ATTACHMENT G

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Final Supplemental Environmental Assessment for Proposed Amended Rule 1143 – Consumer Paint Thinners and Multi-Purpose Solvents

SCAQMD No. 11112008BAR
State Clearinghouse No: 2008111052

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PREFACE

This document constitutes the Final Supplemental Environmental Assessment (EA) for Proposed Amended Rule (PAR) 1143 – Consumer Paint Thinners and Multi-Purpose Solvents. The Draft Supplemental EA was released for a 30-day public review and comment period from May 6, 2010, to June 4, 2010. Three comment letters were received from the public on the Draft Supplemental EA before the close of the comment period. All of these comment letters along with the responses to comments are included in Appendix D of this document.

In addition, ~~one~~ two late comment letters were ~~was~~ received from the public relative to both the proposed amended rule and the Draft Supplemental EA on June 23, 2010 and June 29, 2010, respectively. These~~is~~ late comment letters and the responses to comments are included in Appendix G of this document.

Subsequent to release of the Draft Supplemental EA, minor modifications were made to PAR 1143. To facilitate identification, modifications to the document are included as underlined text and text removed from the document is indicated by ~~strikethrough~~. Staff has reviewed the clarifying language in ~~modifications to~~ PAR 1143 and concluded that none of the modifications alter any conclusions reached in the Draft Supplemental EA, nor provide new information of substantial importance relative to the draft document. As a result, these minor revisions do not require recirculation of the document pursuant to CEQA Guidelines §15073.5. Therefore, this document now constitutes the Final Supplemental EA for PAR 1143.

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INTRODUCTION

The California Legislature created the South Coast Air Quality Management District (SCAQMD) in 1977[1] 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 referred to herein as the district. 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[2]. Furthermore, the SCAQMD must adopt rules and regulations that carry out the AQMP[3]. The 2007 AQMP concluded that major reductions in emissions of volatile organic compounds (VOC), oxides of sulfur (SOx) and oxides of nitrogen (NOx) are necessary to attain the air quality standards for ozone (the key ingredient of smog) and particulate matter (PM10 and PM2.5). Ozone, a criteria pollutant which has been shown to adversely affect human health, is formed when VOCs react with NOx in the atmosphere. VOCs and NOx also contribute to the formation of PM10 and PM2.5.

The California Air Resources Board (CARB) generally has lead regulatory authority over consumer products. However, air pollution control districts may regulate emissions from consumer products for which CARB has not yet adopted specific regulations to control such emissions. Consumer paint thinners and multi-purpose solvents are considered to be consumer products that contribute substantial VOC emissions within the district. For this reason, the 2007 Air Quality Management Plan (AQMP) was adopted and includes control measure CM#2007CTS-04 – Emission Reductions from the Reduction of VOC Content of Consumer Products Not Regulated by the State Board, which seeks further VOC emission reductions from consumer products not otherwise regulated by CARB. As a result, SCAQMD first adopted Rule 1143 to control one potential significant source of VOC emissions.

Rule 1143 – Consumer Paint Thinners and Multi-Purpose Solvents, adopted by the SCAQMD Governing Board on March 6, 2009, implements CM#2007CTS-04 by reducing the VOC contents of these consumer products sold by suppliers, distributors, and retailers to consumers. As part of the rule adoption, the SCAQMD Governing Board also certified the environmental analysis prepared pursuant to the California Environmental Quality Act (CEQA), Final Environmental Assessment for Proposed Rule 1143 – Consumer Paint Thinners and Multi-Purpose Solvents, February 2009, SCAQMD No. 11112008BAR, State Clearinghouse No. 2008111052.

On April 1, 2009, W.M. Barr initiated a lawsuit challenging the SCAQMD's environmental analysis in the CEQA document prepared supporting its original March 6, 2009 adoption of Rule 1143. The case, W.M. Barr v. South Coast Air Quality Management District, Los Angeles Superior Court Case No. BS 119869, was heard by the court on December 7, 2009. The court upheld the SCAQMD's Final Environmental Assessment (EA) against all challenges except one. The court found that the SCAQMD's Final EA failed to address the issue of "whether acetone-based thinner is a significantly higher fire risk than mineral-based paint thinner."

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

In constructing the appropriate remedy, the court ultimately allowed the SCAQMD to maintain Rule 1143's interim VOC limit of 300 grams per liter (g/L) but ordered the SCAQMD to vacate the final VOC limit of 25 g/L for paint thinners and multi-purpose solvents. The court expressly found that the SCAQMD "presents uncontradicted evidence that no one, including Barr, was concerned about the fire hazard associated with the 300 g/L [interim limit]." The court also reiterated its earlier ruling that "the Environmental Assessment was adequate except with respect to the fire hazard issue."

On June 4, 2010, the SCAQMD Governing Board approved ~~will first consider proposed~~ amendments to Rule 1143 that ~~will~~ rescinded the 25 g/L VOC limit. Because the SCAQMD had ~~has~~ no discretion with regard to the rescission of this portion of Rule 1143, the action was ~~is~~ considered to be ministerially exempt from CEQA pursuant to CEQA Guidelines §15268 – Ministerial Projects. Thus, a Notice of Exemption was ~~has been~~ prepared pursuant to CEQA Guidelines §15062 - Notice of Exemption. ~~If approved on June 4, 2010, t~~The Notice of Exemption was ~~will be~~ filed with the county clerks of Los Angeles, Orange, Riverside and San Bernardino counties.

On July 9, 2010, the SCAQMD Governing Board will consider proposed amendments to Rule 1143 to: 1) re-establish the 25 g/L VOC limit; 2) add consumer warning requirements for all flammable and extremely flammable products; 3) add requirements for conducting public education and outreach with local fire departments to consumers regarding the reformulation of potentially more flammable paint thinners; 4) clarify the intent of the exemption for thinners for industrial maintenance (IM) coatings, zinc-rich IM primers, and high-temperature IM coatings as well as clean-up solvents for polyaspartic and polyurea coatings; and, 5) make other minor clarifications. Of these proposed changes, only the re-establishment of the 25 g/L VOC limit would result in physical changes that would require an additional CEQA analysis relative to fire hazards. To comply with the court order to make the previously prepared CEQA document adequate with respect to the aforementioned fire hazard issue in accordance with CEQA Guidelines §15163(b), SCAQMD has prepared this Final ~~Draft~~ Supplemental EA to specifically analyze the effects of the proposed amendments with respect to fire hazards from replacing formulations that contain combustible solvents like mineral spirits with formulations that may contain flammable and extremely flammable solvents, such as acetone. Because the remainder of the Final EA that was prepared at the time of adoption of Rule 1143 was either not challenged or was upheld by the court, no other environmental topics will be considered in this Final ~~Draft~~ Supplemental EA.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

The proposed amendments to Rule 1143 are considered a "project" as defined by CEQA. CEQA requires that the potential adverse environmental impacts of proposed projects be evaluated and that methods to reduce or avoid identified significant adverse environmental impacts of these projects be implemented if feasible. The CEQA process is designed 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 or alternatives, when an impact is significant.

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. SCAQMD's regulatory

program was certified by the Secretary of the Resources Agency on March 1, 1989, and is codified as SCAQMD Rule 110. Pursuant to Rule 110, SCAQMD has prepared this Final ~~Draft~~ Supplemental EA.

CEQA and Rule 110 require that potential adverse 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 and to comply with the court order to take corrective action to make the previously certified Final EA adequate for Rule 1143, the SCAQMD has prepared this Final ~~Draft~~ Supplemental EA to address the potential adverse fire hazard impacts associated with replacing mineral spirits-based paint thinner with acetone-based paint thinner. The Final ~~Draft~~ Supplemental EA is a public disclosure document intended to: (a) provide the lead agency, responsible agencies, decision makers and the general public with information on the fire hazard impacts of Rule 1143; and, (b) be used as a tool by decision makers to facilitate decision making on the proposed project.

In re-establishing the 25 g/l limit, the proposed project does not differ from the original project, except for the addition of administrative requirements and rule clarifications. In analyzing all these changes, this Final ~~Draft~~ Supplemental EA, prepared pursuant to CEQA, identifies fire hazards as the only area that may be adversely affected by the proposed project. In accordance with CEQA Guidelines §15163(c), the~~is~~ Draft Supplemental EA was ~~will be~~ given the same kind of notice and public review as given to the previously certified Final EA (e.g., a 30-day public review and comment period). Three ~~Any~~ comment~~s~~ letters were received during the public comment period on the analysis presented in the~~is~~ Draft Supplemental EA. These comment letters have been ~~will be~~ responded to and are included in Appendix D of this~~e~~ Final Supplemental EA. Prior to making a decision on the proposed amendments to Rule 1143, the SCAQMD Governing Board must review and certify the Final Supplemental EA as providing adequate information on the potential adverse fire hazard impacts of the proposed amendments to Rule 1143.

To address the potential fire hazard impacts, the SCAQMD revised the project as originally adopted to include consumer warning requirements and a public outreach and education program for flammable and extremely flammable products. SCAQMD's review of the proposed project shows that the project, as modified to address the potential fire hazard impacts, would not have a significant adverse effect on the environment. Therefore, pursuant to CEQA Guidelines §15252, no alternatives or mitigation measures are required to be included in this Final ~~Draft~~ Supplemental EA. The analysis in this document supports the conclusion of less than significant adverse fire hazard impacts.

PREVIOUS CEQA DOCUMENTATION FOR RULE 1143

This Final ~~Draft~~ Supplemental EA is a comprehensive environmental document that is limited to analyzing potential fire hazard impacts from PAR 1143 as part of a court order. 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, lack of progress in advancing the effectiveness of control technologies to comply with requirements in technology forcing rules, court order, etc.). Two CEQA documents have been prepared to analyze the effects of Rule 1143.

The following paragraphs summarize these previously prepared CEQA documents. The ~~current Draft~~ Final Supplemental EA focuses on the currently proposed amendments to Rule 1143 and does not rely on these previously prepared CEQA documents for the fire hazard issue under consideration herein. The following documents are available at SCAQMD Headquarters. In addition, a link for downloading files from the SCAQMD's website is provided for those CEQA documents prepared after January 1, 2000. The following is a summary of the contents of these documents.

Notice of Exemption From CEQA for Proposed Amended Rule 1143 – Consumer Paint Thinners and Multi-Purpose Solvents; to be considered by the Governing Board in June 2010: The proposed amendments to Rule 1143 consisted~~s~~ of rescinding the VOC limit of 25 g/L for paint thinners and multi-purpose solvents to comply with the judgment issued by the Los Angeles County Superior Court on April 1, 2010. Because the SCAQMD had~~s~~ no discretion with regard to the proposed project, it ~~is~~ was considered to be ministerially exempt. Therefore, pursuant to CEQA Guidelines §15268 – Ministerial Projects, the proposed project was determined to be exempt from CEQA and a Notice of Exemption was prepared. ~~Upon adoption of the proposed project,~~ T~~t~~his document is ~~will be~~ available for downloading by visiting the following website at: http://www.aqmd.gov/ceqa/noe.html

Final Environmental Assessment for Proposed Amended; February 2009 (SCAQMD No. 11112008BAR, State Clearinghouse No. 2008111052): The objective of proposed rule (PR) 1143 was to implement Control Measure CTS-04 in the 2007 AQMP by reducing VOC emissions from the use of consumer product paint thinners and multi-purpose solvents that are typically sold through retail outlets or through any persons acquiring a consumer product for resale of these materials within SCAQMD's jurisdiction. The adoption of PR 1143: 1) effective January 1, 2010, established an interim material VOC limit of 300 grams per liter for all consumer paint thinners and multi-purpose solvents; 2) effective January 1, 2011, established a material VOC limit of 25 grams per liter for all consumer paint thinners and multi-purpose solvents; 3) provided a sell-through period of one year for products manufactured prior to the effective date; 4) required manufacturers to provide a list of distributors and to submit annual quantity emission reports; 5) prohibited the sale of non-compliant products; 6) exempted solvents used to clean-up equipment provided they are labeled and designated for polyaspartic and polyurea coatings, and thinners labeled and designated for the thinning of specific industrial maintenance coatings; and, 7) prohibited consumer paint thinners and multi-purpose solvents that contain an excess of 0.1 percent of Group II exempt compounds as listed in SCAQMD Rule 102 – Definition of Terms, except cyclic, branched, or linear, completely methylated siloxanes. PR 1143 was estimated to reduce VOC emissions by 9.75 tons per day, with 5.94 tons per day by January 1, 2010 and then by an additional 3.81 tons per day for the final limit, effective January 1, 2011. A Draft EA for the proposed adoption of Rule 1143 was released for a 30-day public review and comment period from November 13, 2008, to December 12, 2008. Three comment letters were received from the public on the Draft EA on or before the close of the comment period of the Draft EA. In addition, one comment letter was received from the public relative to both the proposed rule and the Draft EA on December 30, 2008. After circulation of the Draft EA, a Final EA was prepared, which included the comment letters and responses to comments, and was certified by the SCAQMD Governing Board on March 6, 2009. The environmental analysis in the Final EA concluded that PR 1143 would not generate any significant adverse environmental impacts. On April 1, 2010, the Los Angeles Superior Court upheld this Final EA

against CEQA challenges raised by W.M. Barr except with respect to the issue of fire hazards. This document can be obtained by visiting the following website at:
http://www.aqmd.gov/ceqa/documents/2009/aqmd/finalEA/FEA-1143.pdf

PROJECT LOCATION

Proposed Amended Rule (PAR) 1143 would apply to manufacturers, distributors and sellers of consumer paint thinners and multi-purpose solvents located throughout the SCAQMD's jurisdiction. The SCAQMD has jurisdiction over an area of 10,473 square miles, 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) as shown in Figure 1. The Basin, which is a subarea of the district, is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The 6,745 square-mile Basin includes all of Orange County and the non-desert 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 non-attainment 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.

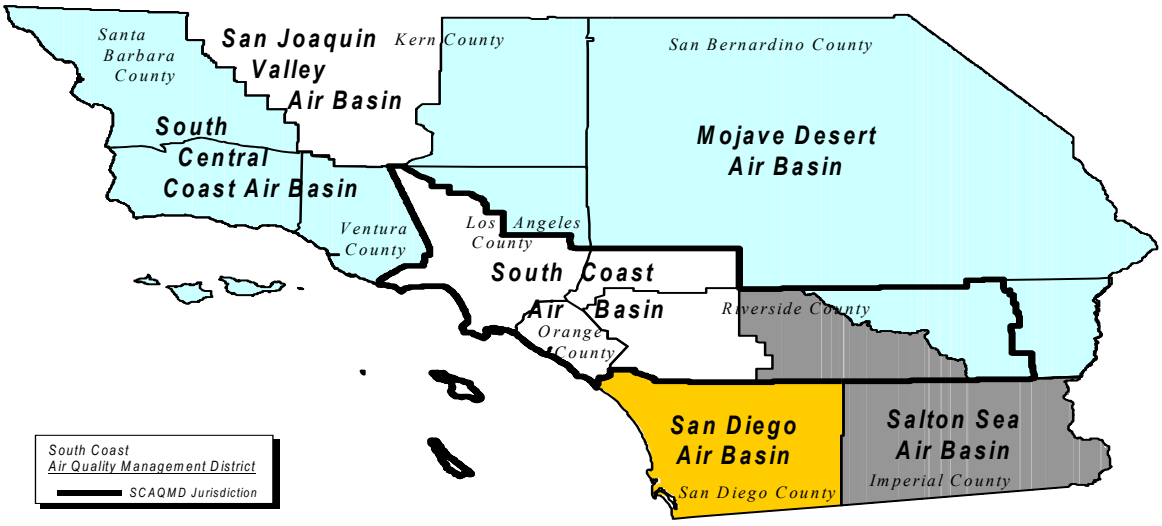

Figure 1
Boundaries of the South Coast Air Quality Management District

PROJECT OBJECTIVE

The key objectives of PAR 1143 are to:

- Re-establish the final VOC content limit for consumer paint thinners and multi-purpose solvents at 25 g/L, which is achievable using currently available low- and zero- VOC technologies from manufacturers;

- Add consumer warning requirements for all flammable and extremely flammable products;
- Add requirements to conduct a public education and outreach program in joint cooperation ~~conjunction~~ with local fire departments regarding flammable and extremely flammable products that may be included in consumer paint thinners and multi-purpose solvents;
- Clarify the intent of the exemption for thinners for industrial maintenance (IM) coatings, zinc-rich IM primers, and high-temperature IM coatings as well as clean-up solvents for polyaspartic and polyurea coatings; and,
- Make other minor corrections and clarifications.

PROJECT BACKGROUND AND INVENTORY

A "consumer product," as defined under California Health and Safety Code §41712(a)(1), is "a chemically formulated product used by household and institutional consumers, including, but not limited to, detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products, but does not include other non-aerosol paint products, furniture coatings, or architectural coatings." Consumer paint thinners and multi-purpose solvents are used for cleaning grease, oil, paint, and carbon deposits from tools, equipment, substrate pre-cleaning, thinning coatings and adhesives, and for other general cleaning purposes. The raw materials needed to formulate the paint thinners and multi-purpose solvents generally come from chemical plants and petroleum refineries. Multi-purpose solvents are available at a variety of retail outlets, including nationwide merchants like Lowe's and Home Depot, as well as smaller hardware stores. Approximately 1.2 million[4] gallons of high-VOC containing multi-purpose solvents are currently sold within SCAQMD's jurisdiction per year.

CARB has the authority to regulate certain consumer products; however, local air districts retain the authority to adopt VOC standards for any consumer product category for which CARB has not already adopted a specific standard. *See* Cal. Health & Safety Code § 41712(f). At the time that Rule 1143 was under development, CARB did not regulate consumer paint thinners and multi-purpose solvents and the SCAQMD pursued regulatory authority for this category of consumer products by adopting Rule 1143 on March 6, 2009. However, on September 24, 2009, CARB amended their Consumer Products Regulation, to also include the category of consumer paint thinners and multi-purpose solvents with mostly equivalent VOC limits but with delayed compliance dates when compared to SCAQMD's Rule 1143. Specifically, CARB's interim limit would go into effect on January 1, 2011 and the final limit would go into effect on January 1, 2014. Although CARB amended the Consumer Products Regulation on September 24, 2009, CARB has not yet adopted the amended regulation. When compared to Rule 1143, CARB included other provisions in their regulation that have statewide applicability such as a limitation of aromatic content, prohibition of the use of trichloroethylene, limiting the use of products with a global warming potential (GWP) greater than 150, and exempting small containers of paint thinner (e.g., eight fluid ounces or less). Although not part of the September 2009 amendments, CARB's Consumer Products Regulation contains an exemption for products reformulated with low vapor pressure solvents. Lastly, to address the issue of fire hazards that may result from substituting acetone for mineral spirits, CARB's regulation contains statewide labeling requirements for products with flammable and extremely flammable solvents to immediately

[4] This is based on a total inventory of 10.2 tons of VOC per day and a sales weighted average VOC content of 736 grams per liter. CARB's Initial Statement of Reasons (ISOR) for the Consumer Products Regulation also supported this VOC inventory from these sources, based on a survey conducted in 2009.

notify consumers of potential flammability issues. The labeling requirements are designed to ensure compliance with all applicable Consumer Product Safety Commission (CPSC) requirements. In addition, the regulation includes two other provisions to further reduce fire hazard risks, a three-year delayed implementation of the final limits, and a small container exemption effective during the interim limit.

SCAQMD staff inquired with CARB as to the necessity of the two other provisions to effectively mitigate the fire hazard risk. In a letter dated May 4, 2010, Janette M. Brooks, Chief of the Air Quality Measures Branch for CARB responded to that inquiry. (See Appendix B for the full letter.) Ms. Brooks explained that CARB's statewide labeling requirements were designed based on input from various fire officials to reduce the potential increased fire hazard risk associated with their regulation and if Rule 1143 was revised to include similar labeling requirements, that any increased fire hazard risk would be addressed. Ms. Brooks also noted that while these two additional provisions may have an ancillary benefit of further reducing fire hazard risks, CARB recognized that there will likely continue to be formulations that use highly flammable chemicals to meet the final limit. As a result, Ms. Brooks concluded that the labeling requirement "effectively mitigates the potential increased fire hazard risks" from the use of flammable solvents like acetone in reformulated products.

In addition, PAR 1143 goes beyond CARB's warning labeling requirements by adding requirements to conduct a public education and outreach program in conjunction with local fire departments regarding flammable and extremely flammable reformulated products. In a letter dated May 5, 2010, Steve Bunting, Division Chief, Fire Marshal for the Newport Beach Fire Department, provides his expert opinion about the fire hazard risk associated with PAR 1143. (See Appendix C for the full letter). Mr. Bunting stated that PAR 1143's incorporation of consumer warning label requirements along with a comprehensive public education and outreach program would greatly reduce any potential fire hazard risks associated with the rule such that they would be "mitigated 'to a less than significant level' …"

Based on the comments provided by Ms. Brooks and Mr. Bunting, as well as the history of relatively safe handling by consumers of currently available acetone products, SCAQMD staff believes that with both the consumer labeling and public education and outreach requirements incorporated into PAR 1143, any fire hazard concerns regarding the final VOC limit proposed in Rule 1143 are fully addressed.

Consumer p~~P~~aint thinners and multi-purpose solvents are available at a variety of retail outlets, including mass merchants like Lowe's and Home Depot, as well as smaller hardware stores. Approximately 1,212,932 gallons of high-VOC containing solvents are sold in the SCAQMD's jurisdiction each year, mostly for multi-purpose solvent use, with a small portion used to thin solvent-based paints. Prior to the adoption and implementation of Rule 1143, traditional product formulations consisted of solvents, including toluene, mineral spirits and xylene, aqueous and soy technologies (methyl esters), as well as exempt solvents such as acetone and parachlorobenzotriflouride (PCBTF). Consumer p~~P~~aint t~~T~~hinners and m~~M~~ulti-purpose s~~S~~olvents are typically sold in quart, gallon and five-gallon capacities.

Based on CARB's projected inventories from various sources, the estimated emissions from the entire consumer products category for the entire state of California, when compared to emissions inventories of other large VOC source categories, is the largest category at 245 tons of VOC per

day. Approximately 43.4 percent of the entire consumer products inventory or 106.3 tons of VOC per day is emitted within SCAQMD's jurisdiction. The 2007 AQMP estimated the inventory to be 107 tons of VOC per day by 2014 for all consumer products and 7.3 tons of VOC per day by 2014 for consumer paint thinners and multi-purpose solvents. However, a subset of the consumer products inventory from CARB's Category of Emission Sources (CES) #88047 for multi-purpose solvents estimates this portion of the VOC inventory to be slightly higher at 7.45 tons per day. In addition to the CES #88047 inventory for multi-purpose solvents, the inventories for two other CES sources, clean-up solvents (CES #92106) at 0.97 ton of VOC per day and thinning solvents (CES #92114) at 1.78 tons of VOC per day, are also included in the total inventory estimates for 2014. Thus, as summarized in Table 1, the 2014 baseline emissions for these three CES source categories are approximately 10.2 tons of VOC emissions per day. Using sales-weighted average (SWA) VOC emissions of 736 g/L, the adoption of Rule 1143 was estimated to reduce VOC emissions from the regulated substances by approximately 9.75 tons per day in 2014.

Table 1
Usage and Emissions of Consumer Paint Thinners and Multi-Purpose Solvents

Description	CES #	Daily Usage (gal/day)	Annual Usage* (gal/year)	VOC Emissions (tons/day)
Multi-purpose solvent	88047	2,426.7	885,746	7.45
Clean-up solvents	92106	315.6	115,194	0.97
Thinning solvents	92114	580.8	211,992	1.78
	TOTAL	**3,323**	**1,212,932**	**10.20**

* Annual usage is based on 365 days per year.

By implementing the court's decision and going forward with rulemaking efforts to rescind the final 25 g/L VOC limit at the June 4, 2010 Governing Board meeting, 3.81 tons per day of VOC emission reductions were ~~would be~~ temporarily foregone. However, by re-establishing the final 25 g/L VOC limit in PAR 1143 at the July 9, 2010 Governing Board meeting, these foregone reductions will be regained. Because the final 25 g/L VOC limit was not meant to take effect until January 1, 2011, these actions will not net any real VOC emissions foregone provided that PAR 1143 is ~~both rulemaking efforts are~~ approved by the SCAQMD Governing Board.

COMPLIANT TECHNOLOGIES

The following subsections identify potential compliant technologies that may be used to formulate compliant products.

Clean Air Solvents Program

By definition, a consumer product is a chemically formulated product used by household and institutional consumers. Unlike industrial facilities, consumers are unable to install air pollution control technologies to collect and destroy air pollutant emissions. As a result, reducing VOC emissions from solvents and thinners is expected to rely solely on reformulating these products with low VOC or exempt solvents. Solvents used to reformulate compliant products are described in the next subsection.

