a specific VOC content for the coating is met.

Rule 1113 has been amended on numerous occasions. In November 1996, the rule was amended and included a requirement for the VOC content of clear lacquers to be reduced from 680 grams per liter (g/l) to 550 g/l, effective January 1, 1998. Acceptable lacquers applied by spray application methods were successfully developed to meet the 550 g/l requirement. In 1999, a coating manufacturer approached the AQMD stating that a 550 g/l *brushing* lacquer could not be successfully developed. These brushing lacquers are exclusively formulated for the residential "do-it-yourself" market and are not sprayed, but applied by hand with a brush. The manufacturer was virtually the only company marketing brushing lacquer in the AQMD. The AQMD recommended that the company seek a variance.

In 1999, the company was granted a variance for one year from the 680 g/l requirement for lacquers. The variance was extended for an additional year in 2000. Since being granted the variance, the manufacturer of the clear brushing lacquer has conducted extensive research efforts in an attempt to formulate a compliant product (550 g/l). AQMD staff met with the manufacturer on several occasions to discuss and evaluate these efforts. The company also filed a comprehensive written report outlining and summarizing their research efforts.

AQMD staff also applied several of the low-VOC brushing lacquers (550g/l) developed by the company to wood panels. The solvent systems of some of the coatings evaporated too quickly causing "brush drag" and leaving an unacceptable finish. Other formulations did not spread smoothly or evenly resulting in equally poor aesthetics.

Staff concluded that an amendment to the rule is necessary since no available compliant products are feasible at this time.

The manufacturer's representatives indicated that their future efforts in reformulating brushing lacquers would be aimed at achieving the existing future limit in Rule 1113 of 275 g/l for other clear wood finishing lacquers (effective January 1, 2005). Thus, the amendment will include a requirement to reach this future limit.

PAR 1113 has provisions for technology assessments to be conducted for lacquers by year 2004. Staff intends to include brushing lacquers in this technology assessment if necessary.

Proposal
In this amendment, staff proposes to:

- add a category for clear brushing lacquers limiting the maximum allowable VOC content not to exceed 680 grams per liter and require that the VOC content be reduced to 275 g/l by January 1, 2005 (consistent with the January 1, 2005 requirement for other clear wood finish lacquers);
- include a definition for clear brushing lacquer; and
- require specific labeling and reporting requirements for such brushing lacquers.

The annual average emissions from architectural and industrial maintenance (AIM) coatings for the year 2000 is estimated at 59.4 tons per day (1997 AQMP). The summer annual average emissions for AIM coatings for year 2000 is over 70 tons per day. The manufacturer of the brushing lacquer estimates annual sales in the AQMD at 20,000 gallons per year. The potential activity of other companies marketing brushing lacquers in the AQMD will not necessarily result in an increase in the total use of brushing lacquers. The participation of other companies with brushing lacquers will most likely alter the market share among competing products and the 20,000 gallon per year consumption of brushing lacquers within the AQMD is assumed to be fixed. The emissions (0.16 tons per day) from the use of 20,000 gallons per year represents less than 0.27% of the total annual average emissions from all AIM coatings in the year 2000.

The creation of a new brushing lacquer category with an allowable VOC content of 680 grams per liter will delay emission reductions in the amount of 0.08 tons per day until 2005. However, the 1999 amendment to the 1997 State Implementation Plan (SIP) for ozone allows substitution of emission reductions from another rule that achieved more emission reductions than planned. The AQMD is substituting emission reductions in excess of the SIP commitment from another control measure to offset the temporary delay in reductions caused by this amendment to Rule 1113.

California Environmental Quality Act (CEQA) Analysis
Pursuant to California Environmental Quality Act (CEQA) and the AQMD's Certified Regulatory Program (Rule 110), staff has prepared an Environmental Assessment (EA) for Proposed Amended Rule 1113 – Architectural Coatings. The Draft EA was made available for a 45-day review period. The analysis in the draft EA concluded that, because of the volume of coatings affected by the proposed amendments, delaying the final VOC content requirement would result in emission reductions foregone that would exceed the AQMD's VOC significance threshold of 55 pounds per day. No other environmental areas would be adversely affected by the proposed project. The Final EA, which includes responses to comments made on the draft document, is included as part of the attached package for the public hearing on the proposed rule.

Socioeconomic Analysis
Since the amendment merely delays implementation of existing limitations, no additional costs are expected to be incurred by parties affected by this amendment. As a result, there are no socioeconomic impacts.

AQMP and Legal Mandates
The California Health and Safety Code requires the AQMD to adopt an Air Quality Management Plan (AQMP) to meet state and federal ambient air quality standards in the South Coast Air Basin. In addition the California Health & Safety Code requires that the AQMD adopt rules and regulations that carry out objectives of the AQMP. Though the amendment results in a delay of emission reductions, surplus reductions from other control measures will offset the delay and Proposed Amended Rule 1113 remains consistent with the requirements set forth in the AQMP and does not hinder in any fashion the clean air goals of AQMD.

Implementation Plan
All potential sources have been noticed of the proposed requirements. Should Rule 1113 be adopted, all sources that must comply will be notified through the AQMD's outreach effort. Therefore, no additional implementation actions are expected to be necessary.

Resource Impacts
Since there are no implementation issues, Proposed Amended Rule 1113 will have no adverse impact on AQMD resources or budgets.

Attachments

A. Summary of Proposal
B. Key Issues and Responses
C. Rule Development Process
D. Key Contacts List
E. Resolution
F. Proposed Rule Language
G. Staff Report
H. Final Environmental Assessment

ATTACHMENT A

SUMMARY OF PROPOSAL

Proposed Amended Rule 1113 –Architectural Coatings
1. In this amendment, staff proposes to: • add a category for clear brushing lacquers limiting the maximum allowable VOC content not to exceed 680 grams per liter and require that the VOC content be reduced to 275 g/l by January 1, 2005 (consistent with the January 1, 2005 requirement for other clear wood finishing lacquers); • include a definition for clear brushing lacquer; and • require specific labeling and reporting requirements for such brushing lacquers.

ATTACHMENT B

KEY ISSUES AND RESPONSES

1. There are additional issues surrounding Rule 1113 that should be addressed in this amendment.

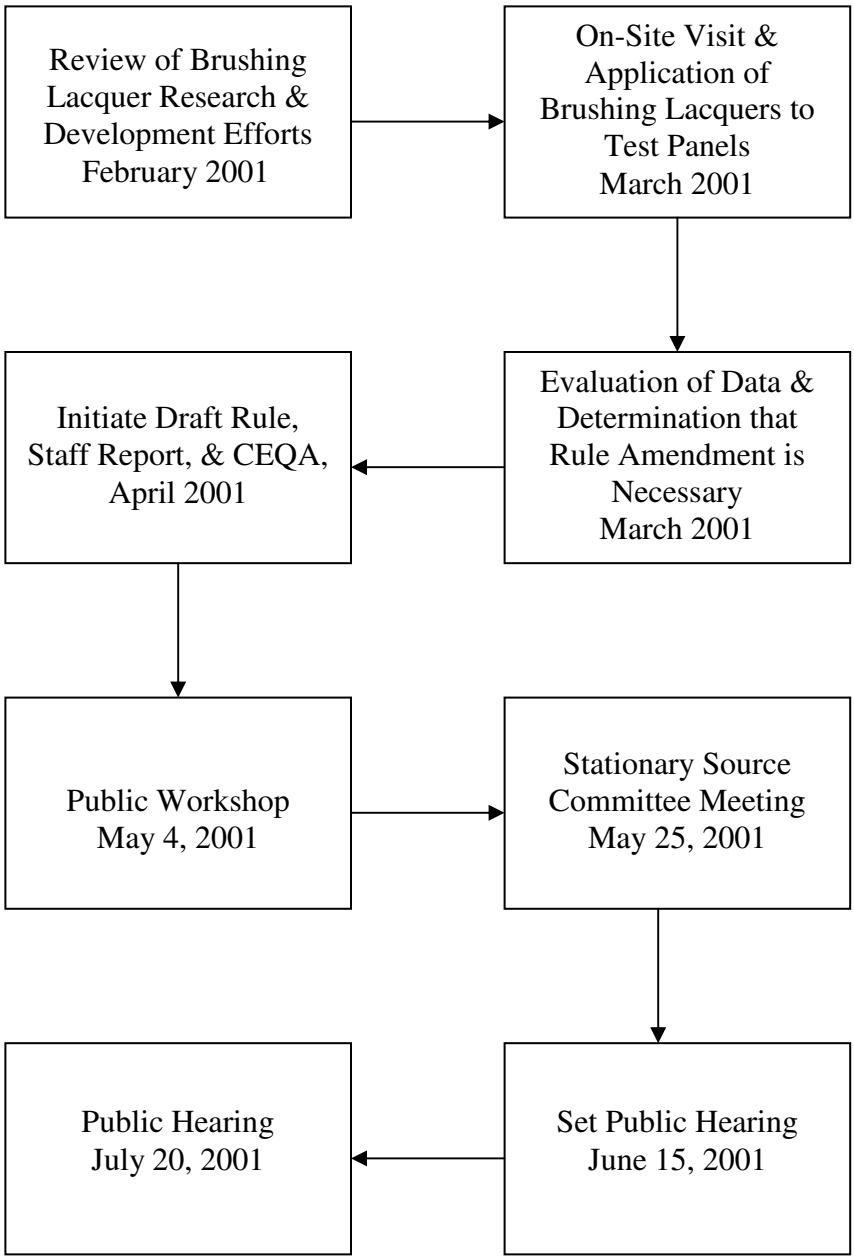
   Staff has established the Rule 1113 Working Group and Technology Advisory Committee and are meeting regularly to discuss rule implementation issues. There are several technology assessments underway to evaluate product performance of compliant coatings. The current amendment is designed to address a variance issue.

2. CARB asked that reporting requirements be added for clear brushing lacquers and that the test method section of the rule be modified to include approval by USEPA and ARB. The agency asked for other minor changes to the rule, as well.

   Staff added a reporting requirement for clear brushing lacquers. Staff has agreed to address the remaining CARB concerns in future amendments to the rule.

ATTACHMENT C

RULE DEVELOPMENT PROCESS



ATTACHMENT D

KEY CONTACTS LIST

Chemical Manufacturers/Suppliers

Deft, Incorporated
Hercules Corporation
Eastman Chemical Corporation

Consultants

The Wood Coatings Research Group

Industries/Regulated Communities

Deft, Incorporated

Miscellaneous

Haight, Brown, Bonesteel, L.L.P.

RESOLUTION NO.

A Resolution of the Governing Board of the South Coast Air Quality Management District (AQMD) certifying the Final Environmental Assessment for Proposed Amended Rule 1113 – Architectural Coatings.

A Resolution of the Governing Board of the AQMD adopting Proposed Amended Rule 1113 – Architectural Coatings.

WHEREAS, the AQMD Governing Board has determined with certainty that Proposed Amended Rule 1113 – Architectural Coatings, is considered a "project" pursuant to the California Environmental Quality Act (CEQA); and

WHEREAS, the AQMD has had its regulatory program certified pursuant to Public Resources Code Section 21080.5 and has conducted CEQA review pursuant to such program (AQMD Rule 110); and

WHEREAS, AQMD staff has prepared a Draft Environmental Assessment (EA) pursuant to its certified regulatory program and state CEQA Guidelines Section 15252, setting forth the potential environmental consequences of Proposed Amended Rule 1113 – Architectural Coatings; and

WHEREAS, the Draft EA was circulated for public review, comments received have been responded to, and a Final EA has been prepared; and

WHEREAS, it is necessary that the adequacy of the Final EA, including the responses to comments, be determined by the Governing Board prior to its adoption; and

WHEREAS, a Mitigation Monitoring Plan pursuant to Public Resources Code Section 21081.6, has not been prepared since no mitigation measures are necessary; and

WHEREAS, the AQMD has prepared a Statement of Findings and a Statement of Overriding Considerations pursuant to State CEQA Guidelines Section 15091 and 15093, respectively, regarding adverse environmental impacts that cannot be mitigated to insignificance, as required by CEQA, and which is included as Attachment 1 and incorporated herein by reference; and

WHEREAS, the AQMD Governing Board voting on Proposed Amended Rule 1113 – Architectural Coatings, has reviewed, considered, and hereby certifies the Final EA; and

WHEREAS, the AQMD Governing Board obtains its authority to adopt, amend, or rescind rules and regulations from Sections 40000, 40001, and 40702 of the California Health and Safety Code; and

WHEREAS, the AQMD Governing Board has determined that a need exists to adopt Proposed Amended Rule 1113 – Architectural Coatings, in that no low-VOC alternatives are currently available for clear wood finish brushing lacquers; and

WHEREAS, the AQMD Governing Board finds that the limit for clear wood finish brushing lacquers is technology forcing and infeasible to implement and is substituting emission reductions from another control measure that achieves excess VOC emission reductions; and

WHEREAS, the AQMD Governing Board has determined that Proposed Amended Rule 1113 – Architectural Coatings is written and displayed so that the meaning can be easily understood by persons directly affected by them; and

WHEREAS, the AQMD Governing Board has determined that Proposed Amended Rule 1113 – Architectural Coatings, as proposed to be amended, is in harmony with, and not in conflict with, or contradictory to, existing statutes, court decisions, or state or federal regulations; and

WHEREAS, the AQMD Governing Board has determined that Proposed Amended Rule 1113 – Architectural Coatings, as proposed to be adopted, does not impose the same requirement as any existing state or federal regulation, and the proposed rule is necessary and proper to execute the powers and duties granted to, and imposed upon, the AQMD; and

WHEREAS, the AQMD Governing Board in adopting the regulation, references the following statutes which the AQMD hereby implements, interprets or make specific: Health and Safety Code Sections 40001 (rules to achieve ambient air quality standards), 40440(a) (rules to carry out the Air Quality Management Plan), 40440(b) (BARCT), and 40440(c) (cost effectiveness), 40920.6 (potential control options and incremental cost-effectiveness), and Federal Clean Air Act Section 172(c)(1)(RACT); and

WHEREAS, the AQMD specifies the manager of Rule 1113 as the custodian of the documents or other materials which constitute the record of proceedings upon which the adoption of this proposed amendment is based, which are located at the South Coast Air Quality Management District, 21865 E. Copley Drive, Diamond Bar, California; and

WHEREAS, the AQMD Governing Board has determined that no socioeconomic impacts are associated with the amendment to Rule 1113 – Architectural Coatings, and no Socioeconomic Impact Assessment is necessary; and

WHEREAS, a public hearing has been properly noticed in accordance with the provisions of Health and Safety Code Section 40725; and

WHEREAS, the AQMD Governing Board has held a public hearing in accordance with all provisions of law; and

NOW, THEREFORE, BE IT RESOLVED that the AQMD Governing Board hereby certifies, pursuant to the authority granted by law, the Final EA for Proposed Amended Rule 1113 – Architectural Coatings; and

BE IT FURTHER RESOLVED that the AQMD Governing Board hereby amends, pursuant to the authority granted by law, Proposed Amended Rule 1113 – Architectural Coatings, as set forth in the attached and incorporated herein by this reference.

Attachment

DATE:_____ _____

CLERK OF THE BOARD

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Attachment 1 to the Governing Board Resolution for Proposed Amended Rule 1113 - Architectural Coatings:

Statement of Findings and Statement of Overriding Considerations

July 2001

Author:	Michael Krause	Air Quality Specialist
Reviewed by:	Steve Smith, Ph.D.	Program Supervisor
	Frances Keeler	Senior Deputy District Counsel

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Supervisor, Fourth District
Riverside County Representative

EXECUTIVE OFFICER:

BARRY R. WALLERSTEIN, D.Env.

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INTRODUCTION

The proposed amended Rule 1113 - Architectural Coatings is a "project" as defined by the California Environmental Quality Act (CEQA) (Cal. Public Resources Code §§21000 et seq.). The South Coast Air Quality Management District (SCAQMD) is the lead agency for the project and, therefore, has prepared an Environmental Assessment (EA) pursuant to CEQA Guidelines §15252 and SCAQMD Rule 110. The purpose of the EA is to describe the project and to identify, analyze, and evaluate any potentially significant adverse environmental impacts that may result from adopting and implementing the proposed project. The EA was circulated to the public for a 45-day review and comment period ending July 5, 2001. During the 45-day public review and comment period, the SCAQMD received no comment letters on the Draft EA. Minor changes were necessary to make the Draft EA into a Final EA. However, these minor modifications and updates do not constitute "significant new information"[1] and, therefore, does not require recirculation of the document pursuant to CEQA Guidelines §15088.5.

SUMMARY OF THE PROPOSED PROJECT

The SCAQMD is proposing to establish a new category for clear wood finish brushing lacquers at a 680 grams per liter VOC content limit, compared to the existing requirement of 550 grams per liter VOC content limit for other lacquers. This new category pertains only to clear wood finish lacquers that are applied by brushing the architectural coating onto a substrate by hand. Effective January 1, 2005, however, the brushing lacquers will be required to meet the 275 grams per liter VOC content requirement, similar to other lacquers. The proposed amendment will result in a delay of VOC emission reductions, not an increase in existing emissions because, until recently, the one known affected coating manufacturer of the brushing lacquer was under a variance which allowed the company to sell the brushing lacquer at the higher 680 grams per liter VOC content limit.

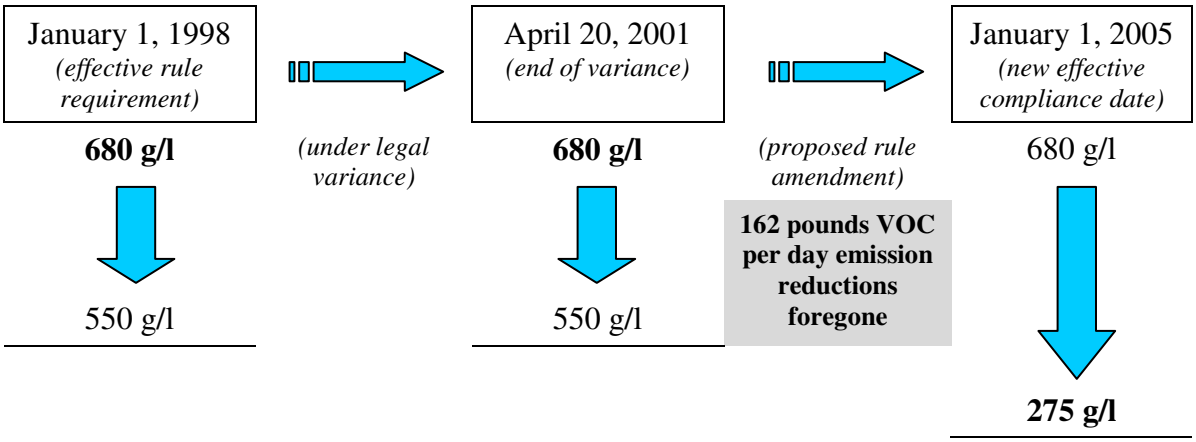
[1] "Significant new information" requiring recirculation include, for example, a disclosure showing that:
(1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
(2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
(3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.
(4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

SIGNIFICANT ADVERSE IMPACTS THAT CANNOT BE REDUCED BELOW A SIGNIFICANT LEVEL

Based on the volume of affected coatings currently sold, the delay of VOC emission reductions is anticipated to exceed the SCAQMD's daily significance threshold. The Draft EA identified "air quality" as the only area that may be adversely affected by the proposed project.

Air Quality

One known affected coating manufacturer of clear wood finish brushing lacquer was, until recently, under a variance which allowed the company to sell the brushing lacquer at 680 grams per liter VOC content limit in lieu of the required 550 grams per liter VOC content limit for all lacquers. The proposed amendments to Rule 1113 will further delay 162 pounds per day of anticipated VOC emission reductions as a result of maintaining the 680 grams per liter VOC content limit for wood finish brushing lacquers and eliminating the interim VOC content limit requirement for this coating category. Therefore, this direct impact to air quality is significant. The clear wood finish brushing lacquer will be required to comply with 275 grams per liter VOC content limit as of January 1, 2005. The rule currently requires the VOC content limit of all clear wood finish lacquers to be 275 grams per liter by January 1, 2005, so the delay in achieving anticipated emission reductions is not permanent.



By delaying compliance with the VOC content limit requirement, the brushing lacquer formulated at 680 grams per liter will continue to be used. Therefore, potential toxic emissions from the 680 grams per liter brushing lacquer will also continue to be emitted. Based on the ingredients in the 680 grams per liter brushing lacquer, potential toxic emissions have been determined to be less than the chronic/acute toxic significance threshold and therefore, toxic impacts are not significant.

STATEMENT OF FINDINGS

Public Resources Code §21081 and CEQA Guidelines §15091(a) state that "No public agency shall approve or carry out a project for which an EIR has been completed which identifies one or more significant adverse environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding." Additionally, the findings must be supported by substantial evidence in the record (CEQA Guidelines §15091(b)). As identified in the Final EA and summarized above, the proposed project has the potential to create significant adverse air quality impacts. The SCAQMD Governing Board, therefore, makes the following findings regarding the proposed project. The findings are supported by substantial evidence in the record as explained in each finding. This Statement of Findings will be included in the record of project approval and will also be noted in the Notice of Determination.

1. **Delay in VOC emission reductions would exceed SCAQMD daily VOC significance thresholds.**

Finding and Explanation: Extending the 680 grams per liter VOC content limit and eliminating the interim VOC content requirement for clear brushing lacquers (550 grams per liter) will result in a delay of 162 pounds per day of VOC emission reductions. The rule change results in a delay of VOC emission reductions and not an increase in existing emissions because the one known affected coating manufacturer of the brushing lacquer was, until recently, under a legal variance, which means the company was allowed to continue manufacturing brushing lacquer at the 680 grams per liter VOC content limit. The proposed project does not allow an increase of VOC content limit above what was allowed under the legal variance. As of January 1, 2005, the clear wood finish brushing lacquer will be required to comply with 275 grams per liter VOC content limit. The rule currently requires the VOC content limit of all clear wood finish lacquers to be 275 grams per liter by January 1, 2005, so the delay in emission reductions is not permanent.

The Governing Board finds that besides encouraging coating formulators of brushing lacquers to reformulate and comply with the 275 grams per liter VOC content limit earlier than proposed, no feasible mitigation measures are available to lessen the significant adverse impact to air quality from the proposed delayed compliance. CEQA defines "feasible" mitigation measures as those that are "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors" (Public Resources Code §21061.1).

The Governing Board finds further that aside from the No Project Alternative, the Final EA considered alternatives pursuant to CEQA Guidelines §15126.6, but no

project alternatives would reduce to insignificant levels the significant air quality impacts identified for the proposed project.

No program for reporting or monitoring changes were required in the proposed project or made a condition of approval pursuant to CEQA Guidelines §15091(d). Therefore, a mitigation monitoring plan, per Public Resources Code §21081.6 and CEQA Guidelines §15097, has not been prepared.

The record of approval for this project may be found in the SCAQMD's Clerk of the Board's Office located at SCAQMD Headquarters in Diamond Bar, California.

STATEMENT OF OVERRIDING CONSIDERATIONS

If significant adverse impacts of a proposed project remain after incorporating mitigation measures, or no measures or alternatives to mitigate the adverse impacts are identified, the lead agency must make a determination that the benefits of the project outweigh the unavoidable adverse environmental effects if it is to approve the project. CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project (CEQA Guidelines §15093 (a)). If the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable" (CEQA Guidelines §15093 (a)). Accordingly, a Statement of Overriding Considerations regarding potentially significant adverse air quality impacts resulting from the proposed project has been prepared. This Statement of Overriding Considerations is included as part of the record of the project approval for the proposed project. Pursuant to CEQA Guidelines §15093(c), the Statement of Overriding Considerations will also be noted in the Notice of Determination for the proposed project.

Despite the inability to incorporate changes into the project that will mitigate potentially significant adverse air quality impacts to a level of insignificance, the SCAQMD's Governing Board finds that the following benefits and considerations outweigh the significant unavoidable adverse environmental impacts:

1. Imposing the current VOC current requirement for the clear brushing lacquer coating category would eliminate this product from the market, leaving end-users no suitable replacement alternative.

2. If the brushing lacquers are phased out permanently, the end-users could be forced to use substitutes that are more harmful to the existing environment.

3. If the brushing lacquers are phased out permanently, the end-users could be forced to use substitutes that are may not produce satisfactory results, especially if the substitute involves a different application process, such as spraying, that is not familiar to the "do-it-yourself" market.

4. Cumulative air quality impacts from the proposed amendments are not expected to be significant because implementation of all AQMP control measures is expected to result in net emission reductions and overall air quality improvement. For example, the 1999 amendments to the 1997 State Implementation Plan (SIP) for ozone achieved more emission reductions than planned.

The SCAQMD's Governing Board finds that the above-described considerations outweigh the unavoidable significant effects to the environment as a result of the proposed project.

(Adopted Sept. 2, 1977)(Amended Dec. 2, 1977)(Amended Feb. 3, 1978)
(Amended Sept. 5, 1980)(Amended Apr. 3, 1981)(Amended July 3, 1981)
(Amended by California Air Resources Board Oct. 21, 1981)
(Amended Aug. 5, 1983)(Amended Mar. 16, 1984)(Amended Aug. 2, 1985)
(Amended Nov. 1, 1985)(Amended Feb. 6, 1987)(Amended Jan. 5, 1990)
(Amended Feb. 2, 1990)(Amended Nov. 2, 1990)(Amended Dec. 7, 1990)
(Amended Sept. 6, 1991)(Amended March 8, 1996)(Amended August 9, 1996)
(Amended November 8, 1996)(Amended May 14, 1999)
PAR1113 June 1, 2001

PROPOSED AMENDED RULE 1113 - ARCHITECTURAL COATINGS

(a) Applicability

This rule is applicable to any person who supplies, sells, offers for sale, or manufactures any architectural coating for use in the District that is intended to be applied to stationary structures or their appurtenances, and to mobile homes, pavements or curbs; as well as any person who applies or solicits the application of any architectural coating within the District. The purpose of this rule is to limit the VOC content of architectural coatings used in the District or to allow the averaging of such coatings, as specified, so their actual emissions do not exceed the allowable emissions if all the averaged coatings had complied with the specified limits.

(b) Definitions

For the purpose of this rule, the following definitions shall apply:

(1) AEROSOL COATING PRODUCT means a pressurized coating product containing pigments or resins that dispenses product ingredients by means of a propellant, and is packaged in a disposable can for hand-held application, or for use in specialized equipment for ground marking and traffic marking applications.

(2) APPURTENANCES are accessories to a stationary structure, including, but not limited to: hand railings, cabinets, bathroom and kitchen fixtures, fences, rain-gutters and down-spouts, window screens, lamp-posts, heating and air conditioning equipment, other mechanical equipment, large fixed stationary tools, signs, motion picture and television production sets, and concrete forms.

(3) ARCHITECTURAL COATINGS are any coatings applied to stationary structures and their appurtenances, to mobile homes, to pavements, or to curbs.

(4) BELOW-GROUND WOOD PRESERVATIVES are wood preservatives formulated to protect below-ground wood.

(5) BITUMINOUS COATINGS MATERIALS are black or brownish coating materials, soluble in carbon disulfide, consisting mainly of hydrocarbons and which are obtained from natural deposits, or as residues from the distillation of crude petroleum oils, or of low grades of coal.

(6) BITUMINOUS ROOF COATINGS are coatings formulated and recommended for roofing that incorporate bituminous coatings materials.

(7) BOND BREAKERS are coatings applied between layers of concrete to prevent the freshly poured top layer of concrete from bonding to the substrate over which it is poured.

(8) CHEMICAL STORAGE TANK COATINGS are coatings used as interior tank linings for the storage of oxygenated solvents, oxygenated solvent mixtures, and acid based products.

(9) CLEAR BRUSHING LACQUERS are clear wood finishes, excluding clear lacquer sanding sealers, formulated with nitrocellulose or synthetic resins to dry by solvent evaporation without chemical reaction and to provide a solid, protective film, which are intended exclusively for application by brush, and which are labeled as specified in paragraph (d)(7).

~~(9)~~(10) CLEAR WOOD FINISHES are clear and semi-transparent coatings, including lacquers and varnishes, applied to wood substrates to provide a transparent or translucent solid film.

~~(10)~~(11) COATING is a material which is applied to a surface in order to beautify, protect, or provide a barrier to such surface.

~~(11)~~(12) COLORANTS are solutions of dyes or suspensions of pigments.

~~(12)~~(13) CONCRETE-CURING COMPOUNDS are coatings applied to freshly poured concrete to retard the evaporation of water.

~~(13)~~(14) DRY-FOG COATINGS are coatings which are formulated only for spray application so that when sprayed, overspray droplets dry before falling on floors and other surfaces.

~~(14)~~(15) ESSENTIAL PUBLIC SERVICE COATING is a protective (functional) coating applied to components of power, municipal wastewater, water, bridges and other roadways; transmission or distribution systems during repair and maintenance procedures.

~~(15)~~(16) EXEMPT COMPOUNDS (See Rule 102-Definition of Terms.)

~~(16)~~(17)FIRE-PROOFING EXTERIOR COATINGS are opaque coatings formulated to protect the structural integrity of outdoor steel and other outdoor construction materials and listed by Underwriter's Laboratories, Inc. for the fire protection of steel.

~~(17)~~(18)FIRE-RETARDANT COATINGS are coatings listed by Underwriter's Laboratories, Inc. as fire-retardant coatings with a flame spread index of less than 25.

~~(18)~~(19)FLAT COATINGS are coatings that register a gloss of less than 15 on an 85-degree meter or less than 5 on a 60-degree meter.

~~(19)~~(20)FLOOR COATINGS are opaque coatings that are formulated for application to flooring; including but not limited to decks, porches, gymnasiums, bowling alleys; for purposes of abrasion resistance.

~~(20)~~(21)GRAMS OF VOC PER LITER OF COATING, LESS WATER AND LESS EXEMPT COMPOUNDS, is the weight of VOC per combined volume of VOC and coating solids and can be calculated by the following equation:

$$\text{Grams of VOC per Liter of Coating, Less Water and Less Exempt Compounds} = \frac{W_s - W_w - W_{es}}{V_m - V_w - V_{es}}$$

Where:

W_s = weight of volatile compounds in grams

W_w = weight of water in grams

W_{es} = weight of exempt compounds in grams

V_m = volume of material in liters

V_w = volume of water in liters

V_{es} = volume of exempt compounds in liters

For coatings that contain reactive diluents, the Grams of VOC per Liter of Coating, Less Water and Less Exempt Compounds, shall be calculated by the following equation:

$$\text{Grams of VOC per Liter of Coating, Less Water and Less Exempt Compounds} = \frac{W_s - W_w - W_{es}}{V_m - V_w - V_{es}}$$

Where:

W_s = weight of volatile compounds emitted during curing, in grams

W_w = weight of water emitted during curing, in grams

W_{es} = weight of exempt compounds emitted during curing, in grams

V_m = volume of the material prior to reaction, in liters

V_w = volume of water emitted during curing, in liters

V_{es} = volume of exempt compounds emitted during curing, in liters

~~(21)~~(22)GRAMS OF VOC PER LITER OF MATERIAL is the weight of VOC per volume of material and can be calculated by the following equation:

$$\text{Grams of VOC per Liter of Material} = \frac{W_s - W_w - W_{es}}{V_m}$$

Where: W_s = weight of volatile compounds in grams

W_w = weight of water in grams

W_{es} = weight of exempt compounds in grams

V_m = volume of the material in liters

~~(22)~~(23)GRAPHIC ARTS COATINGS (Sign Paints) are coatings formulated for and hand-applied by artists using brush or roller techniques to indoor and outdoor signs (excluding structural components) and murals, including lettering enamels, poster colors, copy blockers, and bulletin enamels.

~~(23)~~(24)HIGH-TEMPERATURE INDUSTRIAL MAINTENANCE COATINGS are industrial maintenance coatings formulated for and applied to substrates exposed continuously or intermittently to temperatures above 400 degrees Fahrenheit.

~~(24)~~(25)INDUSTRIAL MAINTENANCE COATINGS are coatings, including primers, sealers, undercoaters, intermediate coatings and topcoats formulated for and applied to substrates that are exposed to one or more of the following extreme environmental conditions:

(A) immersion in water, wastewater, or chemical solutions (aqueous and non-aqueous solutions), or chronic exposure of interior surfaces to moisture condensation;

(B) acute or chronic exposure to corrosive, caustic or acidic agents, or to chemicals, chemical fumes, chemical mixtures, or solutions;

(C) repeated exposure to temperatures in excess of 250 degrees Fahrenheit;

(D) repeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial solvents, cleaners, or scouring agents; or

(E) exterior exposure of metal structures.

Effective July 1, 2002, Industrial Maintenance Coatings are not for residential use or for use in areas of industrial, commercial, or institutional facilities not exposed to such extreme environmental conditions, such as office space and meeting rooms

~~(25)~~(26)JAPANS/FAUX FINISHING COATINGS are glazes designed for wet-in-wet techniques used as a stain or glaze to create artistic effects, including but not limited to, dirt, old age, smoke damage, and simulated marble and wood grain.

~~(26)~~(27)LACQUERS are clear or pigmented wood finishes, including clear lacquer sanding sealers, formulated with nitrocellulose or synthetic resins to dry by evaporation without chemical reaction.

~~(27)~~(28)LOW-SOLIDS COATINGS are coatings containing one pound or less of solids per gallon of material.

~~(28)~~(29)MAGNESITE CEMENT COATINGS are coatings formulated for and applied to magnesite cement decking to protect the magnesite cement substrate from erosion by water.

~~(29)~~(30)MASTIC COATINGS are coatings formulated to cover holes and minor cracks and to conceal surface irregularities, and applied in a thickness of at least 10 mils (dry, single coat).

~~(30)~~(31)METALLIC PIGMENTED COATINGS are coatings containing at least 0.4 pound of elemental metallic pigment per gallon (50 grams/liter) of coating as applied.

~~(31)~~(32)MULTI-COLOR COATINGS are coatings which exhibit more than one color when applied and which are packaged in a single container and applied in a single coat.

~~(32)~~(33)NONFLAT COATINGS are coatings that register a gloss of 5 or greater on a 60-degree meter and a gloss of 15 or greater on an 85-degree meter.

~~(33)~~(34)PRE-TREATMENT WASH PRIMERS are coatings which contain a minimum of 1/2 percent acid, by weight, applied directly to bare metal surfaces to provide necessary surface etching.

~~(34)~~(35)PRIMERS are coatings applied to a surface to provide a firm bond between the substrate and subsequent coats.

~~(35)~~(36)QUICK-DRY ENAMELS are non-flat coatings which comply with the following:

(i) Shall be capable of being applied directly from the container by brush or roller under normal conditions, normal conditions being ambient temperatures between 60° F and 80°F;

(ii) When tested in accordance with ASTM D 1640 they shall: set-to-touch in two hours or less, dry-hard in eight hours or less, and be tack-free in four hours or less by the mechanical test method; and

(iii) Shall have a 60° dried film gloss of no less than 70.

~~(36)~~(37)QUICK-DRY PRIMERS, SEALERS, AND UNDERCOATERS are primers, sealers, and undercoaters which are intended to be applied to a surface to provide a firm bond between the substrate and subsequent coats and which are dry-to-touch in one-half hour and can be recoated in two hours (ASTM D 1640). This category will be subsumed by the primers, sealers, and undercoaters category effective January 1, 2002.

~~(37)~~(38)REACTIVE DILUENT is a liquid which is a VOC during application and one in which, through chemical and/or physical reaction, such as polymerization, becomes an integral part of the coating.

~~(38)~~(39)RECYCLED COATINGS are coatings collected through Household Hazardous Waste Collection Programs or other waste minimization and resource recovery programs. Recycled coatings shall be formulated such that not less than 50% of the total weight consists of secondary post-consumer waste paint, with not less than 10% of the total weight consisting of post-consumer waste paint.

~~(39)~~(40)ROOF COATINGS are non-bituminous coatings formulated for application to exterior roofs and for the primary purpose of preventing penetration of the substrate by water, or reflecting heat and ultraviolet radiation. Metallic pigmented roof coatings which qualify as metallic pigmented coatings shall not be considered to be in this category, but shall be considered to be in the metallic pigmented coatings category.

~~(40)~~(41)RUST PREVENTATIVE COATINGS are coatings formulated for use in preventing the corrosion of metal surfaces in residential and commercial situations.

~~(41)~~(42)SANDING SEALERS are clear wood coatings formulated for and applied to bare wood for sanding and to seal the wood for subsequent application of coatings. To be considered a sanding sealer a coating must be clearly labeled as such.

~~(42)~~(43)SEALERS are coatings applied to substrates to prevent subsequent coatings from being absorbed by the substrate, or to prevent harm to subsequent coatings by materials in the substrate.

~~(43)~~(44)SHELLACS are clear or pigmented coatings formulated solely with the resinous secretions of the lac beetle (laccifer lacca), thinned with alcohol, and formulated to dry by evaporation without a chemical reaction.

~~(44)~~(45)SOLICIT is to require for use or to specify, by written or oral contract.

~~(45)~~(46)SPECIALTY PRIMERS is a coating formulated and recommended for application to a substrate to seal fire, smoke or water damage; or to condition excessively chalky surfaces. An excessively chalky surface is one that is defined as having chalk rating of four or less as determined by ASTM D-4214 – Photographic Reference Standard No. 1 or the Federation of Societies for Coatings Technology "Pictorial Standards for Coatings Defects".

~~(46)~~(47)STAINS are opaque or semi-transparent coatings which are formulated to change the color but not conceal the grain pattern or texture.

~~(47)~~(48)SWIMMING POOL COATINGS are coatings specifically formulated to coat the interior of swimming pools and to resist swimming pool chemicals.

~~(48)~~(49)SWIMMING POOL REPAIR COATINGS are chlorinated, rubber-based coatings used for the repair and maintenance of swimming pools over existing chlorinated, rubber-based coatings.

~~(49)~~(50)TINT BASE is an architectural coating to which colorants are added.

~~(50)~~(51)TRAFFIC COATINGS are coatings formulated for and applied to public streets, highways, and other surfaces including, but not limited to, curbs, berms, driveways, and parking lots.

~~(51)~~(52)UNDERCOATERS are coatings formulated and applied to substrates to provide a smooth surface for subsequent coats.

~~(52)~~(53)VARNISHES are clear wood finishes formulated with various resins to dry by chemical reaction on exposure to air.

~~(53)~~(54)VOLATILE ORGANIC COMPOUND (VOC)

See Rule 102.

~~(54)~~(55)WATERPROOFING WOOD SEALERS are colorless coatings which are formulated for the sole purpose of preventing penetration of porous substrates by water on wood substrates.

~~(55)~~(56)WATERPROOFING CONCRETE/MASONRY SEALERS are clear or pigmented film forming compounds that are formulated for sealing concrete and masonry to provide resistance against water, alkalis, acids, ultraviolet light, and staining.

~~(56)~~(57)WOOD PRESERVATIVES are coatings formulated to protect wood from decay or insect attack by the addition of a wood preservative chemical registered by the California Environmental Protection Agency.

(c) Requirements

(1) Except as provided in paragraphs (c)(2), (c)(3), (c)(4), and specified coatings averaged under (c)(6), no person shall supply, sell, offer for sale, manufacture, blend, or repackage any architectural coating for use in the District which, at the time of sale or manufacture, contains more than 250 grams of VOC per liter of coating (2.08 pounds per gallon), less water, less exempt compounds, and less any colorant added to tint bases, and no person shall apply or solicit the application of any architectural coating within the District that exceeds 250 grams of VOC per liter of coating as calculated in this paragraph.

(2) Except as provided in paragraphs (c)(3), (c)(4), and designated coatings averaged under (c)(6), no person shall supply, sell, offer for sale, manufacture, blend, or repackage, for use within the District, any architectural coating listed in the Table of Standards which contains VOC (excluding any colorant added to tint bases) in excess of the corresponding VOC limit specified in the table, after the effective date specified, and no person shall apply or solicit the application of any architectural coating within the District that exceeds the VOC limit as specified in this paragraph. No person shall apply or solicit the application within the District of any industrial maintenance coatings for residential use; or of any rust-preventative coating for industrial use.

TABLE OF STANDARDS
VOC LIMITS
Grams of VOC Per Liter of Coating,
Less Water And Less Exempt Compounds

COATING	Limit*	Effective 1/1/1998	Effective 1/1/1999	Effective 5/14/99	Effective 7/1/2001	Effective 7/1/2002	Effective 1/1/2005	Effective 7/1/2006	Effective 7/1/2008
Bond Breakers	350								
Chemical Storage Tank Coatings	420							100	
Clear Wood Finishes									
Varnish	350								
Sanding Sealers	350								
Lacquer	680	550					275		
Clear Brushing Lacquer ***	680						275		
Concrete-Curing Compounds	350								
Dry-Fog Coatings	400								
Essential Public Service Coating	420					340		100	
Fire-proofing Exterior Coatings	450		350						
Fire-Retardant Coatings									
Clear	650								
Pigmented	350								
Flats	250				100				50
Floor Coatings	420					100		50	
Graphic Arts (Sign) Coatings	500								
High Temperature Industrial Maintenance Coatings						550		420	
Industrial Maintenance Coatings	420					250		100	
Japans/Faux Finishing Coatings	700		350						
Magnesite Cement Coatings	600		450						
Mastic Coatings	300								
Metallic Pigmented Coatings	500								
Multi-Color Coatings	420	250							
Non-Flat Coatings	250					150		50	
Pigmented Lacquer	680	550					275		
Pre-Treatment Wash Primers	780								
Primers, Sealers, and Undercoaters	350					200		100	
Quick-Dry Enamels	400					250		50	
Quick-Dry Primers, Sealers, and Undercoaters	350**					200		100	
Recycled Coatings				250		250		100	
Roof Coatings	300			250					
Bituminous Roof Coatings	300					250			
Rust Preventative Coatings	420			400				100	
Shellac									
Clear	730								
Pigmented	550								
Specialty Primers	350							100	
Stains	350					250			
Swimming Pool Coatings									
Repair	650								
Other	340								
Traffic Coatings	250	150							
Waterproofing Sealers Wood Concrete/Masonry	 400 400					 250			
Wood Preservatives									
Below-Ground	350								
Other	350								

- * The specified limits remain in effect unless revised limits are listed in subsequent columns in the Table of Standards
- ** The specified limit applies unless the manufacturer submits a report pursuant to Rule 1113(g)(2).
- *** An interim limit of 550 g/l will be required effective July1, 2003

TABLE OF STANDARDS (cont.)

VOC LIMITS

Grams of VOC Per Liter of Material

COATING	Limit
Low-Solids Coating	120

(3) If anywhere on the container of any coating listed in the Table of Standards, on any sticker or label affixed thereto, or in any sales or advertising literature, any representation is made that the coating may be used as, or is suitable for use as, a coating for which a lower VOC standard is specified in the table or in paragraph (c)(1), then the lowest VOC standard shall apply. This requirement does not apply to the representation of the following coatings in the manner specified:

(A) lacquer sanding sealers, which may be recommended for use as sanding sealers in conjunction with clear lacquer topcoats;

(B) metallic pigmented coatings, which may be recommended for use as primers, sealers, undercoaters, roof coatings, or industrial maintenance coatings;

(C) shellacs; and

(D) low-solids coatings.

(4) Except where already required to be in compliance with the previous version of this rule, sale or application of a coating manufactured prior to the effective date of the corresponding standard in the Table of Standards, and not complying with that standard, shall not constitute a violation of paragraph (c)(2) until three years after the effective date of the standard.

(5) All architectural coating containers used to apply the contents therein to a surface direct from said container by pouring, siphoning, brushing, rolling, padding, ragging or other means, shall be closed when not in use. These architectural coating containers include, but should not be limited to: drums, buckets, cans, pails, trays or other application containers.

(6) Averaging Compliance Option

On or after January 1, 2001, in lieu of specific compliance with the applicable limits in the Table of Standards for floor; primers, sealers, and undercoaters; quick-dry primers, sealers, and undercoaters; quick-dry enamels; rust preventative; roof; stains; waterproofing wood sealers;

industrial maintenance coatings, as well as flats and non-flats (excluding recycled coatings), manufacturers may average designated coatings such that their actual cumulative emissions from the averaged coatings are less than or equal to the cumulative emissions that would have been allowed under those limits over a compliance period not to exceed one year. Such manufacturers must also comply with the averaging provisions contained in Appendix A, as well as maintain and make available for inspection, records, for at least three years after the end of the compliance period.

(d) Administrative Requirements

(1) Containers for all coatings subject to this rule shall display the date of manufacture of the contents or a code indicating the date of manufacture. The manufacturers of such coatings shall file with the Executive Officer of the District and the Executive Officer of the Air Resources Board an explanation of each code.

(2) Containers for all coatings subject to the requirements of this rule shall carry a statement of the manufacturer's recommendation regarding thinning of the coating. This recommendation shall not apply to the thinning of architectural coatings with water. The recommendation shall specify that the coating is to be employed without thinning or diluting under normal environmental and application conditions, unless any thinning recommended on the label for normal environmental and application conditions does not cause a coating to exceed its applicable standard.

(3) Each container of any coating subject to this rule shall display the maximum VOC content of the coating, as supplied, and after any thinning as recommended by the manufacturer. The VOC content of low-solids coatings shall be displayed as grams of VOC per liter of material (excluding any colorant added to the tint bases) and the VOC content of any other coating shall be displayed as grams of VOC per liter of coating (less water and less exempt compounds, and excluding any colorant added to tint bases). VOC content displayed may be calculated using product formulation data, or may be determined using the test method in subdivision (e).

(4) After January 1, 1998, the coating container label or container shall include the words “Quick-Dry” or shall list the following:

(A) The recoat time for quick-dry primers, sealers, and undercoaters, or

(B) The dry-hard time for quick-dry enamels.

Containers and container labels shall not contain the words "Quick-Dry" unless the material meets the dry times specified in the respective definitions or the material complies with the respective general VOC limit for enamels or primers, sealers, and undercoaters.

(5) The labels of all rust preventative coatings shall include the statement "For Metal Substrates Only" prominently displayed, effective July 1, 2002.

(6) The labels of all specialty primers shall include the statement "For Fire-, Smoke-, Water-Damaged, or Excessively Chalky Substrates Only" prominently displayed, effective July 1, 2002.

(7) The labels of all clear brushing lacquers shall include the statements "For brush applications only" and "This product must not be thinned or sprayed", prominently displayed, effective January 1, 2002 until January 1, 2005.

(8) Each manufacturer of clear brushing lacquers shall, on or before April 1 of each calendar year beginning in the year 2002 submit an annual report to the Executive Officer until April 1, 2006. The report shall specify the number of gallons of clear brushing lacquers sold in the District during the preceding calendar year, and shall describe the method used by the manufacturer to calculate such sales.

(e) Test Methods

For the purpose of this rule, the following test methods shall be used

(1) VOC Content of Coatings

The VOC content of coatings subject to the provisions of this rule shall be determined by:

(A) The United States Environmental Protection Agency (USEPA) Reference Test Method 24 (Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings, Code of Federal Regulations Title 40, Part 60, Appendix A) with the exempt compounds' content determined by Method 303 (Determination of Exempt Compounds) in the South Coast Air Quality Management District's (SCAQMD) "Laboratory Methods of Analysis for Enforcement Samples" manual, or

(B) Method 304 [Determination of Volatile Organic Compounds (VOC) in Various Materials] in the SCAQMD's "Laboratory Methods of Analysis for Enforcement Samples" manual.

(C) Exempt Perfluorocarbons

The following classes of compounds:

cyclic, branched, or linear, completely fluorinated alkanes

cyclic, branched, or linear, completely fluorinated ethers with no unsaturations

cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations

sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine

will be analyzed as exempt compounds for compliance with subdivision (c), only when manufacturers specify which individual compounds are used in the coating formulations. In addition, the manufacturers must identify the USEPA, ARB, and SCAQMD approved test methods, which can be used to quantify the amount of each exempt compound.

(2) Acid Content of Coatings

The acid content of a coating subject to the provisions of this rule shall be determined by ASTM Test Method D 1613-85 (Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products).

(3) Metal Content of Coatings

The metallic content of a coating subject to the provisions of this rule shall be determined by Method 311 (Determination of Percent Metal in Metallic Coatings by Spectrographic Method) in the SCAQMD's "Laboratory Methods of Analysis for Enforcement Samples" manual.

(4) Flame Spread Index

The flame spread index of a fire-retardant coating subject to the provisions of this rule shall be determined by ASTM Test Method E 84-91A (Standard Test Method for Surface Burning Characteristics of Building Material) after application to an organic or inorganic substrate, based on the manufacturer's recommendations.

(5) Drying Times

The set-to-touch, dry-hard, dry-to-touch, and dry-to-recoat times of a coating subject to the provisions of this rule shall be determined by ASTM

Test Method D 1640 (Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature). The tack-free time of a coating subject to the provisions of this rule shall be determined by ASTM Test Method D 1640, according to the Mechanical Test Method.

(6) Gloss Determination

The gloss shall be determined by ASTM Test Method D 523 (Specular Gloss).

(7) Equivalent Test Methods

Other test methods determined to be equivalent after review by the staffs of the District, the California Air Resources Board, and the USEPA, and approved in writing by the District Executive Officer may also be used.

(8) Multiple Test Methods

When more than one test method or set of test methods are specified for any testing, a violation of any requirement of this rule established by any one of the specified test methods or set of test methods shall constitute a violation of the rule.

(9) All test methods referenced in this subdivision shall be the version most recently approved by the appropriate governmental entities.

(f) Technology Assessment for Flats; Nonflats; Primers, Sealers, and Undercoaters; Quick-dry Primers, Sealers, and Undercoaters; Quick-dry Enamels; Waterproofing Wood Sealers; Stains; Floor; Rust Preventative; Industrial Maintenance Coatings; and Lacquer Coatings

The Executive Officer shall conduct:

(1) A technology assessment for the future VOC limit for flat coatings as specified in paragraph (c)(2) by July 1, 2000 and July 1, 2007.

(2) A technology assessment for the future VOC limit for lacquers specified in paragraph (c)(2) by January 1, 2004.

(3) A technology assessment for the future VOC limit for nonflats; primers, sealers, and undercoaters; quick-dry primers, sealers, and undercoaters; quick-dry enamels; waterproofing wood sealers; stains floor, rust preventative, and industrial maintenance coatings as specified in paragraph (c)(2) by July 1, 2001 and July 1, 2005.

In conducting the above technology assessments, the Executive Officer shall consider any applicable future California Air Resources Board surveys on architectural coatings.

After each technology assessment, the Executive Officer shall report to the Governing Board as to the appropriateness of maintaining the future VOC limit.

The Executive Officer shall conduct a study to further assess reactivity of architectural coatings.

(g) Exemptions

(1) The provisions of this rule shall not apply to:

(A) architectural coatings in containers having capacities of one quart or less, provided that the manufacturer shall submit an annual report to the Executive Officer within three months of the end of each calendar year. The report shall contain information as required by the Executive Officer to monitor the use of the small container exemption. The loss of this exemption due to the failure of the manufacturer to submit an annual report shall apply only to the manufacturer; or

(B) architectural coatings sold in this District for shipment outside of this District or for shipment to other manufacturers for repackaging; or

(C) emulsion type bituminous pavement sealers; or

(D) aerosol coating products.

(E) Use of stains and lacquers in all areas within the District at an elevation of 4,000 feet or greater above sea level.

(2) Until July 1, 2002, architectural coatings recommended by the manufacturer for use solely as quick-dry primers, sealers and undercoaters, need not comply with the provisions of subdivision (c), so long as the manufacturer submits an annual report to the Executive Officer within three months of the end of each calendar year reporting the number of gallons of coatings sold in California under this exemption.

(3) Notwithstanding the provisions of paragraph (c)(2), a person or facility may add up to 10 percent by volume of VOC to a lacquer to avoid blushing of the finish during days with relative humidity greater than 70 percent and temperature below 65 degrees Fahrenheit, at the time of application provided that:

(A) the coating is not applied from April 1 to October 31 of any year;

(B) the coating contains acetone and no more than 550 grams of VOC per liter of coating, less water and exempt compounds, prior to the addition of VOC.

(4) The January 1, 2005 VOC limit for lacquers shall not be applicable until January 1, 2007 and the July 1, 2008 VOC limit for flat coatings shall not be applicable to any manufacturer which meets all of the following criteria:

(A) The total gross annual receipts are $2,000,000 or less, and

(B) The total number of employees is 100 or less, and

(C) The manufacturer requesting this exemption files a written request with the Executive Officer annually which includes, but is not limited to,

(i) The total gross annual receipts for each of the last three years.

(ii) The total number of employees for each of the last three years

For the purposes of determining the total gross annual receipts and the total number of employees, a manufacturer shall include data from all facilities (both within and outside of the District) which they own, operate, have an ownership interest, or are legally affiliated. If a manufacturer exceeds the criteria specified in subparagraphs (g)(4)(A) or (g)(4)(B) any time after the initial request is filed with the Executive Officer, this exemption shall be immediately terminated, the manufacturer shall forfeit any future eligibility for this exemption, and the manufacturer shall be considered in violation of this rule for each and every day that lacquers or flat coatings which do not comply with the respective VOC limit in the Table of Standards are supplied, sold, or offered for sale within the District. The loss of this exemption due to the manufacturer exceeding the criteria in subparagraphs (g)(4)(A) or (g)(4)(B) shall apply only to the manufacturer.

(5) Manufacturers of recycled coatings must submit a letter to the Executive Officer certifying their status as a Recycled Paint Manufacturer. The manufacturer shall submit an annual report to the Executive Officer within three months of the end of the calendar year. The report shall include for each recycled coating, gallons repackaged and distributed in the District.

(6) Manufacturers of rust preventative coatings shall submit an annual report to the Executive Officer within three months of the end of the calendar year. The report shall include for each rust preventative coating, the number of gallons sold in the District.

(7) Essential Public Service Agencies shall submit an annual report to the Executive Officer within three months of the end of the calendar year. The report shall include for each essential public service coating, the number of gallons used in the District.

(8) The provisions of paragraph (c) shall not apply to manufacturing facilities which apply coatings to test specimens for purposes of research and development of those coatings.

(9) The July 1, 2006 VOC limit for nonflats, primers, sealers, and undercoaters, quick-dry enamels, and rust-preventative coatings shall not be applicable until July 1, 2008 to any manufacturer which meets all of the following criteria:

(A) The total gross annual receipts are $5,000,000 or less, and

(B) The total number of employees is 100 or less, and

(C) The manufacturer requesting this exemption files a written request with the Executive Officer annually which includes, but is not limited to,

(i) The total gross annual receipts for each of the last three years.

(ii) The total number of employees for each of the last three years

For the purposes of determining the total gross annual receipts and the total number of employees, a manufacturer shall include data from all facilities (both within and outside of the District) which they own, operate, have an ownership interest, or are legally affiliated. If a manufacturer exceeds the criteria specified in subparagraphs (g)(9)(A) or (g)(9)(B) any time after the initial request is filed with the Executive Officer, this exemption shall be immediately terminated, the manufacturer shall forfeit any future eligibility for this exemption, and the manufacturer shall be considered in violation of this rule for each and every day that lacquers or flat coatings which do not comply with the respective VOC limit in the Table of Standards are supplied, sold, or offered for sale within the District. The loss of this exemption due to the manufacturer exceeding the

criteria in subparagraphs (g)(9)(A) or (g)(9)(B) shall apply only to the manufacturer.

(10) Manufacturers of specialty primers shall submit an annual report to the Executive Officer within three months of the end of the calendar year. The report shall include for each specialty primer, the number of gallons sold in the District.

APPENDIX A: Averaging Provision

(A) The manufacturer shall demonstrate that actual emissions from the coatings being averaged are less than or equal to the allowable emissions, for the specified compliance period using the following equation:

$$\sum_{i=1}^{n} GiMi \leq \sum_{i=1}^{n} GiViLi$$

Where:

$\sum_{i=1}^{n} GiMi$ = Actual Emissions

$\sum_{i=1}^{n} GiViLi$ = Allowable Emissions

Gi = Total Gallons of Product (i) subject to Averaging;

Mi = Material VOC content of Product (i), as pounds per gallon; (as defined in paragraph (b)(21))

Vi = Percent by Volume Solids and VOC in Product I

$$= \frac{Vm - Vw - Ves}{Vm}$$

(as defined in paragraph (b)(20))

For Non-Zero VOC Coatings:

$$= \frac{\text{Material VOC}}{\text{Coating VOC}}$$

= *For Zero VOC coatings*:
% solids by volume

Li = Regulatory VOC Content Limit for Product (i), as pounds per gallon; (as listed in paragraph (c)(2) Table of Standards)

The averaging is limited to coatings that are designated by the manufacturer. Any coating not designated in the averaging Program shall comply with the VOC limit in the Table of Standards. The manufacturer shall not include any quantity of coatings that it knows or should have known will not be used in the District.

(B) Averaging Program (Program)

(B) Averaging Program (Program)

At least six months prior to the start of the compliance period, manufacturers shall submit an Averaging Program, which is subject to all the provisions of Rule 221 – Plans and Rule 306 – Plan Fees, to the Executive Officer. Averaging may not be implemented until the Program is approved in writing by the Executive Officer.

Within 45 days of submittal of a complete Program, the Executive Officer shall either approve or disapprove the Program. The Program applicant and the Executive Officer may agree to an extension of time for the Executive Officer to take action on the Program.

(C) General Requirements

The Program shall include all necessary information for the Executive Officer to make a determination as to whether the manufacturer may comply with the averaging requirements over the specified compliance period in an enforceable manner. Such information shall include, but is not limited to, the following:

1. An identification of the contact persons, telephone numbers, and name of the manufacturer who is submitting the Program.
2. An identification of each coating that has been selected by the manufacturer for inclusion in this program that exceeds the applicable VOC limit in the Table of Standards, their VOC content specified in units of both grams of VOC per liter of coating, and grams of VOC per liter of material, and the designation of the coating category.
3. A detailed demonstration showing that the projected actual emissions will not exceed the allowable emissions for a single compliance period that the Program will be in effect. In addition, the demonstration shall include VOC content information for each coating that are below the compliance limit in the Table of Standards. The demonstration shall use the equation specified in paragraph (A) of this Appendix for projecting the actual emissions and allowable emissions during each compliance period. The demonstration shall also include all VOC content levels and projected volume within the District for each coating listed in the Program during each compliance period. The requested data can be summarized in a matrix form.

4. A specification of the compliance period(s) and applicable reporting dates. The length of the compliance period shall not be more than one year or less than six months.
5. An Identification and description of all records to be made available to the Executive Officer upon request, if different than those identified under paragraph (c)(6).
6. An identification and description of specific records to be used in calculating emissions for the program and subsequent reporting, and a detailed explanation as to how those records will be used by the manufacturer to verify compliance with the averaging requirements.
7. A statement, signed by a responsible party for the manufacturer, that all information submitted is true and correct, and that records will be made available to the Executive Officer upon request.

(D) Reporting Requirements

(1) For every single compliance period, the manufacturer shall submit a mid-term report listing all coatings subject to averaging during the first half of the compliance period, detailed analysis of the actual and allowable emissions at the end of the mid-term, and an explanation as to how the manufacturer intends to achieve compliance by the end of the compliance period. The report shall be signed by the responsible party for the manufacturer, attesting that all information submitted is true and correct. The mid-term report shall be submitted within 45 days after the midway date of the compliance period. A manufacturer may request, in writing, an extension of up to 15 days for submittal of the mid-term report.

(2) Within 60 days after the end of the compliance period or upon termination of the Program, whichever is sooner, the manufacturer shall submit to the Executive Officer a final report, providing a detailed demonstration of the balance between the actual and allowable emissions for the compliance period, an update of any identification and description of specific records used by the manufacturer to verify compliance with the averaging requirement, and any other information requested by the Executive Officer to determine whether the manufacturer complied with the averaging requirements over the specified compliance period. The report shall be signed by the responsible party for the manufacturer, attesting that all information submitted is true and correct, and that records will be made

available to the Executive Officer upon request. A manufacturer may request, in writing, an extension of up to 30 days for submittal of the final report.

(E) Renewal of a Program

A Program automatically expires at the end of the compliance period. The manufacturer may request a renewal of the Program by submitting a renewal request that shall include an updated Program, meeting all applicable Program requirements. The renewal request will be considered conditionally approved until the Executive Officer makes a final decision to deny or approve the renewal request based on a determination of whether the manufacturer is likely to comply with the averaging requirements. The Executive Officer shall base such determination on all available information, including but not limited to, the mid-term and final reports of the preceding compliance period. The Executive Officer shall make a decision to deny or approve a renewal request no later than 45 days from the date of the final report submittal, unless the manufacturer and the Executive Officer agree to an extension of time for the Executive Officer to take action on the renewal request.

(F) Modification of a Program

A manufacturer may request a modification of the Program at any time prior to the end of the compliance period. The Executive Officer shall take action to approve or disapprove the modification request no longer than 45 days from the date of its submittal. No modification of the compliance period shall be allowed. A Program need not be modified to specify additional coatings to be averaged that are below the applicable VOC limits.

(G) Termination of a Program

1. A manufacturer may terminate its Program at any time by filing a written notification to the Executive Officer. The filing date shall be considered the effective date of the termination, and all other provisions of this rule including the VOC limits shall immediately thereafter apply. The manufacturer shall also submit a final report 60 days after the termination date. Any exceedance of the actual emissions over the allowable

emissions over the period that the Program was in effect shall constitute a separate violation for each day of the entire compliance period.