As part of implementing SCAQMD Rule 1171 – Solvent Cleaning Operations[5], the SCAQMD developed the Clean Air Solvent (CAS) program to highlight ultra-low VOC technologies, as well as provide a marketing tool for the manufacturers of these ultra-low VOC products. Information on the SCAQMD's CAS program can be found at the following website: http://www.aqmd.gov/rules/cas/index.html. In order to qualify for CAS certification the following criteria must be met:

1. VOC concentration is no more than 25 grams of VOC per liter of material, as applied;
2. Composite vapor pressure is no more than 5 mm Hg of VOC at 20°C (68° F);
3. Reactivity is not higher than toluene; and,
4. The product contains no compounds classified as either: a) a hazardous air pollutant (HAP) by the federal Clean Air Act; b) an ozone-depleting compound (ODC); or, c) a global warming compound (GWC).

Manufacturers, suppliers, and users can apply for certification of products that meet these CAS qualifications. The certification is valid for five years and can be renewed upon approval by the SCAQMD. The most common and effective cleaners that meet the CAS criteria are water-based or aqueous cleaners that contain little or no VOCs, although other options such as VOC-exempt or soy-based compounds are also available.

Even though the CAS certification program was originally developed in association with Rule 1171, many of the solvent technologies from the CAS certification program can be used as consumer paint thinners and multi-purpose solvents under PAR 1143. Specifically, there are 171 certified CAS solvents to date and 102 of these products can be used in the consumer market for compliance with PAR 1143. The CAS product list is frequently reviewed and updated to reflect any new findings, especially those that may be directly applicable to the products that would be subject to PAR 1143 requirements. In addition, 62 other products have been identified that meet the proposed final VOC limits, but are currently not certified under the CAS program.

Low VOC and Exempt Solvents Expected to be Used to Formulate Compliant Products

The following categories of low- and zero-VOC technologies may be able to achieve a VOC material final emission limit of 25 g/L or less and also comply with PAR 1143's interim VOC emission limit of 300 g/L: 1) aqueous solvents; 2) exempt solvents and any blend of exempt solvents; and, 3) bio-based solvents for lowering the volatility of exempt solvents. A brief description of each category is provided.

Aqueous Cleaners

On the open market, there are many aqueous-based (i.e. water-based or waterborne) cleaners currently available for use; several have been certified by the SCAQMD's CAS certification program. Further, many manufacturers have developed waterborne products that already meet the lower VOC limits. Many of these waterborne products, especially coatings, do not require thinning, and are typically supplied as "ready to use." For some spray applications under certain climatic conditions, there are some waterborne coatings that can be thinned, but water, not conventional solvent, would be used as the thinning agent. Further, aqueous

[5] Rule 1171 limits the VOC content of most cleaning solvents to 25 grams per liter or less.

cleaners, not solvent-based cleaners, would be used to clean~~ed~~ waterborne coatings and other water-based products.

Exempt Solvent: Acetone

Acetone is currently listed as a Group I exempt solvent pursuant to SCAQMD Rule 102. Acetone was originally "delisted" as a VOC by the EPA in 1995. Acetone is a colorless, highly volatile liquid that has a fragrant, mint-like odor. Common uses for acetone are nail polish removers and for thinning paint. It has a high solvent strength greater than the other types of solvents, except for xylene, which has a similar solvent strength. Acetone is widely available at retail stores that sell solvents.

Exempt Solvent: Methyl Acetate

Methyl acetate is not a VOC as it is currently listed as a Group I exempt solvent pursuant to SCAQMD Rule 102. Methyl Acetate, also known as acetic acid~~,~~ methyl ester or methyl ethanoate, is a colorless liquid with a fragrant, fruity odor. Methyl acetate is commonly used as a solvent in adhesives and nail polish removers.

Exempt Solvent: Parachlorobenzotrifluoride

Parachlorobenzotrifluoride (PCBTF) is not a VOC as it is currently listed as a Group I exempt solvent pursuant to SCAQMD Rule 102. PCBTF is a colorless liquid with a distinct aromatic odor and is distributed under the brand name "Oxsol." PCBTF is often used in the printing industry to dissolve ink, but may also used as a cleaning solvent and paint thinner for other industries. Oxsol 100 and Oxsol 300 are used in the automotive industry for parts washing as a compliant replacement for Stoddard solvent.

Bio-Based Solvents

Several manufacturers have already formulated cleaning solvents using bio-based solvents or methyl esters via soy-, coconut- and rapeseed-based formulations. Several of these products have been certified pursuant to the SCAQMD's CAS program and are currently available on the open market. Methyl esters can be used in solvent-based coatings because they are miscible in solvent. However, methyl esters are not miscible in waterborne products. Methyl esters also mix well with acetone and have been used to formulate blends so that the VOC material content is at or below 25 g/L and the overall volatility is reduced.

Table 2 contains a list of VOC-based products that meet the current interim 300 g/L VOC material limit for both waterborne and solvent-based coatings and are currently sold at several suppliers.

Table 2
Currently Available Thinners and Reducers That Meet The 300 g/L VOC Limit

MANUFACTURER	PRODUCT DESCRIPTION	PRODUCT CHEMISTRY	VOC (g/L)
NON-ACETONE CONTAINING THINNERS:			
WM Barr	Klean Strip KS Pro Paint Thinner (1691.3)	Hydrotreated Light Distillate 30-40%	326*
WM Barr	Klean Strip KS Pro Paint Thinner (1691.4)	Hydrotreated Light Distillate 15-40%	300
Packaging Service Co., Inc.	Crown Paint Thinner NEXT	30-40% Petroleum Distillate	254.4
RecoChem Inc.	Renew Paint Thinner	14-40% Solvent Naphtha, Heavy Aliphatic	330*
WM Barr Co.	Klean Strip Green Safer Paint Thinner (1691.4E)	30-40% Hydrotreated Light Distillate	300
ACETONE CONTAINING THINNERS:			
WM Barr	Klean Strip Green Lacquer Thinner (6005.4)	Acetone 40-70%	295.0

*Products that can be reformulated and are within the VOC test error.

Table 3 contains a list of some of the low-VOC paint thinners that have been formulated to meet the proposed 25 g/L VOC final material limit for both waterborne and solvent-based coatings and are currently available from several suppliers. These products are expected to be used to comply with PAR 1143. The thinners and reducers identified in Table 3 are divided in two sections: the first section lists the non-acetone containing thinners and the second section summarizes acetone-containing thinners. It is important to note that several of the acetone-containing formulations identified also contain PCBTF, which has a flash point of 109°F, similar to mineral spirits used in traditional paint thinners.

Table 3
Currently Available Thinners and Reducers That Meet The 25 g/L VOC Limit

MANUFACTURER	PRODUCT DESCRIPTION	PRODUCT CHEMISTRY	VOC (g/L)
NON-ACETONE CONTAINING THINNERS:			
Carboline Company	**236 E Thinner**	**< 100% PCBTF**	**0**
Deft Finishes	**VOC Exempt Reducer IS-256**	**60-100% PCBTF**	**0**
Ellis Paint Company	78 Co-Solvent Low-VOC	2-Butoxyethanol, n-propyl Alcohol	25
Pacific Coast Lacquer	1720B Compliant Waterborne Cleaning Solution	PropGlycolMonomethylEther, n-Prop Alcohol	24
Sunnyside Corporation	Green Envy Paint Thinner	< 5% PCBTF/H2O	19
ACETONE CONTAINING THINNERS:			
Carboline Company	225 E Thinner	< 100% Acetone	0
Carboline Company	**243 E Thinner**	**↑55% PCBTF, ↑55% Acetone**	**0**
Deft Finishes	**VOC Exempt Reducer IS-276**	**60-80% PCBTF, 10-30% Acetone**	**0**
Ellis Paint Company	2040 NOVOC Compliant Universal Solvent	80% Acetone, 20% Methyl Acetate	5
Ellis Paint Company	80/20 Zero VOC Exempt Solvent	80% Acetone, 20% Methyl Acetate	5
Ellis Paint Company	70 Acetone	100% Acetone	0
M.L. Campbell	VC 1681 Medium Reducer, VOC Exempt	70% Acetone, 30% PCBTF	0
M.L. Campbell	**VC 1671 Slow Retarder, VOC Exempt**	**70% PCBTF, 30% Acetone**	**0**
M.L. Campbell	VC16936 Fast Reducer, VOC Exempt	100% Acetone	0
Pacific Coast Lacquer	2040 NOVOC Compliant Universal Solvent	80% Acetone, 20% Methyl Acetate	0
Pacific Coast Lacquer	**8050 Medium Universal Solvent**	**50% PCBTF, 50% Acetone**	**0**
Pacific Coast Lacquer	**8075 Slow Universal Exempt Reducer**	**75% PCBTF, 25% Acetone**	**0**
Pacific Coast Lacquer	2010 Acetone	100% Acetone	0
Packaging Service Co., Inc.	Crown Acetone	99-100% Acetone	0
Packaging Service Co., Inc.	LVLT01 Crown NEXT Lacquer Thinner	85-95% Acetone, 5% Soy	0
PPG	Acetone CP	Acetone	0
Rust-Oleum	2400 Thinner	< 100% Acetone	0
Rust-Oleum	VOC Compliant Thinner	< 100% Acetone	0

Note: All formulations using ≥ 50% PCBTF are in bold type

PROJECT DESCRIPTION

Rule 1143 applies to consumer paint thinners and multi-purpose solvents offered for sale and use within the district by manufacturers, suppliers, distributors and retailers and would limit the VOC content of these products available for purchase by consumers. The following summarizes the proposed amendments. A copy of PAR 1143 is included in Appendix A.

Definitions

For clarity and consistency within PAR 1143, the definitions of "consumer," "multi-purpose solvents," and "paint thinners" are proposed for deletion, and instead, definitions of "consumer multi-purpose solvents," "consumer paint thinners," "manufacturer," "responsible party," and "VOC content" are proposed to be added.

Requirements

PAR 1143 contains a proposal to re-establish the final limit of the VOC content of consumer paint thinners and multi-purpose solvents at 25 g/L of material which is equivalent to 0.21 lb/gal of material after any dilution effective January 1, 2011. In addition, PAR 1143 contains a clarification regarding the intent of the prohibition of sale as it applies to a manufacturer that sells to an independent distributor.

Administrative Requirements

To alert consumers about flammable or extremely flammable reformulations that may result from implementing Rule 1143, PAR 1143 prohibits flammable or extremely flammable paint thinners or multi-purpose solvents from being named on the principal display panel as paint thinner, multi-purpose solvent, clean-up solvent or paint clean-up when sold, offered for sale, supplied or manufactured, unless any ~~either~~ of the following criteria are met: 1) the product includes a hang tag or sticker with the statement "Formulated to meet low ~~California~~ VOC limits; see warnings on label;" 2) the product includes a hang tag or sticker with the statement that the product has been "Formulated to meet low VOC limits with [the common name of the chemical compound (e.g., 'Acetone,' 'Methyl Acetate,' etc) that results in the product meeting the criteria for 'Flammable,' or 'Extremely Flammable']; 3) the product includes a hang tag as a second principal display panel with the statement that the product has been "Formulated to meet low VOC limits" placed adjacent to and associated with the required CPSC warning; 4) the product's principal display panel contains the statement placed adjacent to and associated with the required CPSC warning that the product has been "Formulated to meet low VOC limits", in the same font size or larger as the principal display panel product name~~or,~~ 5~~2~~) the product labeling identifies the common name of the chemical compound that meets the flammable or extremely flammable criteria, in the same font size or larger as the principal~~e~~ display panel product name; or, 6) the product label meets the labeling requirements in CARB's Consumer Product Regulation as specified in Title 17, CCR, §94512(e), as adopted. Most of t~~T~~hese~~is~~ labeling requirements were ~~was~~ developed by CARB in conjunction with representatives from the CPSC and various fire officials to inform the end-user ~~address the potential fire hazard impacts resulting from~~ of the potential substitution of more flammable acetone or methyl acetate for less flammable mineral spirits in complying with the low ~~CARB~~ VOC limits. None of these labeling or notice requirements will preclude the use of any additional labeling or notice for consumer education.

PAR 1143 includes criteria to define what would make a product flammable or extremely flammable. PAR 1143 also includes requirements that the product container label display the VOC content of the product and that all product information is displayed on the container in a readily observable manner, without having to remove or disassemble any portion of the container or packaging. PAR 1143 also contains prohibitions to prevent the removal, alteration, concealment or defacement of product labeling and display information as required by this part.

The above administrative requirements are similar ~~identical~~ to those approved in CARB's consumer products regulation but with additional options to address the same potential fire hazard risk to consumers.

Lastly, in addition to CARB's consumer labeling and warning requirements, by November 30, 2010, PAR 1143 requires the SCAQMD's Executive Officer to ~~continue~~ conduct~~ing~~, in conjunction with the changes in the VOC content limits~~local fire departments~~, a public education and outreach program for flammable and extremely flammable products that will be available to consumers as a result of implementing Rule 1143. SCAQMD staff will work with local fire departments to develop a public education and outreach program that will include the following: 1) create public service announcements in both English and Spanish, to be aired on television and radio from October 2010 to January 2012; 2) conduct retailer training of retailers in November 2010, including big box retailers at their corporate headquarters, so that they may alert consumers about the potential changes; 3) disseminate 25,000 hardcopy brochures in several languages from November 2010 to January 2012; 4) create alerts via Twitter; and, 5) place electronic versions of the hardcopy brochures and the public service announcements on SCAQMD, CARB, YouTube, local fire department and local city websites. In addition, the Executive Officer of the SCAQMD will report the status of the public education and outreach program to the Stationary Source Committee in November, 2010 and November, 2011. Lastly, if additional consumer education is needed, the Executive Officer may extend the public education and outreach program beyond January 2012.

Information Exempt From Disclosure

PAR 1143 contains a proposed name change and clarification to subdivision (h) from "Confidentiality of Information" to "Information Exempt From Disclosure" to be consistent with the District Guidelines that implement the California Public Records Act.

Exemptions

PAR 1143 contains labeling requirements for products used exclusively for thinning industrial maintenance (IM) coatings, Zinc-Rich IM primers, and high temperature IM coatings as well as clean-up solvents for polyaspartic and polyurea coatings. To address instances of circumvention identified by CARB and the SCAQMD, PAR 1143 clarifies that the exemption for this type of thinner does not apply to any product used for clean-up operations or making any additional use claims on the label or any other product literature.

Severability

PAR 1143 contains new subdivision (k) to address severability in the event that any provision of the rule is held by judicial order to be invalid, or invalid or inapplicable to any person or circumstance. If any of these events occur, the judicial order shall not affect the validity of the remainder of PAR 1143, or the validity or applicability of such provision to other persons or circumstances. In the event any of the exceptions to PAR 1143 are held by judicial order to be invalid, the persons or circumstances covered by the exception shall instead be required to comply with the remainder of PAR 1143.

FIRE HAZARD IMPACTS

Of the proposed changes in PAR 1143, only the re-establishment of the final VOC limit of 25 grams per liter of material (0.21 pounds per gallon of material) beginning January 1, 2011 for consumer paint thinners and multi-purpose solvents will result in physical changes that would require an environmental analysis. Specifically, re-establishment of the final VOC limit in PAR 1143 is estimated to reduce VOC emissions by 3.81 tons per day. Compliance with this final VOC limit is based on the assumption that new formulations of paint thinners and multi-purpose

solvents would be made with replacement solvents to comprise products such as those listed in Table 3. However, because of the low cost of acetone, it is likely that the majority of reformulated products will be acetone-based. As a result, with increased availability and access, consumers may use more acetone-based thinners as opposed to currently available mineral spirit-based thinners. This Final ~~Draft~~ Supplemental EA has been prepared in response to the ruling by the Los Angeles Superior Court that the original Final EA did not sufficiently analyze fire risk impacts to consumers from using products that comply with the 25 g/L VOC content limit requirement. To address the narrow issue identified by the Court, the SCAQMD has identified the following significance criterion:

Fire Hazards Significance Criterion
Impacts associated with fire hazards will be considered significant if the project will create a significant fire hazard to the public through the increased use of extremely flammable materials by consumers.

Hazard Safety Regulations
A number of physical or chemical properties may cause a substance to be a fire hazard. With respect to determining whether any conventional or replacement solvent is a fire hazard, each Material Safety Data Sheet (MSDS) has also been consulted for the National Fire Protection Association 704 flammability hazard rating system (i.e. NFPA 704). NFPA 704 is a "standard (that) provides a readily recognized, easily understood system for identifying flammability hazards and their severity using spatial, visual, and numerical methods to describe in simple terms the relative flammability hazards of a material[6]. However, there are limitations to the NFPA 704 rating system.

Because several substances can have the same NFPA 704 Flammability Ratings Code, other factors can make each substance's fire hazard very different from each other. For example, all but one of the conventional solvents and all but one of the replacement solvents are designated as "highly flammable with an NFPA Flammability Ratings Code of "3" and yet all of these solvents have varying fire hazard risks. For this reason, additional chemical characteristics, such as auto-ignition temperature, boiling point, evaporation rate, flash point, lower explosive limit (LEL), upper explosive limit (UEL), and vapor pressure, are also considered when determining whether a substance is fire hazard. The following is a brief description of each these chemical characteristics.

Auto-ignition Temperature: The auto-ignition temperature of a substance is the lowest temperature at which it will spontaneously ignite in a normal atmosphere without an external source of ignition, such as a flame or spark.

Boiling Point: The boiling point of a substance is the temperature at which the vapor pressure of the liquid equals the environmental pressure surrounding the liquid. Boiling is a process in which molecules anywhere in the liquid escape, resulting in the formation of vapor bubbles within the liquid.

[6] National Fire Protection Association, FAQ for Standard 704. http://www.nfpa.org/faq.asp?categoryID=928&cookie%5Ftest=1#23057

Evaporation Rate: Evaporation rate is the rate at which a material will vaporize (evaporate, change from liquid to a vapor) compared to the rate of vaporization of a specific known material. This quantity is a represented as a unitless ratio. For example, a substance with a high evaporation rate will readily form a vapor which can be inhaled or explode, and thus have a higher hazard risk. Evaporation rates generally have an inverse relationship to boiling points, (i.e., the higher the boiling point, the lower the rate of evaporation).

Flash Point: Flash point is the lowest temperature at which a volatile liquid can vaporize to form an ignitable mixture in air. Measuring a liquid's flash point requires an ignition source. At the flash point, the vapor may cease to burn when the source of ignition is removed. There are different methods that can be used to determine the flashpoint of a solvent but the most frequently used method is the Tagliabue Closed Cup standard (ASTM D56), also known as the TCC. The flashpoint is determined by a TCC laboratory device which is used to determine the flash point of mobile petroleum liquids with flash point temperatures below 175 °F (79.4 °C).

Lower Explosive Limit (LEL): The lower explosive limit of a gas or a vapor is the limiting concentration (in air) that is needed for the gas to ignite and explode or the lowest concentration (percentage) of a gas or a vapor in air capable of producing a flash of fire in presence of an ignition source (e.g., arc, flame, or heat). If the concentration of a substance in air is below the LEL, there is not enough fuel to continue an explosion. In other words, concentrations lower than the LEL are "too lean" to burn. For example, methane gas has a LEL of 4.4 percent (at 138 degrees Centigrade) by volume, meaning 4.4 percent of the total volume of the air consists of methane. At 20 degrees Centrigrade, the LEL for methane is 5.1 percent by volume. If the atmosphere has less that 5.1% methane, an explosion cannot occur even if a source of ignition is present. When the concentration of methane reaches 5.1 percent, an explosion can occur if there is an ignition source.

Upper Explosive Limit (UEL): The upper explosive limit of a gas or a vapor is the highest concentration (percentage) of a gas or a vapor in air capable of producing a flash of fire in presence of an ignition source (e.g., arc, flame, or heat). Concentrations of a substance in air above the UEL are "too rich" to burn.

Vapor Pressure: Vapor pressure is an indicator of a chemical's tendency to evaporate into gaseous form.

Flash point is a particularly important measure of the fire hazard of a substance. For example, the Consumer Products Safety Commission (CPSC) promulgated Labeling and Banning Requirements for Chemicals and Other Hazardous Substances in 15 U.S.C.§1261 and 16 CFR Part 1500. Per the CPSC, the flammability of a product is defined in 16 CFR Part 1500.3 (c)(6) and is based on flash point. For example, a liquid needs to be labeled as: 1) "Extremely Flammable" if the flash point is below 20 ^{o}F; 2) "Flammable" if the flash point is above 20 ^{o}F but less than 100^{o}F; or, 3) "Combustible" if the flash point is above 100 ^{o}F up to and including 150 ^{o}F

Fire Hazards of Cleaners and Solvents

Of the amendments proposed for PAR 1143, only the re-establishment of the 25 g/L VOC material content limit for consumer paint thinners and multi-purpose solvents would potentially result in physical changes, though PAR 1143 does not dictate the creation or use of any particular product formulation. Since there are many different product manufacturers and formulations of paint thinners and multi-purpose solvents, as well as many different applications or uses, the specific chemical composition of all potential reformulated products is not known.

There are some compliant products in Table 3 that have already been reformulated with flammable or extremely flammable substances. Thus, the proposed project is expected to result in the use of formulations that could potentially pose fire hazard risks. In addition, there are potential replacement solvents such as aqueous or water-based cleaning solvents, bio-based solvents, and methyl esters that are also currently available and that are expected to be developed to comply, not only with PAR 1143, but with other rules that regulate VOC emissions through solvent reformulations. These products can or are expected to be used as replacements but they do not have flammability concerns. For these reasons, the following analysis will focus on the fire hazard risks of the products reformulated with flammable or extremely flammable substances.

Commonly used products that would likely be replaced include, for example, denatured alcohol (ethanol), methyl ethyl ketone (MEK), mineral spirits (Stoddard solvent), toluene, xylene, and varnish maker's and painter's (VMP) naphtha. These materials are all flammable, with mineral spirits being the least flammable of the group, and are typically sold to the consumer in quart, gallon and five-gallon containers.

Based upon currently available information, the primary replacement solvents are expected to be acetone, methyl acetate or PCBTF. All three of these solvents are listed as Group I exempt solvents in SCAQMD Rule 102. Acetone and methyl acetate are extremely flammable, while PCBTF is combustible with a flash point similar to mineral spirits. For the purpose of conducting a worst-case analysis, it is assumed that products compliant with PAR 1143 would be formulated by using these Group I exempt compounds to replace many organic solvents currently used as paint thinners and multi-purpose solvents[7].

Flammability Characteristics of Conventional Solvents and Potential Replacement Solvents

Table 4 contains a summary of these conventional solvents in use today and potential replacement solvents that may be used or are already in use to comply with PAR 1143 along with each solvent's chemical characteristics as they pertain to flammability. Of the solvents listed in Table 4, acetone and PCBTF are the only solvents qualified as both currently used conventional solvents as well as potential replacement solvents. Acetone, because of its low cost and its exemption as a VOC, and also because it is currently used in multipurpose cleaning solvents in a variety of settings including industrial, institutional, and commercial applications, is expected to be the most widely used component of potential replacement products developed for PAR 1143 compliance.

[7] Note that PAR 1143 contains a general prohibition against the sale, manufacture, blend or repackage of any consumer paint thinner or multi-purpose solvent that contains in excess of 0.1 percent by weight of most Group II exempt compounds (e.g., toxic or ozone-depleting substances) listed in SCAQMD Rule 102.

Like the conventional solvents listed, the three solvents identified here as compliant replacement solvents, have fire hazard issues. This is especially true for acetone and methyl acetate which are both extremely flammable and both have very low flash points when compared to the other solvents. When compared to acetone and methyl acetate, PCBTF, which is classified as combustible, poses a lesser degree of fire hazard because it has similar flash point as mineral spirits. The following is a description of each solvent's flammability information. This information was extracted from the material safety data sheet (MSDS) of each product.

Conventional Solvents

Consumer paint thinners and multi-purpose solvents are used for cleaning grease, oil, paint, and carbon deposits from tools, equipment, substrate pre-cleaning, thinning coatings and adhesives, and for other general cleaning purposes. The raw materials needed to formulate the paint thinners and multi-purpose solvents generally come from chemical plants and petroleum refineries. Multi-purpose solvents are available at a variety of retail outlets, including nationwide chain home improvement retail stores, as well as smaller hardware stores. Approximately 1.2 million[8] gallons of high-VOC containing multi-purpose solvents are currently sold within SCAQMD's jurisdiction per year.

The following subsections provide brief summaries of the physical and chemical properties of commonly used solvents currently used for cleaning and thinners available.

Acetone

Acetone is a colorless, highly volatile liquid that has a fragrant, mint-like odor. It is a manufactured chemical that is also found naturally in the environment. It occurs naturally in plants, trees, volcanic gases, forest fires, and as a product of the breakdown of body fat. It is present in vehicle exhaust, tobacco smoke, and landfill sites. Acetone is used to make plastic, fibers, drugs, and other chemicals. It is also used to dissolve other substances. Industrial processes contribute more acetone to the environment than natural processes. Common uses for acetone are nail polish removers and for thinning paint. It has a high solvent strength greater than the other types of solvents, except for xylene, which has a similar solvent strength. Acetone is widely available at retail stores that sell solvents.

1. As a VOC: Acetone is currently listed as a Group I exempt VOC pursuant to SCAQMD Rule 102 – Definition of Terms, because it does not contribute appreciably to ozone formation. Acetone was originally "delisted" as a VOC by the EPA in 1995.

2. Flammability: Acetone has the lowest flash point, -4 ^{o}F (below freezing), and is the most flammable of all the solvents considered in PAR 1143. Acetone, along with the majority of the other solvents except for mineral spirits and PCBTF, is rated "three" for flammability by the NFPA which means that it is considered to be highly flammable. However, because of the ultra-low flash point, labeling requirements pursuant to the CPSC classifies acetone as "extremely flammable."

[8] This is based on a total inventory of 10.2 tons of VOC per day and a sales weighted average VOC content of 736 grams per liter. CARB's Initial Statement of Reasons (ISOR) for the Consumer Products Regulation also supported this VOC inventory from these sources, based on a survey conducted in 2009.

Table 4
Chemical Characteristics of Conventional and Potential Replacement Solvents

Conventional Solvents								
Chemical Compound	**Auto-ignition Temperature (^{o}C)**	**Boiling Point (@760 mmHg, ^{o}F)**	**Evaporation Rate @25 ^{o}C** (Butyl Acetate = 1)	**Flash Point (^{o}F)**	**LEL/UEL [a] (% by Vol.)**	**Vapor Pressure (mmHg @ 20 ^{o}C)**	**NFPA Flammability Rating [b]**	**Labeling Requirement per CPSC[c]**
Acetone	538	56	6.1	-4	2.6/12.8	180	3	Extremely Flammable
Denatured Alcohol (Ethanol)	435	78	2.3	56	3.3/19	44	3	Flammable
Isopropyl Alcohol	399	180	2.3	53	2/12.7	33	3	Flammable
Lacquer Thinner [d]	238	212.6	2.7	7.4	2/18.4	97.7	3	1. Extremely Flammable 2. Special Hazards Labeling per 16 CFR Part 1500.14 (a)(3), (a)(4), (b)(3) & (b)(4)
MEK	474	80	4.0	16	1.8/11.5	8.7	3	Extremely Flammable
Mineral Spirits (Stoddard)	232	154-188	0.1	109-113	1.0 / 7	1.1	2	1. Combustible 2. Special Hazards Labeling per 16 CFR Part 1500.14 (a)(3) & (b)(3)
Paint Thinner [e]	229	299.6	1.4	81 - 117	1.0 / 7.3	2	3	1. Flammable if Flash Point < 100 ^{o}F or Combustible if Flash Point > 100^{o}F 2. Special Hazards Labeling per 16 CFR Part 1500.14 (a)(3) & (b)(3)
PCBTF [f]	>500	282	0.9	109	0.9/10.5	5.3	1	Combustible
Toluene	538	111	2.0	41	1.3 / 7	22	3	1. Flammable 2. Special Hazards Labeling per 16 CFR Part 1500.14 (a)(3) & (b)(3)
Turpentine	253	323.7	0.7	94.3	0.8/ n/a	5	3	1. Flammable 2. Special Hazards Labeling per 16 CFR Part 1500.14 (a)(5) & (b)(5)
VM&P Naphtha	288	266.9	1.2	53.1	1.2/6	20	3	1. Flammable 2. Special Hazards Labeling per 16 CFR Part 1500.14 (a)(3) & (b)(3)
Xylene	499	139	0.8	81	1.0/6.6	6	3	1. Flammable 2. Special Hazards Labeling per 16 CFR Part 1500.14 (a)(3) & (b)(3)

Table 4 (concluded)
Chemical Characteristics of Conventional and Potential Replacement Solvents

Potential Replacement Solvents								
Chemical Compound	**Auto-ignition Temperature (^{o}C)**	**Boiling Point (@760 mmHg, ^{o}F)**	**Evaporation Rate @25 ^{o}C** (Butyl Acetate = 1)	**Flash Point (^{o}F)**	**LEL/UEL [a] (% by Vol.)**	**Vapor Pressure (mmHg @ 20 ^{o}C)**	**NFPA Flammability Rating [b]**	**Labeling Requirement per CPSC[c]**
Acetone	538	56	6.1	-4	2.6/12.8	180	3	Extremely Flammable
Methyl Acetate	501	56	5.3	15	3/16	171	3	Extremely Flammable
PCBTF [f]	> 500	282	0.9	109	0.9/10.5	5.3	1	Combustible

[a] Lower Explosive Limit / Upper Explosive Limit

[b] NFPA Flammability Rating: 0 = Not Combustible; 1 = Combustible if heated; 2 = Caution: Combustible liquid flash point of 100^{o} to 200^{o}F; 3 = Warning: Flammable liquid flash point below 100^{o}F; 4 = Danger: Flammable gas or extremely flammable liquid

[c] The Consumer Products Safety Commission (CPSC) has Labeling and Banning Requirements for Chemicals and Other Hazardous Substances which are located in 15 U.S.C.§1261 and 16 CFR Part 1500. Specifically, the flammability of a product is defined in 16 CFR Part 1500.3 (c)(6) and is based on flash point. For example, a flammable liquid needs to be labeled as: 1) "Extremely Flammable" if the flash point is below 20 ^{o}F; 2) "Flammable" if the flash point is above 20 ^{o}F but less than 100^{o}F; or, 3) "Combustible" if the flash point is above 100 ^{o}F up to and including 150 ^{o}F.

[d] Lacquer thinner is manufactured from petroleum distillates and blended with other solvents, such as xylene, toluene, isopropyl alcohol, acetone, methanol, and light aliphatic solvent naphtha. Exact blending ratios vary widely.

[e] While paint thinner is predominantly referred to as "mineral spirits" or "stoddard solvent" (listed elsewhere in this table, paint| thinner is broadly described as being manufactured from petroleum distillates and can be a blend of multiple solvents, including but not limited to, mineral spirits, naphtha, nonanes (mixture), 1,2,4-trimethyl benzene, ethyl benzene, diacetone alcohol, n-butyl acetate, methyl isobutyl ketone, cumene and xylene.

[f] Source: OxyChem Specialty Business Group

Denatured Alcohol

Denatured alcohol, also referred to as ethanol or ethyl alcohol, is used as a solvent and in making many commercial products. Denatured alcohol is a colorless liquid and has a strong odor of ethanol. The term "denatured" means that an additive has been mixed into the alcohol to make the taste unpleasant and toxic to human health so that it will not be consumed as a beverage. Typical additives are methanol, isopropyl alcohol, acetone, methyl ethyl ketone, methyl isobutyl ketone. Denatured alcohol is an ethanol that can be used as a solvent for cleaning and in some cases, thinning. It can also be used as an aid for sanding wood. Denatured alcohol has a high VOC content and can be found for sale at most hardware stores.

1. As a VOC: Denatured alcohol has a high VOC material content that ranges from 791 g/L to 815 g/L.

2. Flammability: Denatured alcohol has a flash point of 56^{o}F so at typical ambient temperatures, denatured alcohol is considered flammable. Other solvents with a similar flash point are isopropyl alcohol and VM&P Naphtha. In addition, denatured alcohol is rated "three" for flammability by the NFPA which means that it is considered to be highly flammable. Lastly, the CPSC classifies denatured alcohol as flammable.

Isopropyl Alcohol

Isopropyl alcohol (IPA), also referred to as isopropanol, isopro, and rubbing alcohol, is a colorless liquid with a strong odor. IPA is a widely used solvent for medical and industrial applications because it sanitizes the treated area and dries rapidly. For industrial applications, IPA is commonly used to clean electronic circuits and electronic devices. IPA can be found for sale at hardware and drugstores stores.

1. As a VOC: IPA has a high VOC material content that ranges from 787 g/L to 815 g/L.

2. Flammability: IPA has a flash point of 53^{o}F so at typical ambient temperatures, denatured alcohol is considered flammable. Other solvents with a similar flash point are denatured alcohol and VM&P Naphtha. In addition, IPA is rated "three" for flammability by the NFPA which means that it is considered to be highly flammable. Lastly, the CPSC classifies IPA as flammable.

Lacquer Thinner

Lacquer thinner is manufactured from petroleum distillates and blended with other solvents; it offers similar properties as toluene but costs less. Lacquer thinner is mainly used as a thinning agent for nitrocellulose and acrylic lacquers, but can also be used as thinners for epoxies, automotive paint and gravure printing inks.

1. As a VOC: Lacquer thinner has a high VOC material content that ranges from 739 g/L to 850 g/L.

2. Flammability: Lacquer thinner has the second lowest flash point, 7.4 ^{o}F (below freezing), and as such, is the second most flammable when compared to acetone of all the solvents considered in PAR 1143. Lacquer thinner, along with the majority of the

other solvents except for mineral spirits and PCBTF, is rated "three" for flammability by the NFPA which means that it is considered to be highly flammable. However, because of the ultra-low flash point, labeling requirements pursuant to the CPSC classifies lacquer thinner as "extremely flammable."

Methyl Ethyl Ketone

Methyl ethyl ketone (MEK), also known as butanone, is a manufactured organic solvent and has a butterscotch odor similar to acetone. MEK is an effective solvent because of its ability to dissolve gums, resins, cellulose acetate and nitrocellulose coatings.

The primary use of methyl ethyl ketone (MEK), accounting for approximately 63 percent of all use, is as a solvent in protective coatings. It is also used as a solvent in printing inks, paint removers, and other cleaning products; in the production of magnetic tapes; and in dewaxing lubricating oil. MEK is used as a chemical intermediate in several reactions, including condensation, halogenation, ammonolysis, and oxidation. Small amounts of MEK are also used as a sterilizer for surgical instruments, hypodermic needles, syringes, and dental instruments; as an extraction solvent for hardwood pulping and vegetable oil; and as a solvent in pharmaceutical and cosmetic production.

1. As a VOC: MEK has a high VOC material content that ranges from 803 g/L to 810 g/L.

2. Flammability: MEK has the fourth lowest flash point, 16 ^{o}F (below freezing) when compared to acetone, and as such, is the fourth most flammable of all the solvents considered in PAR 1143. MEK, along with the majority of the other solvents except for mineral spirits and PCBTF, is rated "three" for flammability by the NFPA which means that it is considered to be highly flammable. However, because of the ultra-low flash point, labeling requirements pursuant to the CPSC classifies MEK as "extremely flammable."

Mineral Spirits

Mineral spirits, also known as Stoddard solvent, is a petroleum distillate that is used to remove oils, grease, and carbon and is added to thread cutting oils as a cleaning agent. Mineral spirits can be further refined so that the aromatics are removed which results in a product called "odorless" mineral spirits. Odorless mineral spirits are favored for oil painting because they are less toxic and do not emit strong odors like unrefined mineral spirits.

1. As a VOC: Mineral spirits has a high VOC material content that ranges from 759 g/L to 790 g/L.

2. Flammability: Mineral spirits has a relatively high flash point that ranges between 109^{o}F and 113 ^{o}F (well above typical ambient temperatures) when compared to acetone and a similar flash point when compared to PCBTF, and as such, is one of the least flammable of all the solvents considered in PAR 1143. Mineral spirits, is the only solvent that is rated "two" for flammability by the NFPA which means that it is considered to be moderately flammable. Because of its high flash point range, labeling requirements pursuant to the CPSC classifies MEK as "combustible."

Paint Thinner

Paint thinner is a petroleum distillate blend similar to odorless mineral spirits. The primary purpose of paint thinner is to thin oil-based paint. However, paint thinner is effective for degreasing tools and general household cleaning.

1. As a VOC: Paint thinner has a high VOC material content that ranges from 775 g/L to 882 g/L.

2. Flammability: Paint thinner has a relatively high flash point that ranges between 81 ^{o}F and 117 ^{o}F depending on the blending components. The lower end of this temperature spectrum falls within typical ambient temperatures. Paint thinner, along with the majority of the other solvents except for mineral spirits and PCBTF, is rated "three" for flammability by the NFPA which means that it is considered to be highly flammable. Because of its varying composition of blending components with a wide flash point range, labeling requirements pursuant to the CPSC classifies paint thinner as either "flammable" if the mixture's flash point is below 100 ^{o}F or "combustible" if the mixture's flash point is above 100 ^{o}F.

PCBTF (parachlorobenzotrifluoride)

PCBTF is a colorless liquid with a distinct aromatic odor. It is commonly used as an ink solvent in the printing industry and is sold under the brand name Oxsol 100. PCBTF had originally been used as an intermediate in the production of other compounds, but more recently has been marketed as a cleaning solvent and a paint thinner. Because it is only manufactured in a limited number of countries overseas (e.g., China), it is considered to be expensive due to high shipping costs relative to other possible solvent replacements.

1. As a VOC: Exempt pursuant to EPA and listed as exempt in Rule 102, class I.

2. Flammability: PCBTF, like mineral spirits, has a relatively high flash point at 109^{o}F (well above typical ambient temperatures) when compared to acetone, and as such, is one of the least flammable of all the solvents considered in PAR 1143. PCBTF, is the only solvent that is rated "one" for flammability by the NFPA which means that it is considered to be slightly flammable or combustible if heated. Because of its high flash point range, labeling requirements pursuant to the CPSC classifies PCBTF as "combustible."

Toluene

Toluene is a colorless liquid that has a sweet, pungent, benzene-like odor. The largest use for toluene is for the production of benzene. Toluene has the following applications: 1) as an octane booster or enhancer for blending gasoline; 2) as a raw material for making toluene diisocyanate; 3) as a solvent; and 4) for solvent extraction processes. As a solvent, it may be used in aerosol spray paints, wall paints, lacquers, inks, adhesives, natural gums, and resins, as well as in a number of consumer products, such as spot removers, paint strippers, cosmetics, perfumes, and antifreezes.

1. As a VOC: Toluene has a high VOC material content of 863 g/L.

2. Flammability: Toluene has a flash point of 41°F so at typical ambient temperatures, it is considered flammable. Other solvents with similar but slightly higher flash points are denatured alcohol, isopropyl alcohol and VM&P Naphtha. Toluene is rated "three" for flammability by the NFPA which means that it is considered to be highly flammable.

Turpentine

Turpentine, a bio-based solvent used as a thinning solvent for oil-based paints, is manufactured from distilling pine tree sap into a fluid.

1. As a VOC: Turpentine has a high VOC material content of 863 g/L.

2. Flammability: Turpentine has a flash point of 94.3°F so at typical ambient temperatures, it is considered flammable. Other solvents with similar but slightly higher flash points are paint thinner and xylene. In addition, turpentine is rated "three" for flammability by the NFPA which means that it is considered to be highly flammable. Lastly, the CPSC classifies turpentine as flammable.

Varnish Makers and Printers Naphtha

Varnish makers and printers (VM&P) naphtha, also known as petroleum ether, is a petroleum-based chemical that is commonly used as a cleaning solvent and is manufactured by distilling petroleum or coal tar.

1. As a VOC: VM&P naphtha has a high VOC material content that ranges from 750 g/L to 875 g/L.

2. Flammability: VM&P naphtha has a flash point of 53.1°F so at typical ambient temperatures, it is considered flammable. Other solvents with similar flash points are denatured alcohol and isopropyl alcohol. In addition, VM&P naphtha is rated "three" for flammability by the NFPA which means that it is considered to be highly flammable. Lastly, the CPSC classifies VM&P naphtha as flammable.

Xylene

Xylene is a colorless, sweet-smelling liquid that is produced from petroleum. The term xylene, also known as xylol, refers to a mixture of three benzene derivatives (isomers) that can be differentiated by the following forms: meta-xylene (m-xylene), ortho-xylene (o-xylene), and para-xylene (p-xylene). Xylene can also occur naturally in petroleum and coal tar and is formed during forest fires. Chemical industries produce xylene from petroleum. It is one of the top 30 chemicals produced in the United States in terms of volume. Xylene is used as a solvent and in the printing, rubber, and leather industries. It is also used as a cleaning agent, paint thinner, and in paints and varnishes. It is found in small amounts in airplane fuel and gasoline.

1. As a VOC: Xylene has a high VOC material content that ranges from 860 g/L to 872 g/L.

2. Flammability: Xylene has a relatively high flash point at 81°F, which is within typical ambient temperatures. Xylene, along with the majority of the other solvents except for

mineral spirits and PCBTF, is rated "three" for flammability by the NFPA which means that it is considered to be highly flammable. The CPSC classifies xylene as flammable.

Potential Replacement Solvents

Acetone

For information on the characteristics of acetone, see the previous acetone discussion in the "Conventional Solvents" subsection.

Methyl Acetate

Methyl acetate, also known as acetic acid methyl ester or methyl ethanoate, is a clear, flammable liquid with a characteristic smell like certain glues or nail polish removers. Methyl acetate is used as a solvent in glues and nail polish removers, in chemical reactions, and for extractions. Methyl acetate is a non-polar (lipophilic) to a weakly polar (hydrophilic) solvent.

1. As a VOC: Exempt pursuant to EPA and listed as exempt in Rule 102, class I.

2. Flammability: Methyl acetate has the third lowest flash point, 15^{o}F (below freezing), and as such, is the third most flammable when compared to acetone of all the solvents considered in PAR 1143. Methyl acetate, along with the majority of the other solvents except for mineral spirits and PCBTF, is rated "three" for flammability by the NFPA which means that it is considered to be highly flammable. The CPSC also classifies methyl acetate as "extremely flammable."

PCBTF (parachlorobenzotrifluoride)

For information on the characteristics of PCBTF, see the previous PCBTF discussion in the "Conventional Solvents" subsection.

Flammability Comparison of Conventional Solvents and Potential Replacement Solvents

While the flammability ratings by the NFPA are the same for acetone, denatured alcohol (ethanol), isopropyl alcohol, methyl acetate, MEK, paint thinner, toluene, turpentine, VM&P naphtha, and xylene, only acetone and lacquer thinner are required to be labeled as "extremely flammable" pursuant to the CPSC's labeling standards. Since the VOC content of lacquer thinner makes it ineligible for use as a compliant material under PAR 1143, acetone and methyl acetate are the only extremely flammable substances that may continue to be used; both of these have a likelihood that their use will be increased as a result of implementing PAR 1143. PCBTF is a combustible solvent that has also been used as a VOC replacement in paint thinners.

On the other hand, acetone has a higher lower explosive limit (LEL) than all the conventional solvents except denatured alcohol with only methyl acetate having the highest LEL of all the solvents. Having a higher LEL means that acetone vapors will not cause an explosion unless the vapor concentration exceeds 26,000 ppm. In contrast, toluene vapors can cause an explosion at 13,000 ppm, which poses a much greater risk of explosion. The concentration of mineral spirits or xylene vapors, other conventional solvents, which could cause an explosion, is even lower at 10,000 ppm. Under operating guidelines of working with flammable material under well-ventilated areas, as prescribed by the fire department codes, it would be difficult to achieve

concentrated streams of such vapors for unconventional solvents and would be extremely more difficult for acetone and methyl acetate.

However, taking flash point into consideration, acetone has the lowest flash point of all the solvents and this factor makes acetone the highest flammability risk of all the other solvents. Even though acetone is currently in use as a conventional solvent, implementation of PAR 1143 means that more acetone could be used to reformulate potential replacement solvents. Thus, the potential for an increased use of acetone means the potential for an increased fire risk. For a "worst-case" scenario, this analysis assumes that currently used conventional solvents would be reformulated with acetone because, as shown in Table 4, no other potential replacement solvent reformulations were identified that have a lower flash point, which is the primary basis for the flammability classification.

As a result of being delisted as a VOC by the USEPA, CARB, and many air districts including the SCAQMD, acetone usage has been steadily increasing irrespective of PAR 1143, including the use as a multi-purpose solvent sold as a conventional solvent. In addition, conventional thinners and solvents are already being formulated with acetone although the specific usage quantity is unknown at this time. In any event, it is likely that for some solvent categories, acetone usage could increase as a result of PAR 1143. However, it is anticipated that a large percentage of future reformulated products will be formulated using water-based formulations, which generally are not flammable, have higher flash points, and have lower NFPA and CPSC fire hazard classifications when compared to conventional solvents.

Acetone is currently used in a wide variety of applications. Chemistry classes at all levels from grade school to universities, as well as industrial laboratories, use acetone for wiping down counter tops and cleaning glassware. Additional uses for acetone include architectural and wood coating reformulations, varnish, lacquers, inks, adhesives, floor coatings, solvents for paint, and cosmetic products including nail polish and nail polish remover.

Labels and MSDSs accompanying acetone-based products caution the consumer ~~user~~ regarding acetone's extreme flammability and advise the user to "keep the container away from heat, sparks, flame and all other sources of ignition. The vapors may cause flash fire or ignite explosively. Use only with ventilation." All of the solvent ~~large coating~~ manufacturers currently offer pure acetone for sale in quart or gallon containers with similar warnings at chain home improvement retail stores. Figure 2 shows the front label of pure acetone currently available for sale at local hardware stores.

Figure 2
Front Label of Pure Acetone

The Uniform Fire Code (UFC) treats solvents such as acetone, butyl acetate, and MEK as Class I Flammable Liquids. Further, the UFC considers all of these solvents to present the same relative degree of fire hazard. However, because acetone has a much lower flash point than the other Class I Flammable Liquids, acetone is considered to have a more severe fire hazard potential and, as shown in Figure 2, is labeled "extremely flammable." SCAQMD staff conducted a store shelf survey of big box retailers, as well as automotive and cosmetic supply shops, and found a wide array of consumer products that contain very high levels of acetone, with up to 80 percent for some. These include automotive parts cleaners, engine degreasers, nail polish removers, adhesives, paints, and carpet spot removers, mostly packaged in aerosol containers. The labeling notifies consumers that these products contain acetone, an extremely flammable solvent. Because the use of acetone and acetone-based products span multiple applications and have been used for many years without evidence of significant fire accidents[9], SCAQMD believes that

[9] The California Governor's Office of Emergency Services (OES) tracks solvent-based fire events via their Hazardous Materials Spill Report system. Reports received by OES from January 2002 through December 9, 2008 show that there were 31 events that involved acetone and of these, only one resulted in fire due to a mixture of acetone with other chemicals on-site. The majority of the acetone release events reported during this timeframe was caused by operator error, container mishandling, railcar leaks, truck transport leaks, broken pipeline, container punctures and other container leaks, and cleaning up illicit drug laboratories. Similarly, the California State Fire Marshal in cooperation with the National Fire Incident Report System tracks fire statistics, but the cause of a chemical fire is described in general terms (i.e., not one specific chemical is assigned as the main cause of the fire). For example, between 2003 and 2007, there were 179 fires in California that were attributed to maintenance shops and paint shops. Similarly, in 2008, there were 95 fires in California that were caused by a chemical reaction. However, none of these statistics share the specific origin or cause of the fires and they ~~certainly~~ do not identify acetone as the source.

when consumers are properly alerted to a change from mineral-spirit based thinners to acetone-based thinners, they would handle the reformulated products with the same level of caution they currently handle acetone-based products.

With respect to suppliers and sellers of affected thinners and multi-purpose solvents, the UFC and Uniform Building Code set standards intended to minimize risks from flammable or otherwise hazardous materials. Local jurisdictions are required to adopt the uniform codes or comparable regulations. For some applications, local fire agencies require permits for the use or storage of hazardous materials and permit modifications for proposed increases in their use. Permit conditions depend on the type and quantity of the hazardous materials onsite. Permit conditions may include, but are not limited to, specifications for sprinkler systems, electrical systems, ventilation, and containment. The fire departments make annual business inspections to ensure compliance with permit conditions and other appropriate regulations.

Local fire departments limit residential storage of flammable liquids to five gallons and recommends storage in a cool place. If the flammable coating container will be exposed to direct sunlight or heat, storage in cool water is recommended. Finally, all metal containers involving the transfer of five gallons or more should be grounded and bonded.

While PAR 1143 has no provisions that would dictate the use of any specific material, persons who currently use consumer paint thinner and multi-purpose solvents would continue to have the flexibility of choosing the product formulation best suited for their needs. If available and given the choice, persons who utilize these materials would want to choose a paint thinner or multi-purpose solvent that does not pose a substantial safety hazard. However, the likelihood of products to be reformulated with acetone, a substance that is more flammable than the other potential replacement solvents, compliance with PAR 1143 could result in reformulated products with increased fire hazard issues.

With respect to suppliers and sellers of affected thinners and multi-purpose solvents, Health and Safety Code §25506 specifically requires all businesses handling hazardous materials to submit a business emergency response plan to assist local administering agencies in the emergency release or threatened release of a hazardous material. Business emergency response plans generally require the following:

1. Identification of individuals who are responsible for various actions, including reporting, assisting emergency response personnel and establishing an emergency response team;
2. Procedures to notify the administering agency, the appropriate local emergency rescue personnel, and the California Office of Emergency Services;
3. Procedures to mitigate a release or threatened release to minimize any potential harm or damage to persons, property or the environment;
4. Procedures to notify the necessary persons who can respond to an emergency within the facility;
5. Details of evacuation plans and procedures;
6. Descriptions of the emergency equipment available in the facility;
7. Identification of local emergency medical assistance; and

8. Training (initial and refresher) programs for employees in:
   a. The safe handling of hazardous materials used by the business;
   b. Methods of working with the local public emergency response agencies;
   c. The use of emergency response resources under control of the handler; and
   d. Other procedures and resources that will increase public safety and prevent or mitigate a release of hazardous materials.