2. The Executive Officer may terminate a Program if any of the following circumstances occur:
   (a) The manufacturer violates the requirements of the approved Program, and at the end of the compliance period, the actual emissions exceed the allowable emissions.
   (b) The manufacturer demonstrates a recurring pattern of violations and has consistently failed to take the necessary steps to correct those violations.

(H) Change in VOC Limits

If the VOC limits of a coating listed in the Program are amended such that its effective date is less than one year from the date of adoption, the affected manufacturer may base its averaging on the prior limits of that coating until the end of the compliance period immediately following the date of adoption.

(I) Labeling

Each container of any coating that is included in averaging program, and that exceeds the applicable VOC limit in the Table of Standards shall display the following statement: "This product is subject to the averaging provisions of SCAQMD Rule 1113". A symbol specified by the Executive Officer may be used as a substitute.

(J) Violations

The exceedance of the allowable emissions for any compliance period shall constitute a separate violation for each day of the compliance period. However, any violation of the requirements of the Averaging Provision of this rule, which the violator can demonstrate, to the Executive Officer, did not cause or allow the emission of an air contaminant and was not the result of negligent or knowing activity may be considered a minor violation.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Staff Report for Proposed Amended Rule 1113 – Architectural Coatings

July 20, 2001
R1113SRC

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Planning, Rule Development, & Area Sources
Elaine Chang, DrPH

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Speaker of the Assembly Appointee

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LIST OF ACRONYMS AND ABBREVIATIONS

AIM	Architectural and Industrial Maintenance
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
CARB	California Air Resources Board
g/l	Grams of VOC per liter of material (less water and exempt compounds)
PAR	Proposed Amended Rule
SIP	State Implementation Plan
VOC	Volatile Organic Compound

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BACKGROUND

Emissions of volatile organic compounds (VOCs) from stationary and mobile sources are major contributors to the formation of ozone (a key ingredient of smog) in the South Coast Air Basin. The formation of ozone occurs as VOCs react with oxides of nitrogen in the atmosphere. Ozone, a criteria pollutant, has been shown to adversely affect human health. It also contributes to the formation of another criteria pollutant, PM_{10}.

The use of architectural coatings (coatings applied to stationary structures and their appurtenances) in the SCAQMD is a major source of Volatile Organic Compound (VOC) emissions. In 1977, Rule 1113 – Architectural Coatings, was adopted to reduce VOC emissions from the use of architectural coatings. The rule prohibits the manufacture, sale, distribution, or application of architectural coatings within the SCAQMD unless a specific VOC content for the coating is met.

Subsequent to its adoption, Rule 1113 has been amended on numerous occasions. In November 1996, the rule was amended and included a requirement for the VOC content of clear lacquers to be reduced from 680 grams per liter (g/l) to 550 g/l, effective January 1, 1998. Acceptable lacquers applied by spray application methods were successfully developed to meet the 550 g/l requirement. In 1999, Rule 1113 was again amended, and a coating manufacturer approached the SCAQMD claiming that a 550 g/l ***brushing*** lacquer could not be successfully developed. These brushing lacquers are exclusively formulated for the residential "do-it-yourself" market and are not sprayed, but applied by hand with a brush. The manufacturer was virtually the only company marketing brushing lacquer in the SCAQMD. However, the SCAQMD chose not to establish a category for brushing lacquer and recommended that the company seek a variance.

In April 1999, the company was granted a variance for one year from the 680 g/l requirement for lacquers. In April 2000 a 550g/l brushing had still not been successfully developed and the company was granted a one-year extension on their variance. The extension expired on April 20, 2001, and thus far there has been no success in developing a compliant brushing lacquer. The company met with SCAQMD representatives and presented the research and testing efforts performed over the last two years. Additionally, SCAQMD staff witnessed the application of low-VOC brushing lacquer formulations to wood panels. As a result of these meetings and activities, the SCAQMD determined that an acceptable 550 g/l brushing lacquer was not available and agreed to amend Rule 1113 to allow the use of 680 g/l brushing lacquer. The amendment is narrow in scope and will only focus on the issues surrounding clear brushing lacquers.

The manufacturer's representatives indicated that their future efforts in reformulating brushing lacquers would be aimed at achieving the 275 g/l limit proposed for July 1, 2005. PAR 1113 has provisions for technology assessments to be conducted for lacquers by year 2004. Brushing lacquers will be included in this technology assessment.

LEGISLATIVE AUTHORITY

The California Legislature created the South Coast Air Quality Management District (AQMD) in 1977 (The Lewis-Presley Air Quality Management Act, Health and Safety Code Section 40400 et seq.) as the agency responsible for developing and enforcing air pollution control rules and regulations in the South Coast Air Basin (Basin). By statute, the AQMD is required to adopt an Air Quality Management Plan (AQMP) demonstrating compliance with all state and federal ambient air quality standards for the Basin [California Health and Safety Code Section 40460(a)]. Furthermore, the AQMD must adopt rules and regulations that carry out the AQMP [California Health and Safety Code Section 40440(a)].

RATIONALE FOR AMENDMENT

During the two-year variance period, the manufacturer of the clear brushing lacquer conducted extensive research efforts in an attempt to formulate a compliant product (550 g/l). SCAQMD staff met with the manufacturer on several occasions to discuss and evaluate these efforts. The company also filed a comprehensive written report outlining and summarizing their research efforts.

SCAQMD staff also applied several of the low-VOC brushing lacquers (550g/l) developed by the company to wood panels. The solvent systems of some of the coatings evaporated too quickly causing "brush drag" and leaving an unacceptable finish. Other formulations did not spread smoothly or evenly resulting in equally poor aesthetics.

Staff has concluded that an amendment to the rule is necessary since no available compliant products that are feasible at this time.

STAFF PROPOSAL

In this amendment, staff proposes to:

- add a category for clear brushing lacquers limiting the maximum allowable VOC content not to exceed 680 grams per liter and require that the VOC content be reduced to 275 g/l by January1, 2005 (consistent with the January 1, 2005 requirement for sprayable lacquers);

- include a definition for clear brushing lacquer; and

- require specific labeling and reporting for such brushing lacquers.

EMISSION INVENTORY

Emission inventories for architectural coatings are not developed in the conventional manner of extracting data from the Annual Emission Reporting (AER) System or the Automated Emission Inventory System (AEIS). Manufacturers, distributors, and users of architectural coatings subject to Rule 1113 do not report emissions to the District. The quantity of architectural coatings used is obtained from sales data from manufacturers, distributors and retailers. The annual average emissions from architectural and industrial maintenance (AIM) coatings for the year 2000 is estimated at 59.4 tons per day (1997 AQMP). The summer annual average emissions for AIM coatings for year 2000 is over 70 tons per day.

The manufacturer of the brushing lacquer estimates annual sales in the District at 20,000 gallons per year. At 680 grams of VOC per liter (5.67 lbs/gal) this equates to emissions of:

20,000 gallons/yr x 5.7 lbs VOC/gallon x ton/2000 lbs x yr/365 days = 0.16 tons per day

This is less than 0.027% of the total annual average from all AIM coatings in the year 2000.

EMISSION REDUCTIONS

All lacquers were required to meet the Rule 1113 requirement of 550 grams of VOC per liter effective January 1, 1998. The creation of a new brushing lacquer category with an allowable VOC content of 680 grams per liter is a relaxation within the rule requirements. Therefore, no emission reduction will occur, rather, a delay in the emission reduction until 2005 will result from this proposed amendment.

At the time the manufacturer of the brushing lacquer requested a variance, two additional companies with a 680 g/l brushing lacquer also petitioned for a variance. However, the other two companies were denied a variance since they did not have an existing market within the SCAQMD. By amending the rule and exempting clear brushing lacquer, these two companies (and possibly more) could potentially market their brushing lacquers in the SCAQMD. However, the potential activity of other companies marketing brushing lacquers in the SCAQMD will not necessarily result in an increase in the total use of brushing lacquers. The participation of other companies with brushing lacquers will most likely alter the market share amongst competing products and the 20,000 gallon per year consumption of brushing lacquers within the SCAQMD is assumed to be fixed.

Based upon a 20,000 gallon per year consumption of a 680 gram per liter (5.7 lbs/gal) brushing lacquer the resulting emission reductions delayed until July 1, 2003 are calculated below (based upon 550 g/l compliant lacquer and using a solids basis):

Annual emissions from 680 g/l (5.7 lbs/gal) material =

20,000 gal/year x 5.7 lbs VOC/gal = 114,000 lbs/yr **(1)**

Assume solvent density of 7.3 lbs VOC/gal.

Volume fraction solids in 5.7 lbs /gal material = 1 – (5.7/7.3) = .22 (22% solids)

Total annual solids usage = 20,000 gal/ material/yr x .22 gal solids/gal material =

4,400 gallons solids per year.

Volume fraction solids in 550 grams VOC/l material (4.58 lbs/gal) =

1 – (4.58/7.3) = .37 gal solids/gal material (37% solids)

No. of gallons of 550 g/l coating required to equal solids of 680 gal/l coating =

4400 gals solids/.37 gals/yr = 11,892 gals/yr

Corresponding emissions from use of 550 g/l coating =

11,892 gals/yr x 4.58 lbs VOC/gal = 54,465 lbs/yr **(2)**

Emission Reduction Delayed = (1) – (2) = 114,000 lbs/yr – 54,465lbs/yr = 59,535 lbs/yr

Daily Emission Reduction Delayed = 59,535 lbs/yr x yr/365 d = 163 lbs/d (.08 tpd)

The November 1996 adoption of amendments to Rule 1113 that limited the VOC content for lacquers set a technology-forcing standard as the limit applies to brushing lacquers. The technology has not yet been developed to meet the limit specified in the rule. The District therefore finds the limit for brushing lacquers infeasible and its implementation is not possible at this time. The 1999 amendment to the 1997 State Implementation Plan (SIP) for ozone allows substitution of emission reductions from another rule that achieved more emission reductions than planned. The District is substituting emission reductions in excess of the SIP commitment from another control measure to offset the temporary delay in reductions caused by this amendment to Rule 1113.

COST-EFFECTIVENESS

A cost-effectiveness analysis determines the cost to comply with new regulatory requirements and is required by Section 40440.8 of the California Health & Safety Code. Cost-effectiveness expresses the cost in dollars per ton of pollutant reduced.

There are no cost impacts anticipated as a result of the proposed amendment. Therefore, a cost-effectiveness analysis (including incremental cost-effectiveness) is not applicable.

CONCLUSION

During the two-year variance period, the manufacturer of the clear brushing lacquer conducted extensive research efforts in an attempt to formulate a compliant product (550 g/l). SCAQMD staff met with the manufacturer on several occasions to discuss and evaluate these efforts. Additionally, SCAQMD staff applied several of the low-VOC brushing lacquers (550 g/l) developed by the company to wood panels and determined that the finishes were unacceptable (See RATIONALE FOR AMENDMENT section of staff report). Staff was also unsuccessful in an attempt to locate a 550 g/l brushing lacquer anywhere in the United States. Staff concludes that the amendment is warranted and necessary since no 550 g/l materials are available and feasible.

Approximately 20,000 gallons per year of brushing lacquer are sold in the South Coast basin. The amendment is not expected to increase the sales or usage of brushing lacquer. The amendment will delay a reduction of 163 pounds (0.08 tons) per day until July, 2005, when the brushing lacquer will be required to meet a VOC content limit of 275 g/l by January 1, 2005. No cost impacts are expected to occur as a result of the amendment.

COMPARATIVE ANALYSIS

PAR 1113 does not impose more stringent emission limitations than in the existing rule, therefore, no comparative analysis is required.

DRAFT FINDINGS UNDER THE CALIFORNIA HEALTH AND SAFETY CODE

Before adopting, amending, or repealing a rule, the California Health and Safety Code requires the AQMD to adopt written findings of necessity, authority, clarity, consistency, non-duplication, and reference, as defined in Section 40727. The draft findings are as follows:

Necessity - The AQMD Governing Board has determined that a need exists to amend Rule 1113 – Architectural Coatings, to allow the use of brushing lacquers since it has been adequately demonstrated that compliant products are not currently available.

Authority - The AQMD Governing Board obtains its authority to adopt, amend, or repeal rules and regulations from the California Health and Safety Code Sections 40000, 40440, 40463, and 40725 through 40728.

Clarity - The AQMD Governing Board has determined that Proposed Amended Rule 1113 is written or displayed so that its meaning can be easily understood by persons directly affected by it.

Consistency - The AQMD Governing Board has determined that Proposed Amended Rule 1113 is in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, federal or state regulations.

Non-Duplication - The AQMD Governing Board has determined that the Proposed Amended Rule 1131 does not impose the same requirements as any existing state or federal regulations, and the proposed amended rule is necessary and proper to execute the powers and duties granted to, and imposed upon, the AQMD.

Reference - In adopting this regulation, the AQMD Governing Board references the following statutes which the AQMD hereby implements, interprets or makes specific: California Health and Safety Code Sections 40001 (rules to achieve ambient air quality standards), 40440(a) (rules to carry out the AQMP) and 40440(c) (cost-effectiveness), 40920.6 (potential control options and incremental cost-effectiveness), and Federal Clean Air Act Section 172(c)(1)(RACT).

PUBLIC COMMENTS AND RESPONSES

1. Reference: Letter Received by Texture Coatings of America (TCA) Dated April 6, 2001

The letter references three categories for discussion:

Category A – Specialty Primers
Category B – Industrial Maintenance Coatings as related to Permanent Anti-Graffiti Coatings
Category C – Water Proofing Concrete/Masonry Sealers

Category A – Specialty Primers

Comment:	**Response**:
Waterborne primers do not work on previously coated concrete and masonry substrates	The staff's technology assessment during the 1999 amendment process has identified a variety of primers available for concrete and masonry, of which several indicating the ability to use over waterproofed concrete and masonry substrates. Nonetheless, staff proposed a specialty primers category with a higher interim limit at the Public Hearing for the 1999 amendments to Rule 1113 to address concerns about specific substrates that were identified as problematic substrates during the rulemaking process.
Comment:	**Response**:
Concrete Tilt-Up walls with form release oils cannot be coated with waterborne primers.	Staff does not disagree with this statement. However, as discussed in earlier meetings and during the rulemaking phase, any substrate, including concrete, should undergo a manufacturer's recommended surface preparation techniques, which typically state that all oils, dust, and other debris should be completely removed prior to application. TCA's comment suggests that a painting contractor not follow the recommended surface preparation guidelines. Staff's technology assessment has concluded that waterborne

	concrete primers adhere well to a properly prepared substrate.

Category B - Industrial Maintenance Coatings as related to Permanent Anti-Graffiti Coatings

Comment:	**Response**:
Anti-Graffiti Systems are not available.	Compliant permanent, anti-graffiti coatings are available, as indicated testimony presented at the 1999 Public Hearing for amendments to Rule 1113, as well as information collected by staff as a part of the technology assessment. This information has been shared with TCA on numerous occasions, and to date, TCA has not provided any actual empirical date to support claims regarding the superior performance of its single-component anti-graffiti coatings. Drying and curing mechanisms of different coatings systems are dependent on the overall formulation, drying properties, and numerous other factors. Please forward the results of any actual testing that you may have conducted that shows the problems detailed.

Category C – Water Proofing Concrete/Masonary Sealers

Comment:	**Response:**
Rule 1113 language implies that the VOC content of waterproofing wood sealers are going down and the VOC content of waterproofing sealers for concrete and masonry will have a higher limit. Is this true?	With regards to clarifying issues regarding waterproofing sealers, TCA is correct in stating that waterproofing wood sealers will have a compliance limit of 250 g/l effective July 1, 2002. However, waterproofing concrete/masonry sealers will retain the 400 g/l compliance limit

2. Additional Comments:

Comment:	**Response:**
There are additional issues surrounding Rule 1113 that should be addressed in this amendment.	Staff has established the Rule 1113 Working Group and Technology Advisory Committee and they are meeting regularly to discuss rule implementation issues. There are several technology assessments underway to evaluate product performance of compliant coatings. The current amendment is designed to address a variance issue.
Comment:	**Response:**
CARB asked that reporting requirements be added for clear brushing lacquers and that the test method section of the rule be modified to include approval by USEPA and ARB. The agency asked for other minor changes to the rule, as well.	Staff added a reporting requirement for clear brushing lacquers. Staff has agreed to address the remaining CARB concerns in future amendments to the rule.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Final Environmental Assessment for:

Proposed Amended Rule 1113 - Architectural Coatings

July 6, 2001

SCAQMD No. 010522MK

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PREFACE

This document constitutes the Final Environmental Assessment (EA) for the amendments to Rule 1113 - Architectural Coatings. The Draft EA was released for a 45-day public review and comment period from May 22, 2001 to July 5, 2001. No comment letters were received from the public. Minor modifications have been made to the Draft such that it is now a Final EA. Deletions and additions to the text of the EA are denoted using ~~strikethrough~~ and *italics*, respectively.

CHAPTER 1

EXECUTIVE SUMMARY

INTRODUCTION

Rule 1113 – Architectural Coatings, was originally adopted by the South Coast Air Quality Management District (SCAQMD or district) on September 2, 1977, to control volatile organic compound (VOC) emissions from architectural coating operations. VOC emissions from stationary and mobile sources are major contributors to the formation of ozone (key ingredient of smog) in the South Coast Air Basin (Basin). The formation of ozone occurs as VOCs react with oxides of nitrogen (NO_X) in the atmosphere. Ozone, a criteria pollutant, has been shown to adversely affect human health. It also contributes to the formation of another criteria pollutant, particulate matter with a diameter less than 10 microns (PM10).

Under Rule 1113, emissions are controlled by limiting the VOC content, measured in grams per liter, of the architectural coatings sold and applied within the jurisdiction of the SCAQMD. The rule prohibits the manufacture, sale, distribution, or application of architectural coatings within the jurisdiction of the SCAQMD unless a specific VOC content for the coating is met. Since its adoption, Rule 1113 has been amended 20 times. The most recent amendments in 1999, implemented Air Quality Management Plan (AQMP) control measure CTS-07.

The SCAQMD is proposing to establish a new category for clear wood finish brushing lacquers at a 680 grams per liter VOC content limit to be used in lieu of the required 550 grams per liter VOC content limit for other lacquers. This pertains only to clear wood finish lacquers that are applied by brushing the architectural coating onto a substrate by hand. Effective January 1, 2005, however, the brushing lacquers will be required to meet the 275 grams per liter VOC content requirement for other lacquers. The proposed amendments will result in a delay of VOC emission reductions, not an increase in existing emissions because the one known affected coating manufacturer of the brushing lacquer was, until recently, under a variance which allows the company to sell the brushing lacquer at the higher VOC content limit. Based on the volume of affected coatings currently sold, the delay of VOC emission reductions is anticipated to exceed the SCAQMD's daily significance threshold.

Pursuant to the California Environmental Quality Act (CEQA) (California Public Resources Code § 21000 et seq.), this document includes an analysis of the potential environmental impacts from implementing proposed amended Rule 1113. Based upon an initial evaluation in the Initial Study prepared for the proposed amendments, air quality has been identified as the only environmental topic having the potential to be adversely affected by the proposed amendments and the impacts are analyzed in this document. Due to the delay of VOC emission reductions, adverse air quality impacts have been determined to be significant.

LEGISLATIVE AUTHORITY

The California Legislature created the SCAQMD in 1977 (Lewis-Presley Air Quality Management Act, California Health and Safety Code §§ 40400 et seq.) as the agency responsible for developing and enforcing air pollution control rules and regulations in the SCAB and portions of the Salton Sea Air Basin and Mojave Desert Air Basin.. By statute, SCAQMD is required to adopt an AQMP demonstrating compliance with all state and federal ambient air quality standards for the District [California Health and Safety Code § 40460(a)]. Furthermore, SCAQMD must adopt rules and regulations that carry out the AQMP [California Health and Safety Code, § 40440(a)]. The 1997 AQMP concluded that major reductions in emissions of VOCs and NOx are necessary to attain the air quality standards for ozone and PM10. Rule 1113 was originally prepared pursuant to these mandates.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

The proposed amendments to Rule 1113 are a "project" as defined by CEQA (Cal. Public Resources Code §21080.5). SCAQMD is the lead agency for the proposed project and has prepared appropriate environmental analysis pursuant to its certified regulatory program (SCAQMD Rule 110). 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 SCAQMD's regulatory program was certified by the Secretary of the Resources Agency on March 1, 1989, and is codified as SCAQMD Rule 110.

CEQA requires that the potential environmental impacts of proposed projects be evaluated and that feasible methods to reduce or avoid significant adverse environmental impacts of these projects be identified. To fulfill the purpose and intent of CEQA, the SCAQMD has prepared this environmental assessment (EA) to address the potential environmental impacts associated with the proposed amendments to Rule 1113. This Draft EA is intended to: (a) provide the lead agency, responsible agencies, decision makers and the general public with detailed information on the environmental effects of the proposed project; and, (b) to be used as a tool by decision makers to facilitate decision making on the proposed project.

Appendix A includes a Notice of Preparation/Initial Study (NOP/IS) which identifies environmental topics to be analyzed in this document. The NOP/IS was distributed to responsible agencies and interested parties for a 30-day review and comment period from March 22, 2001 to April 20, 2001. The NOP/IS identified air quality impacts to be potentially adverse. During that public comment period the SCAQMD received one comment letter that supported the rule amendment.

All comments received during the public comment period on the analysis presented in the Draft EA will be responded to and included in the Final EA. Prior to making a decision on the proposed amendments, the SCAQMD Governing Board must review and certify the EA as providing adequate information on the potential adverse environmental impacts of the amended rule.

CEQA DOCUMENTATION FOR RULE 1113 - ARCHITECTURAL COATINGS

This EA is a comprehensive environmental document that analyzes the environmental impacts from current proposed amendments to Rule 1113. SCAQMD rules, as ongoing regulatory programs, have the potential to be revised over time due to a variety of factors (e.g., regulatory decisions by other agencies, new data, inability to comply, etc.). The other document which comprises the CEQA record for the current proposed amendments to Rule 1113, includes the Notice of Preparation/Initial Study (March 22, 2001) in Appendix A. A summary of the contents of this document is given below.

Notice of Preparation/Initial Study of an Environmental Assessment for the Proposed Amendments to Rule 1113, March 22, 2001: The NOP/IS of an EA for the Proposed Amendments to Rule 1113 was released for a 30-day public review period on March 22, 2001. The NOP contained a brief project description and the environmental checklist, as required by state CEQA Guidelines, which included a description of the probable environmental effects that may result from implementing the proposed amendments.

Other CEQA Documents for Rule 1113

Several previous environmental analyses have been prepared to analyze past amendments to Rule 1113 and are listed as followed. The following summaries of previous CEQA documents are included for informational purposes only. The current EA focuses on the currently proposed amendments to Rule 1113 and does not rely on these previously prepared EAs. These documents can still be obtained by contacting the SCAQMD's Public Information Center at (909) 396-2039 or the following e-mail address: ceqa_admin@aqmd.gov.

Final Subsequent Environmental Assessment (SEA) for Proposed Rule 1113, May 4, 1999: The Final SEA for the proposed amendments to Rule 1113 was completed and available to the public prior to the public hearing for proposed amended Rule 1113 (May 14, 1999). The Final DEA contained seven comment letters received from the public on the Draft SEA and responses to those comments. The Draft SEA was released for a 30-day public review and comment period from

March 23, 1999 to April 21, 1999. The Draft SEA analyzed potential adverse environmental impacts from reducing the allowable VOC content limit per liter of coating from the following coating categories: industrial maintenance; non-flats; quick-dry enamels; primers, sealers, and undercoaters; quick-dry primers sealers, and undercoaters; roof coatings; and waterproofing wood sealers. Several new categories were added including high temperature industrial maintenance coatings, rust preventative coatings, bituminious roof coatings, recycled flats and nonflats, essential public service coatings and floor coatings. Also, the exemption for quick-dry primers sealers, and undercoaters was deleted.

Final Subsequent Environmental Assessment for Proposed Rule 1113, November 1996: The Final SEA for the proposed amendments to Rule 1113 was completed and available to the public prior to the public hearing for proposed amended Rule 1113 (November 8, 1996). These amendments reduced the VOC content limits of four coating categories: lacquers, flats (interior and exterior), traffic coatings, and multi-color coatings, resulting in an overall net reduction of 10.3 tons per day of VOC emissions from this source category. In addition, the amendments temporarily increased the VOC content limits for four coating categories. Other components of the proposed amendments included addition of and modification to some definitions, updating the analytical test methods, and establishing an averaging methodology for flats to provide flexibility for complying with future VOC content limits.

Final Environmental Assessment for Proposed Rule 1113, August 1996: The Final SEA for the proposed amendments to Rule 1113 was completed and available to the public prior to the public hearing for proposed amended Rule 1113 (August 9, 1996). These amendments incorporated an exemption from the VOC limits for coatings sold in containers one quart size or less. The analysis concluded that adopting a small container exemption would result in significant adverse air quality impacts.

Final Subsequent Environmental Assessment for Proposed Rule 1113, February 1990: The Final SEA for the proposed amendments to Rule 1113 was completed and available to the public prior to the public hearing for proposed amended Rule 1113 (February 2, 1990). The amendments included the following provisions: exemptions for 11 categories of specialty coatings were eliminated; lower VOC content limits for 15 new coating categories; technology-forcing low VOC limits for ten existing coating categories; consolidation of the industrial maintenance coating categories from ten to three; and reorganization of the subdivisions of the rule.

Notice of Exemptions for Other Rule 1113 Amendments

Rule 1113 has been amended a number of times since January 1, 1990, as summarized in the following bullet points. For each amendment described below a Notice of Exemption was prepared.

- **March 8, 1996** – These amendments established a definition for aerosol coatings consistent with CARB's definition, revised the definition of exempt compounds by referencing Rule 102 – Definition of Terms, and created an exemption for aerosol coatings.

- **September 6, 1991** – These amendments created a new coating category, low-solids stain, and also incorporated a calculation method for determining VOC content on a materials basis. The amendment also prohibited use of Group II exempt compounds, including ozone-depleting chlorofluorocarbons (CFCs) and several toxic solvents.

- **December 7, 1990** – These amendments incorporated new definitions for specialty coatings and established a specific VOC content limit in the table of standards.

- **November 2, 1990** – These amendments incorporated new definitions for specialty coatings and established a specific VOC content limit in the table of standards.

- **February 2, 1990** - These amendments incorporated new definitions for specialty coatings and established a specific VOC content limit in the table of standards.

INTENDED USES OF THIS DOCUMENT

In general, a CEQA document is an informational document that informs a public agency's decision-makers and the public generally of potentially significant environmental effects of a project, identifies possible ways to avoid or minimize the significant effects, and describes reasonable alternatives to the project (CEQA Guidelines §15121). A public agency's decision-makers must consider the information in a CEQA document prior to making a decision on the project. Accordingly, this Draft EA is intended to: (a) provide the SCAQMD Governing Board and the public with information on the environmental effects of the proposed project; and, (b) be used as a tool by the SCAQMD Governing Board to facilitate decision making on the proposed project.

Additionally, CEQA Guidelines §15124(d)(1) require a public agency to identify the following specific types of intended uses:

1. A list of the agencies that are expected to use the EA in their decision-making;
2. A list of permits and other approvals required to implement the project; and
3. A list of related environmental review and consultation requirements required by federal, state, or local laws, regulations, or policies.

To the extent that local public agencies, such as cities, county planning commissions, etc., are responsible for making land use and planning decisions related to projects undertaken as a result of the proposed amendments to Rule 1113, they could possibly rely on this EA during their decision-making process. Similarly, public agencies approving projects at facilities complying with the proposed amendments to Rule 1113 may rely on this EA.

EXECUTIVE SUMMARY

CEQA Guidelines §15123 requires an EIR to include a brief summary of the proposed actions and their consequences[1]. In addition, areas of controversy including issues raised by the public must also be included in the executive summary. This Draft EA consists of the following chapters: Chapter 1 – Executive Summary; Chapter 2 – Project Description; Chapter 3 – Existing Setting, Chapter 4 – Potential Environmental Impacts and Mitigation Measures; Chapter 5 – Project Alternatives; and various appendices. The following subsections briefly summarize the contents of each chapter.

Summary of Chapter 1 – Executive Summary

Chapter 1 includes a discussion of the legislative authority that allows the SCAQMD to amend and adopt air pollution control rules, identifies general CEQA requirements and the intended uses of this CEQA document, and summarizes the remaining five chapters that comprise this Draft EA.

1 Although the SCAQMD has an approved Certified Regulatory Program, it follows the standard CEQA recommended procedural requirements when preparing its EAs.

Summary Chapter 2 - Project Description

The following is a summary of proposed amended Rule (PAR) 1113:

- add a category for clear brushing lacquers limiting the maximum allowable VOC content not to exceed 680 grams per liter and require that the VOC content be reduced to 275 grams per liter effective January 1, 2005;
- include a definition for clear brushing lacquers; and
- require specific labeling requirements for such brushing lacquers.

Summary Chapter 3 - Existing Setting

Pursuant to the CEQA Guidelines §15125, Chapter 3 – Existing Setting, includes descriptions of those environmental areas that could be adversely affected by PAR 1113. The following subsection briefly highlights the existing setting for the environmental area that could be adversely affected by implementing PAR 1113.

Air Quality

Pursuant to the CEQA Guidelines §15125, Chapter 3 includes descriptions of those environmental areas that could be adversely affected as a result of the implementation of the proposed amendments as they exist at the time the NOP/IS were released for public review. Thus, the subsections of Chapter 3 describe the existing setting for air quality.

Air quality in the SCAQMD has shown substantial improvement over the last two decades. Nevertheless, some federal and state air quality standards are still exceeded frequently and by a wide margin. Of the National Ambient Air Quality Standards (NAAQS) established for six criteria pollutants (ozone, lead, sulfur dioxide, nitrogen dioxide, carbon monoxide and PM10), the area within the SCAQMD's jursidiction is only in attainment with sulfur dioxide, nitrogen dioxide and lead standards. Chapter 3 provides a brief description of the existing air quality setting for each criteria pollutant, as well as the human health effects resulting from each criteria pollutant.

Summary Chapter 4 - Environmental Impacts

CEQA Guidelines §15126(a) requires the following: "An EIR shall identify and focus on the significant environmental effects of the proposed project. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects."

The following subsection briefly summarizes the analysis of potential adverse environmental impacts from the adoption and implementation of PAR 1113.

Air Quality

One known affected coating manufacturer of clear wood finish brushing lacquer was, until recently, under a variance which allowed the company to sell the brushing lacquer at 680 grams per liter VOC content limit in lieu of the required 550 grams per liter VOC content limit for all lacquers. The proposed amendments to Rule 1113 will delay reducing 162 pounds per day of VOC emission reductions due to an extension of the current variance and delay in complying with the existing rule requirement for clear brushing lacquers. Therefore, this direct impact to air quality is significant. The clear wood finish brushing lacquer will be required to comply with 275 grams per liter VOC content limit as of January 1, 2005. The rule currently requires the VOC content limit of all clear wood finish lacquers to be 275 grams per liter by January 1, 2005, so the delay in achieving anticipated emission reductions is not permanent.

TABLE 1-1

Environmental Impacts from Proposed Project

ENVIRONMENTAL TOPIC	PROPOSED PROJECT	MITIGATION MEASURES
Air Quality Criteria Pollutants	Significant due to delay in VOC emission reductions	Encourage reformulation and compliance with 275 grams per liter VOC content limit earlier than required.
TAC	Not Significant	None required

Potential Environmental Impacts Found Not To Be Significant

The Initial Study for PAR 1113 includes an environmental checklist of approximately 17 environmental topics. Review of the proposed project at the NOP/IS stage identified one topic for further review in the Draft EA. Where the Initial Study concluded that the project would have no significant direct or indirect adverse effects on the remaining environmental topics, no comments were received on the NOP/IS or at the public meetings that changed this conclusion. The screening analysis concluded that the following environmental areas would not be significantly adversely affected by PAR 1113:

- aesthetics
- agriculture resources

- biological resources
- cultural resources
- energy
- geology/soils
- hazards and hazardous materials
- hydrology and water quality
- land use and planning
- mineral resources
- noise
- population and housing
- public services
- recreation
- solid/hazardous waste
- transportation/traffic

Summary Chapter 5 - Alternatives

Three feasible alternatives to the proposed amendments are summarized in Table 1-2: Alternative A (No Project); Alternative B (Further Delay in Compliance Dates) and Alternative C (Eliminate Final Compliance Limit).

TABLE 1-2

Project Alternatives

	ALTERNATIVE A (No Project)	**ALTERNATIVE B** (Further Delay in Compliance Dates)	**ALTERNATIVE C** (Eliminate Final Compliance Limit)
Compliance Action	1. Maintain current VOC content limit for clear wood finish lacquers	1. Create new clear brushing lacquer category under clear wood finish 2. Delay VOC content limit reduction 3. Add labeling requirement	1. Create new clear brushing lacquer category under clear wood finish 2. Delay VOC content limit reduction 3. Add labeling requirement
VOC Content Limit (Compliance Date)	550 g/l (until 1/1/05) 275 g/l (after 1/1/05)	680 g/l (until 1/1/05) 550 g/l (after 1/1/05) 275 g/l (after 1/1/07)	680 g/l (until 1/1/05) 550 g/l (after 1/1/05)

The proposed project is preferred over Alternative A because it achieves the primary project goal of allowing additional time to reformulate a low VOC brushing lacquer. Imposing the current VOC content requirement for this coating category would eliminate this product from the market, leaving end-users no suitable replacement alternative.

The proposed project is recommended over Alternatives B and C because it requires compliance with the lower VOC content limit at 275 grams per liter at the same time required in the current rule and thus achieving the originally anticipated final VOC emission reductions from this coating category.

Summary Chapter 6 - Other CEQA Topics

CEQA requires EAs to address the potential for irreversible environmental changes, growth-inducing impacts and inconsistencies with regional plans. Consistent with the 1997 AQMP EIR, additional analysis of the proposed project confirms that it would not result in irreversible environmental changes or the irretrievable commitment of resources, foster economic or population growth or the construction of additional housing, or be inconsistent with regional plans.

CHAPTER 2

PROJECT DESCRIPTION

Project Location
Background
Existing Rule 1113
Rationale for Amendment
Project Objective
Project Description
Description of Affected Architectural Coating Categories

PROJECT LOCATION

The SCAQMD has jurisdiction over an area of 10,473 square miles (referred to hereafter as the district), consisting of the four-county South Coast Air Basin (Basin) and the Riverside County portions of the Salton Sea Air Basin (SSAB) and the Mojave Desert Air Basin (MDAB). The Basin, which is a subarea of the SCAQMD's jurisdiction, 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 6,745 square-mile 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 is 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 Valley Planning Area) is a subregion of both Riverside County and the SSAB and is bounded by the San Jacinto Mountains to the west and the eastern boundary of the Coachella Valley to the east (Figure 2-1).

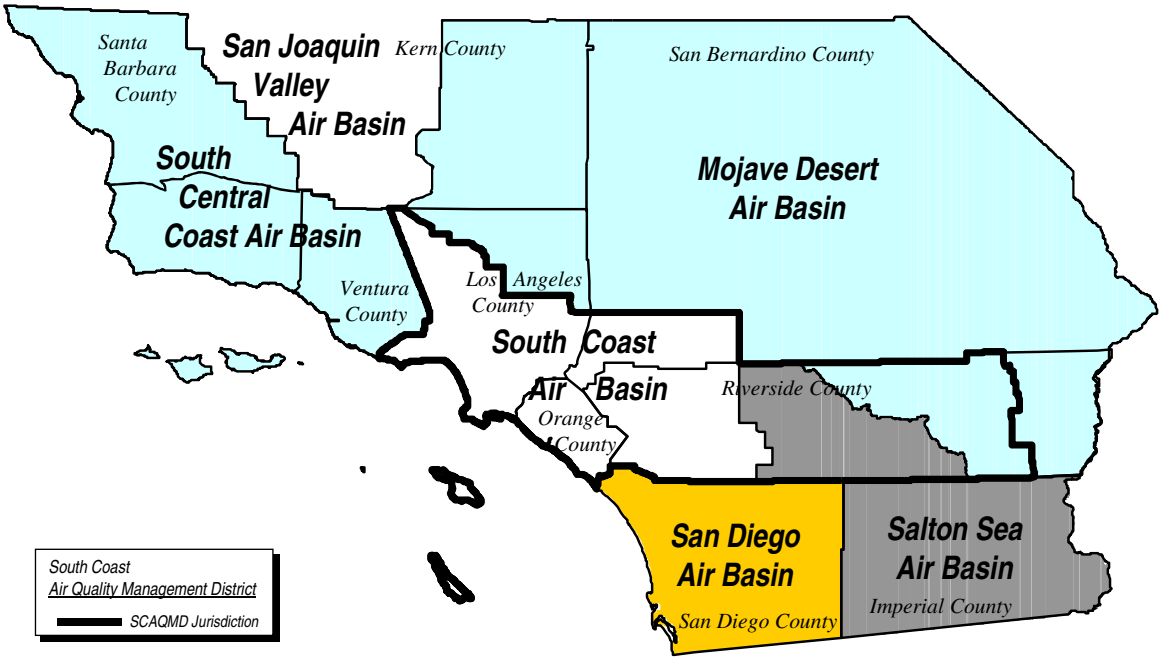

FIGURE 2-1

South Coast Air Quality Management District

BACKGROUND

Architectural and industrial maintenance (AIM) coatings are used to beautify and protect homes, office buildings, factories, and their appurtenances on a variety of surfaces - metal, wood, plastic, concrete, wallboard, etc. For example, AIM coatings are applied to the interior and exterior of homes and offices, factory floors, bridges, stop signs, roofs, swimming pools, driveways, etc. AIM coatings may be applied by brush, roller or spray gun; by do-it-yourselfers (DIY), painting contractors, or maintenance personnel.

AIM and other coatings are composed of: pigments, which give the paint its color and ability to hide the underlying surface, and are generally in the form of finely ground powders; binders (resins), in which the pigment particles are dispersed and that bind the pigment to the painted surface; carriers (solvents), used to keep the paint in a liquid state during application, and to otherwise aid in the application of the paint; and specialty coatings (additives), necessary for other coating characteristics. The carriers and some specialty chemicals evaporate, leaving behind the film-forming components of the coating. The resins used in AIM coatings include acrylics, vinyls, alkyds, cellulosics, epoxies, urethanes, polyurethanes, etc.. The carriers in solvent-based coatings are organic solvents such as alcohols, ketones, esters, glycols, glycol ethers, and aromatic, or aliphatic hydrocarbons, and are usually VOCs. The carrier in a waterborne coating is water, although most waterborne coatings contain some VOCs, primarily glycols or texanol.

AIM coatings are usually purchased ready-to-use, although some come in two components that must be mixed prior to application. They are available in a wide range of colors, gloss and performance characteristics. One important criterion for selecting coatings is durability. Coatings are expected to last from two to 10 years with the average expectation of five to seven years. Failure of coatings to stand up to the elements such as sunlight, weather, and cleaning can shorten the life of the coating and require more frequent recoating.

A solvent may sometimes be used to thin a coating if it is too thick to spray or brush. Application problems caused by low temperature and high humidity can also be overcome by the addition of solvent to the coating. Waterborne coatings are thinned with water only, whereas solvent-based coatings can only be thinned by organic solvents. Similarly, brushes, rollers and spray guns used with waterborne coatings are cleaned with water, while such equipment used with solvent-based coatings use organic solvents for cleanup. Generally, coatings are sold as 'ready-to-use' to eliminate the need for thinning in the field.

EXISTING RULE 1113

VOC emissions from architectural coating operations are regulated by SCAQMD Rule 1113. The rule is applicable to any person who supplies, sells, offers for sale, or manufacturers any architectural coating for use in the district that is intended to be applied to stationary structures or their appurtenances, and to mobile homes, pavements or curbs; as well as any person who applies or solicits the application of any architectural coatings within the district. The purpose of this rule is to limit the VOC content, measured in grams per liter, of architectural coatings used in the district or to allow the averaging of such coatings, as specified, so their actual emissions do not exceed the allowable emissions if all the averaged coatings had complied with the specified limits. Originally adopted September 2, 1977, Rule 1113 has been amended 20 times.

RATIONALE FOR AMENDMENT

During the November 1996 amendments, the rule included a requirement for the VOC content of clear lacquers to be reduced from 680 grams per liter to 550 grams per liter, effective January 1, 1998. Lacquers applied by spray application methods were successfully developed to meet the 550 grams per liter requirement. During the 1999 amendments, one coating manufacturer approached the SCAQMD claiming that a 550 grams per liter lacquer when applied by brushing the coating onto the substrate could not be successfully developed prior to the final compliance date of January 1, 1998. These brushing lacquers are exclusively formulated for the residential "do-it-yourself" market and are not sprayed, but applied by hand with a brush. The company was the only company marketing brushing lacquer in the SCAQMD's jurisdiction. Sales of the coating were approximately 20,000 gallons per year. At the time, the SCAQMD was unable to establish a separate category and VOC content requirements for brushing lacquer because this issue was identified too late in the rule amendment process and the SCAQMD recommended that the company seek a variance.

In April 1999, the company was granted a variance for one year from the 550 grams per liter requirement for lacquers. In April 2000, a 550 grams per liter brushing lacquer had still not been successfully developed and the company was granted a one year extension on its variance. The extension ended on April 20, 2001, and thus far there has been no success in developing a compliant brushing lacquer. The company met with the SCAQMD and outlined all of the research and testing efforts performed over the last two years. The company filed a comprehensive report outlining and summarizing these efforts. Additionally, SCAQMD staff visited the company for further meetings, applied low-VOC brushing lacquer formulations to wood panels, and searched throughout the country in an attempt to find a 550 grams per liter brushing lacquer. As a result of these meetings and activities, the SCAQMD

determined that an acceptable 550 grams per liter brushing lacquer was not available and agreed to amend Rule 1113 to allow additional time to develop brushing lacquers that could comply with the final VOC content limit for lacquers in Rule 1113. The proposed amendments would require brushing lacquers to comply with the 680 grams per liter limit until December 31, 2004.

PROJECT OBJECTIVE

The primary objective of PAR 1113 is to create a new coating category for clear wood finish lacquers applied by brushing the product onto the substrate. Clear wood finish lacquers applied using other methods such as spraying would be unaffected by the proposed amendments. While proposed to be excluded from complying with the VOC content limit of 550 grams per liter, the brushing lacquer will be required to comply with 275 grams per liter VOC content limit as of January 1, 2005. The proposed amendments would allow additional time to develop compliant low VOC brushing lacquers. The rule currently requires the VOC content limit of all clear wood finish lacquers to be 275 grams per liter by January 1, 2005, so the delay in emission reductions is not permanent.

PROJECT DESCRIPTION

The following is a summary of PAR 1113:

- add a category for clear brushing lacquers limiting the maximum allowable VOC content not to exceed 680 grams per liter and require that the VOC content be reduced to 275 grams per liter effective January 1, 2005 [Paragraph (c)(2)];

- include a definition for "clear brushing lacquers" [Paragraph (b)(9)]; and

- require specific labeling requirements for such brushing lacquers [Paragraph (d)(7)].

DESCRIPTION OF AFFECTED ARCHITECTURAL COATING CATEGORY

Clear Brushing Lacquers

Clear brushing lacquers are clear wood finishes, excluding clear lacquer sanding sealers, formulated with nitrocellulose or synthetic resins to dry by solvent evaporation without chemical reaction. Brushing lacquers provide a solid, protective film, which are intended exclusively for application by brush and are labeled "for

brush applications only" and "this product must not be thinned or sprayed." Current annual sales of clear brushing lacquers in the SCAQMD's jurisdiction is estimated at 20,000 gallons per year.

CHAPTER 3

EXISTING SETTING

Introduction
Architectural Coating Industry
Air Quality

INTRODUCTION

In order to determine the significance of the impacts associated with a proposed project, it is necessary to evaluate the project's impacts against the backdrop of the environment as it exists at the time the NOP/IS is published. The CEQA Guidelines defines "environment" as "the physical conditions that exist within the area which will be affected by a proposed project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance" (CEQA Guidelines §15360; see also Public Resources Code §21060.5). Furthermore, a CEQA document must include a description of the physical environment in the vicinity of the project, as it exists at the time the notice of preparation is published, from both a local and regional perspective (CEQA Guidelines §15125). Therefore, the "environment" or "existing setting" against which a project's impacts are compared consists of the immediate, contemporaneous physical conditions at and around the project site (Remy, et al; 1996).

The following sections summarize the existing setting for air quality which is the only environmental area that may be adversely affected by proposed amended Rule 1113. An overview of air quality in the district is given below. A more complete discussion of current and projected future air quality in the district, with and without additional control measures can be found in the 1997 Final Environmental Impact Report (EIR) for the 1997 AQMP (Chapter 3 and 4) and in the Final 1997 AQMP and the five associated appendices. The 1997 AQMP Final EIR contains more comprehensive information on existing and projected environmental settings for all environmental areas discussed in this chapter. Copies of the above-referenced documents are available from the SCAQMD's Public Information Center by calling (909) 396-2039.

ARCHITECTURAL COATING INDUSTRY

AIM coatings are the largest segment of the United States' total paint market. Shipments of AIM coatings acccounted for just over half of the total industry shipments. Architectural coatings are sold to do-it-yourself customers, painting contractors, and commercial and industrial maintenance users through company stores, independent dealers, mass retailers, and home improvement centers. The annual average emissions from AIM coatings for the year 2000 is estimated at 59.4 tons per day (1997 AQMP). The summer annual average emissions for AIM coatings for year 2000 is over 70 tons per day.

In the SCAQMD's jurisdiction, one company is marketing and selling approximately 20,000 gallons per year of clear wood finish brushing lacquers at 680 grams of VOC per liter. When Rule 1113 was amended in 1996 the VOC content limit for clear lacquers was reduced from 680 to 550 grams of VOC per liter by January 1, 1998.

Acceptable lacquers applied by spray application methods were successfully developed to meet the 550 grams of VOC per liter requirement. The one coating manufacturer of clear wood finish brushing lacquers claimed that a 550 grams of VOC per liter could not be successfully developed. These brushing lacquers are exclusively formulated for the residential "do-it-yourself" market and are not sprayed, but applied by hand with a brush. The company was granted a variance for two years allowing them to formulate and sell the brushing lacquer at 680 grams of VOC per liter. During those two years, the company conducted extensive research and testing to develop a brushing lacquer at 550 grams of VOC per liter and demonstrated to the SCAQMD the application and aesthetic flaws of the developing coatings. The SCAQMD was also unsuccessful in an attempt to locate a brushing lacquer at 550 grams of VOC per liter anywhere in the United States. The extension expired on April 20, 2001, and thus far no compliant brushing lacquer has been developed.

AIR QUALITY

Criteria Pollutants

It is the responsibility of the SCAQMD to ensure that state and federal ambient air quality standards are achieved and maintained in its geographical jurisdiction. Health-based air quality standards have been established by California and the federal government for the following criteria air pollutants: ozone, carbon monoxide (CO), nitrogen dioxide (NO2), particulate matter less than 10 microns (PM10), sulfur dioxide (SO2) and lead. These standards were established to protect sensitive receptors with a margin of safety from adverse health impacts due to exposure to air pollution. The California standards are more stringent than the federal standards and in the case of PM10 and SO2, far more stringent. California has also established standards for sulfate, visibility, hydrogen sulfide, and vinyl chloride. The state and national ambient air quality standards for each of these pollutants and their effects on health are summarized in Table 3-1.

The SCAQMD monitors levels of various criteria pollutants at 34 monitoring stations. The 1999 air quality data from SCAQMD's monitoring stations are presented in Table 3-2.

Ozone

Unlike primary criteria pollutants that are emitted directly from an emissions source, ozone is a secondary pollutant. It is formed in the atmosphere through a photochemical reaction of VOC, NOx, oxygen, and other hydrocarbon materials with sunlight.

TABLE 3-1

Federal and State Ambient Air Quality Standards

	STATE STANDARD	FEDERAL PRIMARY STANDARD	MOST RELEVANT EFFECTS
AIR POLLUTANT	CONCENTRATION/ AVERAGING TIME	CONCENTRATION/ AVERAGING TIME	
Ozone	0.09 ppm, 1-hr. avg. >	0.12 ppm, 1-hr avg.>	(a) Short-term exposures: (1) Pulmonary function decrements and localized lung edema in humans and animals (2) Risk to public health implied by alterations in pulmonary morphology and host defense in animals; (b) Long-term exposures: Risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (c) Vegetation damage; (d) Property damage
Carbon Monoxide	9.0 ppm, 8-hr avg. > 20 ppm, 1-hr avg. >	9 ppm, 8-hr avg.> 35 ppm, 1-hr avg.>	(a) Aggravation of angina pectoris and other aspects of coronary heart disease; (b) Decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (c) Impairment of central nervous system functions; (d) Possible increased risk to fetuses
Nitrogen Dioxide	0.25 ppm, 1-hr avg. >	0.053 ppm, ann. avg.>	(a) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (b) Risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; (c) Contribution to atmospheric discoloration
Sulfur Dioxide	0.04 ppm, 24-hr avg.> 0.25 ppm, 1-hr. avg. >	0.03 ppm, ann. avg.> 0.14 ppm, 24-hr avg.>	(a) Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma
Suspended Particulate Matter (PM10)	30 $\mu g/m^3$, ann. geometric mean > 50 $\mu g/m^3$, 24-hr average>	50 $\mu g/m^3$, annual arithmetic mean > 150 $\mu g/m^3$, 24-hr avg.>	(a) Excess deaths from short-term exposures and exacerbation of symptoms in sensitive patients with respiratory disease; (b) Excess seasonal declines in pulmonary function, especially in children
Sulfates	25 $\mu g/m^3$, 24-hr avg. >=		(a) Decrease in ventilatory function; (b) Aggravation of asthmatic symptoms; (c) Aggravation of cardio-pulmonary disease; (d) Vegetation damage; (e) Degradation of visibility; (f) Property damage
Lead	1.5 $\mu g/m^3$, 30-day avg. >=	1.5 $\mu g/m^3$, calendar quarter>	(a) Increased body burden; (b) Impairment of blood formation and nerve conduction
Visibility-Reducing Particles	In sufficient amount to reduce the visual range to less than 10 miles at relative humidity less than 70%, 8-hour average (10am - 6pm)		Visibility impairment on days when relative humidity is less than 70 percent

Table 3-2
1999 Air Quality Data - South Coast Air Quality Management District

		Carbon Monoxide					
						No. Days Standard Exceeded[a)]	
						Federal	State
Source/ Receptor Area No.	Location of Air Monitoring Station	No. Days of Data	Max. Conc. in ppm 1-hour	Max. Conc. in ppm 8-hour		≤9.5 ppm 8-hr.	>9.0 ppm 8-hr.
LOS ANGELES COUNTY							
1	Central LA	364	7	6.1		0	0
2	NW Coast LA Co	362	6	4.5		0	0
3	SW Coast LA Co	361	10	9.4		0	0
4	S Coast LA Co	358	7	6.6		0	0
6	W Sn Fernan V	365	9	9.3		0	0
7	E Sn Fernan V	362	9	9.0		0	0
8	W Sn Gabrl V	356	9	6.6		0	0
9	E Sn Gabrl V1	356*	5*	3.9*		0*	0*
9	E Sn Gabrl V2	--	--	--		--	--
10	Pomona/Wln	356	10	6.7		0	0
11	S Sn Gabrl V	363	7	5.6		0	0
12	S Cent LA Co 1	361	19	11.0		8	10
12	S Cent LA Co 2	349	19	11.7		6	6
13	Sta Clarita V	356	7	3.6		0	0
ORANGE COUNTY							
16	N Orange Co	364	11	5.3		0	0
17	Cent Orange Co	123*	8*	5.3*		0*	0*
18	N Coast Orange	359	8	6.4		0	0
19	Saddleback V 1	365	4	2.5		0	0
19	Saddleback V 2	--	--	--		--	--
RIVERSIDE COUNTY							
22	Norco/Corona	--	--	--		--	--
23	Metro Riv Co 1	354	7	4.4		0	0
23	Metro Riv Co 2	300*	7*	4.1*		0*	0*
24	Perris Valley	--	--	--		--	--
25	Lake Elsinore	--	--	--		--	--
29	Banning Airport	--	--	--		--	--
30	Coachella V1**	350	3	1.8		0	0
30	Coachella V2**	--	--	--	--	--	--
SAN BERNARDINO COUNTY							
32	NW SB V	--	--	--	--	--	--
33	SW SB V 1	--	--	--	--	--	--
33	SW SB V 2	--	--	--	--	--	--
34	Cent SB V 1	--	--	--	--	--	--
34	Cent SB V 2	358	5	4.0	0	0	0
35	E SB V	--	--	--	--	--	--
37	Cent SB Mtns	--	--	--	--	--	--

ABBREVIATIONS USED IN THE AREA NAMES: LA = Los Angeles, SB = San Bernardino, N = North, S = South, W = West, E = East, V = Valley, P = Pass, Cent = Central

ppm - Parts per million parts of air, by volume.

-- - Pollutant not monitored.

* - Less than 12 full months of data. May not be representative.

** - Salton Sea Air Basin

a) - The federal 1-hour standard (1-hour average CO > 35 ppm) was not exceeded.

Table 3-2
1999 Air Quality Data - South Coast Air Quality Management District
(continued)

Source/ Receptor Area No.	Location of Air Monitoring Station	No. Days of Data	Ozone: Max. Conc. in ppm 1-hour	Ozone: Max Conc. in ppm 8-hour	Ozone: Fourth High Conc. ppm 8-hour	Ozone: No. Days Standard Exceeded Federal > .12 ppm 1-hr.	Ozone: No. Days Standard Exceeded Federal > .08 ppm 8-hr.	Ozone: No. Days Standard Exceeded State > .09 ppm 1-hr
LOS ANGELES COUNTY								
1	Central LA	362	0.13	0.11	0.079	1	2	13
2	NW Coast LA Co	365	0.12	0.08	0.069	0	0	4
3	SW Coast LA Co	362	0.15	0.09	0.066	1	1	1
4	S Coast LA Co	362	0.13	0.08	0.068	1	0	3
6	W Sn Fernan V	365	0.10	0.09	0.081	0	1	5
7	E Sn Fernan V	362	0.12	0.10	0.084	0	3	13
8	W Sn Gabrl V	361	0.12	0.10	0.086	0	4	15
9	E Sn Gabrl V1	339*	0.14*	0.10*	0.095*	2*	9*	24*
9	E Sn Gabrl V2	362	0.14	0.11	0.096	3	8	25
10	Pomona/Wln V1	358	0.14	0.10	0.089	2	10	19
11	S Sn Gabrl V	363	0.12	0.10	0.080	0	2	6
12	S Cent LA Co 1	363	0.12	0.06	0.041	0	0	1
12	S Cent LA Co 2	342*	0.16*	0.09*	0.083*	1*	2*	6*
13	Sta Clarita V	357	0.12	0.10	0.095	0	13	18
ORANGE COUNTY								
16	N Orange Co	365	0.12	0.09	0.078	0	1	6
17	Cent Orange Co	157*	0.10*	0.08*	0.061*	0*	0*	1*
18	N Coast Orange	350	0.10	0.08	0.070	0	0	1
19	Saddleback V 1	361	0.10	0.08	0.071	0	0	2
19	Saddleback V 2	--	--	--	--	--	--	--
RIVERSIDE COUNTY								
22	Norco/Corona	--	--	--	--	--	--	--
23	Metro Riv Co 1	359	0.14	0.11	0.104	3	27	38
23	Metro Riv Co 2	--	--	--	--	--	--	--
24	Perris Valley	365	0.11	0.10	0.091	0	7	10
25	Lake Elsinore	360	0.14	0.13	0.106	4	37	51
29	Banning Airport	358	0.14	0.13	0.114	5	33	55
30	Coachella V 1**	349	0.13	0.11	0.098	1	21	27
30	Coachella V 2**	358	0.13	0.11	0.089	1	7	13
SAN BERNARDINO COUNTY								
32	NW SB V	361	0.15	0.12	0.103	4	17	29
33	SW SB V 1	--	--	--	--	--	--	--
33	SW SB V 2	--	--	--	--	--	--	--
34	Cent SB V 1	365	0.14	0.10	0.098	4	16	26
34	Cent SB V 2	365	0.16	0.13	0.115	14	31	45
35	East SB V	365	0.15	0.13	0.115	12	39	59
37	Cent SB Mtns	365	0.17	0.14	0.133	30	90	93

ABBREVIATIONS USED IN THE AREA NAMES: LA = Los Angeles, SB = San Bernardino, N = North, S = South, W = West, E = East, V = Valley, P = Pass, Cent = Central

ppm - Parts per million parts of air, by volume.

-- - Pollutant not monitored.

* - Less than 12 full months of data. May not be representative.

** - Salton Sea Air Basin.

Table 3-2
1999 Air Quality Data - South Coast Air Quality Management District
(continued)

Source/ Receptor Area No.	Location of Air Monitoring Station	Nitrogen Dioxide: No. Days of Data	Max. Conc. in ppm 1-hour	Average Compared to Federal Standard[b] AAM in ppm	No. Days Std. Exc'd State > 0.25 ppm 1-hour
LOS ANGELES COUNTY					
1	Central LA	347	0.21	0.0391	0
2	NW Coast LA Co	359	0.13	0.0291	0
3	SW Coast LA Co	356	0.13	0.0295	0
4	S Coast LA Co	359	0.15	0.0342	0
6	W Sn Fernan V	354	0.12	0.0287	0
7	E Sn Fernan V	343	0.18	0.0456	0
8	W Sn Gabrl V	362	0.16	0.0379	0
9	E Sn Gabrl V 1	327*	0.16*	0.0390*	0*
9	E Sn Gabrl V 2	357	0.14	0.0328	0
10	Pomona/Wln V	346	0.16	0.0503	0
11	S Sn Gabrl V	333*	0.16*	0.0391*	0
12	S Cent LA Co 1	343	0.18	0.0428	0
12	S Cent LA Co 2	148*	0.16*	0.0404*	0*
13	Sta Clarita V	141*	0.10*	0.0284*	0*
ORANGE COUNTY					
16	N Orange Co	364	0.16	0.0351	0
17	Cent Orange Co	154*	0.12*	0.0327*	0*
18	N Coast Orange Co	347	0.12	0.0209	0
19	Saddleback V 1	--	--	--	--
19	Saddleback V 2	--	--	--	--
RIVERSIDE COUNTY					
22	Norco/Corona	--	--	--	--
23	Metro Riv Co 1	354	0.13	0.0225	0
23	Metro Riv Co 2	--	--	--	--
24	Perris Valley	--	--	--	--
25	Lake Elsinore	334*	0.11*	0.0200*	0
29	Banning Airport	361	0.31	0.0243	1
30	Coachella V 1**	350	0.07	0.0195	0
30	Coachella V 2**	--	--	--	--
SAN BERNARDINO COUNTY					
32	NW SB V	357	0.13	0.0398	0
33	SW SB V 1	--	--	--	--
33	SW SB V 2	--	--	--	--
34	Cent SB V 1	343	0.15	0.0388	0
34	Cent SB V 2	355	0.14	0.0358	0
35	E SB V	--	--	--	--
37	Cent SB Mtns	--	--	--	--

ABBREVIATIONS USED IN THE AREA NAMES: LA = Los Angeles, SB = San Bernardino, N = North, S = South, W = West, E = East, V = Valley, P = Pass, Cent = Central

ppm - Parts per million parts of air, by volume.

AAM - Annual arithmetic mean.

-- - Pollutant not monitored.

* - Less than 12 full months of data. May not be representative.

** - Salton Sea Air Basin.

b) - The federal standard is annual arithmetic mean NO^2 greater than 0.0534 ppm. No location exceeded this standard.