In general, every county or city and all facilities using a minimum amount of hazardous materials are required to formulate detailed contingency plans to eliminate, or at least minimize, the possibility and effect of fires, explosion, or spills. In conjunction with the California Office of Emergency Services, local jurisdictions have enacted ordinances that set standards for area and business emergency response plans. These requirements include immediate notification, mitigation of an actual or threatened release of a hazardous material, and evacuation of the emergency area. Based on the preceding information, it is not anticipated that PAR 1143 would impair implementation of or physically interfere with an adopted or modified emergency response plan or emergency evacuation plan.

Nevertheless, fire officials expressed concern with respect to both Rule 1143 and CARB's Consumer Products Regulation that increased used of acetone-based paint thinners that would replace mineral spirits-based paint thinners would increase the risk of fire loss since consumers would not be adequately warned of the change to the more flammable acetone with its low flash point. To meet these concerns, CARB worked with fire officials to include consumer warnings and labeling requirements in their Consumer Products Regulation to alert consumers of the potential change over from combustible mineral spirits-based products to extremely flammable acetone-based products and the increased fire hazard potential.

In recognition of the same potential increased fire risk concerns associated with the increased use of acetone in reformulated products, PAR 1143 contains the same proposed requirements designed to specifically address the fire hazard issue. For example, CARB's consumer warning language has been included in PAR 1143 to provide consumers with necessary information for products formulated with flammable and extremely flammable solvents, including acetone. Specifically, the amendments to Rule 1143 include the following:

> No person shall sell, supply, offer for sale, or manufacture for use in the District any "Flammable" or "Extremely Flammable" Paint thinner or Multi-purpose Solvent named, on the Principal Display Panel as "Paint Thinner", "Multi-purpose Solvent", "Clean-up Solvent", or "Paint Clean-up";

Unless any of the following criteria are met:

> Products which include an attached "hang tag" or sticker that displays, at a minimum, the following statement: "Formulated to meet low ~~California~~ VOC limits; see warnings on label".~~; and,~~
>
> Products which include an attached "hang tag" or sticker that displays, at a minimum, the following statement: "Formulated to meet low VOC limits with the

common name of the chemical compound (e.g., "Acetone," "Methyl Acetate", etc.) that results in the product meeting the criteria for "Flammable" or "Extremely Flammable".

Products which include a hang tag as a second principal display panel with the following statement placed adjacent to and associated with the required CPSC warning: "Formulated to meet low VOC limits."

Products with a principal display panel that contains the following statement placed adjacent to and associated with the required CPSC warning in the same font size or larger as the principal display panel product name: "Formulated to meet low VOC limits."

Products where that Principal Display Panel displays, in a font size as large as or larger than the font size of any other words on the panel, the common name of the chemical compound (e.g., "Acetone," "Methyl Acetate", etc.) that results in the product meeting the criteria for "Flammable" or "Extremely Flammable".

Products that meet the labeling requirements of the CARB Consumer Product Regulation specified in Title 17, CCR, §94512(e) as adopted.

This language is designed to alert the consumer that new formulations may be more flammable than their conventional solvent counterpart. Because there could also be new acetone-based formulations that meet the interim 300g/L limit, this language will also protect the consumer irrespective of which VOC limit is achieved. Further, the proposed amended rule language is identical to the labeling language in CARB's consumer products regulation which has been supported as an acceptable remedy to address the safety concerns initially expressed by fire authorities (see Appendix C for a letter from the Newport Beach Fire Department). None of these labeling or notice requirements will preclude the use of any additional labeling or notice for consumer education.

PAR 1143 also includes additional language that goes beyond CARB's requirements and commits the SCAQMD to continue conducting ongoing public education and outreach activities in conjunction with the local fire departments to alert the public on the dangers of reformulated solvents with flammable or extremely flammable chemicals. Since the adoption of Rule 1143 in March 2009, SCAQMD staff has met with local fire departments and related fire agencies several times (e.g., March 27, 2009, June 12, 2009, May 4, 2010, May 18, 2010, and June 30, 2010) to develop educational brochures and public service announcements to further alert the public of a potential change in formulations of paint thinners and multi-purpose solvents. This outreach effort is designed to further emphasize the public's need to review labels for products that may use flammable or extremely flammable solvents.

Based upon these considerations, less than significant fire hazard impacts are expected from the implementation of PAR 1143. Since no significant fire hazard impacts were identified, no mitigation measures are necessary or required.

APPENDIX A

PROPOSED AMENDED RULE 1143

In order to save space and avoid repetition, please refer to the latest version of Proposed Amended Rule 1143 located elsewhere in the Governing Board package.

The version "Working Date: 04/16/10" of the proposed amended rule was circulated with the Draft Supplemental EA that was released on May 6, 2010 for a 30-day public review and comment period ending June 4, 2010.

Original hard copies of the Draft Supplemental EA, which include the version "Working Date: 04/16/10" of the proposed amended rule, can be obtained through the SCAQMD Public Information Center at the Diamond Bar headquarters or by calling (909) 396-2039.

APPENDIX B

LETTER FROM CALIFORNIA AIR RESOURCES BOARD

(May 4, 2010)

Air Resources Board

Mary D. Nichols, Chairman
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Linda S. Adams
Secretary for
Environmental Protection

Arnold Schwarzenegger
Governor

May 4, 2010

Naveen Berry
Planning & Rules Manager
South Coast AQMD
21865 Copley Drive
Diamond Bar, California 91765

Dear Mr. Berry:

We are responding to your inquiry regarding the labeling requirement included in our proposed amended regulation limiting the permissible volatile organic compound (VOC) content of multi-purpose solvents and paint thinners. The labeling requirement is a mitigation measure designed to reduce the potential increased fire hazard risk associated with this regulation. As reflected in our staff report, various fire officials believe the fire risk associated with this proposed regulation is that consumers may not realize that the characteristics of products identified by general terms such as "paint thinner" may change as a result of the proposed limits. As a result, without clear notification of this change, these officials contend that there is a potential for increased fire hazards associated with the proposed VOC limits for these products.

Based on this concern, we worked closely with fire officials to draft a labeling requirement that would immediately alert the consumer to potential changes in product formulations that could present a fire hazard if the products are used improperly. This requirement is found in Section 94512(e) of our proposed regulation. We understand that South Coast Air Quality Management District's (SCAQMD) proposed Rule 1143 will include similar labeling requirements to those approved in our proposed regulation. We believe that this labeling requirement addresses the concerns articulated by fire officials, and therefore, effectively mitigates the potential increased fire hazard resulting from the use of more flammable solvents such as acetone in reformulated products.

In our staff report, we noted two additional provisions in our proposed regulation that may have the ancillary benefit of minimizing fire hazard risks. One provision is the effective date of our final limit, which is three years later than SCAQMD's proposed rule. While this additional lead time may lead to product reformulations that are less flammable, we recognize that this may not occur. As a result, even after a three-year delay, we acknowledge that it is possible there will continue to be formulations that use highly

flammable chemicals to meet the final limit. Nevertheless, we believe that our proposed labeling requirement effectively mitigates the potential increased fire hazard resulting from the use of flammable solvents such as acetone in reformulated products.

Another provision that is mentioned in our staff report is the small container exemption, which is effective only for our interim limit. The primary purpose of that exemption is to allow limited use of currently formulated solvents during the interim limit to thin previously purchased solvent-borne coatings. In that way, there may be less need to resort to acetone for thinning purposes while our interim limit is in effect. We recognize that, based on previous SCAQMD regulations, many coatings sold within the District are waterborne. This exemption, therefore, may be utilized to a greater extent in air districts in California, outside of the SCAQMD. And, again, we believe that our proposed labeling requirement effectively mitigates the potential increased fire hazard because it notifies the consumer that they are purchasing a more flammable product with different use instructions.

If you have any questions, please contact Mr. David Mallory, Manager, Measures Development Section, at (916) 445-8316, or by email at dmallory@arb.ca.gov.

Sincerely,

Janette M. Brooks

Janette M. Brooks, Chief
Air Quality Measures Branch

cc: David Mallory, P.E., Manager
Measures Development Section

APPENDIX C

LETTER FROM NEWPORT BEACH FIRE DEPARTMENT

NEWPORT BEACH FIRE DEPARTMENT
P.O. BOX 1768, 3300 NEWPORT BLVD., NEWPORT BEACH, CA 92658-8915

May 5, 2010

Mr. Naveen Berry
Planning & Rules Manager
21865 Copely Drive
Diamond Bar, CA 91765

Re: South Coast Air Quality Management District Proposed Amended Rule 1143

Dear Mr. Berry:

This letter responds to your recent request for an opinion regarding the potential fire risks associated with South Coast Air Quality Management District's Proposed Amended Rule 1143, or PAR 1143. PAR 1143 is proposed for adoption on July 7, 2010. You have specifically requested an opinion whether the acetone-based paint thinners that may result from PAR 1143's 25 gram/Liter VOC limit present a significantly higher fire risk than mineral spirit-based paint thinners. As explained below, it is my opinion that any increased risks that acetone-based paint thinners may present, as compared to mineral spirit-based paint thinners, are greatly reduced and any such risk will be mitigated to a "less than significant" level by PAR 1143's consumer warning label requirement and a comprehensive public education program including point-of-sale safety brochures, public safety announcements and an informational webpage for local fire departments.

As you know, I currently serve as the Division Chief, Fire Marshal for the Newport Beach Fire Department. I have held this position for five (5) years and have been a member of the Newport Beach Fire Department for over thirty (30) years. I am also a member of the Southern California Fire Prevention Officers (SoCalFPO), a section of the California Fire Chiefs Association. The mission of this organization is to promote the protection of life, property, and the environment from the effect of fire and other hazardous events through education, engineering and enforcement. My involvement with the District on PAR 1143 has been at the direction of both the Office of the State Fire Marshal (OSFM) and the SoCalFPO Board of Directors. I am also the immediate past President of the Orange County Fire Marshals Association.

On March 2, 2009, the OSFM contacted me and asked that I review the District's original Rule 1143 which set an interim limit of 300 g/l and a final limit of 25 g/l. The OSFM also asked that I attend and provide comments at the District's hearing on March 6, 2009 regarding the original adoption of Rule 1143. At that hearing, I expressed concerns about Rule 1143's

potential fire hazard impacts based on the possibility that products commonly used by consumers might be reformulated using solvents with a lower flashpoint, such as acetone, than those currently in use, such as mineral spirits. My primary concern was addressing the potential risk to consumers who are accustomed to using "combustible" multi-purpose solvents and paint-thinners and who may not be aware that the multi-purpose solvents and paint thinners may change to "flammable" or "extremely flammable" after Rule 1143's 25 g/l limit takes effect. Generally, a "combustible" liquid has a flashpoint above 100 degrees Fahrenheit while a "flammable" liquid has a flashpoint above 20 degrees Fahrenheit and below 100 degrees Fahrenheit. An "extremely flammable" liquid has a flashpoint at or below 20 degrees Fahrenheit.

On that basis, fire department public education specialists from Los Angeles, Orange and San Bernardino counties are working with District staff to prepare point-of-sale brochures that will provide additional information to consumers regarding the potential fire risks associated with products formulated to meet the 25 g/l limit. We are also working with District staff to develop public safety announcements. I have also discussed developing hang tags and consumer warning labeling requirements for the reformulated products with District staff, but these measures were ultimately incorporated into similar regulations adopted by the California Air Resources Board, or CARB.

While I was working with the District to address potential fire risks associated with Rule 1143, CARB was contemporaneously working on proposed regulations limiting the VOC content of consumer multi-purpose solvent and paint-thinners. During that time, CARB staff asked that I attend a public workshop in order to address stakeholder fire hazard concerns regarding CARB's proposed regulations. My concern with CARB's regulations, similar to my concern with Rule 1143, was that consumers need to be warned that product formulations could potentially be changed to include solvents with a lower flashpoint, such as acetone, than those currently in use in order to meet the 25 g/l limit.

CARB's regulations include a labeling requirement that will warn consumers about potential product changes. CARB's regulations generally require that any flammable or extremely flammable multi-purpose solvent and paint-thinner sold, offered for sale or manufactured for use in California must either: (a) be accompanied by hang tags or stickers indicating that the product has been formulated to meet California VOC limits and directing attention to the product's warning labels; or (b) display the common name of the chemical that causes the product to be classified as "flammable" or "extremely flammable" on the product's principal display panel such as "acetone." Efforts to add additional warnings to the containers were prohibited by federal statutes that describe the precise language and "signal words" to be used on hazard labels for consumer products.

On September 24, 2009, I testified at the CARB hearing regarding the adoption of CARB's regulations. I reiterated my concern that consumers need to be warned about the potential use of acetone in the reformulation of multi-purpose solvents and paint-thinners, but also stated that CARB's labeling obligation addressed any such concerns.

PAR 1143 adopts essentially the same consumer warning label requirement adopted by CARB. This consumer warning label requirement will take effect immediately after PAR 1143 is adopted. Accordingly, after PAR 1143 takes effect, any "flammable" or "extremely flammable" multi-purpose solvent or paint thinner sold in the District must include this additional warning. Consumers will therefore be warned that products have been reformulated to meet Rule 1143's VOC limitations, especially those products that contain acetone.

My opinion, therefore, is that any increased fire risks that acetone-based paint thinners may present, as compared to mineral-spirit based thinners, will be mitigated to a "less than significant" level by PAR 1143's consumer warning label requirement and a public education program including point-of-sale safety brochures, public safety announcements, and an informational webpage.

Sincerely,

Steve Bunting
Division Chief, Fire Marshal

APPENDIX D

COMMENT LETTERS ON THE DRAFT SUPPLEMENTAL EA

AND RESPONSES TO COMMENTS

Comment Letter #1
(American Coatings Association, June 4, 2010)

From: Dave Darling [mailto:ddarling@paint.org]
Sent: Friday, June 04, 2010 6:06 AM
To: Barbara Radlein
Subject: 1143June2010comments

June 4, 2010

Ms. Barbara Radlein
c/o Office of Planning, Rule Development, and Area Sources
South Coast Air Quality Management District (SCAQMD)
21865 Copley Drive
Diamond Bar, CA 91765

RE: SCAQMD Proposed Rule 1143 – Consumer Paint Thinners and Multi-Purpose Solvents; Draft Supplemental Environmental Assessment; ACA Comments

Dear Ms. Radlein:

The American Coatings Association (ACA) [1] submits the following comments on the Draft Supplemental Environmental Assessment

As stated in previous correspondence, ACA opposes Rule 1143 and any amendments to this rulemaking since CARB has jurisdiction over this rulemaking as consumer paint thinners and multi-purpose solvents fall under CARB's consumer product category, and duplicating CARB's efforts in this regard has and will continue to be a costly and unnecessary expenditure of resources. Thus, SCAQMD should abandon the Rule 1143 and allow the CARB rule apply. 1-1

Further, ACA supports the comments submitted by the W.M. Barr and Company 1-2

Sincerely,

/s/
David Darling, P.E.
Director, Environmental Affairs

*** Sent via email ***

[1] The American Coatings Association (ACA) is a voluntary, nonprofit trade association working to advance the needs of the paint and coatings industry and the professionals who work in it. The organization represents paint and coatings manufacturers, raw materials suppliers, distributors, and technical professionals. ACA serves as an advocate and ally for members on legislative, regulatory and judicial issues, and provides forums for the advancement and promotion of the industry through educational and professional development services.

Responses to Comment Letter #1
(American Coatings Association, June 4, 2010)

1-1 Contrary to the comment, SCAQMD staff strongly believes that there is an urgent need for Rule 1143, as proposed for amendment at the July 9, 2010 Governing Board meeting. Rule 1143 was adopted for the purpose of implementing control measure CM#2007CTS-04 in the 2007 AQMP which specifically targets emission reductions from consumer paint thinners and multi-purpose solvents. At the time of the adoption of Rule 1143, these source categories were not regulated by CARB. At full implementation, Rule 1143 will reduce VOC emissions by 3.81 tons per day or 1,391 tons per year by 2012 in the South Coast Air Basin. Further, by the time CARB's final limit is fully implemented, implementation of Rule 1143 is estimated to have already achieved 6,953 tons of VOC emission reductions. Given the extreme non-attainment status with the federal 8-hour ozone standard in the South Coast Air Basin combined with the fact that its 16.5 million residents experience the highest ozone and PM2.5 exposure rates in the nation, the estimated VOC emission reductions that will be achieved from implementing Rule 1143 are desperately needed to protect public health and help the region achieve compliance with federal 8-hour ozone and PM2.5 air quality standards. The residents living in SCAQMD's jurisdiction will benefit from these VOC emission reductions.

1-2 With regard to the comments submitted on behalf of W.M. Barr, see the responses to Comment Letter #3.

Comment Letter #2
(American Chemistry Council, June 4, 2010)

June 4, 2010

Via E-mail

Ms. Barbara Radlein
c/o Planning, Rule Development and Area Sources
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765
E-mail: bradlein@aqmd.gov

Re: Draft Supplement Environmental Assessment for Proposed Amended Rule 1143 – Consumer Paint Thinners and Multi-purpose Solvents

Dear Ms. Radlein:

The Solvents Industry Group ("SIG")[1] of the American Chemistry Council is pleased to submit the following comments on South Coast Air Quality Management District's ("South Coast" or "District") Draft Supplement Environmental Assessment for Proposed Amended Rule 1143 ("PAR 1143 EA"), Consumer Paint Thinners and Multi-Purpose Solvents ("MPS").[2] The draft PAR 1143EA evaluates the fire hazard impact from South Coast's proposal to re-establish the 25 grams per liter (g/L) volatile organic compound ("VOC") tier 2 standard for consumer paint thinners and multi-purpose solvents.[3] SIG's member companies would be affected by PAR 1143, and thus have a strong interest in the rule's development and implementation and the EA.

As previously stated in our PAR 1143 comments, SIG believes that the most efficient and effective means for reducing the ozone-forming potential of VOC-containing products, and avoiding the increased flammability risks associated with low VOC mass-based limits, is through the use of reactivity-based regulations. Therefore, SIG continues to oppose the mass-based PAR 1143 and the re-establishment of the 25 g/L Tier 2 standard. 2-1

[1] SIG members include The Dow Chemical Company, ExxonMobil Chemical Corporation, Shell Chemical LP, and Eastman Chemical Company.

[2] Notice of Public Workshop, Proposed Amended Rule 1143 – Consumer Paint Thinners and Multi-purpose Solvents (Apr. 2010), available at http://www.aqmd.gov/pub_edu/notice_ 1143_Apr_28_10.html; Draft Proposed Amended Rule 1143 – Consumer Paint Thinners and Multi-purpose Solvents (June 2010), available at http://www.aqmd.gov/rules/proposed/1143/ PAR1143_6-4-10_PW.pdf; Draft Proposed Amended Rule 1143 – Consumer Paint Thinners and Multi-purpose Solvents (July 2010), available at http://www.aqmd.gov/rules/proposed/1143/ PAR1143_7-9-10_PW.pdf.

[3] On December 7, 2009, the Los Angeles County Superior Court vacated Rule 1143 after finding that South Coast failed to comply with the California Environmental Quality Act by not properly analyzing the potential increased fire hazards of Rule 1143. Upon consideration of South Coast's Motion to Limit Remedy, the Court severed and vacated the Tier 2 requirements.

americanchemistry.com 1300 Wilson Boulevard, Arlington, VA 22209 | (703) 741-5000

After reviewing the draft PAR 1143 EA, SIG continues to be concerned with the increased public safety risk associated with the Tier 2 standard. The District's current proposal mandates that the Tier 2 limit take effect just months after its adoption. Such an approach is not likely to sufficiently address the increased public fire hazards created by PAR 1143, and poses an unnecessary risk to public safety. If SCAQMD moves forward with the re-establishment of the mass based Tier 2 limits, SCAQMD should adopt a three-year phase in period that builds in sufficient time for a public education outreach program to alert the public to the additional safety hazards of using more flammable products that will result from the adoption of the tier 2 limits, as well as to allow sufficient time for development of less flammable alternatives. For these reason, SIG urges the District, if it cannot be convinced to abandon the re-establishment of the Tier 2 standard, to at least adopt the same implementation schedule as CARB. 2-2

SIG also recommends that the final EA address the environmental benefits and fire risks associated with a reactivity-based program. Such an analysis will show that a reactivity-based approach would result in a greater reduction of ozone forming potential without the increased fire risk associated with the mass-based Tier 2 limit. This comparative analysis would provide the Governing Board with meaningful information about the alternative approaches for achieving its ozone reduction goals and whether it should readopt the Tier 2 standards. 2-3

SIG remains committed to working with South Coast on these issues and looks forward to continued dialogue in this area. If you have any questions, please contact me at (703) 741-5612 or Leslie_Berry@americanchemistry.com

Sincerely,

Leslie Berry

Leslie Berry
Solvent Industry Group Manager
Chemical Products and Technology

americanchemistry.com 1300 Wilson Boulevard, Arlington, VA 22209 | (703) 741-5000

Responses to Comment Letter #2
(American Chemistry Council, June 4, 2010)

2-1 SCAQMD staff is studying the viability of a reactivity-based ozone control strategy by actively participating in research projects pertaining to establishing maximum incremental reactivity (MIR) values for different VOCs. For example, SCAQMD staff is actively participating in the North American Research Strategy for Tropospheric Ozone (NARSTO) work related to reactivity. SCAQMD staff also continues to participate in the following committees: Applications Benefits, Near Term Science, Toxics, Atmospheric Chemistry and PM. Further, SCAQMD staff recognizes the low MIR values associated with the compounds that are considered exempt under the traditional VOC mass-based regulatory scheme as well as the potential flexibility of an alternate ozone control strategy. In concept, SCAQMD staff is not opposed to a reactivity-based approach to control ozone, but based on the state of the science and other comments received, there are several concerns. For example, one of the main concerns is that there may be toxicity associated with some VOC-containing compounds that have a relatively low MIR value. Other issues that need to be considered include the potential for secondary organic aerosol formation, specific consensus methodology, and enforceability. Further, CARB staff has indicated that, effective and efficient enforcement of the aerosol coatings rule, which is a reactivity-based control approach, has been an issue over the past few years, especially with regard to formulation data and analytical limitations. The USEPA is also in the process of developing a "toolkit" that will address SIP equivalency and will include additional enforceability guidelines for a reactivity-based approach. Thus, SCAQMD staff plans to continue working closely with CARB, USEPA, the American Chemistry Council, other industry members and the public to address these issues. Lastly, the plethora of multi-purpose solvents that use aqueous- and soy-based technology are not classified as flammable or extremely flammable and to date, limited MIR or secondary organic aerosol formulation data is available for these products. Therefore, SCAQMD staff is continuing to participate in the national effort to address these key data gaps.

Further the Governing Board package for the adoption of Rule 1143 on March 6, 2009 included a resolution that committed SCAQMD staff to evaluate the feasibility in a stakeholder working group of a reactivity-based approach for thinners. SCAQMD staff believes it is necessary to take the time to fully evaluate an alternative ozone control strategy that utilizes reactivity of different VOCs. In the meantime, PAR 1143 relies upon a mass-based approach to reducing VOCs for the source category of consumer paint thinners and multi-purpose solvents.

2-2 The commenter's implication that the final 25g/L VOC limit will go into effect only a few "months after adoption" is not entirely accurate, since that same final limit had been adopted as part of Rule 1143 on March 6, 2009 with an effective date of January 1, 2011, providing almost two years (e.g., 21 months) of advance notice to the regulated industry and the public. The commenter suggests that at a

minimum, SCAQMD adopt the same implementation schedule as CARB to further reduce the potential fire hazard risk. After careful consideration of these risks, SCAQMD staff has decided to propose that the final limits be adopted on the same original schedule. CARB has acknowledged in its letter that an extended implementation schedule will not significantly reduce fire hazard risks. Instead, CARB relies on immediate consumer education at the point of sale with its requirements for prominent labeling or a hang tag. SCAQMD goes a step further and not only requires the same point of sale education but will also engage in a consumer awareness public education campaign with local fire officials to inform the public of the potential change in formulation of paint thinners to using more flammable products.

The intent behind the public outreach and education program is to alert consumers of the potential increased flammability dangers that may be associated with new product formulations. The public outreach and education program will be an ongoing process that will continue to be in effect after the January 1, 2011 implementation date. The comment that "such an approach is not likely to sufficiently address the increased public fire hazards created by PAR 1143, and poses and unnecessary risk to public safety" is unsubstantiated. On the contrary, as expressed in CARB's letter in Appendix B of this document, CARB staff acknowledges while that their regulation contains a three-year sell through, that additional amount of time does not guarantee that less flammable products will be formulated. In other words, whether the compliance date is 21 months or three-years from rule adoption, less flammable products may not necessarily be available for the consumer to use. Further, SCAQMD staff has conducted its own technology assessment, and based on existing rules in the South Coast that limit most coatings to waterborne technology, SCAQMD staff strongly believes that the limit of 25 g/L, effective January 1, 2011 is feasible.