Table 3-2
1999 Air Quality Data - South Coast Air Quality Management District
(continued)

		Sulfur Dioxide			
Source/ Receptor Area No.	Location of Air Monitoring Station	No. Days of Data	Max. Conc. in ppm 1-hour[c)]	Max. Conc. in ppm 24-hour[c)]	Average Compared to Federal Standard[d)] AAM in ppm
LOS ANGELES COUNTY					
1	Central LA	333*	0.05*	0.010*	0.0023*
2	NW Coast LA Co	--	--	--	--
3	SW Coast LA Co	363	0.09	0.020	0.0040
4	S Coast LA Co	360	0.05	0.011	0.0027
6	W Sn Fernan V	--	--	--	--
7	E Sn Fernan V	346	0.01	0.003	0.0001
8	W Sn Gabrl V	--	--	--	--
9	E Sn Gabrl V 1	--	--	--	--
9	E Sn Gabrl V 2	--	--	--	--
10	Pomona/Wln V	--	--	--	--
11	S Sn Gabrl V	--	--	--	--
12	S Cent LA Co 1	--	--	--	--
12	S Cent LA Co 2	--	--	--	--
13	Sta Clarita V	--	--	--	--
ORANGE COUNTY					
16	N Orange Co	--	--	--	--
17	Cent Orange Co	--	--	--	--
18	N Coast Orange	363	0.02	0.008	0.0007
19	Saddleback V 1	--	--	--	--
19	Saddleback V 2	--	--	--	--
RIVERSIDE COUNTY					
22	Norco/Corona	--	--	--	--
23	Metro Riv Co 1	358	0.03	0.011	0.0014
23	Metro Riv Co 2	--	--	--	--
24	Perris Valley	--	--	--	--
25	Lake Elsinore	--	--	--	--
29	Banning Airport	--	--	--	--
30	Coachella V 1**	--	--	--	--
30	Coachella V 2**	--	--	--	--
SAN BERNARDINO COUNTY					
32	NW SB V	--	--	--	--
33	SW SB V 1	--	--	--	--
33	SW SB V 2	--	--	--	--
34	Cent SB V 1	355	0.01	0.010	0.0018
34	Cent SB V 2	--	--	--	--
35	E SB V	--	--	--	
37	Cent SB Mtns	--	--	--	--

ABBREVIATIONS USED IN THE AREA NAMES: LA = Los Angeles, SB = San Bernardino, N = North, S = South, W = West, E = East, V = Valley, P = Pass, Cent = Central

ppm - Parts per million parts of air, by volume.
AAM - Annual arithmetic mean.
* - Less than 12 full months of data. May not be representative.
-- - Pollutant not monitored.
** - Salton Sea Air Basin.

c) - The state standards are 1-hour average > 0.25 ppm and 24-hour average >0.04 ppm. No location exceeded state standards.

d) - The federal standard is annual arithmetic mean SO_2 greater than 80 $\mu g/m^3$ (0.03 ppm). No location exceeded this standard. The other federal standards (3-hour average > 0.50 ppm, and 24-hour average > 0.14 ppm) were not exceeded either

Table 3-2
1999 Air Quality Data - South Coast Air Quality Management District
(continued)

Source/ Receptor Area No.	Location of Air Monitoring Station	No. Days of Data	Max. Conc. in µg/m^3 24-hour	Suspended Particulates PM10[e] No. (%) Samples Exceeding Standard Federal >150 µg/m^3 24-hour	Suspended Particulates PM10[e] No. (%) Samples Exceeding Standard State >50 µg/m^3 24-hour	Annual Averages[g] AAM Conc µg/m^3	Annual Averages[g] AGM Conc µg/m^3
LOS ANGELES COUNTY							
1	Central LA	60	88	0	19(33)	44.8	42.1
2	NW Coast LA Co	--	--	--	--	--	--
3	SW Coast LA Co	60	69	0	6(10)	35.6	33.4
4	S Coast LA Co	59	79	0	13(22)	38.9	36.4
6	W Sn Fernan V	--	--	--	--	--	--
7	E Sn Fernan V	60	82	0	21(35)	43.7	40.6
8	W Sn Gabrl V	--	--	--	--	--	--
9	E Sn Gabrl V 1	60	103	0	35(58)	56.3	51.5
9	E Sn Gabrl V 2	--	--	--	--	--	--
10	Pomona/Wln V	--	--	--	--	--	--
11	S Sn Gabrl V	--	--	--	--	--	--
12	S Cent LA Co 1	--	--	--	--	--	--
12	S Cent LA Co 2	--	--	--	--	--	--
13	Sta Clarita V	56	75	0	12(21)	38.4	34.5
ORANGE COUNTY							
16	N Orange Co	--	--	--	--	--	--
17	Cent Orange Co	39*	122*	0*	15(39)*	49.4*	43.4*
18	N Coast Orange	--	--	--	--	--	--
19	Saddleback V 1	60	111	0	6(10)	36.7	34.2
19	Saddleback V 2	33*	56*	0*	1(3)*	28.8*	27.6*
RIVERSIDE COUNTY							
22	Norco/Corona	56	136	0	31(55)	55.4	49.0
23	Metro Riv Co 1	64	153	1(2)	46(72)	72.3	64.9
23	Metro Riv Co 2	--	--	--	--	--	--
24	Perris Valley	60	112	0	30(50)	50.0	44.0
25	Lake Elsinore	--	--	--	--	--	--
29	Banning Airport	34*	86*	0*	4(12)*	34.5*	29.8*
30	Coachella V 1**	58	104	0	3(5)	28.8	26.1
30	Coachella V 2**	56	119	0	30(54)	52.7	49.8
SAN BERNARDINO COUNTY							
32	NW SB V	--	--	--	--	--	--
33	SW SB V 1	57	112	0	32(56)	55.3	49.9
33	SW SB V 2	55	183	1(2)	37(67)	65.9	58.6
34	Cent SB V 1	59	116	0	36(61)	60.2	54.3
34	Cent SB V 2	59	134	0	33(56)	56.5	50.6
35	E SB V	57	92	0	23(40)	46.6	40.5
37	Cent SB Mtns	57	47	0	0	27.1	23.6

ABBREVIATIONS USED IN THE AREA NAMES: LA = Los Angeles, SB = San Bernardino, N = North, S = South, W = West, E = East, V = Valley, P = Pass, Cent = Central

µg/m^3 - Micrograms per cubic meter of air.

AAM - Annual arithmetic mean. AGM - Annual geometric mean.

-- - Pollutant not monitored.

* - Less than 12 full months of data. May not be representative.

** - Salton Sea Air Basin.

e) - PM10 samples were collected every 6 days using the size-selective inlet high volume sampler with quartz filter media

g) - Total suspended particulates, lead, and sulfate were determined from samples collected every 6 days by the high volume sampler method, on glass fiber filter media. Federal TSP standard superseded by PM_{10} standard, July 1, 1987.

h) - Federal PM10 standard is AAM > 50 µg/m^3; state standard is AGM > 30 µg/m^3

Table 3-2
1999 Air Quality Data - South Coast Air Quality Management District
(continued)

Source/ Receptor Area No.	Location of Air Monitoring Station	No. Days of Data	Max. Conc. in µg/m³ 24-hour	No. (%) Samples Exceeding Federal Standard >65 µg/m³ 24-hour	Annual Averages[i] AAM Conc, µg/m³
		Suspended Particulates PM2.5[f]			
LOS ANGELES COUNTY					
1	Central LA	136	69.3	2(2)	23.1
2	NW Coast LA Co	--	--	--	--
3	SW Coast LA Co	--	--	--	--
4	S Coast LA Co	148	66.9	1(1)	21.5
6	W Sn Fernan V	71*	79.0*	1(1)*	17.5*
7	E Sn Fernan V	106	79.5	1(1)	23.3
8	W Sn Gabrl V	95*	73.0*	1(1)*	20.6*
9	E Sn Gabrl V 1	144	81.3	3(2)	25.6
9	E Sn Gabrl V 2	--	--	--	--
10	Pomona/Wln V	--	--	--	--
11	S Sn Gabrl V	111	85.6	2(2)	25.7
12	S Cent LA Co 1	110	67.8	1(1)	24.2
12	S Cent LA Co 2	--	--	--	--
13	Sta Clarita V	--	--	--	--
ORANGE COUNTY					
16	N Orange Co	--	--	--	--
17	Cent Orange Co	115	68.7	2(2)	24.4
18	N Coast Orange	--	--	--	--
19	Saddleback V 1	--	--	--	--
19	Saddleback V 2	68*	56.6*	0*	16.8*
RIVERSIDE COUNTY					
22	Norco/Corona	--	--	--	--
23	Metro Riv Co 1	151	111.2	9(6)	30.9
23	Metro Riv Co 2	110	90.0	2(2)	26.9
24	Perris Valley	--	--	--	--
25	Lake Elsinore	--	--	--	--
29	Banning Airport	--	--	--	--
30	Coachella V 1**	--	--	--	--
30	Coachella V 2**	83*	29.6*	0*	12.6*
SAN BERNARDINO COUNTY					
32	NW SB V	--	--	--	--
33	SW SB V 1	96*	85.9*	2(2)*	25.7*
33	SW SB V 2	--	--	--	--
34	Cent SB V 1	121	98.0	3(3)	25.9
34	Cent SB V 2	104	121.5	4(4)	25.7
35	E SB V	--	--	--	--
37	Cent SB Mtns	--	--	--	--

ABBREVIATIONS USED IN THE AREA NAMES: LA = Los Angeles, SB = San Bernardino, N = North, S = South, W = West, E = East, V = Valley, P = Pass, Cent = Central

µg/m³ - Micrograms per cubic meter of air.

AAM - Annual arithmetic mean. AGM - Annual geometric mean.

-- - Pollutant not monitored.

* - Less than 12 full months of data. May not be representative.

** - Salton Sea Air Basin.

f) - PM2.5 federal standard was established effective September 16, 1997. PM2.5 samples were collected every 3 days using the size selective inlet high volume sampler.

i) - Federal PM2.5 standard is AAM > 15 µg/m³

Table 3-2
1999 Air Quality Data - South Coast Air Quality Management District
(continued)

		Particulates TSP[g)]		
				Annual Averages
Source/ Receptor Area No.	Location of Air Monitoring Station	No. Days of Data	Max. Conc. in µg/m^3 24-hour	AAM Conc, µg/m^3
LOS ANGELES COUNTY				
1	Central LA	60	138	73.7
2	NW Coast LA Co	56	108	50.9
3	SW Coast LA Co	55	113	63.9
4	S Coast LA Co	60	158	64.2
6	W Sn Fernan V	--	--	--
7	E Sn Fernan V	--	--	--
8	W Sn Gabrl V	57	109	55.1
9	E Sn Gabrl V 1	56	209	101.3
9	E Sn Gabrl V 2	--	--	--
10	Pomona/Wln V	--	--	--
11	S Sn Gabrl V	59	182	86.6
12	S Cent LA Co 1	59	176	90.9
12	S Cent LA Co 2	--	--	--
13	Sta Clarita V	--	--	--
ORANGE COUNTY				
16	N Orange Co	--	--	--
17	Cent Orange Co	--	--	--
18	N Coast Orange	--	--	--
19	Saddleback V 1	--	--	--
19	Saddleback V 2	--	--	--
RIVERSIDE COUNTY				
22	Norco/Corona	--	--	--
23	Metro Riv Co 1	60	261	120.0
23	Metro Riv Co 2	70	140	90.3
24	Perris Valley	--	--	--
25	Lake Elsinore	--	--	--
29	Banning Airport	--	--	--
30	Coachella V 1**	--	--	--
30	Coachella V 2**	--	--	--
SAN BERNARDINO COUNTY				
32	NW SB V	56	150	77.6
33	SW SB V 1	--	--	--
33	SW SB V 2	--	--	--
34	Cent SB V 1	60	232	106.3
34	Cent SB V 2	55	203	102.8
35	E SB V	--	--	--
37	Cent SB Mtns	--	--	--

µg/m^3 - Micrograms per cubic meter of air.
AAM - Annual arithmetic mean. AGM - Annual geometric mean.
-- - Pollutant not monitored.
* - Less than 12 full months of data. May not be representative.
** - Salton Sea Air Basin.
g) - Total suspended particulates, lead, and sulfate were from samples collected every 6 days by the high volume sampler method, on glass fiber filter media.

Table 3-2
1999 Air Quality Data - South Coast Air Quality Management District
(continued)

		Lead[g)]	
Source/ Receptor Area No.	Location of Air Monitoring Station	Max. Mo. Conc.[j)] µg/m^3	Max. Qtrly. Conc.[j)] µg/m^3
LOS ANGELES COUNTY			
1	Central LA	.0.13	0.07
2	NW Coast LA Co	--	--
3	SW Coast LA Co	0.05	0.04
4	S Coast LA Co	0.06	0.05
6	W SN Fernan V	--	--
7	E Sn Fernan V	--	--
8	W Sn Gabrl V	--	--
9	E Sn Gabrl V 1	--	--
9	E Sn Gabrl V 2	--	--
10	Pomona/Wln V	--	--
11	S Sn Gabrl V	0.21	0.09
12	S Cent LA Co 1	0.17	0.09
12	S Cent LA Co 2	--	--
13	Sta Clarita V	--	--
ORANGE COUNTY			
16	N Orange Co	--	--
17	Cent Orange Co	--	--
18	N Coast Orange	--	--
19	Saddleback V 1	--	--
19	Saddleback V 2	--	--
RIVERSIDE COUNTY			
22	Norco/Corona	--	--
23	Metro Riv Co 1	0.00	0.05
23	Metro Riv Co 2	0.05	0.04
24	Perris Valley	--	--
25	Lake Elsinore	--	--
29	Banning/San Gor P	--	--
29	Banning Airport	--	--
30	Coachella V 1**	--	--
30	Coachella V 2**	--	--
SAN BERNARDINO COUNTY			
32	NW SB V	0.07	0.05
33	SW SB V 1	--	--
33	SW SB V 2	--	
34	Cent SB V 1	--	--
34	Cent SB V 2	0.07	0.05
35	E SB V	--	--
37	Cent SB Mtns	--	--

µg/m^3 - Micrograms per cubic meter of air.
-- - Pollutant not monitored.
* - Less than 12 full months of data. May not be representative.
** - Salton Sea or Majave Desert Air Basin.
g) - Total suspended particulates, lead, and sulfate were determined from samples collected every 6 days by the high volume sampler method, on glass fiber filter media.
j) - Federal lead standard is quarterly average 15 µg/m^3; state standard is monthly average 15 µg/m^3. No location exceeded lead standards. Special monitoring immediately downwind of stationary sources of lead was carried out at four locations in 1999. The maximum average concentration was 0.29 µg/m^3, recorded in Area 5, Southeast Los Angeles County, and the maximum quarterly average concentration was 0.23 µg/m^3, recorded in Area 1, Central Los Angeles.

Table 3-2
1999 Air Quality Data - South Coast Air Quality Management District
(continued)

		Sulfate[g)]	
			No. (%) Samples Exceeding Standard
Source/ Receptor Area No.	Location of Air Monitoring Station	Max. Conc. in µg/m^3 24-hour	State >=25 µg/m^3 24-hour
LOS ANGELES COUNTY			
1	Central LA	17.9	0
2	NW Coast LA Co	13.9	0
3	SW Coast LA Co	18.8	0
4	S Coast LA Co	13.7	0
6	W Sn Fernan V	--	--
7	E Sn Fernan V	--	--
8	W Sn Gabrl V	16.4	0
9	E Sn Gabrl V 1	17.8	0
9	E Sn Gabrl V 2	--	--
10	Pomona/Wln V	--	--
11	S Sn Gabrl V	25.6	1(2)
12	S Cent LA Co 1	15.6	0
12	S Cent LA Co 2	--	--
13	Sta Clarita V	--	--
ORANGE COUNTY			
16	N Orange Co	--	--
17	Cent Orange Co	--	--
18	N Coast Orange	--	--
19	Saddleback V 1	--	--
19	Saddleback V 2	--	--
RIVERSIDE COUNTY			
22	Norco/Corona	--	--
23	Metro Riv Co 1	10.7	0
23	Metro Riv Co 2	10.6	0
24	Perris Valley	--	--
25	Lake Elsinore	--	--
29	Banning Airport	--	--
30	Coachella V 1**	--	--
30	Coachella V 2**	--	--
SAN BERNARDINO COUNTY			
32	NW SB V	11.7	0
33	SW SB V 1	--	--
33	SW SB V 2	--	--
34	Cent SB V 1	12.4	0
34	Cent SB V 2	10.9	0
35	E SB V	--	--
37	Cent SB Mtns	--	--

µg/m^3 - Micrograms per cubic meter of air.
-- - Pollutant not monitored.
* - Less than 12 full months of data. May not be representative.
** - Salton Sea Air Basin.
g) - Total suspended particulates, lead, and sulfate were determined from samples collected every 6 days by the high volume sampler method, on glass fiber filter media.

Ozone is a deep lung irritant, causing the passages to become inflamed and swollen. Exposure to ozone produces alterations in respiration, the most characteristic of which is shallow, rapid 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.

The national ozone ambient air quality standard is exceeded far more frequently in the SCAQMD's jurisdiction than any other area in the United States[2.] In the past few years, ozone air quality has been the cleanest on record in terms of maximum concentration and number of days exceeding the standards and episode levels. Maximum one-hour average and eight-hour average ozone concentrations in 1999 (0.17 ppm and 0.14 ppm) were 142 percent and 175 percent of the federal one-hour and eight-hour standards, respectively. Ozone concentrations exceeded the one-hour state standard at all monitored locations in 1999. In 1997, the U.S. EPA promulgated a new national ambient air quality standard for ozone. Soon thereafter, a court decision ordered that the U.S. EPA could not enforce the new standard until adequate justification for the new standard was provided. U.S. EPA appealed the decision to the Supreme Court. On February 27, 2001, the Supreme Court upheld U.S. EPA's authority and methods to establish clean air standards. The Supreme Court, however, ordered U.S. EPA to revise its implementation plan for the new ozone standard. Meanwhile, CARB and local air districts continue to collect technical information in order to prepare for an eventual SIP to reduce unhealthful levels of ozone in areas violating the new federal standard. California has previously developed a SIP for the current ozone standard, which has been approved by U.S. EPA for the South Coast Air Basin.

Carbon Monoxide

CO is a colorless, odorless gas formed by the incomplete combustion of fuels. CO competes with oxygen, often replacing it in the blood, thus reducing the blood's ability to transport oxygen to vital organs in the body. The ambient air quality standard for carbon monoxide is intended to protect persons whose medical condition already compromises their circulatory systems' ability to deliver oxygen. These medical conditions include certain heart ailments, chronic lung diseases, and anemia. Persons with these conditions have reduced exercise capacity even when exposed to

[2] It should be noted that in 1999 Houston, Texas exceeded the federal ozone standards on more occasions than the SCAQMD and reported the highest ozone concentration in the nation.

relatively low levels of CO. Fetuses are at risk because their blood has an even greater affinity to bind with CO. Smokers are also at risk from ambient CO levels because smoking increases the background level of CO in their blood.

CO was monitored at 21 locations in the district in 1999. The national and state eight-hour CO standards were exceeded at two locations. The highest eight-hour average CO concentration of the year (11.7 ppm) was 123 percent of the federal standard. Source/Receptor Area No. 12, South Central Los Angeles County, reported the greatest number of the exceedances of the federal and state CO standards (eight and 10 days, respectively) in 1999.

Nitrogen Dioxide

NO2 is a brownish gas that is formed in the atmosphere through a rapid reaction of the colorless gas nitric oxide (NO) with atmospheric oxygen. NO and NO2 are collectively referred to as NOx. NO2 can cause health effects in sensitive population groups such as children and people with chronic lung diseases. It can cause respiratory irritation and constriction of the airways, making breathing more difficult. Asthmatics are especially sensitive to these effects. People with asthma and chronic bronchitis may also experience headaches, wheezing and chest tightness at high ambient levels of NO2. NO2 is suspected to reduce resistance to infection, especially in young children.

By 1991, exceedances of the federal standard were limited to one location in Los Angeles County. The Basin was the only area in the United States classified as nonattainment for the federal NO2 standard under the 1990 Clean Air Act Amendments. No location in the area of SCAQMD's jurisdiction has exceeded the federal standard since 1992 and the South Coast Air Basin was designated attainment for the national standard in 1998. In 1999, the maximum annual arithmetic mean (0.0503ppm) was 94 percent of the federal standard (the federal standard is annual arithmetic mean NO2 greater than 0.0534 ppm.). The more stringent state standard was exceeded on one day, with a maximum one-hour average NO2 concentration (0.31 ppm) that was 124 percent of the state standard (0.25 ppm). Despite declining NOx emissions over the last decade, further NOx emissions reductions are necessary because NOx emissions are PM10 and ozone precursors.

Particulate Matter (PM10)

PM10 is defined as suspended particulate matter 10 microns or less in diameter and includes a complex mixture of man-made and natural substances including sulfates, nitrates, metals, elemental carbon, sea salt, soil, organics and other materials. PM10 may have adverse health impacts because these microscopic particles are able to penetrate deeply into the respiratory system. In some cases, the particulates themselves may cause actual damage to the alveoli of the lungs or they may contain

adsorbed substances that are injurious. Children can experience a decline in lung function and an increase in respiratory symptoms from PM10 exposure. People with influenza, chronic respiratory disease and cardiovascular disease can be at risk of aggravated illness from exposure to fine particles. Increases in death rates have been statistically linked to corresponding increases in PM10 levels.

In 1999, PM10 was monitored at 21 locations in the district. There was one exceedance of the federal 24-hour standard (150 μg/m3), while the state 24-hour standard (50 μg/m3) was exceeded at 20 locations. The federal standard (annual arithmetic mean greater than 50 μg/m3) was exceeded in eight locations, and the state standard (annual geometric mean greater than 30 μg/m3) was exceeded at 17 locations.

In 1997, the U.S. EPA promulgated a new national ambient air quality standard for PM2.5, particulate matter 2.5 microns or less in diameter and a new PM10 standard as well. The PM2.5 standard complements existing national and state ambient air quality standards that target the full range of inhalable PM10. However, a court decision ordered that the U.S. EPA couldn't enforce the new PM10 standard until adequate justification for the new standard is provided. U.S. EPA is complying with the decision by considering separate fine (PM2.5) and coarse (PM2.5-10) standards. Meanwhile, CARB and local air districts continue to collect technical information in order to prepare for an eventual SIP to reduce unhealthful levels of PM2.5 in areas violating the new federal standards. California has previously developed a SIP for the current PM10 standard.

Sulfur Dioxide

SO2 is a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. Health effects include acute respiratory symptoms and difficulty in breathing for children. Though SO2 concentrations have been reduced to levels well below state and federal standards, further reductions in emissions of SO2 are needed to comply with standards for other pollutants (sulfate and PM10).

Lead

Lead concentrations once exceeded the state and national ambient air quality standards by a wide margin, but have not exceeded state or federal standards at any regular monitoring station since 1982. Though special monitoring sites immediately downwind of lead sources recorded very localized violations of the state standard in 1994, no violations were recorded at these stations since that time.

Sulfates

Sulfates are a group of chemical compounds containing the sulfate group, which is a sulfur atom with four oxygen atoms attached. Though not exceeded in 1993, 1996, 1997, and 1998, the state sulfate standard was exceeded at three locations in 1994 and one location in 1995 and 1999. There are no federal air quality standards for sulfate.

Visibility

Since deterioration of visibility is one of the most obvious manifestations of air pollution and plays a major role in the public's perception of air quality, the state of California has adopted a standard for visibility or visual range. Until 1989, the standard was based on visibility estimates made by human observers. The standard was changed to require measurement of visual range using instruments that measure light scattering and absorption by suspended particles. It has been determined that the calibration of the instruments used to measure visibility was faulty, and no reliable data are available for 1999.

Volatile Organic Compounds

It should be noted that there are no state or national ambient air quality standards for VOCs because they are not classified as criteria pollutants. VOCs are regulated, however, because reduction in VOC emissions reduces the rate of photochemical reactions that contribute to the formation of ozone. They 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 VOCs 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.

Non-Criteria Pollutant Emissions

Although the SCAQMD's primary mandate is attaining the State and National Ambient Air Quality Standards for criteria pollutants within the district, SCAQMD also has a general responsibility pursuant to the Health and Safety Code, Section 41700, to control emissions of air contaminants and prevent endangerment to public health. As a result, over the last few years the SCAQMD has regulated pollutants other than criteria pollutants such as TACs, greenhouse gases and stratospheric ozone

depleting compounds. The SCAQMD has developed a number of rules to control non-criteria pollutants from both new and existing sources. These rules originated through state directives, CAA requirements, or the SCAQMD rulemaking process.

In addition to promulgating non-criteria pollutant rules, the SCAQMD has been evaluating AQMP control measures as well as existing rules to determine whether or not they would affect, either positively or negatively, emissions of non-criteria pollutants. For example, rules in which VOC components of coating materials are replaced by a non-photochemically reactive chlorinated substance would reduce the impacts resulting from ozone formation, but could increase emissions of toxic compounds or other substances that may have adverse impacts on human health.

Table 3-3 lists a typical clear wood finish brushing lacquer formulation at 680 grams of VOC per liter, and whether those ingredients are regulated under Rule 1401 - New Source Review of Toxic Air Contaminants. Two of the ingredients, xylene and isopropyl alcohol, are regulated for both chronic (long-term non-cancer) risk and acute (short-term non-cancer) risk, one ingredient, ethyl benzene, is regulated for its chronic risk, and one ingredient, 2-butoxyethanol, is regulated for acute risk.

TABLE 3-3

Typical Clear Wood Finish Brushing Lacquer Formulation

Ingredients	CAS #	Weight (percent)	Rule 1401 Regulated Health Impacts	Significance Threshold (at 25 meters)
Aliphatic Hydrocarbon	8052-41-3	15	not listed	not listed
Naphtha	64742-89-8	10	not listed	not listed
Xylene	1330-20-7	<5	Chronic Non-Cancer; Acute Non-Cancer	23,100 lbs/yr 11.0 lbs/hr
Ethyl Benzene	100-41-4	<1	Chronic Non-Cancer	66,100 lbs/yr
Isopropanol Anhydrous	67-63-0	<5	Chronic Non-Cancer; Acute Non-Cancer	231,100 lbs/yr 1.6 lbs/hr
n-Butyl Alcohol	71-36-3	5	not listed	not listed
Isobutyl Isobutyrate	97-85-8	15	not listed	not listed
Methyl n-Amyl Ketone	110-43-0	10	not listed	not listed
2-Butoxyethanol (Ethylene Glycol Monobutyl Ether)	111-76-2	10	Acute Non-Cancer	7.0 lbs/hr
Isobutyl Alcohol	78-83-1	<1	not listed	not listed

The following sections summarize the existing setting for the two major categories of non-criteria pollutants: compounds that contribute to ozone depletion and global warming, and TACs.

Ozone Depletion and Global Warming

The SCAQMD adopted a "Policy on Global Warming and Stratospheric Ozone Depletion" on April 6, 1990. The policy commits the SCAQMD to consider global impacts in rulemaking and in drafting revisions to the AQMP.

In March of 1992, the SCAQMD Governing Board reaffirmed this policy and adopted amendments to the policy to include the following directives:

- phase out the use and corresponding emissions of chlorofluorocarbons (CFCs), methyl chloroform (1,1,1-trichloroethane or TCA), carbon tetrachloride, and halons by December 1995;
- phase out the large quantity use and corresponding emissions of hydrochlorofluorocarbons (HCFCs) by the year 2000;
- develop recycling regulations for HCFCs;
- develop an emissions inventory and control strategy for methyl bromide; and
- support the adoption of a California greenhouse gas emission reduction goal.

In support of these polices, the SCAQMD Governing Board has adopted several rules to reduce ozone depleting compounds. Several other rules concurrently reduce global warming gases and criteria pollutants.

Toxic Air Contaminants

Historically, the SCAQMD has regulated criteria air pollutants using either a technology-based or an emissions limit approach. The technology-based approach defines specific control technologies that may be installed to reduce pollutant emissions. The emission limit approach establishes an emission limit, and allows industry to use any emission control equipment, as long as the emission requirements are met. The regulation of TACs requires a similar regulatory approach as explained in the following subsections.

Control of TACs Under the TAC Identification and Control Program

California's TAC identification and control program, adopted in 1983 as Assembly Bill (AB) 1807, is a two-step program in which substances are identified as TACs, and airborne toxic control measures (ATCMs) are adopted to control emissions from specific sources. ARB has adopted a regulation designating all 188 federal HAPs as TACs.

ATCMs are developed by ARB and implemented by the SCAQMD and other air districts through the adoption of regulations of equal or greater stringency. Generally, the ATCMs reduce emissions to achieve exposure levels below a determined health threshold. If no such threshold levels are determined, emissions are reduced to the lowest level achievable through the best available control technology unless it is determined that an alternative level of emission reduction is adequate to protect public health.

Under California state law, a federal NESHAP automatically becomes a state ATCM, unless CARB has already adopted an ATCM for the source category. Once a NESHAP becomes an ATCM, CARB and the air pollution control or air quality management district have certain responsibilities related to adoption or implementation and enforcement of the NESHAP/ATCM.

Control of TACs Under the Air Toxics "Hot Spots" Act

The Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588) establishes a state-wide program to inventory and assess the risks from facilities that emit TACs and to notify the public about significant health risks associated with the emissions. Facilities are phased into the AB 2588 program based on their emissions of criteria pollutants or their occurrence on lists of toxic emitters compiled by the SCAQMD. Phase I consists of facilities that emit over 25 tons per year (tpy) of any criteria pollutant and facilities present on the SCAQMD's toxics list. Phase I facilities entered the program by reporting their air TAC emissions for calendar year 1989. Phase II consists of facilities that emit between 10 and 25 tpy of any criteria pollutant, and submitted air toxic inventory reports for calendar year 1990 emissions. Phase III consists of certain designated types of facilities which emit less than 10 tpy of any criteria pollutant, and submitted inventory reports for calendar year 1991 emissions. Inventory reports are required to be updated every four years under the state law.

In October 1992, the SCAQMD Governing Board adopted public notification procedures for Phase I and II facilities. These procedures specify that AB 2588 facilities must provide public notice when exceeding the following risk levels:

- Maximum Individual Cancer Risk: > 10 in 1 million (10×10^{-6})
- Total Hazard Index: > 1.0 for TACs except lead, or > 0.5 for lead

Public notice is to be provided by letters mailed to all addresses and all parents of children attending school in the impacted area. In addition, facilities must hold a public meeting and provide copies of the facility risk assessment in all school libraries and a public library in the impacted area.

The SCAQMD continues to complete its review of the health risk assessments submitted to date and may require revision and resubmission as appropriate before final approval. Notification will be required from facilities with a significant risk under the AB 2588 program based on their initial approved health risk assessments and will continue on an ongoing basis as additional and subsequent health risk assessments are reviewed and approved.

Control of TACs With Risk Reduction Audits and Plans

Senate Bill (SB) 1731, enacted in 1992 and codified at Health and Safety Code Sections 44390 et seq., amended AB 2588 to include a requirement for facilities with significant risks to prepare and implement a risk reduction plan which will reduce the risk below a defined significant risk level within specified time limits. SCAQMD Rule 1402 - Control of Toxic Air Contaminants From Existing Sources, was adopted on April 8, 1994, to implement the requirements of SB 1731.

In addition to the TAC rules adopted by SCAQMD under authority of AB 1807 and SB 1731, the SCAQMD has adopted source-specific TAC rules, based on the specific level of TAC emitted and the needs of the area. These rules are similar to the state's ATCMs because they are source-specific and only address emissions and risk from specific compounds and operations.

Cancer Risks from Toxic Air Contaminants

New and modified sources of toxic air contaminants in the SCAQMD are subject to Rule 1401 - New Source Review of Toxic Air Contaminants and Rule 212 - Standards for Approving Permits. Rule 212 requires notification of the SCAQMD's intent to grant a permit to construct a significant project, defined as a new or modified permit unit located within 1000 feet of a school (a state law requirement under AB 3205), a new or modified permit unit posing an maximum individual cancer risk of one in one million (1×10^{-6}) or greater, or a new or modified facility with criteria pollutant emissions exceeding specified daily maximums. Distribution of notice is required to all addresses within a 1/4-mile radius, or other area deemed appropriate by the SCAQMD. Rule 1401 currently controls emissions of carcinogenic and non-carcinogenic (health effects other than cancer) air contaminants

from new, modified and relocated sources by specifying limits on cancer risk and hazard index (explained further below), respectively.

Health Effects

One of the primary health risks of concern due to exposure to TACs is the risk of contracting cancer. The carcinogenic potential of TACs is a particular public health concern because it is currently believed by many scientists that there is no "safe" level of exposure to carcinogens. Any exposure to a carcinogen poses some risk of causing cancer. It is currently estimated that about one in four deaths in the United States is attributable to cancer. About two percent of cancer deaths in the United States may be attributable to environmental pollution (Doll and Peto 1981). The proportion of cancer deaths attributable to air pollution has not been estimated using epidemiological methods.