Lastly, SCAQMD staff has held numerous meetings with staff from local fire agencies and CARB and continues to work on addressing possible fire hazard issues. The primary concern brought up by the fire marshal was that if a product had been formulated with a higher flashpoint solvent like mineral spirits and then was reformulated with a lower flashpoint solvent like acetone, the user of the product may not realize that they were no longer using a combustible material and that they were now using a product that was extremely flammable. The fire marshal and several local fire agency personnel strongly emphasized that the user must be made aware of these new formulations, if the products contain solvents with lower flashpoints that would make them either flammable or extremely flammable. In addition, SCAQMD and CARB staff worked closely with the fire authorities to develop labeling language that was incorporated into the CARB's statewide regulation. Specifically, the current proposal in PAR 1143 includes the same labeling language from the CARB Consumer Product Regulation as well as additional options. SCAQMD staff and the fire authorities have been working on public education and outreach including public service announcements and brochures highlighting that the newly formulated products developed to comply

with PAR 1143 may be flammable or extremely flammable. The fire authorities have indicated in a letter to SCAQMD staff (see Appendix C of this document) that the public education and outreach provision in PAR 1143 satisfies their primary concerns related to fire hazards, by specifically stating: "My opinion, therefore, is that any increased fire risks that acetone-based paint thinners may present, as compared to mineral-spirit based thinners, will be mitigated to a "less than significant" level by PAR 1143's consumer warning label requirement and a public education program including point-of-sale safety brochures, public safety announcements, and an informational webpage."

2-3 As mentioned in response to Comment 2-1, SCAQMD staff is currently studying the effects of a reactivity-based ozone control strategy for future rulemakings. Because these studies are on-going and conclusions have not been reached for a reactivity approach, PAR 1143 remains a mass-based proposal. Thus, the Final Supplemental EA for PAR 1143 analyzes the mass-based proposal. However, if and when a future rulemaking proposes a reactivity-based program, the CEQA document will analyze the environmental effects at that time.

Comment Letter #3
(W.M. Barr & Company, Inc., June 4, 2010)

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Fax

Name:	Barbara Radlein
Organization:	South Coast Air Quality Management District
Fax:	(909) 396-3324
From:	Michael Hickok
Date:	June 4, 2009
Subject:	Rule 1143 SEA Comments
Pages:	59

COMMENTS BY W.M. BARR & COMPANY, INC.

ON PROPOSED AMENDMENTS TO RULE 1143

AND SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

8000 Centerview Parkway
Suite 400
Memphis TN 38016

W.M. Barr & Company, Inc. ("Barr") hereby urges the District not to adopt the amendments to Rule 1143 scheduled for Governing Board consideration at a July 9, 2010 public hearing for several reasons. First, the District lacks legal authority to adopt them by virtue of State law preemption under Health and Safety Code Section 41712(f). Second, proposed Section (e)(2) of those proposed amendments imposing new labeling requirements is barred by Federal preemption under 15 U.S. C. Section 2075(a). Third, the Draft Supplemental Environmental Assessment ("SEA") for these amendments is inadequate because it fails to acknowledge the significant adverse fire hazard impacts or to consider available mitigation strategies and alternatives. The remainder of these comments elaborates on these reasons why the Governing Board should not adopt the proposed amendments to Rule 1143.

3-1

3-2

3-3

State Law Preemption

On September 24, 2009, the California Air Resources Board ("CARB") adopted a consumer regulation applicable to the same general purpose solvents and paint thinners covered by Rule 1143. A copy of CARB's Resolution 09-51 by which this adoption occurred is Exhibit A hereto. Relevant excerpts from CARB's consumer regulation relating to these products set forth as Title 17, Sections 94508 et seq. in the California Code of Regulations is Exhibit B hereto.

3-4

California Health and Safety Code Section 41712(f) expressly bars the District from adopting consumer product regulations that differ from those adopted by CARB:

> "A district shall adopt no regulation pertaining to disinfectants, nor any regulation pertaining to a consumer product that is different than any regulation adopted by the State Board for that purpose."

Thus, amendments to Rule 1143 are barred by that statute if they include terms different from the CARB regulation.

A comparison of the CARB regulation and the proposed amendments to Rule 1143 reveal there to be significant differences. For example, the more stringent VOC limit in Rule 1143 would take effect on January 1, 2011 under the Rule 1143 amendments, while the effective date of the more stringent limit in the CARB regulation does not take effect until December 31, 2013. Also, the CARB Rule has an exemption for products made with low vapor pressure materials that is not present in the proposed amendments to Rule 1143. Other examples of differences in the two regulations include a short term general small container exemption and a permanent artist's exemption. Because the proposed amendments to Rule 1143 thus differ from CARB's regulation governing the same consumer products, the adoption of those amendments is barred under the doctrine of State law preemption pursuant to Health and Safety Code Section 41712(f).

3-5

Federal Law Preemption

As conceded by the SEA, compliance with the proposed Amendments to Rule 1143 will require the use of paint thinners made with acetone, a highly flammable material. The labeling of products made with that chemical are subject to Federal regulation under the Consumer Product Safety Act set forth as 15 U.S. C. Section 1261 (attached as Exhibit C hereto) and regulations implementing it set forth at 16 C.F. R. Section 1500.121 (attached as Exhibit D hereto). Attached as Exhibit E hereto is a copy of a label for a Barr acetone special-purpose thinner, cleaner and remover product showing an example of a label complying with the above-mentioned Federal statute and regulation.

In order to avoid conflicting labeling requirements around the country, Congress adopted an express preemption statute set forth at 15 U.S. C. Section 2075(a) (Exhibit F hereto):

> "Whenever a consumer product safety standard under this chapter is in effect and applies to a risk of injury associated with a consumer product, no State or political subdivision of a State shall have any authority either to establish or to continue in effect any provision or a safety standard or regulation which prescribes any requirements as to the performance, composition, contents, design, finish, construction, packaging, or labeling of such product which are designed to deal with the same risk of injury associated with such consumer product, unless such requirements are identical to the requirements of the Federal standard."

3-6

Consistent with the clear terms of this express Federal preemption provision, a regulation like the proposed amendments to Rule 1143 is barred if it establishes any labeling requirements that: (1) differ from the requirements under the Federal regulations for the same product; and (2) is designed to deal with the same risk of injury associated with the consumer product.

A review of the proposed amendments to Rule 1143 and the supporting SEA reveal that both of these preemption triggers are present here. With respect to differing requirement, Subsection (e)(2) clearly provides additional labeling requirements not within the Federal regulations, including the name of the chemical (i.e. acetone) in font size as large as any other on the container and the following words "Formulated to meet California VOC limits; see warning on label." Neither of these requirements appear in the Federal regulation attached hereto as Exhibit B. Accordingly, these additional labeling requirements are Federally barred if their purpose is to address the same fire hazard which is the subject of the Federal regulations.

3-7

Clearly these additional labeling requirements are being proposed to address the fire hazard associated with acetone paint thinners. Subjection (e)(3) makes this clear by providing that the requirement applies only to products meeting the "Flammable" or "Extremely Flammable" definition within the same Federal consumer product safety regulation by making reference to Title 16 in the Code of Federal Regulations 1500.3. This cross reference to the Federal regulations reveals that the only purpose of these additional label requirements it to address the same fire hazard as those regulations. Furthermore, the discussion of the new label requirements in the proposed amendments to Rule 1143 set forth at pages 27-28 of the SEA confirm that their purpose is to reduce the fire hazards from products complying with the Rule. It

3-8

must, therefore, be concluded that the proposed new labeling requirement in Rule 1143 is barred by the doctrine of Federal preemption under 15 U.S.C. Section 2075(a). 3-8 (cont'd)

Comments on SEA

The conclusion of the SEA is that "...less than significant fire hazard impacts are expected from implementation of PAR 1143." The two "considerations" that led to that conclusion are the new labeling requirement discussed above and certain public outreach activities vaguely referred to in Subsection (e)(7) of the proposed amendments to Rule 1143. A review of these "considerations" reveals that they do not support the conclusion that they render insignificant the fire hazard that will result from use of extremely flammable acetone products to comply with the proposed Rule 1143. 3-9

(Labeling)

The primary support for the SEA conclusion of "less than significant adverse fire hazard impacts" is the new labeling requirement in Subsection (e)(2) of the proposed Rule1143 amendments. As discussed above, that new requirement is barred under the doctrine of Federal preemption. For that reason alone, the additional labeling requirement cannot properly be relied upon as a consideration rendering fire hazards from use of extremely flammable acetone paint thinners insignificant. 3-10

In order to properly evaluate the practical effect of that new labeling requirement if it were not Federally preempted, one must understand the magnitude of difference in fire hazards between paint thinner products now on the market and paint thinners made with acetone. Barr has developed a paint thinner compliant with the currently existing 300 g/l limit under Rule 1143 sold under then name KS Pro Paint Thinner that is not flammable. A copy of the label for that product is attached hereto as Exhibit G. That label states that KS Pro Paint Thinner is "NOT A FLAMMABLE LIQUID." The fact that this product is not flammable means that it will not burn under any circumstances and thus presents absolutely no fire hazard. In contrast, acetone is *extremely flammable*. As set forth at page 18 of the SEA, acetone has a flash point of -4 degrees Fahrenheit. That means that it will catch fire if exposed to any ignition source if the temperature is above -4 degrees, i.e. at all times within this District. Thus, with respect to Barr's paint thinner product that now complies with Rule 1143, the difference resulting from a shift to acetone to comply with the proposed amendment represents going from no fire risk whatsoever to an extreme hazard. 3-11

This huge differential in risk is presented here in the context of consumers. The primary rationale for the "less that significant" fire hazard conclusion in the SEA is that two new statements on the label will reduce the risk of going from a non-flammable product to an extremely flammable one to insignificance. Consideration of those two new requirements compels the conclusion that neither provides meaningful additional information to consumers about fire hazards. One of the requirements is that the name of the chemical compound (i.e. 3-12

acetone) appear in letters as large as any other on the label. However, there is no basis on which to rationally conclude that all, or even most, consumers will know any details about the chemical properties or flash point implications of that chemical. The other label requirement has two components. The first stating that the product is formulated to meet California VOC standards says absolutely nothing about any fire hazard. The other component merely referring generally to "warnings" on the label by its very nature does nothing to expand on other warnings and does not even refer to fire. Thus, on their face, the new label requirements are insufficient to provide consumers with any meaningful additional information to guide them in their use of an extremely flammable paint thinner. 3-12 (cont'd)

Given that the stated purpose of these two new label requirements was to attempt to address fire hazards associated with the proposed Rule 1143 amendments, it begs the question of why nothing more explanatory was included in new labeling requirements. The answer to that question is revealed in the letter attached as Appendix C to the SEA. At page 2 of that letter, it is explained that the new label requirements set forth in the proposed amendments to Rule 1143 were copies of the label requirements in the new CARB regulation. Then it is admitted that:

> "Efforts to add additional warnings to the containers were prohibited by federal statutes that describe the precise language and 'signal words' to be used on hazard labels for consumer products." 3-13

Hence, what is revealed by this admission it that the two vague, clearly inconsequential additional labeling requirements in the proposed amendments to Rule 1143 were the product of an attempt to circumvent the Federal preemption discussed above. While that explains the initial rationale for those two requirements, it also concedes that it was understood at the time they were created by CARB that they fall short of providing any truly informative additional fire hazard information to consumers. As a result, these two additional labeling requirements are not sufficiently meaningful to consumers to render the difference between a non-flammable paint thinner and an extremely flammable one insignificant.

This conclusion of the inadequacy of the new labeling requirement is compelled even if one were to assume that all consumers read and fully understand product labels. That consumer label-reading assumption is dubious. During a May 21, 2010 meeting of the District's Stationary Source Committee meeting concerning the proposed amendments to Rule 1143, the Chairman of that Committed twice stated as matter-of-fact and common knowledge that nobody reads such labels when told of the new labeling requirements mentioned above – a conclusion that was not contradicted by Staff or any others in attendance. Consistent with that observation, the SEA erred in concluding that the two inconsequential new labeling requirements render insignificant the fire hazard created by the proposed amendments to Rule 1143. 3-14

The general insufficiency of labels to eliminate risks of accidental fire from use of products covered by Rule 1143 was addressed by the Los Angeles County Superior Court Judge in his written decision adopted on December 7, 2009 invalidating the same 25 g/l limit now 3-15

proposed for re-adoption. There the Judge (at page 11) addressed the "increased hazard of fire from *accidents* involving acetone-based paint thinners." His conclusion was that "Labels and warnings help minimize the prospect of accidents, but do not avoid them completely." Thus, the reliance of the SEA on two vague and inconsequential new label requirements as a basis for denying the significance of the increased fire hazard from acetone based paint thinners merely repeats a position already rejected by the Court. 3-15 (cont'd)

(Community Education And Outreach Program)

The only "consideration"other than the above-mentioned labeling provision identified in the SEA to support the "less than significant" impact conclusion is Subsection (e)(7) setting forth a very general administrative requirement that:

> "The Executive Officer shall continue and conduct a public education and an outreach program for flammable and extremely flammable products in conjunction with local fire departments."

This provision includes no details as to how any education is provided to consumers or what constitutes the outreach program. 3-16

The SEA (page 28) explains as follows what is referred to in that provision:

> "Since the adoption of Rule 1143 in March 2009, SCAQMD staff has met with local fire departments and related fire agencies to develop educational brochures and public service announcements to further alert the public of a potential change in formulations of paint thinners and multi-purpose solvents."

There is no indication in the SEA about the scope and/or effectiveness of this brochure/public service announcement program.

What is apparent is that this program is by its nature voluntary for all potential participants other than the District staff. Fire departments may or may not be able or willing to commit resources to any such program now or in the future. It is not clear where or by whom any brochures may be distributed to consumers. Any such distribution would be entirely voluntary. There is also no requirement for consumers to accept or read any brochures. For all these reasons the actual impact of this program on consumers is speculative. There is no basis for concluding that this apparently secondary consideration purportedly supporting the "less than significant" impacts conclusion in the SEA would substantially nullify the very real risk associated with consumers using extremely flammable paint thinners and solvents. 3-17

That conclusion is confirmed by a comparison of this voluntary education/outreach program with very real experiences in occupational settings. Under regulations implementing the Federal Occupational and Safety Act ("OSHA"), employers are required by law to regularly train 3-18

all employees to avoid workplace hazards. (29 C.F.R. Section 1910.1200). This mandatory safety training is certainly more effective than the purely voluntary brochure and public announcement program to be implemented by the District under the proposed amendment to Rule 1143. However, tragic fire accidents still occur when workers covered by OSHA training regulations use extremely hazardous materials like acetone.

3-18 (cont'd)

Attached as Exhibit H hereto is a copy of a March 2006 Fire Safety Alert issued by the Occupational Health Surveillance Program of the Massachusetts Department of Public Health, Office of the State Fire Marshall Department of Fire Services. In that Alert there is a report of three deaths from two different incidents where workers were burned from fires resulting from a lacquer floor sealer having a flash point of 9 degrees Fahrenheit. While it is believed that the extremely flammable chemical primarily involved in those accidents was acetone, it really does not matter for purposes of this analysis whether it was that chemical or another one with such a low flash point. What does matter is that such accidental fires occur even with workers subject to mandatory OSHA training regulations.

3-19

Barr is aware of other examples of fires from use of acetone products by workers subject to OSHA regulations. In 2004 in San Antonio, Texas a worker named Benitez suffered 2nd and 3rd degree burns to his lower body while applying acetone as a floor cleaner with an electric buffer. In 2002 in Los Angeles a worker named Torres and his two co-workers were badly burned when acetone caught fire while being used to remove linoleum flooring because fumes reached an ignition source. In 2000, also in Los Angeles, a worker named Padilla was badly burned when an acetone-based cleaner being used to remove adhesive from a floor ignited from a pilot light on a hot water heater.

3-20

All of theses examples of serious, accidental fires involving acetone occurred with workers covered by mandatory OSHA training requirements. That being the case, it is unrealistic to assume that the voluntary brochure/public announcement program envisioned under the amendments to Rule 1143 would be adequate to prevent such accidents in a consumer acetone use setting in the absence of the kind of mandatory training provided to workers under OSHA.

Conclusion

The shift from the non-flammable paint thinner now sold by Barr to acetone products compliant with the proposed amendments to Rule 1143 having a flash point lower than any temperatures encountered within the District inherently presents a significant increase in fire hazards. The new labeling and voluntary brochure/public announcement provisions in those amendments are not sufficient to render that hazard "less than significant" and at most provide minimal mitigation. Accordingly, Barr urges the District to consider more effective mitigation measures and alternatives to the proposed Rule 1143 amendments.

3-21

EXHIBIT A

State of California
AIR RESOURCES BOARD

Resolution 09-51

September 24, 2009

Agenda Item No.: 09-8-4

WHEREAS, Health and Safety Code sections 39600 and 39601 authorize the Air Resources Board (ARB or Board) to adopt standards, rules and regulations and to do such acts as may be necessary for the proper execution of the powers and duties granted to and imposed upon the Board by law;

WHEREAS, Health and Safety Code section 41712 requires the Board to adopt regulations to achieve the maximum feasible reduction in volatile organic compounds (VOC) emitted by consumer products, if the Board determines that adequate data exist for it to adopt the regulations, and if the regulations are technologically and commercially feasible and necessary;

WHEREAS, pursuant to Health and Safety Code section 41712, the Board has adopted the Regulation for Reducing Emissions from Consumer Products (the "consumer products regulation;" title 17, California Code of Regulations, sections 94507-94517);

WHEREAS, the Board has also adopted test Method 310, "Determination of Volatile Organic Compounds in Consumer Products and Reactive Organic Compounds in Aerosol Coating Products;"

WHEREAS, the Legislature has enacted the California Global Warming Solutions Act of 2006 (Health and Safety Code section 38500 et seq.), which declares that global warming poses a serious threat to the economic well-being, public health, natural resources, and environment of California, and creates a comprehensive multi-year program to reduce greenhouse gas emissions that cause global warming;

WHEREAS, Health and Safety Code section 38510 designates ARB as the State agency charged with monitoring and regulating sources of greenhouse gases that cause global warming in order to reduce these emissions;

WHEREAS, on April 15, 2004, the United States Environmental Protection Agency (U.S. EPA) designated 15 areas of California nonattainment for the federal ambient air quality standard for ozone of 0.08 parts per million averaged over eight hours;

WHEREAS, on September 25, 2007, ARB adopted the State Strategy for California's State Implementation Plan (SIP), which sets forth ARB's plan to attain the federal ozone standard;

WHEREAS, achieving additional VOC reductions from consumer products is an important element of the SIP and is necessary to attain State and federal air quality standards;

WHEREAS, staff has proposed amendments that, when fully implemented, will achieve about 14.7 tons per day of VOC emission reductions from consumer products;

WHEREAS, the proposed amendments would set a lower VOC limit for Double Phase Aerosol Air Freshener, which would become effective on December 31, 2012, and would establish two tiers of new VOC limits for Multi-purpose Solvent and Paint Thinner which would become effective on December 31, 2010, and December 31, 2013, respectively;

WHEREAS, the proposed amendments would prohibit the use of compounds with a global warming potential (GWP) value above 150 in three product categories: Double Phase Aerosol Air Freshener, Multi-purpose Solvent, and Paint Thinner;

WHEREAS, the proposed amendments also include various modifications and clarifications to the existing regulatory language, including modifications to several definitions and minor changes to improve clarity;

WHEREAS, staff has also proposed various amendments to modify and update Method 310, including updates to test method citations and equations specified for the calculation of VOC content;

WHEREAS, the Board has identified methylene chloride (MeCl), trichloroethylene (TCE), and perchloroethylene (Perc), as toxic air contaminants, pursuant to article 3 (commencing with section 39660), chapter 3.5, part 2, division 26 of the Health and Safety Code;

WHEREAS, the proposed amendments would prohibit the use of MeCl, Perc, and TCE in the product categories of Multi-purpose Solvent and Paint Thinner;

WHEREAS, the Board has considered the impact of the proposed amendments on the economy of the State and the potential for adverse economic impacts on California business enterprises and individuals;

WHEREAS, the Board is committed to evaluating community impacts of proposed regulations, including environmental justice concerns;

WHEREAS, the California Environmental Quality Act and Board regulations require that no project that may have significant adverse environmental impacts be adopted as originally proposed if feasible alternatives or mitigation measures are available to reduce or eliminate such impacts;

WHEREAS, a public hearing and other administrative proceedings have been held in accordance with the provisions of chapter 3.5 (commencing with section 11340), part 1, division 3, title 2 of the Government Code;

WHEREAS, the Board staff has consulted with the U.S. EPA regarding consumer product regulations promulgated by other state and local governments as provided in section 183(e) of the federal Clean Air Act;

WHEREAS, the Board finds that:

The proposed amendments to reduce VOC emissions are authorized by California law and satisfy the requirements of Health and Safety Code section 41712;

There exist adequate data to support the adoption of the proposed amendments and to establish that the amendments are necessary, and are commercially and technologically feasible for each of the regulated consumer product categories;

The proposed amendments will not result in the elimination of a product form for any product category;

The proposed amendments are necessary to attain and maintain the state and federal ambient air quality standards, and to help fulfill California's SIP commitments to achieve emission reductions from consumer products;

The proposed limits will reduce VOC emissions by about 14.7 tons per day in 2013;

The economic impacts of the proposed amendments have been analyzed as required by California law, and the conclusions and supporting documentation for this analysis are set forth in the Initial Statement of Reasons;

The cost-effectiveness of the proposed amendments has been considered;

The proposed amendments reduce human health, safety, or environmental risks;

The benefits to human health, public safety, public welfare, or the environment justify the costs of the proposed amendments;

The proposed amendments are consistent with ARB's environmental justice policies and equally benefit residents of any race, culture, or income;
The reporting requirements of the proposed amendments which apply to businesses are necessary for the health, safety, and welfare of the people of the State; and

No reasonable alternative considered or that has otherwise been identified and brought to the attention of ARB would be more effective in carrying out the

purpose for which the amendments are proposed, or be as effective and less burdensome to affected private persons and businesses than the proposed amendments.

WHEREAS, pursuant to the requirements of the California Environmental Quality Act and the Board's regulations, the Board further finds that:

With the mitigation measures described below (which are part of the proposed amendments), the proposed amendments will not result in any significant adverse impacts on the environment;

Prohibiting compounds with a GWP value above 150 for Double Phase Aerosol Air Freshener, Multi-purpose Solvent, and Paint Thinner products will ensure that manufacturers do not begin using high-GWP compounds in products that are reformulated to meet the proposed VOC standards;

Setting a one percent aromatic compound content limit for Multi-purpose Solvent and Paint Thinner products will ensure that the expected reductions in ozone forming potential will occur as products are reformulated to meet the proposed VOC standards for these product categories;

Requiring specific labeling for certain Multi-purpose Solvent and Paint Thinner products will alert consumers of a potential change in product formulation which could present a fire hazard if used improperly;

Adverse health and environmental impacts could occur from the use of MeCl, Perc, and TCE in Multi-purpose Solvents and Paint Thinners, and mitigation measures are necessary and appropriate to prevent a potential increase in emissions of these toxic air contaminants;

Prohibiting MeCl, Perc, and TCE in Multi-purpose Solvents and Paint Thinners will ensure that manufacturers do not begin using these compounds in products that are reformulated to meet the proposed VOC standards for these product categories; and

Suitable and effective alternative formulations that do not contain MeCl, Perc, and TCE are available for the categories of Multi-purpose Solvent and Paint Thinner.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves the adoption of the proposed amendments to sections 94508, 94509, 94510, 94511, 94512, 94513, and 94515, title 17, California Code of Regulations, and the proposed amendments to ARB Method 310, as set forth in Attachment A, with the modifications set forth in Attachment B hereto.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to take final action to adopt the amendments set forth in Attachment A, with the modifications set

forth in Attachment B and such other conforming modifications as may be appropriate, after making the modified regulatory language and any additional supporting documents and information available to the public for a period of 15 days, provided that the Executive Officer shall consider such written comments as may be submitted during this period, shall make modifications as appropriate in light of the comments received, and shall present the regulations to the Board for further consideration if the Executive Officer determines that this is warranted.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to take the following actions: (1) monitor the progress of manufacturers in meeting the VOC limits, and (2) identify any significant problems in achieving the limits and propose any future regulatory modifications that may be appropriate.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to perform a technical assessment of manufacturers' progress towards meeting the three percent VOC limits for Multi-purpose Solvents and Paint Thinners, commencing June 30, 2012. The technical assessment will include an evaluation of the air quality impact of implementing the future three percent by weight VOC limit combined with the one percent by weight VOC aromatic compound limit. In addition, the data collected will enable staff to determine whether a reactivity-based approach to regulating these products would be more appropriate than a mass-based approach.