Noncancer Health Risks from Toxic Air Contaminants

Unlike carcinogens, for most noncarcinogens it is believed that there is a threshold level of exposure to the compound below which it will not pose a health risk. The Cal-EPA Office of Environmental Health Hazard Assessment develops Reference Exposure Levels (RELs) for TACs which are health-conservative estimates of the levels of exposure at or below which health effects are not expected. The noncancer health risk due to exposure to a TAC is assessed by comparing the estimated level of exposure to the REL. The comparison is expressed as the ratio of the estimated exposure level to the REL, called the hazard index (HI).

CHAPTER 4

ENVIRONMENTAL IMPACTS

INTRODUCTION

The state CEQA Guidelines require environmental documents to identify significant environmental effects that may result from a proposed project [CEQA Guidelines §15126.2(a)]. Direct and indirect significant effects of a project on the environment should be identified and described, with consideration given to both short- and long-term impacts. The discussion of environmental impacts may include, but is not limited to, the resources involved; physical changes; alterations of ecological systems; health and safety problems caused by physical changes; and other aspects of the resource base, including water, scenic quality, and public services. If significant adverse environmental impacts are identified, the CEQA Guidelines require a discussion of measures that could either avoid or substantially reduce any adverse environmental impacts to the greatest extent feasible [CEQA Guidelines §15126.4].

State CEQA Guidelines indicate that the degree of specificity required in a CEQA document depends on the type of project being proposed (CEQA Guidelines §15146). The detail of the environmental analysis for certain types of projects cannot be as great as for others. For example, the environmental document for projects, such as the adoption or amendment of a comprehensive zoning ordinance or a local general plan, should focus on the secondary effects that can be expected to follow from the adoption or amendment, but the analysis need not be as detailed as the analysis of the specific construction projects that might follow. As a result, this Draft EA analyzes impacts on a regional level and impacts on the level of individual industries or individual facilities where feasible.

The categories of environmental impacts to be studied in a CEQA document are established by CEQA (Public Resources Code, §21000 et seq.), and the CEQA Guidelines, as promulgated by the State of California Secretary of Resources. Under the state CEQA Guidelines, there are approximately 17 environmental categories in which potential adverse impacts from a project are evaluated. Projects are evaluated against the environmental categories in an Environmental Checklist and those environmental categories that may be adversely affected by the project are further analyzed in the appropriate CEQA document.

POTENTIAL ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Pursuant to CEQA, an Initial Study, including an environmental checklist, was prepared for this project (see Appendix A). Of the 17 potential environmental impact categories, only one (air quality) was identified as being potentially adversely affected by the proposed project. Additionally, one comment letter was received on the Initial Study and responses to the comment letter can be found in Appendix C.

It should be noted that one environmental impact area was identified as potentially significant in the Initial Study and is further evaluated in detail here. The environmental impact analysis for the environmental topic incorporates a "worst-case" approach. This entails the premise that whenever the analysis requires that assumptions be made, those assumptions that result in the greatest adverse impacts are typically chosen. This method ensures that all potential effects of the proposed project are documented for the decision-makers and the public.

Accordingly, the following analyses use a conservative "worst-case" approach for analyzing the potentially significant adverse environmental impacts associated with the implementation of the proposed project.

Air Quality

Until recently, the only known affected coating manufacturer of clear wood finish brushing lacquer was currently under a variance which allowed the company to sell the brushing lacquer at 680 grams per liter VOC content limit in lieu of the required 550 grams per liter VOC content limit for all lacquers. The proposed amendments to Rule 1113 will create a new coating category for the brushing lacquers, not require current rule limit of 550 grams of VOC per liter for the brushing lacquers, and limit the manufacture and sale of them at 680 grams of VOC per liter until January 1, 2005. Thus, the amendments will relax an existing air quality rule requirement.

Significance Criteria

The project will be considered to have significant adverse air quality impacts if any one of the thresholds in Table 4-1 are equaled or exceeded.

TABLE 4-1

SCAQMD Air Quality Significance Thresholds

Mass Daily Thresholds		
Pollutant	**Construction**	**Operation**
NOx	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM10	150 lbs/day	150 lbs/day
SOx	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day

TABLE 4-1 (CONCLUDED)

SCAQMD Air Quality Significance Thresholds

Change in Concentration Thresholds	
NO_2 1-hour average annual average	 500 ug/m^3 = .25 ppm 100 ug/m^3 = .053 ppm
PM10 24-hour average annual geometric average	 2.5 ug/m^3 1.0 ug/m^3
Sulfate 24-hour average	 25 ug/m^3
CO 1-hour average 8-hour average	 1.1 mg/m^3 = 1.0 ppm 050 mg/m^3= .45 ppm

ug/m^3 = microgram per cubic meter; pphm = parts per million; mg/m^3 = milligram per cubic meter

Construction Emissions

PROJECT-SPECIFIC IMPACT: The implementation of the proposed rule will not trigger any construction activity. No add-on control equipment or additional employees will be required from the implementation of the proposed amendments. Additionally, no add-on control equipment will be used to reduce VOC emissions from architectural coatings. The proposed amendments affect a single coating manufacturer whose employees who will continue to work in existing paint laboratories and computer rooms researching and developing new compliant coating formulations.

PROJECT-SPECIFIC MITIGATION: No mitigation required.

Operational Emissions

PROJECT-SPECIFIC IMPACT: The Initial Study identified three air quality issues relative to the existing setting that would be addressed in this Draft EA:: 1) a delay of VOC emission reductions due to an extension of the current variance and delay in complying with the existing rule requirement; 2) an increase in VOC emissions from possible growth in sales of the brushing lacquers at a higher VOC content than would have otherwise occurred under the current Rule 1113 requirements; or 3) the creation of adverse localized effects such as toxics.

Delay in Emission Reductions

The proposed project will allow clear wood finish brushing lacquers to be manufactured and sold at 680 grams of VOC per liter. There is one known coating formulator selling 20,000 gallons per year who, until recently, was under variance. The proposed project does not allow an increase of VOC content limit above what is currently allowed under a legal variance. The proposed project will further delay the VOC emission reduction originally expected from the one coating category that would have been required to reduce the VOC content limit after the variance expired.

The current annual sales of clear brushing lacquers in the District are estimated at 20,000 gallons per year. The annual average emissions from AIM coatings for the year 2000 is estimated at 59.4 tons per day (1997 AQMP). The summer annual average emissions for AIM coatings for year 2000 is over 70 tons per day.

If 20,000 gallons per year of clear brushing lacquers are formulated at 680 grams of VOC per liter (5.67 pounds of VOC per gallon), the current emissions from the new coating category is as follows:

(20,000 gallons/year x 5.67 pounds VOC/gallon)/(365 days/year) = **311 pounds VOC/day**

Solids Equivalent Calculation from 680 to 550 grams per liter Brushing Lacquer

Solvent density of brushing lacquer = 7.3 pounds VOC per gallon

Volume fraction of solids in 5.67 pounds per gallon of material (680 grams per liter) = 1- (5.67/7.3) = 22 percent (0.22) solids

Total annual solids usage = 20,000 gallons of material per year x 0.22 gallons solids per gallon of material = 4,400 gallons solids per year

Now, back calculate to determine the amount of gallons for 550 grams per liter brushing lacquer at equivalent solids content:

Volume fraction of solids in 4.58 pounds per gallon of material (550 grams per liter) = 1-(4.58/7.3) = 37percent (0.37) solids

Equivalent gallons from use of 550 grams per liter brushing lacquer = 4,400 gallons solids per year / 0.22 gallons solids per gallon of material = 11,892 gallons per year

It would take 11,892 gallons of brushing lacquer at 550 grams of VOC per liter to equal the solids content of 20,000 gallons of brushing lacquer at 680 grams of VOC per liter. Therefore, the emissions from brushing lacquer at 550 grams of VOC per liter (4.58 pounds of VOC per gallon) is as follows:

(11,892 gallons/year x 4.58 pounds VOC/gallon)/(365 days/year) = **149 pounds VOC/day**

Solids Equivalent Calculation from 680 to 275 grams per liter Brushing Lacquer

Volume fraction of solids in 2.3 pounds per gallon of material (550 grams per liter) = 1-(2.3/7.3) = 68 percent (0.68) solids

Equivalent gallons from use of 275 grams per liter brushing lacquer = 4,400 gallons solids per year / 0.68 gallons solids per gallon of material = 6,470 gallons per year

Finally, it would take 6,470 gallons of brushing lacquer at 275 grams of VOC per liter to equal the solids of 20,000 gallons of brushing lacquer at 680 grams of VOC per liter. Therefore, the emissions from brushing lacquer at 275 grams of VOC per liter (2.3 pounds of VOC per gallon) is as follows:

(6,470 gallons/year x 2.3 pounds VOC/gallon)/(365 days/year) = **41 pounds VOC/day**

By delaying compliance to lower VOC content limits for clear brushing lacquers, no VOC emission reductions are achieved in accordance with the current rule requirements, but rather VOC emission reduction are foregone until January 1, 2005.

Figure 4-1 depicts the current rule requirement, the variance dates, the proposed new compliance dates and the daily amount of delayed VOC emission reductions. The required VOC content limit for brushing lacquers is highlighted in bold print, and the arrows demonstrate the movement of compliance action.

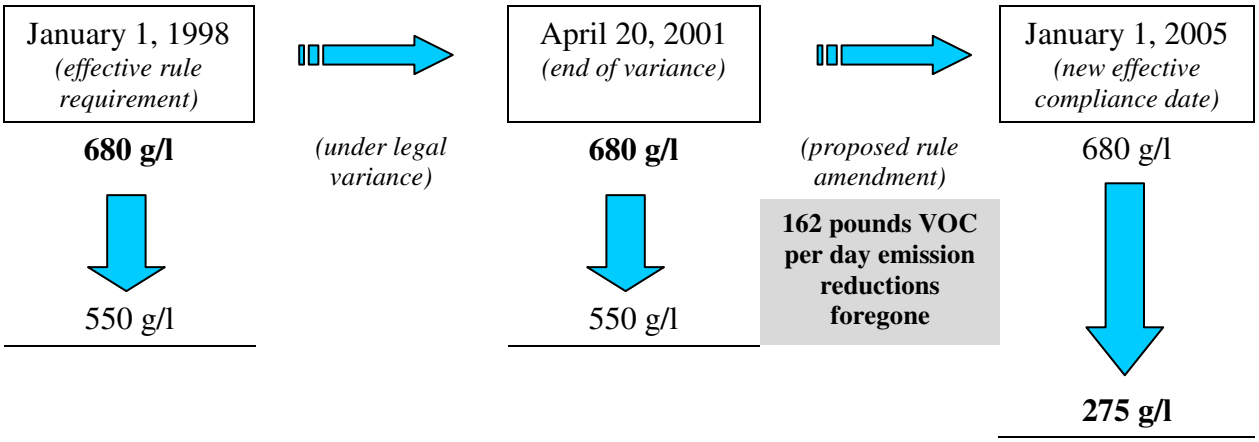

FIGURE 4-1

Delay of VOC Emission Reductions from Brushing Lacquers

Therefore, extending the current variance limit (680 grams per liter) and postponing compliance with the existing rule VOC content requirement for clear brushing lacquers will result in a delay of 162 pounds per day of VOC emission reductions (311 pounds VOC/day - 149 pounds VOC/day). The rule change results in a delay of VOC emission reductions and not an increase in existing emissions because the one known affected coating manufacturer of the brushing lacquer remains at the VOC content level allowed under a legal variance, which means the company continues to sell the brushing lacquer at the 680 grams per liter VOC content limit. The proposed project does not allow an increase of VOC content limit above what was allowed under the legal variance.

As of January 1, 2005, the clear wood finish brushing lacquer will be required to comply with 275 grams per liter VOC content limit. The rule currently requires the VOC content limit of all clear wood finish lacquers to be 275 grams per liter by January 1, 2005, so the delay in emission reductions are not permanent.

The direct adverse impact to air quality is a temporary delay of 162 pounds per day of VOC emission reductions until January 1, 2005. This delay exceeds the SCAQMD's significance threshold of 55 pounds per day of VOC and, therefore, is considered a significant adverse air quality impact.

Possible Growth in Sales of the Brushing Lacquers

At the time the one known manufacturer of the clear wood finish brushing lacquer requested a variance, two additional companies with a 680 grams of VOC per liter brushing lacquer also petitioned for a variance. However, the other two companies were denied a variance because they did not have an existing market/customer base within the district. By amending the rule and exempting clear wood finish brushing lacquers, these two companies could potentially market their brushing lacquer in the district. The SCAQMD, however, does not believe the proposed amendments would result in an increased amount of brushing lacquer being sold in the district because there is a limited customer base for the particular function of the coating. Customers are less likely to commit to new products that will be reformulated and phased out within a few years. It would be speculative to ascertain that the coating formulators could create a new audience for brushing lacquers than currently exists in the district. The most probable outcome is a shift in the market share among the competing brushing lacquers sold.

Potential Toxic Impacts

The proposed project does not allow an increase of VOC content limit above what is currently allowed under the recently expired legal variance. Affected facilities will not need to reformulate to 550 grams per liter but rather reformulate to 275 grams per liter as currently required by the rule. Because these new coatings at 275 grams per liter have not yet been developed, it is speculative to determine what will be the ingredients used to

achieve this low VOC content limit. The potential toxic impacts from lowering the VOC content of brushing lacquers to 275 grams per liter have been analyzed in the Subsequent Environmental Assessment (SCAQMD, November 1996) when the 275 grams per liter VOC content requirement was adopted. The analysis concluded that no significant adverse human health impacts will result from exposure to coatings formulated with toxic air contaminants (such as ethylene glycol monobutyl ether) as a result of reformulating lacquers. In general, reformulation should result in lower levels of toxics exposure and health risk. New coating products that are less toxic tend to be more marketable and less regulated.

By delaying compliance with the VOC content limit requirement, the brushing lacquer formulated at 680 grams per liter will continue to be used. Therefore, potential toxic emissions from the 680 grams per liter brushing lacquer will also continue to be emitted. These potential toxic emissions, however, have been determined to be not significant (please refer to Table 4-2).

At 20,000 gallons per year, the 680 grams per liter (5.67 pounds per gallon) brushing lacquer emits 113,400 pounds per year (38.8 pounds per hour) of VOC emissions.

TABLE 4-2

Potential Toxic Impact from Continuing Use of 680 Grams per Liter Brushing Lacquers

Ingredients	Weight (percent)	Emissions based on 113,400 pounds VOC per year	Chronic/Acute Significance Threshold (at 25 meters)	Exceed Significance Threshold?
Xylene	<5	5,670 lbs/yr	23,100 lbs/yr	No
Ethyl Benzene	<1	1,134 lbs/yr	66,100 lbs/yr	No
Isopropanol Anhydrous	<5	5,670 lbs/yr	231,100 lbs/yr	No
2-Butoxyethanol (Ethylene Glycol Monobutyl Ether)	10	3.88 lbs/hr	7.0 lbs/hr	No

PROJECT-SPECIFIC MITIGATION: The coating formulators of brushing lacquers are encouraged to reformulate and comply with the 275 grams per liter VOC content limit earlier than required.

REMAINING AIR QUALITY IMPACTS: The air quality analysis concluded that significant adverse air quality impacts could be created by the proposed amendments. As a result, a Statement of Findings and a Statement of Overriding Considerations will

be prepared for the Governing Board's consideration and approval prior to the public hearings for the proposed amendments.

CUMULATIVE AIR QUALITY IMPACTS: In general, the preceding analysis concluded that air quality impacts from any construction activities and toxic air contaminants would not be significant from implementation of the proposed project. By temporarily delaying compliance with the VOC content requirements for brushing lacquers, the VOC emissions exceed the SCAQMD's threshold of significance. The delay will also create no significant toxic air contaminant air quality impact. It should be noted, however, that the air quality analysis is a conservative, "worst-case" analysis so actual impacts are not expected to be as great as estimated here. Cumulative air quality impacts from the proposed amendments and all other AQMP control measures considered together, are not expected to be significant because implementation of all AQMP control measures is expected to result in net emission reductions and overall air quality improvement. Indeed, air quality modeling performed for the 1997 AQMP indicated that the Basin would achieve all federal ambient air quality standards by the year 2010 (SCAQMD, 1997).

Further, air quality modeling demonstrated that all state ambient air quality standards except for ozone and PM10 are also expected to be attained by 2010. Therefore, cumulative adverse air quality impacts from the proposed amendments to Rule 1113, modeled in the 1997 AQMP, and AQMP control measures are not anticipated to be significant based upon air quality modeling analyses performed for the 1997 AQMP. This determination is consistent with the conclusion in the 1997 AQMP EIR that cumulative air quality impacts from all AQMP control measures are not expected to be significant (SCAQMD, 1997).

POTENTIAL ENVIRONMENTAL IMPACTS FOUND NOT TO BE SIGNIFICANT

While all the environmental topics required to be analyzed under CEQA were reviewed to determine if the proposed amendments would create significant impacts, the screening analysis concluded that the following environmental areas would not be significantly adversely affected by PAR 1113: aesthetics, agriculture resources, biological resources, cultural resources, energy, geology/soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, solid/hazardous waste and transportation/traffic. These topics were not analyzed in further detail in this environmental assessment, however, a brief discussion of each is provided below.

Aesthetics

The proposed project is intended to include a category for clear wood finish brushing lacquers limiting the VOC content not to exceed 680 grams per limit and requiring the VOC content limit to be reduced to 275 grams per liter by January 1, 2005. Currently, all lacquers are required to comply with a VOC content limit of 550 grams per liter. The concern with the aesthetic look of the brushing lacquer at 550 grams per liter VOC content limit is one reason the new coating category is being proposed. Manufacturers have argued the aesthetic look of the coating is substantially diminished when the lacquer is formulated at the required VOC content limit and applied by a brush. Thus a new category is being proposed to allow brushing lacquers additional time to improve the aesthetic look. Brushing lacquers are used primarily by the home do-it-yourself market.

The proposed coating category is not expected to result in a substantial adverse effect on any scenic vistas, substantially degrade the existing visual character or quality of any site and its surroundings, or create new sources of substantial light or glare which would adversely affect day or nighttime views of an area. No major changes to existing facilities or stockpiling of additional materials or products outside of existing facilities are expected to result.

Agriculture Resources

The proposed project would not result in any new construction of buildings or other structures that would convert farmland to non-agricultural use or conflict with zoning for agricultural use or a Williamson Act contract. There are no provisions in the proposed amended rule that would affect land use plans, policies, or regulations. Land use and other planning considerations are determined by local governments and no land use or planning requirements will be altered by the proposed project.

Biological Resources

The brushing lacquers are typically used by do-it-yourselfers for home projects and therefore would have no direct or indirect impacts that could adversely affect plant or animal species or the habitats on which they rely in the SCAQMD's jurisdiction. A conclusion of the 1997 AQMP EIR was that population growth in the region would have greater adverse effects on plant species and wildlife dispersal or migration corridors in the basin than SCAQMD regulatory activities, (e.g., air quality control measures or regulations). The current and expected future land use development to accommodate population growth is primarily due to economic considerations or local government planning decisions.

There are no provisions in the proposed rule that would affect land use plans, policies, or regulations. Land use and other planning considerations are determined by local governments and no land use or planning requirements will be altered by the proposed project. The proposed amendments to Rule 1113 would not affect in any way habitat conservation or natural community conservation plans, agricultural resources or operations, and would not create divisions in any existing communities. The VOC emissions are not expected to increase, but rather remain at the same levels currently emitted. By January 1, 2005, the VOC emissions are expected to decrease which will provide a benefit to plant and animal species, as well as the human residents in the district.

Cultural Resources

There are existing laws in place that are designed to protect and mitigate potential impacts to cultural resources. The application of architectural coatings, in the vast majority of situations, would occur after construction has already occurred. Consequently, application of architectural coatings has little or no potential to disturb cultural resources. Instead, disturbance of cultural resources would most likely occur during site preparation and would be addressed at that time. Therefore, PAR1113 has no potential to cause a substantial adverse change a historical or archaeological resource, directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, or disturb any human remains, including those interred outside a formal cemeteries. The proposed amendments to Rule 1113 is, 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.

Energy

Because add-on control equipment is not expected to be used to comply with the provisions of PAR 1113, no additional electricity or natural gas use is expected to be required. The hand held brush is the only equipment used to apply the brushing lacquers and brushing applications are not powered by electricity or natural gas. Additionally, PAR 1113 will not substantially increase the number of businesses or amount of equipment in the district since brush lacquers are used primarily by the home-do-it-yourself market. An increase in energy consumption from non-renewable resources (e.g., diesel and gasoline) above current levels is not expected because the amount of coatings shipped to suppliers and users is not anticipated to change. The delay of VOC emission reductions would not be expected to conflict with adopted energy conservation plans, result in the need for new or substantially altered power or natural gas utility systems, or be out of compliance with existing energy standards.

Geology and Soils

Architectural coatings are applied to existing buildings, stationary structures, roads, etc. The proposed amendments affect coating formulators and have no adverse effects on geophysical formations in the district. Additionally, since no add-on control equipment will 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. The proposed project would not result in significant disruption or overcovering of soil, or changes in topography or surface relief features. The proposal would not result in the erosion of beach sand, or a change in existing siltation rates.

Hazards and Hazardous Materials

There is no change in the coating formulation of the brushing lacquer as a result of the proposed amendments. The brushing lacquer is currently under variance from complying with the 550 grams per liter VOC content limit as required by Rule 1113. The proposed amendments will allow the coating to be formulated at the existing higher VOC content limit until January 1, 2005. In order to meet the lower VOC content limits as of January 1, 2005, some coating manufacturers may elect to comply by reformulating with acetone or glycol ethers. These solvents have potential flammability and human health impacts, respectively. These impacts, however, were previously analyzed in a Subsequent Environmental Impact Report for PAR 1113 (SCAQMD No. 960626DWS, November, 1996) when the requirement to lower the VOC content limit for clear lacquers to 275 grams per liter by January 1, 2005, was originally proposed. Because the compliance requirements and the affected facilities have not changed since that analysis, the conclusions determined in that document remain valid. Therefore, no new routine transport, use, emission and disposal of hazardous materials will result from the proposed amendments. The previous EAs concluded that constituents of reformulated coatings are typically less toxic than existing high VOC coatings. Therefore, the proposed amendments would delay potential benefits of reformulated products, which was analyzed in the toxic air contaminant air quality impact analysis.

The brushing lacquer is typically used by home do-it-yourselfers in limited quantities so if there was an accidental condition, the impact would not create a significant hazard to the public, possible nearby public airports or private airstrips or hazardous materials sites compiled pursuant to Government Code §65962.5.

The proposed amendments provide additional time for the coating manufacturer of brushing lacquers to reformulate and would not interfere with airport land use plans, adopted emergency response plans or emergency evacuation plans. There is no change in the composition of brushing lacquer used by the home do-it-yourselfers, so any

wildlands intermixed with residences or areas with flammable materials would not be exposed to any increased fire hazards.

Hydrology and Water Quality

No add-on control equipment is required as a result of the proposed amendment and no immediate reformulation is expected as a result of the proposed amendments, however the coating manufacturer may meet the lower VOC content limit, required as of January 1, 2005, by substituting VOC-containing materials with other substances, such as water. The increased use of water may have the potential to adversely affect both water demand and water quality. These impacts, however, were previously analyzed in a Subsequent Environmental Impact Report for PAR 1113 (SCAQMD No. 960626DWS, November, 1996) when the requirement to lower the VOC content limit for clear lacquers to 275 grams per liter by January 1, 2005 was proposed. Because the compliance requirements and the affected facilities have not changed since that analysis, the conclusions determined in that document remain valid.

Because the proposed amendments would allow continued use of an existing coating product, additional groundwater supplies would be not depleted, existing drainage patterns and systems would not be altered, and water quality would not be degraded. The proposed project would not place housing within a 100-year flood hazard area, expose people to new flooding, seiche, tsunami or mudflow conditions. All requirements of the applicable Regional Water Quality Control Board are expected to be complied with. The proposed project will maintain an existing setting for brushing lacquers and therefore will not require or result new wastewater or water drainage facilities, reduce water supplies or alter the wastewater provider's existing commitments. In conclusion, no new hydrology impacts will result from the proposed amendments.

Land Use and Planning

There are no provisions of the proposed project that would affect land use plans, policies, or regulations because the proposed amendments maintain the existing VOC content limit of brush lacquers, which are used primarily at home by the do-it-yourself market. Land use and other planning considerations are determined by local governments and no land use or planning requirements will be altered by the proposed project. The proposed project would not affect in any way habitat conservation or natural community conservation plans, agricultural resources or operations, and would not create divisions in any existing communities. No new development or alterations to existing land designations will occur as a result of the implementation of the proposed amendments. It is not anticipated that the further use of the brushing lacquer at a 680 grams per liter VOC content limit would require additional land to continue operations

or require rezoning. Therefore, no significant adverse impacts affecting existing or future land uses are expected.

Mineral Resources

There are no provisions of the proposed project that would result in the loss of availability of a known mineral resource of value to the region and the residents of the state, or of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. The proposed amendments would allow continued use of an existing coating product.

Noise

PAR 1113 would allow continued manufacturing of an existing lacquer product and continued use of that product by the home do-it-yourself market. Therefore, no changes in noise levels at the manufacturing facility or in residential areas are anticipated. Coating manufacturers are located in existing industrial or commercial areas where noise levels are already relatively high. It is assumed that operations in these areas are subject to and in compliance with existing community noise ordinances and applicable OSHA or Cal/OSHA workplace noise reduction requirements. 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.

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 coatings in residential areas are expected to comply with local community noise standards.

Population and Housing

PAR 1113 allows continued use of an existing lacquer product and, therefore, is not expected to affect in any way population growth or the supply and/or availability of houses. Human population in the SCAQMD's jurisdiction is anticipated to grow regardless of implementing the proposed project. The proposal would not result in the creation of any industry that would induce or inhibit population growth or distribution. Because the proposed project has no effect on population growth or distribution, the proposed rule would not directly or indirectly induce the construction of single- or multiple-family housing units. Accordingly, no significant adverse impacts on human population or housing are expected.

Because the proposed project will not change the existing setting of brushing lacquers, existing housing or number of people necessitating the construction of replacement housing will not be displaced.

Public Services

There is no expected change in the formulation of the coating and no new materials or procedures will be introduced as a result of the proposed amendments that could pose a need for additional public services above what is currently expected from the fire department, police, schools, parks, government, etc. 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.

Recreation

As discussed under "Land Use" above, there are no provisions to the proposed project that would affect land use plans, policies, or regulations. Land use and other planning considerations are determined by local governments; no land use or planning requirements will be altered by the proposal. The proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities or include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

Solid /Hazardous Waste

Because PAR 1113 would allow continued manufacture and use of an existing lacquer product, the proposed project 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 proposed amendments, no additional increase on the demand for utilities (e.g., electrical, gas, and communication systems) is expected. If the coating manufacturer eventually chooses to reformulate the coating to comply with January 1, 2005 requirement, 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.

Based on the above, the proposed rule is not expected to significantly increase the volume of solid or hazardous wastes, require additional waste disposal capacity, or generate waste that does not meet applicable local, state, or federal regulations.

Transportation/Traffic

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. There are no provisions in the proposed amendments that would increase existing traffic load, worker commute trips, raw material or finished product transport trips, adversely affect parking, or conflict with adopted policies associated with alternative transportation. The level of service standard, traffic levels or existing emergency accesses are expected to change because the proposed project is maintaining the existing setting.

CONSISTENCY

The Southern California Association of Governments (SCAG) and the SCAQMD have developed, with input from representatives of local government, the industry community, public health agencies, the USEPA - Region IX and the California ARB, guidance on how to assess consistency within the existing general development planning process in the Basin. Pursuant to the development and adoption of its Regional Comprehensive Plan Guide (RCPG), SCAG has developed an Intergovernmental Review Procedures Handbook (June 1, 1995). The SCAQMD also adopted criteria for assessing consistency with regional plans and the AQMP in its CEQA Air Quality Handbook. The following sections address analyzes consistency between PAR 1113 and relevant regional plans pursuant to the SCAG Handbook and SCAQMD Handbook.

Consistency with Regional Comprehensive Plan and Guide (RCPG) Policies

The RCPG provides the primary reference for SCAG's project review activity. The RCPG serves as a regional framework for decision making for the growth and change that is anticipated during the next 20 years and beyond. The Growth Management Chapter (GMC) of the RCPG contains population, housing, and jobs forecasts, which are adopted by SCAG's Regional Council and that reflect local plans and policies, shall be used by SCAG in all phases of implementation and review. It states that the overall goals for the region are to (1) re-invigorate the region's economy, (2) avoid social and economic inequities and the geographical isolation of communities, and (3) maintain the region's quality of life.

Consistency with Growth Management Chapter (GMC) to Improve the Regional Standard of Living

The Growth Management goals are to develop urban forms that enable individuals to spend less income on housing cost, that minimize public and private development costs,

and that enable firms to be more competitive, strengthen the regional strategic goal to stimulate the regional economy. Proposed amended Rule 1113 in relation to the GMC would not interfere with the achievement of such goals, nor would it interfere with any powers exercised by local land use agencies. PAR 1113 will not interfere with efforts to minimize red tape and expedite the permitting process to maintain economic vitality and competitiveness.

Consistency with Growth Management Chapter (GMC) to Provide Social, Political and Cultural Equity

The Growth Management goals to develop urban forms that avoid economic and social polarization promotes the regional strategic goals of minimizing social and geographic disparities and of reaching equity among all segments of society. Consistent with the Growth Management goals, local jurisdictions, employers and service agencies should provide adequate training and retraining of workers, and prepare the labor force to meet the challenges of the regional economy. Growth Management goals also includes encouraging employment development in job-poor localities through support of labor force retraining programs and other economic development measures. Local jurisdictions and other service providers are responsible to develop sustainable communities and provide, equally to all members of society, accessible and effective services such as: public education, housing, health care, social services, recreational facilities, law enforcement, and fire protection. Implementing PAR 1113 is not expected to interfere with the goals of providing social, political and cultural equity.

Consistency with Growth Management Chapter (GMC) to Improve the Regional Quality of Life

The Growth Management goals also include attaining mobility and clean air goals and developing urban forms that enhance quality of life, accommodate a diversity of life styles, preserve open space and natural resources, are aesthetically pleasing, preserve the character of communities, and enhance the regional strategic goal of maintaining the regional quality of life. The RCPG encourages planned development in locations least likely to cause environmental impacts, as well as supports the protection of vital resources such as wetlands, groundwater recharge areas, woodlands, production lands, and land containing unique and endangered plants and animals. While encouraging the implementation of measures aimed at the preservation and protection of recorded and unrecorded cultural resources and archaeological sites, the plan discourages development in areas with steep slopes, high fire, flood and seismic hazards, unless complying with special design requirements. Finally, the plan encourages mitigation measures that reduce noise in certain locations, measures aimed at preservation of biological and ecological resources, measures that would reduce exposure to seismic hazards, minimize earthquake damage, and develop emergency response and recovery plans. Proposed

amended Rule 1113 in relation to the GMC is not expected to interfere with attaining these goals and, in fact, promotes improving air quality in the region.

Consistency with Regional Mobility Element (RMP) and Congestion Management Plan (CMP)

Proposed amended Rule 1113 is consistent with the RMP and CMP since no significant adverse impact to transportation/circulation will result from the delay of VOC emission reductions within the district. While traffic and congestion is generated from the transport offsite of wastes for disposal or recycling, the reformulation of the coatings will not require a substantial increase number of employees. Furthermore, because affected facilities will not increase their handling capacities, there will nto be an increase in material transport trips associated with the implementation of PAR 1113. Therefore, transport trips are not expected to significantly adversely affect circulation patterns.

CHAPTER 5

ALTERNATIVES

INTRODUCTION

This Draft EA provides a discussion of alternatives to the proposed project as required by state CEQA Guidelines. Alternatives include measures for attaining objectives of the proposed project and provide a means for evaluating the comparative merits of each alternative. A "No Project" alternative must also be evaluated. The range of alternatives must be sufficient to permit a reasoned choice, but need not include every conceivable project alternative. State CEQA Guidelines §15126.6(c) specifically notes that the range of alternatives required in a CEQA document is governed by a 'rule of reason' and only necessitates that the CEQA document set forth those alternatives necessary to permit a reasoned choice. The key issue is whether the selection and discussion of alternatives fosters informed decision making and meaningful public participation. A CEQA document need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative.

SCAQMD Rule 110 (the rule which 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.

ALTERNATIVES REJECTED AS INFEASIBLE

A CEQA document should identify any alternatives that were considered by the lead agency, but were rejected as infeasible during the scoping process and explain the reasons underlying the lead agency's determination (CEQA Guidelines §15126.6(c). These alternatives and the rationale for rejecting them as infeasible are discussed in the following subsections.

Averaging Provision

This proposed alternative would maintain current VOC content limits and complaince dates for clear wood finish lacquers, and add clear wood finish brushing lacquers to the Averaging Compliance Option which currently exists in the rule. The Averaging Compliance Option is only applicable to those coating types listed in Rule 1113 (c)(6). Once added to the rule, clear brushing lacquers could be formulated, sold and used at 680 grams per liter as long as the averaging provisions in the rule are met. This alternative was determined to be infeasible because the affected coating manufacturer does not formulate enough quantities of the other coatings eligible under the averaging option at a VOC content limit lower than required by the rule to allow the continual formulation of the brushing lacquer at 680 grams per liter.

Cap Sales of the Brushing Lacquer

By fixing a limit on the amount of brushing lacquers formulated at 680 grams of VOC per liter sold in the district, the VOC emissions are limited at 311 pounds per day (20,000 gallons per year) and any potential increase in VOC emissions is avoided. Currently, VOC emission reductions foregone are approximately 311 pounds per day from the one known coating manufacturer. The SCAQMD concluded if other coating formulators do decide to sell their brushing lacquers at 680 grams of VOC per liter in the district, it would not be feasible to determine which coating formulators will participate, when the formulator will sell, who the formulator will sell to, and finally, enforce how much each of the coating formulators will be allowed to sell in order to maintain the integrity of the cap. If only one manufacturer was allowed to sell the brushing lacquer in the district, then the enforcement is achievable. If more than one manufacturer sells brushing lacquers, then enforcing a sales cap would be difficult for the SCAQMD. Therefore, this potential alternative is considered infeasible due to potential enforceability problems.

Declining Annual Sales Cap

Similar to the concept above of placing a cap on the amount of brushing lacquers formulated at 680 grams of VOC per liter sold in the district, this potential alternative would establish a declining annual sales cap through January 1, 2005. On or after January 1, 2005, the brushing lacquer will need to comply with VOC content requirement of the 275 grams of VOC per liter. By reducing the allowable sales cap of brushing lacquer formulated at 680 grams per liter on an annual basis, the coating manufacturer is increasingly motivated each year to develop a successful brushing lacquer formulated at 275 grams of VOC per liter in order to increase product sales. This alternative is not feasible due to the limitations in enforcing the cap. Coating formulators located outside of California and selling to customers in the area would be difficult to track and regulate and, therefore, is considered infeasible.

Extend Current VOC Content Requirement

Rather than eliminate the 550 grams per liter VOC content requirement as proposed in the current amendment, this alternative would delay the date to comply with the 550 grams per liter VOC content requirement to January 1, 2003. This alternative was rejected because of the potential for further delay in complying with the final VOC compliance limit. The concern was that, if the manufacturer expended all of its financial resources in research and development on complying with the 550 grams per liter coating, this would divert resources away from developing a compliant 275 grams per liter coating, thus, requiring a further compliance delay for this coating category. Further, because the date to comply with the 275 grams per liter VOC

content requirement is less than four years away, it would seem unreasonable to believe the brushing lacquer formulators could achieve both limits successfully and market them both in a timely manner. Besides, customers need time to experiment and practice with a new coating product, as well as train employees on the application and cleanup of the new reformulated coating.

DESCRIPTION OF ALTERNATIVES

The following proposed alternatives were developed by modifying specific components of the proposed amendments. The rationale for selecting and modifying specific components of the proposed amendments to generate feasible alternatives for the analysis is based on CEQA's requirement to present "realistic" alternatives; that is, alternatives that can actually be implemented.

The following three alternatives were developed by identifying and modifying major components of PAR 1113. Specifically, the primary components of the proposed alternatives that have been modified are the interim compliance dates, final compliance dates, methods of achieving compliance and VOC content limit requirements. The alternatives are described below and summarized in Table 5-1: Alternative A (No Project); Alternative B (Further Delay in Compliance Dates) and Alternative C (Eliminate Final Compliance Limit). The following sections provide a brief description of each alternative.

TABLE 5-1

Project Alternatives

	ALTERNATIVE A (No Project)	**ALTERNATIVE B** (Further Delay in Compliance Dates)	**ALTERNATIVE C** (Eliminate Final Compliance Limit)
Compliance Action	1. Maintain current VOC content limit for clear wood finish lacquers	1. Create new clear brushing lacquer category under clear wood finish 2. Delay VOC content limit reduction 3. Add labeling requirement	1. Create new clear brushing lacquer category under clear wood finish 2. Delay VOC content limit reduction 3. Add labeling requirement
VOC Content Limit (Compliance Date)	550 g/l (until 1/1/05) 275 g/l (after 1/1/05)	680 g/l (until 1/1/05) 550 g/l (after 1/1/05) 275 g/l (after 1/1/07)	680 g/l (until 1/1/05) 550 g/l (after 1/1/05)

Alternative A - No Project Alternative

Alternative A, the No Project Alternative, would mean not amending Rule 1113 and, therefore, maintaining the existing SCAQMD Rule 1113 requirements. Since the variance for the brushing lacquer formulator has expired, the company would be forced to eliminate sales of brushing lacquer formulated at 680 grams per liter. Customers who currently use that brushing lacquer would be forced to use other types of coatings or wait until a compliant brushing lacquer is reformulated at a VOC content limit at 550 gram per liter or lower.

Alternative B - Further Delay in Compliance Dates

Alternative B would require the coating formulator of brushing lacquers to comply with a 550 grams per liter VOC content limit by January 1, 2005, rather than a 275 grams per liter VOC content limit required by the proposed amendments and current rule. At that point, the industry receives an additional two years to comply with a 275 grams per liter VOC content limit. No averaging provision is allowed and applicable coatings would still be subject to a labeling requirement.

Alternative C - Eliminate Final Compliance Limit

Alternative C would also require the coating formulator of brushing lacquers to comply with a 550 grams per liter VOC content limit by January 1, 2005, rather than a 275 grams per liter VOC content limit required by the proposed amendments and current rule. Alternative C, however, removes the requirement for brushing lacquers to comply with a 275 grams per liter VOC content limit. No averaging provision is allowed and applicable coatings would still be subject to a labeling requirement.

COMPARISON OF THE ALTERNATIVES

The Environmental Checklist (see Appendix A) identified those environmental topics where the proposed project could cause adverse impacts. Further evaluation of these topics in Chapter 4 of this Environmental Assessment revealed that significant project-specific adverse impacts would only be expected in one area after applicable mitigation measures are utilized. The area of concern is air quality and these impacts must be weighed against the public health benefits.

The following sections briefly describe potential adverse environmental impacts that may be generated by each project alternative. Each environmental topic summary contains a brief description of the environmental impacts for each project alternative compared to impacts resulting from implementing the proposed amendments. Potential adverse impacts for the environmental topics are quantified where sufficient

data are available and the calculations are presented in Chapter 2. A comparison of the impacts for each of the environmental topics is summarized in Table 5-2.

TABLE 5-2

Comparison of Adverse Air Quality Impacts of the Alternatives

ENVIRONMENTAL TOPIC	**ALTERNATIVE A** (No Project)	**ALTERNATIVE B** (Further Delay in Compliance Dates)	**ALTERNATIVE C** (Eliminate Final Compliance Limit)
Air Quality			
Criteria Pollutants	Not Significant, less than PAR 1113	162 pounds per day (until January 1, 2005) 108 pounds per day (until January 1, 2007) Significant, greater than PAR 1113	162 pounds per day (until January 1, 2005) 108 pounds per day (permanently foregone) Significant, greater than PAR 1113
TAC	Not Significant, less than PAR 1113	Not Significant, equivalent PAR 1113	Not Significant, equivalent PAR 1113

Air Quality

Alternative A - No Project Alternative

The No Project Alternative would generate no VOC emissions increases, no delay in VOC emission reductions, or no additional VOC emission reductions than already required by the current rule. If the rule requirements are maintained, the VOC emissions from brushing lacquers would be immediately reduced 162 pounds per day (311 pounds per day - 149 pounds per day). As of January 1, 2005, when brushing lacquer will be required to comply with a 275 grams per liter VOC content, the VOC emissions will be reduced 108 pounds per day (149 pounds per day - 41 pounds per day). Please refer to Chapter 4 for the estimated emission levels from brushing lacquers formulated at the different VOC content limits. There would be no change in the impacts from toxic air contaminants from what was analyzed in the previous SEA (SCAQMD, November 1996).

Alternative B - Further Delay in Compliance Dates

Alternative B would delay the dates for complying with the required VOC content limits for brushing lacquers. While the daily VOC emission reductions delayed will not change from the proposed project, the length of time allowing the delay will be extended. This alternative would result in a delay of 162 pounds of VOC emission reductions per day (311 pounds per day - 149 pounds per day) until January 1, 2005, and 108 pounds of VOC emission reductions per day (149 pounds per day - 41 pounds per day) will be delayed until January 1, 2007. Please refer to Chapter 4 for the estimated emission levels from brushing lacquers formulated at the different

VOC content limits. Figure 5-1 depicts the current rule requirements, the variance dates, the proposed compliance dates under Alternative B and the daily amount of VOC emission reductions delayed. The required VOC content limit for brushing lacquers is highlighted in bold print, and the arrows demonstrate the movement of compliance action.

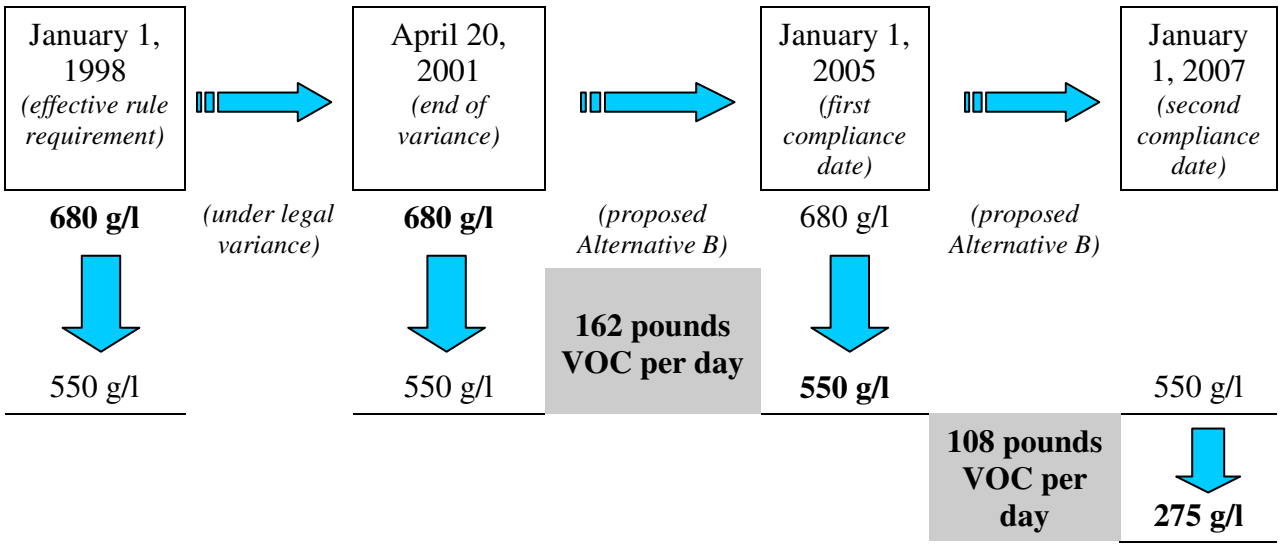

FIGURE 5-1

Delay of VOC Emission Reductions from Alternative B

Alternative C - Eliminate Final Compliance Limit

Alternative C also delays the date for complying with the required VOC content limits for brushing lacquers and eliminates the final compliance limit of 275 grams per liter. Thus, Alternative C will delay 162 pounds of VOC emission reductions per day (311 pounds per day - 149 pounds per day) until January 1, 2005 and then permanently forgo 108 pounds of VOC emission reductions per day (149 pounds per day - 41 pounds per day). The permanent forgone VOC emission reductions which would have been achieved with the proposed project and all other alternatives. Please refer to Chapter 4 for the estimated emission levels from brushing lacquers formulated at the different VOC content limits. Figure 5-2 depicts the current rule requirements, the variance dates, the proposed compliance dates under Alternative C and the daily amount of VOC emission reductions delayed and forgone. The required VOC content limit for brushing lacquers is highlighted in bold print, and the arrows demonstrate the movement of compliance action.

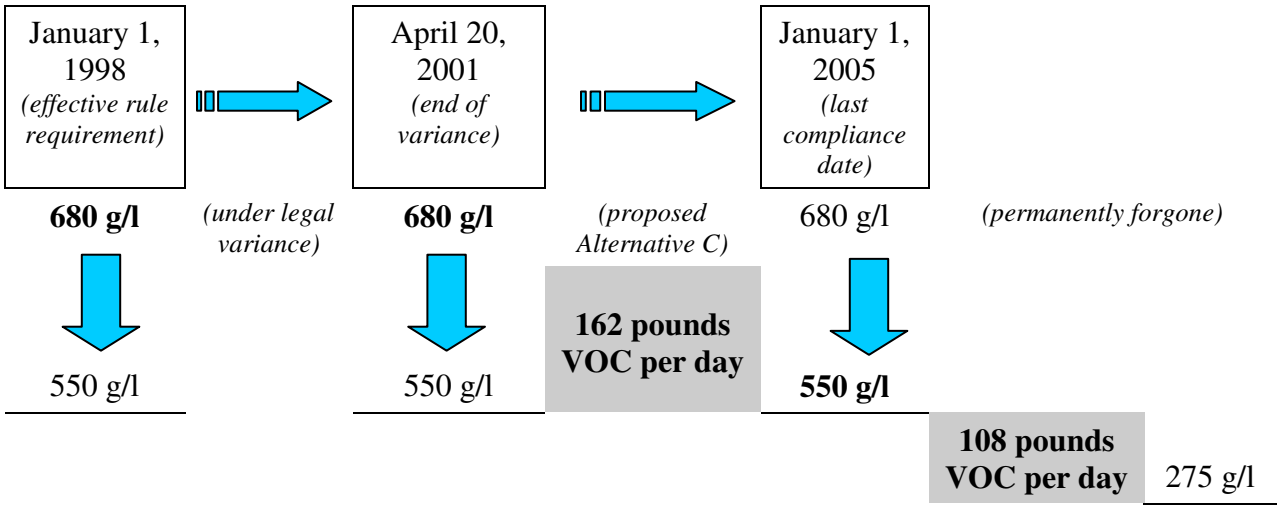

FIGURE 5-2

Delay of VOC Emission Reductions from Alternative C

CONCLUSION

Alternative A provide the greatest benefit to air quality impacts because of immediate VOC emission reduction in compliance with the current rule, however it does not guarantee the survival of clear wood finish brushing lacquers which, if phased out prematurely, could force end-users to use substitutes that are more harmful to the existing environment.

The proposed project is preferred over Alternative A because it achieves the primary project goal of allowing additional time to reformulate a low VOC brushing lacquer. Imposing the current VOC content requirement for this coating category would eliminate this product from the market, leaving end-users no suitable replacement alternative.

The proposed project is recommended over Alternatives B and C because it requires compliance with the lower VOC content limit at 275 grams per liter at the same time required in the current rule and thus achieving the originally anticipated final VOC emission reductions from this coating category.

CHAPTER 6

OTHER CEQA TOPICS

Relationship Between Short-Term Uses and Long-Term Productivity
Significant Irreversible Environmental Changes
Potential Growth-Inducing Impacts

RELATIONSHIP BETWEEN SHORT-TERM USES AND LONG-TERM PRODUCTIVITY

Implementing the proposed amendments is not expected to gain advantage for local short-term uses at the expense of long-term environmental productivity. The intent of proposed amended Rule 1113 is to provide additional time for a coating manufacturer to formulate a low VOC brushing lacquer in the short term, while improving air quality in the long term, thus protecting public health by providing a regulatory framework to limit VOC emissions from architectural coatings. The proposed amendments are designed to be a temporary relief for a small portion of the affected community.

Though there will be short-term air quality impacts associated with the implementation of the proposed amendments, the long-term financial, material, and human resources in the district will be enhanced. By allowing the temporary delay in VOC emission reductions, the coating formulator of brushing lacquer can now focus the costs and workforce in developing a new coating technology meeting the final VOC compliance limit at a possible quicker schedule than required by the rule.

In addition to addressing the effects on long-term productivity, CEQA indicates that this discussion should identify the reason(s) for implementing a project now, instead of reserving the option for future action. PAR 1113 is being revised now because the variance, which allowed the formulation of brushing lacquers at 680 grams per liter, has expired. If PAR 1113 is not amended, the brushing lacquer will be immediately phased-out because the formulator has failed to develop a successful brushing lacquer at the required VOC content limit of 550 grams per liter.

SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA Guidelines §15126(c) requires an environmental analysis to consider "any significant irreversible environmental changes which would be involved if the proposed action should be implemented." The Initial Study identified air quality as a potential impact area.

The delay in VOC emission reductions is temporary until January 1, 2005, when brushing lacquers will be required to comply with a 275 grams per liter VOC content limit as currently required in the rule. The analysis of human health impacts indicated that future compliant low-VOC coatings could be formulated with hazardous materials. Generally, solvents used in low-VOC coatings are typically less hazardous than solvents used in conventional coatings. Because AIM coatings are applied on an as-needed basis, continuous exposures would not occur. As a result, no significant carcinogenic or noncarcinogenic human health impacts are anticipated.

As can be seen by the information presented in this Draft EA, the proposed project would not result in irreversible environmental changes or irretrievable commitment of resources.

POTENTIAL GROWTH-INDUCING IMPACTS

CEQA Guidelines §15126(d) requires an environmental analysis to consider the "growth-inducing impact of the proposed action." Implementing PAR 1113 will not, by itself, have any direct or indirect growth-inducing impacts on businesses in the SCAQMD's jurisdiction because it is not expected to foster economic or population growth or the construction of additional housing and primarily affects existing coating formulation companies.

APPENDIX A

NOTICE OF PREPARATION AND INITIAL STUDY

SUBJECT: **NOTICE OF PREPARATION OF A DRAFT 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), as the Lead Agency, must address the potential adverse affects of the proposed project on the environment. This Notice of Preparation (NOP) serves two purposes: 1) to solicit information on the scope of the environmental analysis for the proposed project, and 2) to notify the public that the SCAQMD will prepare a Draft Environmental Assessment (EA) to further assess potential environmental impacts that may result from implementing the proposed project.

This letter and the NOP 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.

If you wish to receive the Initial Study, please call the SCAQMD's Public Information Center at (909) 396-2039. The Initial Study can also be downloaded by accessing the SCAQMD's website at http://www.aqmd.gov/ceqa. Comments focusing on your area of expertise, your agency's area of jurisdiction, or issues relative to the environmental analysis should be addressed to Mr. Michael Krause (c/o CEQA) at the address shown above, or sent by FAX to (909) 396-3324 or by e-mail to mkrause@aqmd.gov. Comments must be received no later than 5:00 PM on April 20, 2001. Please include the name and phone number of the contact person for your agency. Questions relative to the rule amendments should be directed to Mr. Thomas Liebel at (909) 396-2554.

A Public Workshop for the proposed amendments is tentatively scheduled for May 4, 2001. The Public Hearing for the proposed amendments is scheduled for July 20, 2001. (Note: These public meeting dates are subject to change).

Date: March 20, 2001 **Signature:** Steve Smith

Steve Smith, Ph.D.
Program Supervisor
Planning, Rules, and Area Sources

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

SUBJECT: **NOTICE OF PREPARATION OF A DRAFT 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), as the Lead Agency, has prepared this Notice of Preparation (NOP) and Initial Study (IS). This NOP serve two purposes: 1) to solicit information on the scope of the environmental analysis for the proposed project, and 2) to notify the public that the SCAQMD will prepare a Draft Environmental Assessment (EA) to further assess potential environmental impacts that may result from implementing the proposed project.

This letter, the NOP and the attached IS 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.

Comments focusing on your area of expertise, your agency's area of jurisdiction, or issues relative to the environmental analysis should be addressed to Mr. Michael Krause (c/o CEQA) at the address shown above, or sent by FAX to (909) 396-3324 or by e-mail to mkrause@aqmd.gov. Comments must be received no later than 5:00 PM on April 20, 2001. Please include the name and phone number of the contact person for your agency. Questions relative to the rule amendments should be directed to Mr. Thomas Liebel at (909) 396-2554.

A Public Workshop for the proposed amendments is tentatively scheduled for May 4, 2001. The Public Hearing for the proposed amendments is scheduled for July 20, 2001. (Note: These public meeting dates are subject to change).

Date: March 21, 2001 **Signature:** Steve Smith

Steve Smith, Ph.D.
Program Supervisor
Planning, Rules, and Area Sources

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

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 E. Copley Drive, Diamond Bar, California 91765-4182

NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL ASSESSMENT

Project Title:

Draft Environmental Assessment: Proposed Amended Rule 1113 - Architectural Coatings

Project Location:

South Coast Air Quality Management District (SCAQMD) area of jurisdiction consisting of the four-county South Coast Air Basin (Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino counties), and the Riverside County portions of the Salton Sea Air Basin and the Mojave Desert Air Basin

Description of Nature, Purpose, and Beneficiaries of Project:

The SCAQMD is proposing to include a category for clear wood finish brushing lacquers at a 680 grams per liter VOC content limit to be used in lieu of the required 550 grams per liter VOC content limit for other lacquers. This pertains only to clear wood finish lacquers that are applied by brushing the architectural coating onto a substrate. Effective 1/1/05, however, the brushing lacquers will be required to meet the 275 grams per liter VOC content requirement for other lacquers. The rule change will result in a delay of VOC emission reductions, not an increase in existing emissions because the one known affected coating manufacturer of the brushing lacquer is currently under a variance which allows the company to sell the brushing lacquer at the higher VOC content limit. Based on the volume of affected coatings currently sold, the delay of VOC emission reductions is anticipated to exceed the SCAQMD's daily significance threshold. The Initial Study identified "air quality" as the only area that may be adversely affected by the proposed project.

Lead Agency:	**Division:**
South Coast Air Quality Management District	Planning - CEQA

Initial Study and all supporting documentation are available at:	**or by calling:**	**Initial Study can be accessed at:**
SCAQMD Headquarters 21865 E. Copley Drive Diamond Bar, CA 91765	(909) 396-2039	http://www.aqmd.gov/ceqa

Initial Study Review Period:

March 22 - April 20, 2001

Scheduled Public Meeting Dates (subject to change):

Public Workshop: May 4, 2001
SCAQMD Governing Board Public Hearing: July 20, 2001

Send CEQA Comments to:	**Phone Number:**	**Email:**	**Fax:**
Michael Krause	(909) 396-2706	mkrause@aqmd.gov	(909) 396-3324

Direct Questions on Amendments to:	**Phone Number:**
Thomas Liebel	(909) 396-2554

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Initial Study: Proposed Amended Rule 1113 - Architectural Coatings

March 22, 2001

SCAQMD No. 032201MK

Author:	Michael Krause	Air Quality Specialist
Reviewed By:	Steve Smith, Ph.D.	Program Supervisor, CEQA
	Lou Yuhas	Air Quality Analysis and Compliance Supervisor, Area Sources
	Tom Liebel	Air Engineer II
	Frances Keeler	Senior Deputy District Council

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

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CYNTHIA VERDUGO-PERALTA
Governor's Appointee

S. ROY WILSON, Ed.D.
Supervisor, Fourth District
Riverside County Representative

EXECUTIVE OFFICER:

BARRY R. WALLERSTEIN, D.Env.

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INTRODUCTION

The California Legislature created the South Coast Air Quality Management District (SCAQMD) in 1977[3] as the agency responsible for developing and enforcing air pollution control rules and regulations in the South Coast Air Basin (Basin) and portions of the Salton Sea Air Basin and Mojave Desert Air Basin. By statute, the SCAQMD is required to adopt an air quality management plan (AQMP) demonstrating compliance with all federal and state ambient air quality standards for the district[4]. Furthermore, the SCAQMD must adopt rules and regulations that carry out the AQMP[5]. The 1997 AQMP concluded that major reductions in emissions of volatile organic compounds (VOCs) and oxides of nitrogen (NOx) are necessary to attain the air quality standards for ozone and particulate matter (PM10).

VOC emissions from architectural coating operations are regulated by SCAQMD Rule 1113. Under the rule, emissions are controlled by limiting the VOC content, measured in grams per liter, of the architectural coatings sold and applied in the SCAQMD. Originally adopted in 1977, Rule 1113 has been amended 20 times. The most recent amendments in 1999, implemented AQMP control measure CTS-07.

The SCAQMD is proposing to include a category for clear wood finish brushing lacquers at a 680 grams per liter VOC content limit to be used in lieu of the required 550 grams per liter VOC content limit for other lacquers. This pertains only to clear wood finish lacquers that are applied by brushing the architectural coating onto a substrate. Effective 1/1/05, however, the brushing lacquers will be required to meet the 275 grams per liter VOC content requirement for other lacquers. The rule change will result in a delay of VOC emission reductions, not an increase in existing emissions because the one known affected coating manufacturer of the brushing lacquer is currently under a variance which allows the company to sell the brushing lacquer at the higher VOC content limit. Based on the volume of affected coatings currently sold, the delay of VOC emission reductions is anticipated to exceed the SCAQMD's daily significance threshold. The Initial Study identified “air quality” as the only area that may be adversely affected by the proposed project.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

The proposed amendments to Rule 1113 are a “project’ as defined by the CEQA. CEQA requires that the potential adverse environmental impacts of proposed projects be evaluated and that methods to reduce or avoid identified significant adverse

[3] The Lewis-Presley Air Quality Management Act, 1976 Cal. Stats., ch 324 (codified at Health & Safety Code, §§40400-40540).
[4] Health & Safety Code, §40460 (a).
[5] Health & Safety Code, §40440 (a).

environmental impacts of these projects be implemented if feasible. The purpose of the CEQA process is to inform the SCAQMD's Governing Board, public agencies, and interested parties of potential adverse environmental impacts that could result from implementing the proposed project and to identify feasible mitigation measures when an impact is significant.

California Public Resources Code §21080.5 allows public agencies with regulatory programs to prepare a plan or other written documents in lieu of an environmental impact report once the Secretary of the Resources Agency has certified the regulatory program. The SCAQMD's regulatory program was certified by the Secretary of 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 Environmental Assessment (EA) to evaluate potential adverse impacts from amending Rule 1113.

The SCAQMD as Lead Agency for the project, has prepared this Initial Study (which includes an Environmental Checklist). The Environmental Checklist provides a standard evaluation tool to identify a project's adverse environmental impacts. The Initial Study is also intended to provide information about the proposed project to other public agencies and interested parties prior to the release of the Draft EA. Written comments on the scope of the environmental analysis and possible project alternatives received by the SCAQMD during the 30-day review and comment period will be considered (if received by the SCAQMD during the 30-day review period) when preparing the Draft EA.

PROJECT LOCATION

The SCAQMD has jurisdiction over an area of 10,473 square miles (referred to hereafter as the district), consisting of the four-county South Coast Air Basin (Basin) and the Riverside County portions of the Salton Sea Air Basin (SSAB) and the Mojave Desert Air Basin (MDAB). The Basin, which is a subarea of the SCAQMD's jurisdiction, 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 6,745 square-mile 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 is 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 Valley Planning Area) is a subregion of both Riverside County and the SSAB and is bounded by the San Jacinto Mountains to the west and the eastern boundary of the Coachella Valley to the east (Figure 1-1).