BE IT FURTHER RESOLVED that, following approval of the amendments by the Office of Administrative Law, the Board directs the Executive Officer to submit the amendments to the U.S. EPA for inclusion in the SIP; provided, however, that the Executive Officer shall delay submitting the future three percent VOC limit for Multi-purpose Solvents and Paint Thinners until after the completion of the technical assessment, and staff's determination of whether a reactivity-based approach to regulating these products would be more appropriate than a mass-based approach.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to include in the SIP revision any additional documentation identified as necessary for approval under the federal Clean Air Act and U.S. EPA regulations, and to work with the U.S. EPA to ensure that the amendments are approved as a SIP revision.

I hereby certify that the above is a true and correct copy of Resolution 09-51, as adopted by the Air Resources Board.

Monica Vejar, Clerk of the Board

AQMD 00005

EXHIBIT B

[Note: Proposed amendments are shown in underline to indicate additions and ~~strikeout~~ to indicate deletions.]

Proposed Amendments to the
REGULATION FOR REDUCING EMISSIONS
FROM CONSUMER PRODUCTS

SUBCHAPTER 8.5 CONSUMER PRODUCTS

Amend title 17, California Code of Regulation, sections 94508, 94509, 94510, 94512, 94513, and 94515 to read as follows:

Article 2. Consumer Products

94507. Applicability.

Except as provided in Sections 94509(i) and 94510, this article shall apply to any person who sells, supplies, offers for sale, or manufactures consumer products for use in the state of California.

NOTE: Authority cited: Sections 39600, 39601, and 41712, Health and Safety Code. Reference: Sections 39002, 39600, 40000, and 41712, Health and Safety Code.

§ 94508. Definitions.

(a) For the purpose of this article, the following definitions apply:

(1) "Adhesive" means any product that is used to bond one surface to another by attachment. "Adhesive" does not include products used on humans and animals, adhesive tape, contact paper, wallpaper, shelf liners, or any other product with an adhesive incorporated onto or in an inert substrate. For "Contact Adhesive," "Construction, Panel, and Floor Covering Adhesive," and "General Purpose Adhesive" only, "adhesive" also does not include units of product, less packaging, which weigh more than one pound and consist of more than 16 fluid ounces. This limitation does not apply to aerosol adhesives.

(2) "Adhesive Remover" means a product designed to remove adhesive from either a specific substrate or a variety of substrates. "Adhesive Remover" does not include products that remove adhesives intended for use on humans or animals.

For the purpose of this definition and "Adhesive Remover" subcategories (A-D), the term "adhesive" shall mean a substance used to bond one or more materials.

"Astringent/Toner," deodorant, "Facial Cleaner or Soap," "General-use Hand or Body Cleaner or Soap," "Hand Dishwashing Detergent" (including antimicrobial), "Heavy-duty Hand Cleaner or Soap," "Medicated Astringent/Medicated Toner," and "Rubbing Alcohol."

(11) "Anti-Static Product" means a product that is labeled to eliminate, prevent, or inhibit the accumulation of static electricity. "Anti-Static Product" does not include "Electronic Cleaner," "Floor Polish or Wax," "Floor Coating," and products that meet the definition of "Aerosol Coating Product" or "Architectural Coating."

(12) "Architectural Coating" means a coating applied to stationary structures and their appurtenances, to mobile homes, to pavements, or to curbs.

(13) "Aromatic Compound" means a VOC that contains one or more benzene or equivalent heterocyclic rings.

(14) "Artist's Solvent/Thinner" means any liquid product, labeled to meet ASTM D4236 – 95 (March 1, 2005) Standard Practice for Labeling Art Materials for Chronic Health Hazards, which is incorporated by reference herein, and packaged in a container equal to or less than 32 fluid ounces, labeled to reduce the viscosity of, and or remove, art coating compositions or components.

(15)~~(13)~~"ASTM" means ~~the American Society for Testing and Materials~~ ASTM International.

(16)~~(14)~~"Astringent/Toner" means any product designed or labeled to be applied to the skin for the purpose of cleaning or tightening pores. This category also includes clarifiers and substrate-impregnated products. This category does not include any hand, face, or body cleaner or soap product, "Medicated Astringent/Medicated Toner," cold cream, lotion, antiperspirant, or any Astringent/Toner product regulated as a drug by the United States Food and Drug Administration (FDA).

(17)~~(15)~~"Automotive Hard Paste Wax" means an automotive wax or polish which is: (A) designed to protect and improve the appearance of automotive paint surfaces; and (B) a solid at room temperature; and (C) contains 0% water by formulation.

(18)~~(16)~~"Automotive Instant Detailer" means a product designed for use in a pump spray that is applied to the painted surface of automobiles and wiped off prior to the product being allowed to dry.

(19)~~(17)~~"Automotive Rubbing or Polishing Compound" means a product designed primarily to remove oxidation, old paint, scratches or "swirl marks," and other defects from the painted surfaces of motor vehicles without leaving a protective barrier.

provide finishing of a hairstyle.

For the purposes of this subchapter, "finish" or "finishing" means the maintaining and/or holding of previously styled hair for a period of time.

For the purposes of this subchapter, "styling" means the forming, sculpting, or manipulating the hair to temporarily alter the hair's shape.

(82)~~(80)~~"Hair Styling Product" means a consumer product manufactured on or after December 31, 2006, that is designed or labeled for the application to wet, damp or dry hair to aid in defining, shaping, lifting, styling and/or sculpting of the hair. "Hair Styling Product" includes, but is not limited to hair balm, clay, cream, creme, curl straightener, gel, liquid, lotion, paste, pomade, putty, root lifter, serum, spray gel, stick, temporary hair straightener, wax, spray products that aid in styling but do not provide finishing of a hairstyle, and leave-in volumizers, detanglers and/or conditioners that make styling claims. "Hair Styling Product" does not include "Hair Mousse," "Hair Shine," "Hair Spray," or shampoos and/or conditioners that are rinsed from the hair prior to styling.

For the purposes of this subchapter, "finish" or "finishing" means the maintaining and/or holding of previously styled hair for a period of time.
For the purposes of this subchapter, "styling" means the forming, sculpting, or manipulating the hair to temporarily alter the hair's shape.

(83)~~(81)~~"Heavy-Duty Hand Cleaner or Soap" means a product designed to clean or remove difficult dirt and soils such as oil, grease, grime, tar, shellac, putty, printer's ink, paint, graphite, cement, carbon, asphalt, or adhesives from the hand with or without the use of water. "Heavy-duty Hand Cleaner or Soap" does not include prescription drug products, "Antimicrobial Hand or Body Cleaner or Soap," "Astringent/Toner," "Facial Cleaner or Soap," "General-use Hand or Body Cleaner or Soap," "Medicated Astringent/Medicated Toner" or "Rubbing Alcohol."

(84)~~(82)~~"Herbicide" means a pesticide product designed to kill or retard a plant's growth, but excludes products that are: (A) for agricultural use, or (B) restricted materials that require a permit for use and possession.

(85) "High-Temperature Coating" means a high performance coating labeled and formulated for application to substrates exposed continuously or intermittently to temperatures above 204°C (400°F).

(86)~~(83)~~"Household Product" means any consumer product that is primarily designed to be used inside or outside of living quarters or residences that are occupied or intended for occupation by individuals, including the immediate surroundings.

(87) "Industrial Maintenance Coating" means a high performance architectural coating, including primers, sealers, undercoaters, intermediate coats, and

topcoats formulated for application to substrates, including floors, exposed to one or more of the following extreme environmental conditions listed below and labeled "For industrial use only" or "For professional use only."

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

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

(C) Frequent exposure to temperatures above 121°C (250°F); or

(D) Frequent heavy abrasion, including mechanical wear and frequent scrubbing with industrial solvents, cleansers, or scouring agents; or

(E) Exterior exposure of metal structures and structural components.

(88)~~(84)~~"Insect Repellent" means a pesticide product that is designed to be applied on human skin, hair or attire worn on humans in order to prevent contact with or repel biting insects or arthropods.

(89)~~(85)~~"Insecticide" means a pesticide product that is designed for use against insects or other arthropods, but excluding products that are: (A) for agricultural use, or (B) for a use which requires a structural pest control license under Chapter 14 (commencing with Section 8500) of the Business and Professions Code, or (C) restricted materials that require a permit for use and possession.

(90)~~(86)~~"Insecticide Fogger" means any insecticide product designed to release all or most of its content, as a fog or mist, into indoor areas during a single application.

(91)~~(87)~~"Institutional Product" or "Industrial and Institutional (I&I) Product" means a consumer product that is designed for use in the maintenance or operation of an establishment that: (A) manufactures, transports, or sells goods or commodities, or provides services for profit; or (B) is engaged in the nonprofit promotion of a particular public, educational, or charitable cause. "Establishments" include, but are not limited to, government agencies, factories, schools, hospitals, sanitariums, prisons, restaurants, hotels, stores, automobile service and parts centers, health clubs, theaters, or transportation companies. "Institutional Product" does not include household products and products that are incorporated into or used exclusively in the manufacture or construction of the goods or commodities at the site of the establishment.

(92)~~(88)~~"Label" means any written, printed, or graphic matter affixed to, applied to, attached to, blown into, formed, molded into, embossed on, or appearing upon any consumer product or consumer product package, for purposes of branding,

(104)~~(100)~~"Multi-purpose Dry Lubricant" means any lubricant which is: (A) designed or labeled to provide lubricity solely by depositing a thin film of graphite, molybdenum disulfide ("moly"), or polytetrafluoroethylene or closely related fluoropolymer ("teflon") on surfaces, and (B) designed or labeled for general purpose lubrication, or for use in a wide variety of applications.

(105)~~(101)~~"Multi-purpose Lubricant" means any lubricant designed or labeled for general purpose lubrication, or a lubricant labeled for use in a wide variety of applications. "Multi-purpose Lubricant" does not include "Multi-purpose Dry Lubricant," "Penetrant," or "Silicone-based Multi-Purpose Lubricant."

(106)~~(102)~~"Multi-purpose Solvent" means:

(A) for products manufactured before January 1, 2008: any organic liquid designed to be used for a variety of purposes, including cleaning or degreasing of a variety of substrates, or thinning, dispersing or dissolving other organic materials. "Multi-purpose Solvent" includes solvents used in institutional facilities, except for laboratory reagents used in analytical, educational, research, scientific or other laboratories. "Multi-purpose Solvent" does not include solvents used in cold cleaners, vapor degreasers, conveyorized degreasers or film cleaning machines, or solvents that are incorporated into, or used exclusively in the manufacture or construction of, the goods or commodities at the site of the establishment.

(B) for products manufactured on or after January 1, 2008: any liquid product designed or labeled to be used for dispersing, ~~or~~ dissolving, or removing contaminants or other organic materials. "Multi-purpose Solvent" also includes: ~~(A)~~(1) products that do not display specific use instructions on the product container or packaging, ~~(B)~~(2) products that do not specify an end-use function or application on the product container or packaging, ~~and (C)~~(3) solvents used in institutional facilities, except for laboratory reagents used in analytical, educational, research, scientific or other laboratories~~.~~, (4) "Paint Clean-up" products, and (5) products labeled to prepare surfaces for painting. "Multi-purpose Solvent" does not include solvents used in cold cleaners, vapor degreasers, conveyorized degreasers or film cleaning machines, solvents labeled exclusively for the clean-up of application equipment used for polyaspartic and polyurea coatings, or solvents that are incorporated into, or used exclusively in the manufacture or construction of, the goods or commodities at the site of the establishment. "Multi-purpose Solvent" also does not include any product making any representation that the product may be used as, or is suitable for use as a consumer product which qualifies under another definition in section 94508; such products are not Multi-purpose Solvents and are subject to the "Most Restrictive Limit" provision of section 94512.

(107)~~(103)~~"Nail Polish" means any clear or colored coating designed for application to the fingernails or toenails and including but not limited to, lacquers, enamels, acrylics, base coats and top coats.

(108)~~(104)~~"Nail Polish Remover" means a product designed to remove nail polish and coatings from fingernails or toenails.

(109)~~(105)~~"Non-Carbon Containing Compound" means any compound which does not contain any carbon atoms.

(110)~~(106)~~"Non-Selective Terrestrial Herbicide" means a terrestrial herbicide product that is toxic to plants without regard to species.

(111)~~(107)~~ "Odor Remover/Eliminator" means a product that is designed or labeled to be applied exclusively to hard surfaces to inhibit the ability of soils to create malodors, or functions to entrap, encapsulate, neutralize, convert or eliminate malodor molecules. "Odor Remover/Eliminator" does not include products designed or labeled for use in cleaning soils from hard surfaces, laundering, softening, de-wrinkling or cleaning fabrics, or dishwashing, or products that are defined as "Air Freshener," "Bathroom and Tile Cleaner," "Carpet/Upholstery Cleaner," "Fabric Refresher," "General Purpose Cleaner," "Toilet/Urinal Care Product," "Disinfectant," or "Sanitizer."

(112)~~(108)~~"Oven Cleaner" means any cleaning product designed or labeled to clean and to remove dried or baked on food deposits from oven walls.

(113)~~(109)~~"Paint" means any pigmented liquid, liquefiable, or mastic composition designed for application to a substrate in a thin layer which is converted to an opaque solid film after application and is used for protection, decoration or identification, or to serve some functional purpose such as the filling or concealing of surface irregularities or the modification of light and heat radiation characteristics.

(114) "Paint Clean-up" means any liquid product labeled for cleaning oil-based or water-based paint, lacquer, varnish, or related coatings from, but not limited to, painting equipment or tools, plastics, or metals.

(115)~~(110)~~"Paint Remover or Stripper" means any product designed to strip or remove paints or other related coatings, by chemical action, from a substrate without markedly affecting the substrate. "Paint Remover or Stripper" does not include "Multi-purpose Solvent," paint brush cleaners, products designed and labeled exclusively as "Graffiti Remover," and hand cleaner products that claim to remove paints and other related coatings from skin.

(116)~~(111)~~"Paint Thinner" means any liquid product used for reducing the viscosity of coating compositions or components, that prominently displays the term "Paint

Thinner," "Lacquer Thinner," "Thinner," or "Reducer" on the front panel of its packaging. "Paint Thinner" does not include thinners labeled for the thinning of Industrial Maintenance Coatings, Zinc-Rich Primers, and High Temperature Coatings. "Paint Thinner" also does not include products labeled and used exclusively as a component in a specific coating. "Paint Thinner" also does not include "Artist's Solvent/Thinner."

(117)~~(112)~~"Penetrant" means a lubricant designed or labeled primarily to loosen metal parts that have bonded together due to rusting, oxidation, or other causes. "Penetrant" does not include "Multi-purpose Lubricant" that claim to have penetrating qualities, but are not labeled primarily to loosen bonded parts.

(118)~~(113)~~"Person" shall have the same meaning as defined in Health and Safety Code Section 39047.

(119)~~(114)~~ "Personal Fragrance Product" means any product which is applied to the human body or clothing for the primary purpose of adding a scent or masking a malodor, including, but not limited to, cologne, perfume, aftershave, toilet water, lotion, powder, body mist, and body spray. "Personal Fragrance Product" does not include: (A) Deodorant, as defined in section 94501(d); (B) medicated products designed primarily to alleviate fungal or bacterial growth on feet or other areas of the body; (C) mouthwashes, breath fresheners and deodorizers; (D) lotions, moisturizers, powders or other skin care products designed or labeled to be used primarily to alleviate skin conditions such as dryness and irritations; (E) products designed exclusively to be applied to human genitalia areas, undergarments, and any paper products, napkins or other products that are affixed to undergarments, such as sanitary pads; (F) soaps, shampoos, and products primarily used to clean the human body; and (G) fragrance products designed to be used exclusively on non-human animals.

(120)~~(115)~~"Pesticide" means and includes any substance or mixture of substances labeled, designed, or intended for use in preventing, destroying, repelling or mitigating any pest, or any substance or mixture of substances labeled, designed, or intended for use as a defoliant, desiccant, or plant regulator, provided that the term "pesticide" will not include any substance, mixture of substances, or device which the United States Environmental Protection Agency does not consider to be a pesticide.

(121)~~(116)~~"Pressurized Gas Duster" means a pressurized product labeled to remove dust from a surface solely by means of mass air or gas flow, including surfaces such as photographs, photographic film negatives, computer keyboards, and other types of surfaces that cannot be cleaned with solvents. "Pressurized Gas Duster" does not include "Dusting Aid," "General Purpose Cleaner," "Electrical Cleaner," "Electronic Cleaner," "Energized Electrical Cleaner," or "Anti-Static Product." Pressurized Gas Duster does not include products labeled exclusively to remove dust from equipment where dust removal is accomplished when: electric current exists; residual electrical potential from a component such as a

Insecticide*: Crawling Bug Insecticide (all forms):	1/1/95 1/1/98	40 20
aerosol	12/31/2004	15
Flea and Tick Insecticide	1/1/95	25
Flying Bug Insecticide (all forms):	1/1/95	35
aerosol	12/31/2003	25
Fogger	1/1/95	45
Lawn and Garden Insecticide (all forms)	1/1/95	20
non-aerosol	12/31/2003	3
Wasp and Hornet Insecticide	1/1/2005	40
*See sections 94510(g)(1) and 94510(k) for exemptions that apply to certain insecticides.		
Laundry Prewash: aerosol/solid	1/1/94	22
all other forms	1/1/94	5
Laundry Starch/Sizing/Fabric Finish Product:	1/1/95 12/31/2008	5 4.5
Metal Polish/Cleanser	1/1/2005	30
Motor Vehicle Wash non-aerosol	12/31/10	0.2
Multi-purpose Lubricant: (excluding solid or semisolid products)	1/1/2003 12/31/2013 12/31/2015	50 25 10
[*See sections 94509(q) and 94513(f) for additional requirements that apply to Multi-purpose Lubricant]		
Multi-purpose Solvent	12/31/2010 12/31/2013	30 3
[*See sections 94509(u), 94512(e), and 94513(g) for additional requirements that apply to Multi-purpose Solvent.]		

Nail Polish Remover	1/1/94 1/1/96 12/31/2004 12/31/2007	85 75 0 1
Non-selective Terrestrial Herbicide: non-aerosol	1/1/2002	3
Odor Remover/Eliminator aerosol	12/31/2010	25
non-aerosol	12/31/2010	6
Oven Cleaner*: aerosol/pump spray	1/1/93	8
liquid	1/1/93	5
non-aerosol (including pump spray and liquid) [*See section 94509(p) for additional requirements that apply to Oven Cleaner.]	12/31/2008	1
Paint Remover or Stripper	1/1/2005	50
Paint Thinner [*See sections 94509(u), 94510(m), 94512(e), and 94513(g) for additional requirements that apply to Paint Thinner.]	12/31/2010 12/31/2013	30 3
Penetrant* [*See section 94509(q) and 94513(f) for additional requirements that apply to Penetrant]	1/1/2003 12/31/2013	50 25
Personal Fragrance Product*: products with 20% or less fragrance	1/1/95 1/1/99	80 75
products with more than 20% fragrance *See sections 94510(h), 94510(j), and 94510(l) for exemptions and requirements that apply to Personal Fragrance Products.	1/1/95 1/1/99	70 65
Pressurized Gas Duster* [*See section 94509(r) and 94510(c) for additional provisions that apply to Pressurized Gas Duster]	12/31/2010	1

(4) *Impurities.* The requirements of section 94509(t)(1), (t)(2), and (t)(3) shall not apply to any chemical compound that is present as an impurity in a combined amount equal to or less than 0.1% by weight.

(u) *Requirements for Multi-purpose Solvent and Paint Thinner.*

(1) Except as provided below in sections 94509(u)(2) and (u)(4), effective December 31, 2010, no person shall sell, supply, offer for sale, or manufacture for use in California any Multi-purpose Solvent or Paint Thinner that contains any of the following:

(A) chemical compounds that have a Global Warming Potential (GWP) Value of 150 or greater;

(B) methylene chloride, perchloroethylene, or trichloroethylene;

(C) greater than 1% "Aromatic Compounds" by weight.

(2) *Sell-through of Products.* Multi-purpose Solvents and Paint Thinners that contain any chemical compound that has a GWP Value of 150 or greater; methylene chloride, perchloroethylene, or trichloroethylene; or greater than 1% "Aromatic Compounds" by weight; and were manufactured before December 31, 2010, may be sold, supplied, or offered for sale until December 31, 2013, so long as the product complies with the product dating requirements in section 94512(b).

(3) *Notification for products sold during the sell-through period.* Any person who sells or supplies a consumer product identified above in section 94509(u)(2) must notify the purchaser of the product in writing that the sell-through period for that product will end on December 31, 2013, provided, however, this notification must be given only if both of the following conditions are met:

(A) the product is sold or supplied to a distributor or retailer; and

(B) the product is sold or supplied on or after June 30, 2013.

(4) *Impurities.* The requirements of section 94509(u)(1), (u)(2) and (u)(3) shall not apply to any Multi-purpose Solvent, or Paint Thinner that contains any of the following:

(A) chemical compounds that have a Global Warming Potential (GWP) Value of 150 or greater and are present as impurities in a combined amount equal to or less than 0.1% by weight;

(B) methylene chloride, perchloroethylene, or trichloroethylene that is present as an impurity in a combined amount equal to or less than 0.01% by weight.

NOTE: Authority cited: Sections 38500, 38501, 38510, 38560, 38560.5, 38562, 38580, 39600, 39601, 39650, 39658, 39659, 39666, and 41712, Health and Safety Code. Reference: Sections 38505, 39002, 39600, 39650, 39655, 39656, 39658, 39659, 39666, 40000, and 41712, Health and Safety Code.

§ 94510. Exemptions.

(a) This article shall not apply to any consumer product manufactured in California for shipment and use outside of California.

(b) The provisions of this article shall not apply to a manufacturer or distributor who sells, supplies, or offers for sale in California a consumer product that does not comply with the VOC standards specified in Section 94509, as long as the manufacturer or distributor can demonstrate both that the consumer product is intended for shipment and use outside of California, and that the manufacturer or distributor has taken reasonable prudent precautions to assure that the consumer product is not distributed to California. This subsection (b) does not apply to consumer products that are sold, supplied, or offered for sale by any person to retail outlets in California.

(c) Except for Fabric Softener – Single Use Dryer Product and Pressurized Gas Duster, the VOC limits specified in Section 94509(a) shall not apply to fragrances up to a combined level of 2 percent by weight contained in any consumer product.

(d) The VOC limits specified in Section 94509(a) shall not apply to any LVP-VOC.

(e) The requirements of Section 94512(b) shall not apply to consumer products registered under the Federal Insecticide, Fungicide, and Rodenticide Act, (FIFRA; 7 U.S.C. Section 136-36y).

(f) The VOC limits specified in Section 94509(a) shall not apply to air fresheners that are comprised entirely of fragrance, less compounds not defined as VOCs under Section 94508 or exempted under Section 94510(d).

(g) The VOC limits specified in Section 94509(a) shall not apply to:

(1) insecticides containing at least 98% para-dichlorobenzene.

(2) Until December 30, 2006, the VOC limits specified in Section 94509(a) shall not apply to solid air fresheners containing at least 98% para-dichlorobenzene. On or after December 31, 2006, the provisions of section 94509(o) apply to solid air fresheners containing para-dichlorobenzene.

Products manufactured before December 31, 2014 may be sold, supplied, or offered for sale until December 31, 2017, so long as the product complies with the product dating requirements in Section 94512(b).

(m) Until December 31, 2013, the VOC limits specified in Section 94509(a), and the prohibition of Aromatic Compounds listed in section 94509(u)(5), shall not apply to Paint Thinners that are packaged in containers with a capacity less than or equal to 8 fluid ounces.

NOTE: Authority cited: Sections 39600, 39601 and 41712, Health and Safety Code. Reference: Sections 39002, 39600, 40000, and 41712, Health and Safety Code.

§ 94511. Innovative Products.

(a) The Executive Officer shall exempt a consumer product from the VOC limits specified in Section 94509(a) if a manufacturer demonstrates by clear and convincing evidence that, due to some characteristic of the product formulation, design, delivery systems or other factors, the use of the product will result in less VOC emissions as compared to:

(1) the VOC emissions from a representative consumer product which complies with the VOC limits specified in Section 94509(a), or

(2) the calculated VOC emissions from a noncomplying representative product, if the product had been reformulated to comply with the VOC limits specified in section 94509(a). VOC emissions shall be calculated using the following equation:

$$E_R = E_{NC} \times VOC_{STD} \div VOC_{NC}$$

where:

E_R = The VOC emissions from the noncomplying representative product, had it been reformulated.

E_{NC} = The VOC emissions from the noncomplying representative product in its current formulation.

VOC_{STD} = the VOC limit specified in 94509(a).

VOC_{NC} = the VOC content of the noncomplying product in its current formulation.

If a manufacturer demonstrates that this equation yields inaccurate results due to some characteristic of the product formulation or other factors, an alternative method which accurately calculates emissions may be used upon approval of the Executive Officer.