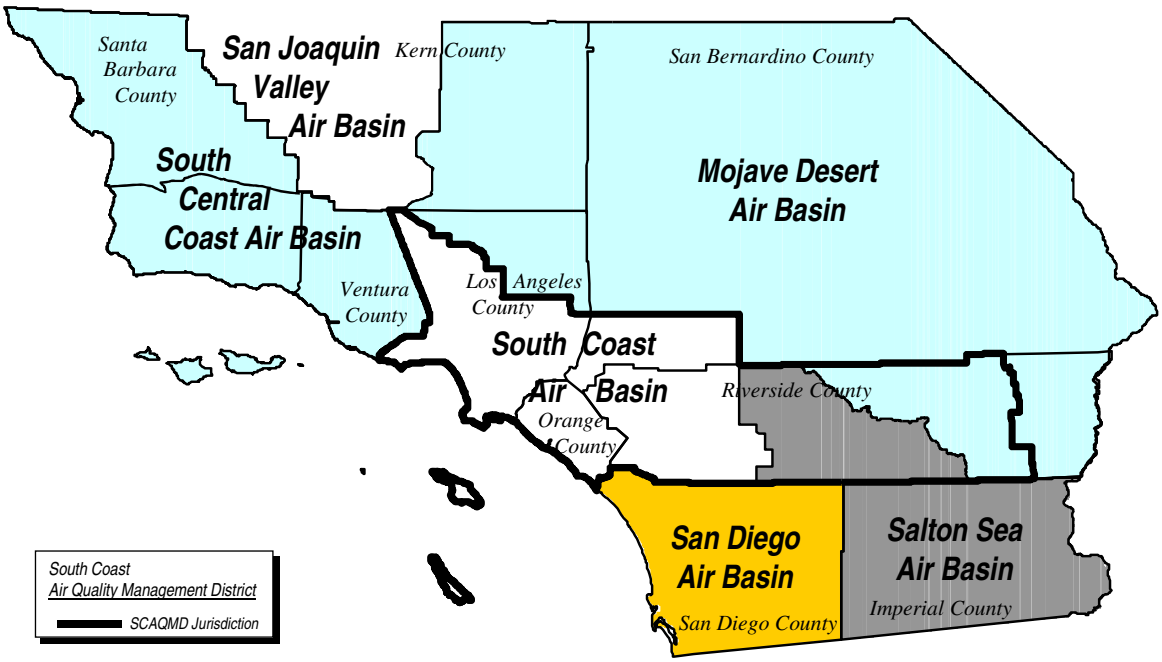

FIGURE 1-1

South Coast Air Quality Management District

PROJECT BACKGROUND AND OBJECTIVE

VOC emissions from architectural coating operations are regulated by SCAQMD Rule 1113. The rule is applicable to any person who supplies, sells, offers for sale, or manufacturers any architectural coating for use in the district that is intended to be applied to stationary structures or their appurtenances, and to mobile homes, pavements or curbs; as well as any person who applies or solicits the application of any architectural coatings within the district. The purpose of this rule is to limit the VOC content, measured in grams per liter, of architectural coatings used in the district or to allow the averaging of such coatings, as specified, so their actual emissions do not exceed the allowable emissions if all the averaged coatings had complied with the specified limits. Originally adopted September 2, 1977, Rule 1113 has been amended 20 times.

During the November 1996 amendments, the rule included a requirement for the VOC content of clear lacquers to be reduced from 680 grams per liter to 550 grams per liter, effective January 1, 1998. Lacquers applied by spray application methods were successfully developed to meet the 550 grams per liter requirement. During the 1999 amendments, one coating manufacturer approached the SCAQMD claiming that a 550 grams per liter lacquer when applied by brushing the coating onto the substrate could not be successfully developed prior to the final compliance date of 1/1/98. These brushing lacquers are exclusively formulated for the residential "do-it-yourself" market and are not sprayed, but applied by hand with a brush. The company was the only company marketing brushing lacquer in the SCAQMD jurisdiction and sales of the coating were approximately 20,000 gallons per year. At the time, the SCAQMD was unwilling to establish a category for brushing lacquer and recommended that the company seek a variance.

In April 1999, the company was granted a variance for one year from the 550 grams per liter requirement for lacquers. In April 2000 a 550 grams per liter brushing lacquer had still not been successfully developed and the company was granted a one year extension on its variance. The extension will end on April 20, 2001, and thus far there has been no success in developing a compliant brushing lacquer. The company met with the SCAQMD and outlined all of the research and testing efforts performed over the last two years. Additionally, SCAQMD staff visited the company for further meetings, applied low-VOC brushing lacquer formulations to wood panels, and searched throughout the country in an attempt to find a 550 grams per liter brushing lacquer. As a result of these meetings and activities, the SCAQMD determined that an acceptable 550 grams per liter brushing lacquer was not available and decided to amend Rule 1113 to allow additional time for brushing lacquers to comply with a lower VOC content limit. Until the sunset date, brushing lacquers would still be required to comply with the 680 grams per liter limit.

The new category affects only clear wood finish lacquers applied by brushing the product and not for clear wood finish lacquers applied using other methods such as spraying. While proposed to be excluded from complying with the VOC content limit of 550 grams per liter, the brushing lacquer will be required to comply with 275 grams per liter VOC content limit as of January 1, 2005. The rule currently requires the VOC content limit of all clear wood finish lacquers to be 275 grams per liter by January 1, 2005, so the delay in emission reductions are not permanent.

PROJECT DESCRIPTION

The following is a summary of the PAR 1113:

- provide a category for clear wood finish brushing lacquers limiting the maximum allowable VOC content not to exceed 680 grams per liter and

require the VOC content limit to be reduced to 275 grams per liter effective January 1, 2005;

- include a definition for clear wood finish brushing lacquer;
- require specific labeling requirements for clear wood finish brushing lacquers;

A copy of PAR 1113 can be found in Appendix A.

ALTERNATIVES

The Draft EA will discuss and compare alternatives to the proposed project as required by SCAQMD Rule 110. Alternatives must include realistic measures for attaining the basic objectives of the proposed project and provide a means for evaluating the comparative merits of each alternative. In addition, the range of alternatives must be sufficient to permit a reasoned choice and it need not include every conceivable project alternative. The key issue is whether the selection and discussion of alternatives fosters 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.

SCAQMD Rule 110 does not impose any greater requirements for a discussion of project alternatives in an environmental assessment than is required for an Environmental Impact Report under CEQA.

Alternatives will be developed based in part on the major components of the proposed amended rule. The rationale for selecting alternatives rests on CEQA's requirement to present "realistic" alternatives; that is alternatives that can actually be implemented. CEQA also requires an evaluation of a "No Project Alternative." Written suggestions on potential project alternatives received during the comment period for the Initial Study will be considered when preparing the Draft EA.

CHAPTER 2 - ENVIRONMENTAL CHECKLIST

Introduction

General Information

Environmental Factors Potentially Affected

Determination

Environmental Checklist and Discussion

INTRODUCTION

The environmental checklist provides a standard evaluation tool to identify a project's adverse environmental impacts. This checklist identifies and evaluates potential adverse environmental impacts that may be created by the proposed amendments to the Rule 1113.

GENERAL INFORMATION

Name of 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
CEQA Contact Person:	Michael Krause (909) 396-2706
Rule Contact Person:	Thomas Liebel (909) 396-2554
Name of Project:	Proposed Amended Rule 1113 - Architectural Coatings

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The following environmental factors checked below would be potentially affected by this project, involving at least one impact that is "Potentially Significant Impact" as indicated by the checklist on the following pages. An explanation relative to the determination of impacts can be found following the checklist for each area.

¤	Aesthetics	¤	Geology and Soils	¤	Population and Housing
¤	Agricultural Resources	¤	Hazards and Hazardous Materials	¤	Public Services
	Air Quality	¤	Hydrology and Water Quality	¤	Recreation
¤	Biological Resources	¤	Land Use and Planning	¤	Solid/Hazardous Waste
¤	Cultural Resources	¤	Mineral Resources	¤	Transportation./Traffic
¤	Energy	¤	Noise		Mandatory Findings

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. An 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: March 22, 2001 **Signature:** Steve Smith

Steve Smith, Ph.D.
Program Supervisor
Planning, Rules, and Area Sources

ENVIRONMENTAL CHECKLIST AND DISCUSSION

		Potentially Significant Impact	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 within a state scenic highway?	¤	¤	
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	¤	¤	
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	¤	¤	

I. a) - d): The proposed project is intended to include a category for clear wood finish brushing lacquers limiting the VOC content not to exceed 680 grams per limit and requiring the VOC content limit to be reduced to 275 grams per liter by 1/1/05. Currently, all lacquers are required to limit their VOC content to 550 grams per liter. The concern with the aesthetic look of the brushing lacquer at 550 grams per liter VOC content limit is one reason the new coating category is being proposed. Manufacturers have argued the aesthetic look of the coating is substantially diminished when the lacquer is formulated at the required VOC content limit and applied by a brush. Thus a new category is being proposed to allow brushing lacquers additional time to improve the aesthetic look. Brushing lacquers are used primarily by the home do-it-yourself market.

The proposed coating category is not expected to result in a substantial adverse effect on any scenic vistas, substantially degrade the existing visual character or quality of any site and its surroundings, or create new sources of substantial light or glare which would adversely affect day or nighttime views of an area. No major changes to

existing facilities or stockpiling of additional materials or products outside of existing facilities are expected to result.

		Potentially Significant Impact	Less Than Significant Impact	No Impact
II.	**AGRICULTURE RESOURCES.** Would the project:			
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?	¤	¤	
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	¤	¤	
c)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	¤	¤	

II. a) - c): The proposed project would not result in any new construction of buildings or other structures that would convert farmland to non-agricultural use or conflict with zoning for agricultural use or a Williamson Act contract. There are no provisions in the proposed amended rule that would affect land use plans, policies, or regulations. Land use and other planning considerations are determined by local governments and no land use or planning requirements will be altered by the proposed project.

	Potentially Significant Impact	Less Than Significant Impact

III. AIR QUALITY. Would the project:

a)	Conflict with or obstruct implementation of the applicable air quality plan?	¤	¤	
b)	Violate any air quality standard or contribute to an existing or projected air quality violation?	¤	¤	
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	¤	¤	
d)	Expose sensitive receptors to substantial pollutant concentrations?	¤		¤
e)	Create objectionable odors affecting a substantial number of people?	¤	¤	
f)	Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?		¤	¤

III. a), c): The proposed amendments will delay VOC emission reductions from brushing lacquers until 1/1/05 and because the coating manufacturer of brushing lacquers is currently under a variance from reducing the VOC content limit, existing VOC emissions will not increase. Therefore, this amendment will not conflict or obstruct from the implementation of the 1997 AQMP or result in a cumulatively considerable net increase of any criteria pollutant.

III. e) The amendments will give the coating manufacturer of brushing lacquers additional time to reformulate and lower the VOC content limit of the applicable coating. Therefore, existing odors from brushing lacquers with not change because the formulation of the coating will not change as a result of the amendments.

III. b), d) and f) Since the variance has a sunset date, the amendments will diminish an existing air quality rule requirement. The Draft EA will investigate whether the proposed amendments to Rule 1113 will result in any of the following: 1) a delay of VOC emission reductions due to an extension of the current variance and delay in complying with the existing rule requirement; 2) an increase in VOC emissions from possible growth in sales of the brushing lacquers at a higher VOC content than would have otherwise occurred under the current Rule 1113 requirements; or 3) the creation of adverse localized effects such as toxics.

	Potentially Significant Impact	**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?	¤	¤	
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?	¤	¤	
c) Have a substantial adverse effect on federally protected wetlands as defined by §404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, 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?

e)	Conflicting with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	¤	¤
f)	Conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	¤	¤

IV. a) - f): The brushing lacquers are typically used by the home do-it-yourselfers for home projects and therefore would have no direct or indirect impacts that could adversely affect plant or animal species or the habitats on which they rely in the SCAQMD's jurisdiction. A conclusion of the 1997 AQMP EIR was that population growth in the region would have greater adverse effects on plant species and wildlife dispersal or migration corridors in the basin than SCAQMD regulatory activities, (e.g., air quality control measures or regulations). The current and expected future land use development to accommodate population growth is primarily due to economic considerations or local government planning decisions.

There are no provisions in the proposed rule that would affect land use plans, policies, or regulations. Land use and other planning considerations are determined by local governments and no land use or planning requirements will be altered by the proposed project. The proposed amendments to Rule 1113 would not affect in any way habitat conservation or natural community conservation plans, agricultural resources or operations, and would not create divisions in any existing communities. The VOC emissions are not expected to increase, but rather remain at the same levels currently emitted. By January 1, 2005, the VOC emissions are expected to decrease which will provide a health benefit to plant, animal species as well as the human residents in the district.

	Potentially Significant Impact	**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 §15064.5?	¤	¤
b)	Cause a substantial adverse change in the significance of an archaeological resource as defined in §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 a formal cemeteries?	¤	¤

V. a) - d): There are existing laws in place that are designed to protect and mitigate potential impacts to cultural resources. The application of architectural coatings, in the vast majority of situations, would occur after construction has already occurred. Consequently, application of architectural coatings has little or no potential to disturb cultural resources. Instead, disturbance of cultural resources would most likely occur during site preparation and would be addressed at that time. Therefore, PAR1113 has no potential to cause a substantial adverse change a historical or archaeological resource, directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, or disturb any human remains, including those interred outside a formal cemeteries. The proposed amendments to Rule 1113 is, 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	**Less Than Significant Impact**	**No Impact**
VI. ENERGY. Would the project:			
a) Conflict with adopted energy conservation plans?	¤	¤	
b) Result in the need for new or substantially altered power or natural gas utility systems?	¤	¤	
c) Create any significant effects on local or regional energy supplies and on requirements for	¤	¤	

additional energy?

d) Create any significant effects on peak and base period demands for electricity and other forms of energy? ¤ ¤

e) Comply with existing energy standards? ¤ ¤

VI. a)-e): Because add-on control equipment is not expected to be used to comply with the provisions of PAR 1113, no additional electricity or natural gas use is expected to be required. The hand held brush is the only equipment used to apply the brushing lacquers and brushing applications are not powered by electricity or natural gas. Additionally, PAR 1113 will not substantially increase the number of businesses or amount of equipment in the district since brush lacquers are used primarily by the home-do-it-yourself market. An increase in energy consumption from non-renewable resources (e.g., diesel and gasoline) above current levels is not expected because the amount of coatings shipped to suppliers and users is not anticipated to change. The delay of VOC emission reductions would not be expected to conflict with adopted energy conservation plans, result in the need for new or substantially altered power or natural gas utility systems, or be out of compliance with existing energy standards.

	Potentially Significant Impact	**Less Than Significant Impact**	**No Impact**
VII. GEOLOGY AND SOILS. Would the project:			
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	¤	¤	
• Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	¤	¤	
• Strong seismic ground shaking?	¤	¤	
• Seismic–related ground failure, including	¤	¤	

liquefaction?
- Landslides? ¤ ¤

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 on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? ¤ ¤

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? ¤ ¤

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? ¤ ¤

VII. a) - e): Architectural coatings are applied to existing buildings, stationary structures, roads, etc. The proposed amendments affect coating formulators and have no adverse effects on geophysical formations in the district. Additionally, since no add-on control equipment will 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. The proposed project would not result in significant disruption or overcovering of soil, or changes in topography or surface relief features. The proposal would not result in the erosion of beach sand, or a change in existing siltation rates.

	Potentially Significant Impact	**Less Than Significant Impact**	**No Impact**

VIII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:

a)	Create a significant hazard to the public or the environment through the routine transport, use, and disposal of hazardous materials?	¤	¤
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?	¤	¤
c)	Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	¤	¤
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would create a significant hazard to the public or the environment?	¤	¤
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	¤	¤
f)	For a project within the vicinity of a private airstrip, would the project 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?	¤	¤

i)	Significantly increased fire hazard in areas with flammable materials?	¤	¤

VIII. a), c): There is no change in the coating formulation of the brushing lacquer as a result of the proposed amendments. The brushing lacquer is currently under variance from complying with the 550 grams per liter VOC content limit as required by Rule 1113. The proposed amendments will allow the coating to be formulated at the existing higher VOC content limit until January 1, 2005. In order to meet the lower VOC content limits as of January 1, 2005, some coating manufacturers may elect to comply by reformulating with acetone or glycol ethers. These solvents have potential flammability and human health impacts, respectively. These impacts, however, were previously analyzed in a Subsequent Environmental Impact Report for PAR 1113 (SCAQMD No. 960626DWS, November, 1996) when the requirement to lower the VOC content limit for clear lacquers to 275 grams per liter by January 1, 2005, was originally proposed. Because the compliance requirements and the affected facilities have not changed since that analysis, the conclusions determined in that document remain valid. Therefore, no new routine transport, use, emission and disposal of hazardous materials will result from the proposed amendments.

VIII b), d), e), f): The brushing lacquer is typically used by home do-it-yourselfers in limited quantities so if there was an accidental condition, the impact would not create a significant hazard to the public, possible nearby public airports or private airstrips or hazardous materials sites compiled pursuant to Government Code §65962.5.

VIII e), g): The proposed amendments is providing additional time for the coating manufacturer of brushing lacquers to reformulate and would not interfere with airport land use plans, adopted emergency response plans or emergency evacuation plans.

VIII h), i): There is no change in the composition of brushing lacquer used by the home do-it-yourselfers, so any wildlands intermixed with residences or areas with flammable materials would not be exposed to any increased fire hazards.

		Potentially Significant Impact	**Less Than Significant Impact**	**No Impact**
IX.	**HYDROLOGY AND WATER QUALITY.** Would the project:			
a)	Violate any water quality standards or waste discharge requirements?	¤	¤	

b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be 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 which would not support existing land uses or planned uses for which permits have been granted)?	¤	¤
c)	Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	¤	¤
d)	Substantially alter the existing drainage pattern of the site or area, including through 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 on- or off-site?	¤	¤
e)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	¤	¤
f)	Otherwise substantially degrade water quality?	¤	¤
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?	¤	¤
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flaws?	¤	¤
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?		
j)	Inundation by seiche, tsunami, or mudflow?	¤	¤
k)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	¤	¤
l)	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?	¤	¤
m)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	¤	¤
n)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	¤	¤
o)	Require in a determination by the wastewater treatment provider which 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?	¤	¤

IX. a): No add-on control equipment is required as a result of the proposed amendment and no immediate reformulation is expected as a result of the proposed amendments, however the coating manufacturer may meet the lower VOC content limit, required as of January 1, 2005, by substituting VOC-containing materials with other substances, such as water. The increased use of water may have the potential to adversely affect both water demand and water quality. These impacts, however, were previously analyzed in a Subsequent Environmental Impact Report for PAR 1113 (SCAQMD No. 960626DWS, November, 1996) when the requirement to lower the VOC content limit for clear lacquers to 275 grams per liter by January 1, 2005 was proposed. Because the compliance requirements and the affected facilities have not changed since that analysis, the conclusions determined in that document remain valid.

IX. b), c), d), e), f): Because the proposed amendments would allow continued use of an existing coating product, additional groundwater supplies would be not depleted, existing drainage patterns and systems would not be altered, and water quality would not be degraded.

IX. g), h), i), j): The proposed project would not place housing within a 100-year flood hazard area, expose people to new flooding, seiche, tsunami or mudflow conditions.

IX. k), l), m), n), o): All requirements of the applicable Regional Water Quality Control Board are expected to be complied with. The proposed project will maintain an existing setting for brushing lacquers and therefore will not require or result new wastewater or water drainage facilities, reduce water supplies or alter the wastewater provider's existing commitments. In conclusion, no new hydrology impacts will result from the proposed amendments.

		Potentially Significant Impact	Less Than Significant Impact	No Impact
X.	**LAND USE AND PLANNING.** Would the project:			
a)	Physically divide an established community?	¤	¤	
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the 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 or natural community conservation plan?	¤	¤	

X. a) - c): There are no provisions of the proposed project that would affect land use plans, policies, or regulations because the proposed amendments maintain the existing VOC content limit of brush lacquers, which are used primarily at home by the do-it-yourself market. Land use and other planning considerations are determined by local governments and no land use or planning requirements will be

altered by the proposed project. The proposed project would not affect in any way habitat conservation or natural community conservation plans, agricultural resources or operations, and would not create divisions in any existing communities. No new development or alterations to existing land designations will occur as a result of the implementation of the proposed amendments. It is not anticipated that the further use of the brushing lacquer at a 680 grams per liter VOC content limit would require additional land to continue operations or require rezoning. Therefore, no significant adverse impacts affecting existing or future land uses are expected.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XI. 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?	¤	¤	
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?	¤	¤	

XI. a), b): There are no provisions of the proposed project that would result in the loss of availability of a known mineral resource of value to the region and the residents of the state, or of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. The proposed amendments would allow continued use of an existing coating product.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XII. NOISE. Would the project result in:			

a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	¤	¤
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	¤	¤
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	¤	¤
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	¤	¤
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	¤	¤
f)	For a project within the vicinity of a private airship, would the project expose people residing or working in the project area to excessive noise levels?	¤	¤

XII. a) - f): PAR 1113 would allow continued manufacturing of an existing lacquer product and continued use of that product by the home do-it-yourself market. Therefore, no changes in noise levels at the manufacturing facility or in residential areas are anticipated. Coating manufacturers are located in existing industrial or commercial areas where noise levels are already relatively high. It is assumed that operations in these areas are subject to and in compliance with existing community noise ordinances and applicable OSHA or Cal/OSHA workplace noise reduction requirements. 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.

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 coatings in residential areas are expected to comply with local community noise standards.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XIII. POPULATION AND HOUSING. Would the project:			
a) Induce substantial growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (e.g. through extension of roads or other infrastructure)?	¤	¤	
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	¤	¤	
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	¤	¤	

XIII. a): PAR 1113 allows continued use of an existing lacquer product and, therefore, is not expected to affect in any way population growth or the supply and/or availability of houses. Human population in the SCAQMD's jurisdiction is anticipated to grow regardless of implementing the proposed project. The proposal would not result in the creation of any industry that would induce or inhibit population growth or distribution. Because the proposed project has no effect on population growth or distribution, the proposed rule would not directly or indirectly induce the construction of single- or multiple-family housing units. Accordingly, no significant adverse impacts on human population or housing are expected.

XIII. b), c): Because the proposed project will not change the existing setting of brushing lacquers, existing housing or number of people necessitating the construction of replacement housing will not be displaced.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XIV. PUBLIC SERVICES. Would the proposal result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government 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:			
a) Fire protection?	¤	¤	
b) Police protection?	¤	¤	
c) Schools?	¤	¤	
d) Parks?	¤	¤	
e) Other public facilities?	¤	¤	

XIV. a) - e): There is no expected change in the formulation of the coating and no new materials or procedures will be introduced as a result of the proposed amendments that could pose a need for additional public services above what is currently expected from the fire department, police, schools, parks, government, etc. 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.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XV. RECREATION.			
a) Would the project 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)	Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	¤	¤

XV. a) - c): As discussed under "Land Use" above, there are no provisions to the proposed project that would affect land use plans, policies, or regulations. Land use and other planning considerations are determined by local governments; no land use or planning requirements will be altered by the proposal. The proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities or include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

		Potentially Significant Impact	**Less Than Significant Impact**	**No Impact**
XVI.	**SOLID/HAZARDOUS WASTE.** Would the project:			
a)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	¤	¤	
b)	Comply with federal, state, and local statutes and regulations related to solid and hazardous waste?	¤	¤	

XVI. a), b) : Because PAR 1113 would allow continued manufacture and use of an existing lacquer product, the proposed project 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 proposed amendments, no additional increase on the demand for utilities (e.g., electrical, gas, and communication systems) is expected. If the coating manufacturer eventually chooses to reformulate the coating to comply with January 1, 2005 requirement, 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.

Based on the above, the proposed rule is not expected to significantly increase the volume of solid or hazardous wastes, require additional waste disposal capacity, or generate waste that does not meet applicable local, state, or federal regulations.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION/TRAFFIC. Would the project:			
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	¤	¤	
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	¤	¤	
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?	¤	¤	
d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	¤	¤	
e) Result in inadequate emergency access?	¤	¤	
f) Result in inadequate parking capacity?	¤	¤	
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks)?	¤	¤	

XVII. a) - g): 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. There are no provisions in the proposed amendments that would increase existing traffic load, worker commute trips, raw material or finished product transport trips, adversely affect parking, or conflict with adopted policies associated with alternative transportation. The level of service standard, traffic levels or existing emergency accesses are expected to change because the proposed project is maintaining the existing setting.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XVIII. 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?		¤	¤

XVIII. a) –c): As discussed above, the proposed project is not expected to create significant adverse impacts to any environmental area except air quality. Potentially significant adverse air quality impacts will be analyzed in the Draft Environmental Assessment.

APPENDIX B

PROPOSED AMENDED RULE 1113

In order to save space and avoid repetition, please refer to the latest version of the proposed amended Rule 1113 located elsewhere in the rule package. The proposed amended rule was circulated with the Draft Environmental Assessment that was released on May 22, 2001 for a 45-day public review and comment period ending July 5, 2001. That version of the rule has not substantially changed from the current proposed rule, which can be found after the Resolution in this Governing Board package.

Original hard copies of the Draft Environmental Assessment, which include the originally proposed rule, can be obtained through the SCAQMD Public Information Center at the Diamond Bar headquarters or by calling (909) 396-2039.

APPENDIX C

COMMENT LETTER ON THE NOP/IS AND RESPONSES TO THE COMMENTS

17451 Von Karman Avenue, Irvine, CA 92614 / (949)474-0400 tel.; (949)474-7269

April 17, 2001

South Coast Air Quality Management District
Attn.: Mr. Michael Krause, c/o CEQA (sent via e-mail to mkrause@aqmd.gov)
21865 E. Copley Drive
Diamond Bar, CA 91765-4182

Re: Project Title: Proposed
Amendments to Rule 1113: Architectural Coatings

Dear Mr. Krause,

This letter is being sent as comments on the Draft Environmental Assessment prepared for the above project title by Deft Incorporated. We appreciate the opportunity to give these comments for your review and consideration. If you seek further information, please advise one of the contacts listed below.

1-1

Company: Deft Inc. is a privately held coatings manufacturer headquartered in Irvine, California. Deft produces coatings for wood finishing as well as for industrial and aerospace customers. Deft Inc. was founded over fifty years ago. The brushing lacquer, Clear Wood Finish, that is the subject of this document was initially produced in 1953. Since that time it has served the homeowner with a high quality lacquer that may be brush applied primarily for wood substrates. Deft has always been in the forefront of technological advances for high performance and lowering emissions wherever possible.

Contacts: The primary contacts at Deft for any additional information or questions are as follows:

1) Dan Bernard
Vice President, Support Services
Telephone (949)476-6715
Fax. (949)474-7269
e-mail: dan@deftfinishes.com

Employed in the coatings industry since 1961 in the areas of research, development and management.

2) Lloyd Haanstra
Chemist/Project Leader
Telephone (949)476-6733
Fax. (949)474-7269
e-mail: lloyd@deftfinishes.com

1-1 cont.

Employed in the coatings industry since 1955 specializing in architectural coatings.

The Product, Clear Wood Finish

Deft's Clear Wood Finish has operated under a variance for VOC limits for two years while research continued in an attempt to develop a quality brushing lacquer at 550 g/l instead of its 680 g/l composition. To this date, all of this work proved unsuccessful. This work also included outside firms, which also concluded that they were unable to accomplish this goal. As pointed out in your CEQA initial study section 1 – 4 this data and tests involved personnel from SCAQMD and this large amount of information is on file as noted in this PAR 1113 initial study (Chapter 1-4).

1-2

Air Quality Impact

PAR 1113, 2 – 4 and 2 – 5, section III, parts d and f, Air Quality Environmental Checklist references a less than significant impact of the project exposing sensitive receptors to substantial pollutant concentrations and potentially significant impact on diminishing an existing air quality rule or future compliance, requirement resulting in a significant increase in air pollutant(s).

For these two areas to be considered an environmental threat to the air quality by a brushing lacquer category, the alternative to a brushing lacquer has to be considered. The replacement for a brushing lacquer is a spray applied lacquer to attain the same quality of a wood finish. When coatings are brush applied essentially 100% of the coating reaches the substrate. When a coating is sprayed there is an amount which is atomized into the air and is deposited in an area that is other than the substrate to be coated. This loss factor is called transfer efficiency. In these types of applications, a value of 35% loss is an acceptable standard defined in Rule 1136, and that gives the application a 65% transfer efficiency value for the spray application.

1-3

When you compare one gallon of clear brushing lacquer at 680 g/l VOC that has 100% transfer efficiency to a spray applied lacquer at 550 g/l that has a 65% transfer efficiency there is not an actual increase in pollutant(s). One gallon of brush applied 680 g/l lacquer contains 2573.8 grams of VOC. It will require 1.538 gallons based on the 65% transfer of 550 g/l VOC spray applied lacquer to apply one gallon to the substrate.

1-4

1-4 cont.

This 1.538 gallons will yield 3201.7 grams of VOC. This is actually an increase of 24% in VOC by using the spray applied material. These values do not contain any increase in environmental factors due to the amount used for cleaning spray equipment or the waste disposal of spent solvent for the cleaning operations.

Mandatory Findings of Significance, Section XVIII, Parts A and C.

1-5

The two areas noted as potentially significant impact are probably natural check points based on those in the Air Quality Section III discussed above. Based on this information shown in Section III discussions these two areas should not be considered to have a potentially significant impact.

PAR 1113 Appendix A Rule

1-6

Deft supports this appendix A with the definition (b)(9) the table of standards, labeling (d)(7), and the editorial changes required for such changes as shown in this proposal.

Sincerely,

Dan Bernard
Vice President, Support Services

COMMENT LETTER #1 FROM
DEFT INCORPORATED

(April 17, 2001)

Response 1-1

This comment provides background on the commentator's company which is the only identified manufacturer of brushing lacquers. It also provides information regarding the history of the clear brushing lacquers and your company contacts. Since this comment does not address environmental issues on the NOP/IS, no further response is necessary.

Response 1-2

This comment summarizes the extensive research and testing effort that has been undertaken by the manufacturer to develop a compliant brushing lacquer. To date, a compliant product has not been formulated. The SCAQMD looks forward to working with Deft as it develops a brushing lacquer that will comply with the 275 grams per liter VOC content requirement before the January 1, 2005 compliance date.

Response 1-3

There is a concern that if the brushing lacquers are phased out prematurely, the end-users could be forced to use substitutes that are more harmful to the existing environment. Staff does not agree that spraying the product would be a substitute or viable alternative for the brushing lacquer. Since brushing lacquers are for the "do-it-yourself" market, it is unlikely that they would be sprayed. End-users will not rent spray equipment or learn how to effectively spray coatings. Rather, the end-user is more likely to use a different type of compliant coating that may not necessarily result in a satisfactory result.

Response 1-4

The analysis comparing of VOC emissions of a brush-applied 680 grams per liter lacquer and a sprayed 550 grams per liter lacquer is flawed. Transfer efficiency is the ratio of coating *solids* applied to a substrate divided by the total coating *solids* used in the coating process. It appears that the commentator calculates ratios of total coating material (solids plus solvents) in his calculations. If a solvent density of 7.3 pounds of VOC per gallon is used, theoretical solids can be calculated and compared. Using this method, 680 grams per liter brushing lacquer increases emissions 0.7 pound per gallon

compared to emissions from a sprayable 550 grams per liter lacquer. Transfer efficiency is generally not used in emissions calculations, so the increase in emissions is even greater than the 0.7 pound per gallon calculated here.

Response 1-5

Because the proposed project has been determined to generate a significant adverse air quality impact on the environment due to the delay of VOC emission reductions that exceeds the SCAQMD's daily VOC significance threshold, the project will have the potential to create significant adverse air quality impacts. This impact, however, will be short term. VOC emissions are considered to be ozone precursors which is a regional pollution problem, thus affecting those living in the region no matter where the VOC is emitted. Therefore, by significantly delaying a reduction in VOC emissions, the project will directly affect the air quality of those human beings living and breathing in the district. Accordingly, parts A and C of Section XVIII in the Initial Study were checked off correctly as indicated in the air quality impacts analysis in Chapter 4.

Response 1-6

Thank you for your support of the proposed amendments to Rule 1113.