(2) The information required in section 94512(d)(1), shall be displayed on the product container such that it is readily observable without removing or disassembling any portion of the product container or packaging. For the purposes of this subsection, information may be displayed on the bottom of a container as long as it is clearly legible without removing any product packaging.

(3) No person shall remove, alter, conceal, or deface the information required in section 94512(d)(1) prior to final sale of the product.

(e) *Additional Requirements for Multi-purpose Solvent and Paint Thinner.*

(1) In addition to the requirements specified in section 94512(a), (b), and (c), both the manufacturer and responsible party for each Multi-purpose Solvent and Paint Thinner sold or offered for sale in areas of California outside the South Coast Air Quality Management District shall ensure that all products manufactured on or after the effective date for the category specified in section 94509(a), meet the following requirements:

(A) Each product container must clearly display the VOC content in percent by weight as determined from actual formulation data.

(B) The information required by this subsection 94512(e)(1), shall be displayed on the product container such that it is readily observable without removing or disassembling any portion of the product container or packaging.

(C) No person shall remove, alter, conceal, or deface the information required by this subsection 94512(e)(1) prior to final sale of the product.

(2) In addition to the requirements specified in section 94512(a), (b), (c), and (e)(1):

(A) Except as provided below in section 94512(e)(2)(B), effective December 31, 2010, until December 31, 2015, no person shall sell, supply, offer for sale, or manufacture for use in California any "Flammable" or "Extremely Flammable" Multi-purpose Solvent or Paint Thinner named, on the Principle Display Panel as "Paint Thinner," "Multi-purpose Solvent," "Clean-up Solvent," or "Paint Clean-up."

(B) Section 94512(e)(2)(A) does not apply to products that meet any of the following criteria:

1. Products which include an attached "hang tag" or sticker that displays, at a minimum, the following statement: "Formulated to

meet California VOC limits; see warnings on label."

2. Products where the Principle Display Panel displays, in a font size as large as or larger than the font size of any other words on the panel, the common name of the chemical compound (e.g., "Acetone," "Methyl acetate," etc.) that results in the product meeting the criteria for "Flammable" or "Extremely Flammable."

(C) For the purposes of this subsection (e)(2), a product is "Flammable" or Extremely Flammable" if it is labeled as "Flammable" or "Extremely Flammable" on the product container, or if the product meets the criteria for these terms specified in title16, Code of Federal Regulations, section 1500.3(c)(6).

NOTE: Authority cited: Sections 39600, 39601, and 41712, Health and Safety Code. Reference: Sections 39002, 39600, 40000, and 41712, Health and Safety Code.

§ 94513. Reporting Requirements.

(a) Upon 90 days written notice, the Executive Officer may require any responsible party to report information for any consumer product or products the Executive Officer may specify including, but not limited to, all or part of the information specified in the following subsections (a)(1) through (a)(12). If the responsible party does not have or does not provide the information requested by the Executive Officer, the Executive Officer may require the reporting of this information by the person that has the information, including, but not limited to, any formulator, manufacturer, supplier, parent company, private labeler, distributor, or repackager.

(1) the company name, address, telephone number, and designated contact person;

(2) any claim of confidentiality made pursuant to Title 17, California Code of Regulations, Section 91011;

(3) the product brand name for each consumer product and the product label;

(4) the product category to which the consumer product belongs;

(5) the applicable product form(s) listed separately;

(6) an identification of each product brand name and form as a "Household Product," "I&I Product," or both;

(7) separate California sales in pounds per year, to the nearest pound, and the method used to calculate California sales for each product form;

used in product reformulation, the testing protocols used, the results of the testing, and the cost of reformulation efforts.

(2) On or before March 31, 2014, all responsible parties for Multi-purpose Lubricant products shall report to the Executive Officer the following information for products sold or offered for sale in California:

(a) data regarding product sales and composition for the year 2013, including the information listed in Section 94513(a), ~~and~~ the entire product label; and

(b) a written update of the research and development efforts undertaken to achieve the 10 percent VOC limit specified in section 94509(a). The written update must include detailed information about the raw materials evaluated for use, MIR values for any VOC or LVP-VOC used or evaluated, the function of the raw material evaluated, hardware used in product reformulation, the testing protocols used, the results of the testing, and the cost of reformulation efforts.

(g) *Special Reporting Requirements for Multi-purpose Solvent and Paint Thinner products*

(1) On or before June 30, 2012, all responsible parties for Multi-purpose Solvent and Paint Thinner products shall report to the Executive Officer the following information for products sold or offered for sale in California:

(a) data regarding product sales and composition for the year 2011, including the information listed in section 94513(a), and the entire product label; and

(b) a written update of the research and development efforts undertaken to achieve the 3 percent VOC limits specified in section 94509(a). The written update must include detailed information about the raw materials evaluated for use; maximum incremental reactivity (MIR) values for any VOC or LVP-VOC used or evaluated; the function of the raw material evaluated; the testing protocols used; the results of the testing; and the cost of reformulation efforts.

NOTE: Authority cited: Sections 39600, 39601, 41511, and 41712, Health and Safety Code. Reference: Sections 39002, 39600, 40000, 41511, and 41712, Health and Safety Code.

§ 94514. Variances.

(a) *Applications for variances.* Any person who cannot comply with the requirements set forth in Section 94509, because of extraordinary reasons beyond the person's reasonable control may apply in writing to the Executive Officer for a variance. The

(g) No person shall create, alter, falsify, or otherwise modify records in such a way that the records do not accurately reflect the constituents used to manufacture a product, the chemical composition of the individual product, and any other test, processes, or records used in connection with product manufacture.

(h) *VOC and Aromatic compound content determination for Multi-purpose Solvent and Paint Thinner products using ARB Method 310.*

(1) *VOC content:*
Testing to determine compliance with the requirements of this article, shall be performed using Air Resources Board Method 310, Determination of Volatile Organic Compounds (VOC) in Consumer Products, adopted September 25, 1997 and as last amended on [Date of Amendment], which is incorporated herein by reference. Alternative methods which are shown to accurately determine the concentration of VOCs in a subject product or its emissions may be used upon approval of the Executive Officer.

(2) *Aromatic compound content:*
Testing to determine aromatic compound content shall be conducted using ARB Method 310 in conjunction with product formulation data.

(A) Upon written notification from the Executive Officer, the Multi-purpose Solvent or Paint Thinner responsible party or manufacturer shall have 10 working days to provide to the Executive Officer, in writing, formulation data as specified in part (i) for products selected for compliance testing:

(1) The weight fraction to the nearest 0.1 percent of each ingredient including; water, VOC, LVP-VOC, total inorganic compounds, and any compound specified in section 94508(a)(152). For hydrocarbon solvents the BIN number as listed in section 94701 (a) or (b), and the initial boiling point and dry point of the solvent shall be specified. Individual compounds present in an amount less than 0.1 percent by weight, are not required to be reported.
(2) By March 1, 2010, and each year thereafter the responsible party shall provide to the Executive Officer contact information for the person who is to receive the letter.
(3) For the purpose of this subsection a Material Safety Data Sheet does not meet the requirement for formulation data.

(B) A violation is established if:

(1) the formulation data supplied by the responsible party or manufacturer shows that the product does not meet the applicable VOC or aromatic content standard; and/or
(2) the responsible party or manufacturer fails to respond to the

notice and provide formulation data with the 10 day specified time frame specified in this subsection.

NOTE: Authority cited: Sections 39600, 39601, 39607, 41511, and 41712, Health and Safety Code. Reference: Sections 39002, 39600, 39607, 40000, 41511, and 41712, Health and Safety Code.

94516. Severability.

Each part of this article shall be deemed severable, and in the event that any part of this article is held to be invalid, the remainder of this article shall continue in full force and effect.

NOTE: Authority cited: Sections 39600, 39601, and 41712, Health and Safety Code. Reference: Sections 39002, 39600, 40000, and 41712, Health and Safety Code.

94517. Federal Enforceability.

For purposes of federal enforceability of this article, the Environmental Protection Agency is not subject to approval determinations made by the Executive Officer under Sections 94511, 94514, and 94515. Within 180 days of a request from a person who has been granted an exemption or variance under Section 94511 or 94514, an exemption or variance meeting the requirements of the Clean Air Act shall be submitted by the Executive Officer to the Environmental Protection Agency for inclusion in the applicable implementation plan approved or promulgated by the Environmental Protection Agency pursuant to Section 110 of the Clean Air Act, 42 U.S.C., Section 7410. Prior to submitting an exemption granted under Section 94511 as a revision to the applicable implementation plan, the Executive Officer shall hold a public hearing on the proposed exemption. Notice of the time and place of the hearing shall be sent to the applicant by certified mail not less than 30 days prior to the hearing. Notice of the hearing shall also be submitted for publication in the California Regulatory Notice Register and sent to the Environmental Protection Agency, every person who requests such notice, and to any person or group of persons whom the Executive Officer believes may be interested in the application. Within 30 days of the hearing the Executive Officer shall notify the applicant of the decision in writing as provided in Section 94511(f). The decision may approve, disapprove, or modify an exemption previously granted pursuant to Section 94511.

NOTE: Authority cited: Section 39600, 39601, 39602, and 41712, Health and Safety Code. Reference: Sections 39002, 39600, 39602, 40000, and 41712, Health and Safety Code.

other organic materials. "Multi-purpose Solvent" includes solvents used in institutional facilities, except for laboratory reagents used in analytical, educational, research, scientific or other laboratories. "Multi-purpose Solvent" does not include solvents used in cold cleaners, vapor degreasers, conveyorized degreasers or film cleaning machines, or solvents that are incorporated into, or used exclusively in the manufacture or construction of, the goods or commodities at the site of the establishment.

(B) for products manufactured on or after January 1, 2008: any liquid product designed or labeled to be used for dispersing, ~~or~~ dissolving, or removing contaminants or other organic materials. "Multi-purpose Solvent" also includes: ~~(A)~~(1) products that do not display specific use instructions on the product container or packaging, ~~(B)~~(2) products that do not specify an end-use function or application on the product container or packaging, ~~and (C)~~(3) solvents used in institutional facilities, except for laboratory reagents used in analytical, educational, research, scientific or other laboratories~~.~~, (4) "Paint ~~C~~clean-up" products, and (5) products labeled to prepare surfaces for painting. For the purposes of this definition only, "Paint clean-up" means any liquid product labeled for cleaning oil-based or water-based paint, lacquer, varnish, or related coatings from, but not limited to, painting equipment or tools, plastics, or metals. "Multi-purpose Solvent" does not include solvents used in cold cleaners, vapor degreasers, conveyorized degreasers or film cleaning machines, solvents labeled exclusively for the clean-up of application equipment used for polyaspartic and polyurea coatings, or solvents that are incorporated into, or used exclusively in the manufacture or construction of, the goods or commodities at the site of the establishment. "Multi-purpose Solvent" also does not include any product making any representation that the product may be used as, or is suitable for use as a consumer product which qualifies under another definition in section 94508; such products are not Multi-purpose Solvents and are subject to the "Most Restrictive Limit" provision of section 94512.

~~(114) "Paint Clean-up" means any liquid product labeled for cleaning oil-based or water-based paint, lacquer, varnish, or related coatings from, but not limited to, painting equipment or tools, plastics, or metals.~~

Note – See the last page in this Attachment B for additional proposed modifications to section 94508(a), Definitions, related to "Aromatic Compound."

Suggested Modifications to section 94512, Administrative Requirements.

1. The originally proposed amendments required the labeling of VOC content in percent by weight as determined from actual formulation data for Multi-purpose Solvents and Paint Thinners. Staff is concerned that this requirement may conflict with existing requirements of the local air districts, that certain size containers of VOC solvents must display the maximum VOC expressed in grams of VOC per liter of

material. Staff is therefore recommending that the originally proposed VOC labeling requirement be deleted. In future rulemakings, staff will consider whether a requirement for VOC content labeling should be applied more generally to some or all consumer products categories. Staff proposes the following modification to section 94512(e):

Modify title 17, CCR, section 94512(e) to read as follows:

(e) *Additional Requirements for Multi-purpose Solvent and Paint Thinner.*

~~(1) In addition to the requirements specified in section 94512(a), (b), and (c), both the manufacturer and responsible party for each Multi-purpose Solvent and Paint Thinner sold or offered for sale in areas of California outside the South Coast Air Quality Management District shall ensure that all products manufactured on or after the effective date for the category specified in section 94509(a), meet the following requirements:~~

~~(A) Each product container must clearly display the VOC content in percent by weight as determined from actual formulation data.~~

~~(B) The information required by this subsection 94512(e)(1), shall be displayed on the product container such that it is readily observable without removing or disassembling any portion of the product container or packaging.~~

~~(C) No person shall remove, alter, conceal, or deface the information required by this subsection 94512(e)(1) prior to final sale of the product.~~

2. It has been recommended that in addition to the options originally proposed for the labeling of flammable or extremely flammable Multi-purpose Solvents and Paint Thinners, manufacturers should also have the option to display the proposed language in a contrasting square or rectangle on the product label. It has also been recommended that requirements for font size be added, and that the required statements be expressed in Spanish as well as English. Staff agrees with the recommendations and is proposing the following modifications to section 94512(e):

Modify title 17, CCR, section 94512(e) to read as follows:

(1)~~(2)~~ In addition to the requirements specified in section 94512(a), (b), and (c), ~~and (e)(1)~~:

(A) Except as provided below in section 94512(e)~~(2)~~(1)(B), effective December 31, 2010, until December 31, 2015, no person shall sell, supply, offer for sale, or manufacture for use in California any "Flammable" or "Extremely Flammable" Multi-purpose Solvent or Paint

Thinner named, on the Principle Display Panel as "Paint Thinner," "Multi-purpose Solvent," "Clean-up Solvent," or "Paint Clean-up."

(B) Section 94512(e)~~(2)~~(1)(A) does not apply to products that meet any of the following criteria:

1. Products which include an attached "hang tag," ~~or~~ sticker, or contrasting square or rectangular area on the Principle Display Panel that displays, at a minimum, the following statements: "Formulated to meet California VOC limits; see warnings on label; Vea las advertencias en la etiqueta, formulado complacientes con leyes de California." in a font size as large as or larger than the signal word as specified in title 16, Code of Federal Regulations, section 1500.121.

2. Products where the Principle Display Panel displays, in English and Spanish and a font size as large as or larger than the font size of any other words on the panel, the common name of the chemical compound (e.g., "Acetone," "Methyl acetate," etc.) that results in the product meeting the criteria for "Flammable" or "Extremely Flammable."

(C) For the purposes of this subsection (e)~~(2)~~(1), a product is "Flammable" or Extremely Flammable" if it is labeled as "Flammable" or "Extremely Flammable" on the product container, or if the product meets the criteria for these terms specified in title 16, Code of Federal Regulations, section 1500.3(c)(6).

Suggested Modifications to section 94515, Test Methods.

Staff is proposing the deletion of proposed section 94515(h)(1) because it is duplicative. The process outlined for determining VOC and GWP content is already specified in subsections 94515(a), (b), (c) and (g), and section 94515(h)(1) is therefore unnecessary. Further, it has been recommended that responsible parties and manufacturers should be allowed 30 working days, rather than 10 working days, to provide to the Executive Officer formulation data for products selected for compliance testing with the proposed aromatic compound content limit. Staff agrees and is proposing the following modifications to section 94515(h):

Modify title 17, CCR, section 94515(h) to read as follows:

(h) ~~*VOC and*~~ *Aromatic compound content determination for Multi-purpose Solvent and Paint Thinner products using ARB Method 310.*

~~*(1) VOC content:*~~

~~Testing to determine compliance with the requirements of this article, shall be performed using Air Resources Board Method 310, Determination of Volatile Organic Compounds (VOC) in Consumer Products, adopted September 25, 1997 and as last amended on [Date of Amendment], which is incorporated herein by reference. Alternative methods which are shown to accurately determine the concentration of VOCs in a subject product or its emissions may be used upon approval of the Executive Officer.~~

~~(2) *Aromatic compound content:*~~
Testing to determine aromatic compound content shall be conducted using ARB Method 310 in conjunction with product formulation data.

(1)~~(A)~~ Upon written notification from the Executive Officer, the Multi-purpose Solvent or Paint Thinner responsible party or manufacturer shall have ~~10~~ 30 working days to provide to the Executive Officer, in writing, formulation data as specified in part (A) ~~(i)~~ for products selected for compliance testing:

(A)~~(1)~~ The weight fraction to the nearest 0.1 percent of each ingredient including: water, VOC, LVP-VOC, total inorganic compounds, and any compound specified in section 94508(a)(152). For hydrocarbon solvents the BIN number as listed in section 94701 (a) or (b), and the initial boiling point and dry point of the solvent shall be specified. Individual compounds present in an amount less than 0.1 percent by weight, are not required to be reported.

(B)~~(2)~~ By March 1, 2010, and each year thereafter the responsible party shall provide to the Executive Officer contact information for the person who is to receive the letter.

(C)~~(3)~~ For the purpose of this subsection a Material Safety Data Sheet does not meet the requirement for formulation data.

(2)~~(B)~~ A violation is established if:

(A)~~(1)~~ the formulation data supplied by the responsible party or manufacturer shows that the product does not meet the applicable ~~VOC or~~ aromatic content standard; and/or

(B)~~(2)~~ the responsible party or manufacturer fails to respond to the notice and provide formulation data within the ~~10~~ 30 working day ~~specified~~ time frame specified in this subsection.

Note – See the last page in this Attachment B for additional proposed modifications to section 94515(h), Test Methods.

EXHIBIT C

C

Effective: August 14, 2008

United States Code Annotated Currentness
Title 15. Commerce and Trade
Chapter 30. Hazardous Substances (Refs & Annos)
§ 1261. Definitions

For the purposes of this chapter--

(a) The term "territory" means any territory or possession of the United States, including the District of Columbia and the Commonwealth of Puerto Rico but excluding the Canal Zone.

(b) The term "interstate commerce" means (1) commerce between any State or territory and any place outside thereof, and (2) commerce within the District of Columbia or within any territory not organized with a legislative body.

(c) The term "Commission" means the Consumer Product Safety Commission.

(d) Repealed. Pub.L. 110-314, Title II, § 204(b)(4)(A), Aug. 14, 2008, 122 Stat. 3041

(e) The term "person" includes an individual, partnership, corporation, and association.

(f) The term "hazardous substance" means:

(1)(A) Any substance or mixture of substances which (i) is toxic, (ii) is corrosive, (iii) is an irritant, (iv) is a strong sensitizer, (v) is flammable or combustible, or (vi) generates pressure through decomposition, heat, or other means, if such substances or mixture of substances may cause substantial personal injury or substantial illness during or as a proximate result of any customary or reasonably foreseeable handling or use, including reasonably foreseeable ingestion by children.

(B) Any substances which the Commission by regulation finds, pursuant to the provisions of section 1262(a) of this title, meet the requirements of subparagraph (1)(A) of this paragraph.

(C) Any radioactive substance, if, with respect to such substance as used in a particular class of article or as packaged, the Commission determines by regulation that the substance is sufficiently hazardous to require la-

beling in accordance with this chapter in order to protect the public health.

(D) Any toy or other article intended for use by children which the Commission by regulation determines, in accordance with section 1262(e) of this title, presents an electrical, mechanical, or thermal hazard.

(E) Any solder which has a lead content in excess of 0.2 percent.

(2) The term "hazardous substance" shall not apply to pesticides subject to the Federal Insecticide, Fungicide, and Rodenticide Act [7 U.S.C.A. 136 et seq.], nor to foods, drugs and cosmetics subject to the Federal Food, Drug, and Cosmetic Act [21 U.S.C.A. 301 et seq.], nor to substances intended for use as fuels when stored in containers and used in the heating, cooking, or refrigeration system of a house, nor to tobacco and tobacco products, but such term shall apply to any article which is not itself a pesticide within the meaning of the Federal Insecticide, Fungicide, and Rodenticide Act but which is a hazardous substance within the meaning of paragraph (1) of this subsection by reason of bearing or containing such a pesticide.

(3) The term "hazardous substance" shall not include any source material, special nuclear material, or byproduct material as defined in the Atomic Energy Act of 1954, as amended [42 U.S.C.A. 2011 et seq.], and regulations issued pursuant thereto by the Atomic Energy Commission.

(g) The term "toxic" shall apply to any substance (other than a radioactive substance) which has the capacity to produce personal injury or illness to man through ingestion, inhalation, or absorption through any body surface.

(h)(1) The term "highly toxic" means any substance which falls within any of the following categories: (a) Produces death within fourteen days in half or more than half of a group of ten or more laboratory white rats each weighing between two hundred and three hundred grams, at a single dose of fifty milligrams or less per kilogram of body weight, when orally administered; or (b) produces death within fourteen days in half or more than half of a group of ten or more laboratory white rats each weighing between two hundred and three hundred grams, when inhaled continuously for a period of one hour or less at an atmospheric concentration of two hundred parts per million by volume or less of gas or vapor or two milligrams per liter by volume or less of mist or dust, provided such concentration is likely to be encountered by man when the substance is used in any reasonably foreseeable manner; or (c) produces death within fourteen days in half or more than half of a group of ten or more rabbits tested in a dosage of two hundred milligrams or less per kilogram of body weight, when administered by continuous contact with the bare skin for twenty-four hours or less.

(2) If the Commission finds that available data on human experience with any substance indicate results different from those obtained on animals in the above-named dosages or concentrations, the human data shall take precedence.

(i) The term "corrosive" means any substance which in contact with living tissue will cause destruction of tissue by chemical action; but shall not refer to action on inanimate surfaces.

(j) The term "irritant" means any substance not corrosive within the meaning of subparagraph (i) of this section which on immediate, prolonged, or repeated contact with normal living tissue will induce a local inflammatory reaction.

(k) The term "strong sensitizer" means a substance which will cause on normal living tissue through an allergic or photodynamic process a hypersensitivity which becomes evident on reapplication of the same substance and which is designated as such by the Commission. Before designating any substance as a strong sensitizer, the Commission, upon consideration of the frequency of occurrence and severity of the reaction, shall find that the substance has a significant potential for causing hypersensitivity.

(l)(1) The terms "extremely flammable", "flammable", and "combustible" as applied to any substance, liquid, solid, or the content of a self-pressurized container shall be defined by regulations issued by the Commission.

(2) The test methods found by the Commission to be generally applicable for defining the flammability or combustibility characteristics of any such substance shall also be specified in such regulations.

(3) In establishing definitions and test methods related to flammability and combustibility, the Commission shall consider the existing definitions and test methods of other Federal agencies involved in the regulation of flammable and combustible substances in storage, transportation and use; and to the extent possible, shall establish compatible definitions and test methods.

(4) Until such time as the Commission issues a regulation under paragraph (1) defining the term "combustible" as applied to liquids, such term shall apply to any liquid which has a flash point above eighty degrees Fahrenheit to and including one hundred and fifty degrees, as determined by the Tagliabue Open Cup Tester.

(m) The term "radioactive substance" means a substance which emits ionizing radiation.

(n) The term "label" means a display of written, printed, or graphic matter upon the immediate container of any substance or, in the case of an article which is unpackaged or is not packaged in an immediate container intended or suitable for delivery to the ultimate consumer, a display of such matter directly upon the article involved or upon a tag or other suitable material affixed thereto; and a requirement made by or under authority of this chapter that any word, statement, or other information appear on the label shall not be considered to be complied with unless such word, statement, or other information also appears (1) on the outside container or wrapper, if any there be, unless it is easily legible through the outside container or wrapper and (2) on all accompanying literature where there are directions for use, written or otherwise.

(o) The term "immediate container" does not include package liners.

(p) The term "misbranded hazardous substance" means a hazardous substance (including a toy, or other article intended for use by children, which is a hazardous substance, or which bears or contains a hazardous substance

in such manner as to be susceptible of access by a child to whom such toy or other article is entrusted) intended, or packaged in a form suitable, for use in the household or by children, if the packaging or labeling of such substance is in violation of an applicable regulation issued pursuant to section 1472 or 1473 of this title or if such substance, except as otherwise provided by or pursuant to section 1262 of this title, fails to bear a label--

(1) which states conspicuously (A) the name and place of business of the manufacturer, packer, distributor or seller; (B) the common or usual name or the chemical name (if there be no common or usual name) of the hazardous substance or of each component which contributes substantially to its hazard, unless the Commission by regulation permits or requires the use of a recognized generic name; (C) the signal word "DANGER" on substances which are extremely flammable, corrosive, or highly toxic; (D) the signal word "WARNING" or "CAUTION" on all other hazardous substances; (E) an affirmative statement of the principal hazard or hazards, such as "Flammable", "Combustible", "Vapor Harmful", "Causes Burns", "Absorbed Through Skin", or similar wording descriptive of the hazard; (F) precautionary measures describing the action to be followed or avoided, except when modified by regulation of the Commission pursuant to section 1262 of this title; (G) instruction, when necessary or appropriate, for first-aid treatment; (H) the word "poison" for any hazardous substance which is defined as "highly toxic" by subsection (h) of this section; (I) instructions for handling and storage of packages which require special care in handling or storage; and (J) the statement (i) "Keep out of the reach of children" or its practical equivalent, or, (ii) if the article is intended for use by children and is not a banned hazardous substance, adequate directions for the protection of children from the hazard, and

(2) on which any statements required under subparagraph (1) of this paragraph are located prominently and are in the English language in conspicuous and legible type in contrast by typography, layout, or color with other printed matter on the label.

The term "misbranded hazardous substance" also includes a household substance as defined in section 1471(2)(D) of this title if it is a substance described in paragraph (1) of subsection (f) of this section and its packaging or labeling is in violation of an applicable regulation issued pursuant to section 1472 or 1473 of this title.

(q)(1) The term "banned hazardous substance" means (A) any toy, or other article intended for use by children, which is a hazardous substance, or which bears or contains a hazardous substance in such manner as to be susceptible of access by a child to whom such toy or other article is entrusted; or (B) any hazardous substance intended, or packaged in a form suitable, for use in the household, which the Commission by regulation classifies as a "banned hazardous substance" on the basis of a finding that, notwithstanding such cautionary labeling as is or may be required under this chapter for that substance, the degree or nature of the hazard involved in the presence or use of such substance in households is such that the objective of the protection of the public health and safety can be adequately served only by keeping such substance, when so intended or packaged, out of the channels of interstate commerce: *Provided*, That the Commission, by regulation, (i) shall exempt from clause (A) of this paragraph articles, such as chemical sets, which by reason of their functional purpose require the inclusion of the hazardous substance involved or necessarily present an electrical, mechanical, or thermal hazard, and which bear labeling giving adequate directions and warnings for safe use and are intended for use by children who have attained sufficient maturity, and may reasonably be expected, to read and heed such directions and warnings, and (ii) shall exempt from clause (A), and provide for the labeling of, common fireworks (including

toy paper caps, cone fountains, cylinder fountains, whistles without report, and sparklers) to the extent that it determines that such articles can be adequately labeled to protect the purchasers and users thereof.

(2) Proceedings for the issuance, amendment, or repeal of regulations pursuant to clause (B) of subparagraph (1) of this paragraph shall be governed by the provisions of subsections (f) through (i) of section 1262 of this title, except that if the Commission finds that the distribution for household use of the hazardous substance involved presents an imminent hazard to the public health, it may by order published in the Federal Register give notice of such finding, and thereupon such substance when intended or offered for household use, or when so packaged as to be suitable for such use, shall be deemed to be a "banned hazardous substance" pending the completion of proceedings relating to the issuance of such regulations.

(r) An article may be determined to present an electrical hazard if, in normal use or when subjected to reasonably foreseeable damage or abuse, its design or manufacture may cause personal injury or illness by electric shock.

(s) An article may be determined to present a mechanical hazard if, in normal use or when subjected to reasonably foreseeable damage or abuse, its design or manufacture presents an unreasonable risk of personal injury or illness (1) from fracture, fragmentation, or disassembly of the article, (2) from propulsion of the article (or any part or accessory thereof), (3) from points or other protrusions, surfaces, edges, openings, or closures, (4) from moving parts, (5) from lack or insufficiency of controls to reduce or stop motion, (6) as a result of self-adhering characteristics of the article, (7) because the article (or any part or accessory thereof) may be aspirated or ingested, (8) because of instability, or (9) because of any other aspect of the article's design or manufacture.

(t) An article may be determined to present a thermal hazard if, in normal use or when subjected to reasonably foreseeable damage or abuse, its design or manufacture presents an unreasonable risk of personal injury or illness because of heat as from heated parts, substances, or surfaces.

CREDIT(S)

(Pub.L. 86-613, § 2, July 12, 1960, 74 Stat. 372; Pub.L. 89-756, §§ 2(a)-(c), 3(a), Nov. 3, 1966, 80 Stat. 1303, 1304; Pub.L. 91-113, §§ 2(a), (c), (d), 3, Nov. 6, 1969, 83 Stat. 187-189; Pub.L. 91-601, § 6(a), formerly § 7(a), Dec. 30, 1970, 84 Stat. 1673, renumbered Pub.L. 97-35, Title XII, § 1205(c), Aug. 13, 1981, 95 Stat. 716; Pub.L. 92-516, § 3(1), Oct. 21, 1972, 86 Stat. 998; Pub.L. 92-573, § 30(a), Oct. 27, 1972, 86 Stat. 1231; Pub.L. 94-284, § 3(c), May 11, 1976, 90 Stat. 503; Pub.L. 95-631, § 9, Nov. 10, 1978, 92 Stat. 3747; Pub.L. 99-339, Title I, § 109(d)(1), June 19, 1986, 100 Stat. 653; Pub.L. 110-314, Title II, § 204(b)(2), (4)(A), (B), (D), Aug. 14, 2008, 122 Stat. 3041, 3042.)

HISTORICAL AND STATUTORY NOTES

Revision Notes and Legislative Reports

1960 Acts. House Report No. 1861, see 1960 U.S. Code Cong. and Adm. News, p. 2833.

EXHIBIT D

C

Effective:[See Text Amendments]

Code of Federal Regulations Currentness
Title 16. Commercial Practices
Chapter II. Consumer Product Safety Commission (Refs & Annos)
Subchapter C. Federal Hazardous Substances Act Regulations
Part 1500. Hazardous Substances and Articles; Administration and Enforcement Regulations (Refs & Annos)

→ § 1500.121 Labeling requirements; prominence, placement, and conspicuousness.

(a)(1) Background and scope. Section 2(p)(1) of the Federal Hazardous Substances Act (FHSA) or "the Act"), 15 U.S.C. 1261(p)(1), requires that hazardous substances bear certain cautionary statements on their labels. These statements include: signal words; affirmative statements of the principal hazard(s) associated with a hazardous substance; the common or usual name, or chemical name, of the hazardous substance; the name and place of business of the manufacturer, packer, distributor, or seller; statements of precautionary measures to follow; instructions, when appropriate, for special handling and storage; the statement "Keep Out of the Reach of Children" or its practical equivalent; and, when appropriate, first-aid instructions. Section 2(p)(2) of the Act specifies that all such statements shall be located prominently on the label of such a substance and shall appear in conspicuous and legible type in contrast by typography, layout, or color with other printed matter on the label. This regulation contains the Commission's interpretations and policies for the type size and placement of cautionary material on the labels of hazardous substances and contains other criteria for such cautionary statements that are acceptable to the Commission as satisfying section 2(p)(2) of the Act. Labels that do not comply with this regulation may be considered misbranded.

(2) Definitions. For the purposes of this section:

(i) Container means the immediate package from which a hazardous substance may be dispensed and also any article, package or wrapping, such as a tube or cone used for a firework or a wet cell battery casing containing sulfuric acid, which is necessary for the substance to function during actual use.

(ii) Cautionary material, cautionary labeling, and cautionary labeling required by the Act mean all items of labeling information required by sections 2 (p) (1) of the FHSA (repeated in 16 CFR 1500.3(b)(14)(i) or by the regulations which require additional labeling under section 3(b) of the Act.

(iii) Display panel means any surface of the immediate container, and of any outer container or wrapping, which bears labeling.

(iv) Principal display panel means the portion(s) of the surface of the immediate container, and of any outer container or wrapping, which bear(s) the labeling designed to be most prominently displayed, shown, presented, or examined under conditions of retail sale. (See paragraph (c)(1) of this section.)

(v) Type size means the actual height of the printed image of each upper case or capital letter as it appears on the label of a hazardous substance. (See paragraph (c)(2) of this section.)

(vi) Signal word means the appropriate word "DANGER," "WARNING," or "CAUTION," as required by sections 2(p)(1) (C) or (D) of the Act.

(vii) Statement of principal hazard(s) means that wording descriptive of the principal or primary hazard(s) associated with a hazardous substance required by section 2(p)(1)(E) of the Act. Some examples of such statements are "HARMFUL OR FATAL IF SWALLOWED," "VAPOR HARM-

FUL," "FLAMMABLE," and "SKIN AND EYE IRRITANT."

(viii) Other cautionary material means all labeling statements, other than "signal words" or "statement(s) of principal hazard(s)," required by the Act or by regulations issued under the Act.

(b) Prominent label placement. To satisfy the requirement of the Act that cautionary labeling statements shall appear "prominently" on the label of a hazardous substance, all such statements shall be placed on the label as follows:

(1) Horizontal placement of labeling statements. Except for the name and place of business of the manufacturer, packer, distributor, or seller, all cautionary material required by the Act shall appear in lines that are generally parallel to any base on which the package rests as it is designed to be displayed for sale or, on display panels other than the principal display panel, in lines generally parallel to all other labeling on that panel. This requirement does not apply to labeling on collapsible tubes, cylindrical containers with a narrow diameter, or F-type containers where both the "front" and "back" of the container are principal display panels. (See paragraph (e) of this section.)

(2) Principal display panel labeling.

(i) All items of cautionary labeling required by the Act may appear on the principal display panel on the immediate container and, if appropriate, on any other container or wrapper. See paragraph (b)(4) of this section for requirements and exceptions for labeling outer containers and wrappings.

(ii) The signal word, the statement of principal hazard(s), and, if appropriate, instructions to read carefully any cautionary material that may be placed elsewhere on the label shall be blocked together within a square or rectangular area, with or without a border, on the principal display panel on the immediate container and, where required by paragraph (b)(4) of this section, on any outer container or wrapping. All cautionary statements placed on the principal display panel shall be separated on all sides from other printed or graphic matter, with the exception of the declaration of net contents required under the Fair Packaging and Labeling Act, 15 U.S.C. 1453(a) (2) and (3), by a border line or by a space no smaller than the minimum allowable height of the type size for cautionary material required by the Act (exclusive of signal words and statements of hazard) on the principal display pan- el.

(iii) Depending on the design of the package or the configuration of the label, or both, a package may have more than one principal display panel. If so, each principal display panel must bear, at a minimum, the signal word, statement of principal hazard or hazards, and, if appropriate, instructions to read carefully any cautionary material that may be placed elsewhere on the label.

(A) Where the principal display panel of the immediate container consists of a lid, cap, or other item which may be separated from the immediate container and discarded, the container shall be deemed to have a second principal display panel elsewhere on the immediate container which must bear, at a minimum, the signal word, statement of principal hazard(s), and instructions, if appropriate, to read any cautionary material which may be placed elsewhere on the label.

(3) Prominent label placement--other display panel labeling. All items of cautionary labeling required by the Act which do not appear on the principal display panel shall be placed together on a display panel elsewhere on the container. The name and place of business of the manufacturer, packer, distributor, or seller may appear separately on any display panel. Where cautionary material appears on a display panel other than the principal display panel, the principal display panel shall bear the statement "Read carefully other cautions on the _____ panel," or its practical equivalent. [A description of the location of the other panel is to be inserted in the

blank space.]

(4) Outer container or wrappings. All cautionary labeling appearing on the immediate container of a hazardous substance shall also appear on any outer container or wrapping used in the retail display of the substance, in the same manner as required for the immediate container. Those cautionary labeling statements appearing on the immediate container which are clearly legible through any outer container or wrapper used in retail display need not appear on the outer container or wrapping itself. (See Section 2(n)(1) of the Act.)

(5) Placement of the word "Poison" and the skull and crossbones symbol. The word "poison" and, when appropriate, the skull and crossbones symbol shall appear on the label of a hazardous substance as follows:

(i) If a hazardous substance is "highly toxic," as defined in § 1500.3(c)(i) and section 2(h)(1) of the FHSA, the label must bear the word "poison" in accordance with section 2(p)(1)(H) of the Act, in addition to the signal word "DANGER," and must also bear the skull and crossbones symbol. Some products, under § 1500.14(b) of the regulations, may, in addition to any required signal word, be required to bear the word "poison" and the skull and crossbones symbol because of the special hazard associated with their ingredients. In both instances, the word "poison" and the skull and crossbones symbol need not appear on the principal display panel on the container, unless all other cautionary labeling required by the Act appears on the principal display panel. The word "poison" and the skull and crossbones symbol, when required, must appear either together with other cautionary labeling on a display panel other than the principal display panel or together with the signal word and statement(s) of principal hazard on the principal display panel.

(ii) Where, pursuant to a regulation issued under section 3(b) of the Act, the label of a hazardous substance requires the word "poison" instead of a signal word, the word, "POISON" shall appear in capital letters on the principal display panel, together with the statement(s) of the principal hazard. Certain substances for which the word "poison" is required instead of any signal word are listed in § 1500.129.

(c) Conspicuousness--type size and style. To satisfy the requirement that cautionary labeling statements under the Act be conspicuous and legible, such statements shall conform to the following requirements:

(1) Area of principal display panel. The area of the principal display panel is the area of the side or surface of the immediate container, or of the side or surface of any outer container or wrapping, that bears the labeling designed to be most prominently displayed, shown, presented, or examined under conditions of retail sale. This area is not limited to the portion of the surface covered with labeling; rather, it includes the entire surface. Flanges at the tops and bottoms of cans, conical shoulders of cans, handles, and shoulders and necks of bottles and jars are excluded in measuring the area. For the purposes of determining the proper type size for cautionary labeling, the area of the principal display panel (or other panel bearing cautionary labeling, under paragraph (c)(2)(ii) of this section) is to be computed as follows:

(i) In the case of a rectangular package, where one entire side is the principal display panel, the product of the height times the width of that side shall be the area of the principal display panel.

(ii) In the case of a cylindrical or nearly cylindrical container or tube on which the principal display panel appears on the side, the area of the principal display panel shall be 40 percent of the product of the height of the container times its circumference.

(iii) In the case of any other shape of container, the area of the principal display panel shall be 40 percent of the total surface of the container, excluding those areas, such as flanges at tops and bottoms, specified in paragraph (c)(1) above. However, if such a container presents an obvious principal dis-

play panel (such as an oval or hour-glass shaped area on the side of a container for dishwashing detergent), the area to be measured shall be the entire area of the obvious principal display panel.

(2) Type-size requirements.

(i) The term type size refers to the height of the actual printed image of each upper case or capital letter as it appears on the label. The size of cautionary labeling shall be reasonably related to the type size of any other printing appearing on the same panel, but in any case must meet the minimum size requirements in Table 1.

(ii) When an item of labeling is required to be in a specified type size, all upper case, or capital, letters must be at least equal in height to the required type size, and all other letters must be the same style as the upper case or capital letters. Unless otherwise specified in the regulations (examples appear at §§ 1500.14(b)(6), 1512.19, 1508.9, and part 1505), the type size of all cautionary statements appearing on any display panel shall comply with the specifications in Table 1 when the area of the display panel is measured by the method in paragraph (c)(1) above:

TABLE 1

Area of principal display panel in square inches	0-2	>2-5	>5-10	>10-15	>15-30	>30
Type size in inches!*						
Signal word**	3/64	1/16	3/32	7/64	1/8	5/32
Statement of hazard	3/64	3/64	1/16	3/32	3/32	7/64
Other cautionary material***	1/32	3/64	1/16	1/16	5/64	3/32

> means "greater than."

* minimum height of printed image of capital or upper case letters.

** including the word "poison" when required instead of a signal word by Section 3(b) of the Act (§ 1500.129).

*** size of lettering for other cautionary material is based on the area of the display panel on which such cautionary material appears.

(iii) If all of the required cautionary labeling does not appear on the principal display panel, the statement to "Read carefully other cautions on the —— panel," or its practical equivalent, must appear in, as a minimum, the same type size as that required in Table 1 for the other cautionary material which appears elsewhere on the label of a hazardous substance. The size of the cautionary labeling that does not appear on the principal display panel is determined by the area of the panel on which it does appear.

(3) Type style--proportion. The ratio of the height of a capital or uppercase letter to its width shall be such that the height of the letter is no more than 3 times its width.

(4) Signal word and statements of hazard--capital letters. The signal word, the word "poison" if required instead of a signal word (see § 1500.129), and the statement of principal hazard or hazards shall be in capital letters.

(5) Multiple statement of hazard--type size and style. All statements of principal hazard or hazards on a label shall appear in the same size and style of type, and shall appear in the same color or have the same degree of boldness.

(6) Accompanying literature containing directions for use. Where literature accompanying the package of a hazardous substance has directions for use, written or otherwise, section 2(n) of the Act requires the literature to bear cautionary labeling.

(i) All such cautionary labeling shall be in reasonable proximity to any direction for use and shall be placed together within the same general area.

(ii) The type size of such cautionary labeling shall be reasonably related to the type size of any other printed matter in the accompanying literature and must be in conspicuous and legible type by typography, layout, or color with other printed matter on the label. The signal word and statement of principal hazard or hazards shall appear in capital let- ters.

(d) Conspicuousness--contrast. To satisfy the requirement that cautionary labeling statements appear in conspicuous and legible type which is in contrast by typography, layout, or color with the other printed matter on the label, such statements shall conform to the following requirements:

(1) Color. Where color is the primary method used to achieve appropriate contrast, the color of any cautionary labeling statement shall be in sharp contrast with the color of the background upon which such a statement appears. Examples of combinations of colors which may not satisfy the requirement for sharp contrast are: black letters on a dark blue or dark green background, dark red letters on a light red background, light red letters on a reflective silver background, and white letters on a light gray or tan background.

(2) Interference with conspicuousness--labeling design, vignettes, or other printed material. For cautionary information appearing on panels other than the principal display panel, the label design, the use of vignettes, or the proximity of other labeling or lettering shall not be such that any cautionary labeling statement is obscured or rendered inconspicuous.

(e) Collapsible metal tubes. Collapsible metal tubes containing hazardous substances shall be labeled so that all cautionary labeling required by the Act appears as close to the dispensing end of the container as possible. The placement and conspicuousness of these statements shall conform to the provisions of paragraphs (b), (c), and (d) of this section.

(f) Unpackaged hazardous substances. Where practicable, unpackaged hazardous substances intended, or distributed in a form suitable, for use in or around a household or by children shall be labeled so that all items of information required by the Act appear upon the article itself. In instances where this is impracticable (for example, because of the size or nature of the article), the required cautionary labeling must be displayed by means of a tag or other suitable material that is no less than five square inches in area and is securely affixed to the article so that the labeling will remain attached throughout conditions of merchandising and distribution to the ultimate consumer. The placement and conspicuousness of all cautionary labeling appearing on such a tag or material, or on an unpackaged article, shall conform to the provisions of paragraphs (b), (c), and (d) of this section. For the purposes of determining the proper type size to use on a tag or other material, the area of one side of the tag or other material shall be the area of the principal display panel.

(g) Exemptions. All requirements of the Act are satisfied by compliance with this § 1500.121. However, exemptions can be granted under section 3(c) of the Act

and § 1500.83, or under the provisions of another statute should this section be incorporated in regulations under another statute. Section 1500.82 contains the requirements for exemption requests under the Federal Hazardous Substances Act.

(h) Effective date. The provisions of this rule apply to hazardous substances bearing labels printed after December 30, 1985. Labels printed prior to the effective date of this rule may be applied until not later than December 28, 1987. This rule applies to all hazardous substances to which labels are applied after December 28, 1987.

[49 FR 50383, Dec. 28, 1984]

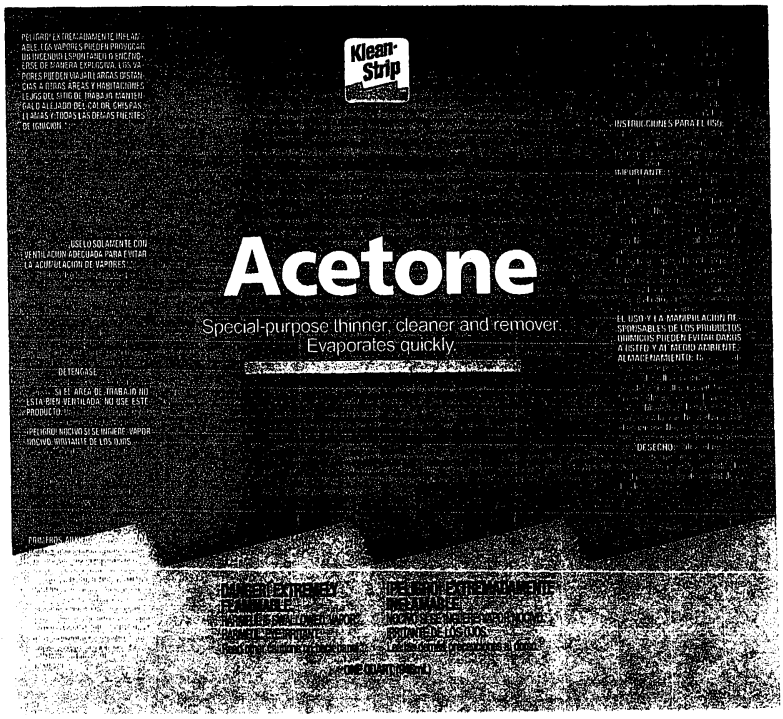
SOURCE: 38 FR 27012, Sept. 27, 1973; 51 FR 29096, Aug. 14, 1986; 57 FR 46665, Oct. 9, 1992; 58 FR 40334, July 28, 1993; 59 FR 9076, Feb. 25, 1994; 60 FR 10752, Feb. 27, 1995, 61 FR 19829, May 3, 1996; 74 FR 6993, Feb. 12, 2009; 74 FR 10480, March 11, 2009, unless otherwise noted.

AUTHORITY: 15 U.S.C. 1261-1278, 122 Stat. 3016

16 C. F. R. § 1500.121, 16 CFR § 1500.121

Current through April 9, 2010; 75 FR 18375

EXHIBIT E



This strong, fast-acting solvent is a thinner and remover for specified coatings, including polyester and epoxy resins, ink, adhesives and contact cement. Acetone is an effective cleanup solvent after the completion of a fiberglass project, for removal of excess fiberglass resin or foreign material from solvent-tolerant surfaces.

DIRECTIONS FOR USE: Use only as specified by the coating, adhesive, or hobby product manufacturer.

IMPORTANT: Carefully read all directions, notes and cautions prior to use. Only use this product as directed on the label. Do not use for any other purpose. Do not mix with any other product. Do not spread this product over large surface areas because fire and health safety risks will increase dramatically. Protect hands with solvent-resistant gloves and eyes with chemical splash goggles. Acetone may soften or damage plastics, synthetics, and many other finishes.

RESPONSIBLE USE AND HANDLING OF ALL CHEMICALS CAN PREVENT HARM TO YOU AND THE ENVIRONMENT.

STORAGE: Do not use or store this product near any source of heat or open flame, furnace areas, pilot lights, stoves, etc. Keep it in a cool, dry spot. Keep container closed when not in use. Do not reuse this container. Use product within one year of purchasing. **DISPOSAL:** Dispose of in accordance with federal, state and local regulations.

DANGER! EXTREMELY FLAMMABLE. VAPORS MAY CAUSE FLASH FIRE OR IGNITE EXPLOSIVELY. VAPORS MAY TRAVEL LONG DISTANCES TO OTHER AREAS AND ROOMS AWAY FROM WORK SITE. KEEP AWAY FROM HEAT, SPARKS, FLAME AND ALL OTHER SOURCES OF IGNITION. Do not smoke. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and all other sources of ignition anywhere in the structure, dwelling or building during use and until vapors are gone from the work site and all areas away from work site. Keep away from electrical outlets and switches. Beware of static electricity that may be generated by synthetic clothing and other sources. **USE ONLY WITH ADEQUATE VENTILATION TO PREVENT BUILDUP OF VAPORS.** Do not use in areas where vapors can accumulate and concentrate such as basements, bathrooms or small enclosed areas. Whenever possible, use outdoors in an open air area. If using indoors open all windows and doors and maintain a cross ventilation of moving fresh air across the work area. If strong odor is noticed or you experience slight dizziness, headache, nausea or eye-watering - **STOP** - ventilation is inadequate. Leave area immediately. **IF THE WORK AREA IS NOT WELL VENTILATED, DO NOT USE THIS PRODUCT.** A dust mask does not provide protection against vapors.

DANGER! HARMFUL IF SWALLOWED. VAPOR HARMFUL. EYE IRRITANT. Contains Acetone. Reports have associated repeated and prolonged overexposure to solvents with neurological and other physiological damage. Intentional misuse of this product by deliberately concentrating and inhaling vapors can be harmful or fatal. Do not take internally. Avoid breathing of vapors or mist and contact with skin, eyes or clothing.

FIRST AID - IF SWALLOWED, call your poison control center, hospital emergency room or physician immediately for instructions. **IN CASE OF EYE CONTACT,** immediately flush with water, remove any contact lens, continue flushing with water for at least 15 minutes, then get medical attention. **IN CASE OF SKIN CONTACT,** irritation may result. Immediately wash with soap and water.

KEEP OUT OF REACH OF CHILDREN

For assistance call:
The Barr Help Line 1-800-398-3892
Monday - Friday 8am - 4:30 pm Central Time

Barr
Product # QAC18

C0570

0 30192 01815 6

EXHIBIT F

C

Effective:[See Text Amendments]

United States Code Annotated Currentness
Title 15. Commerce and Trade
Chapter 47. Consumer Product Safety (Refs & Annos)
§ 2075. State standards

(a) State compliance to Federal standards

Whenever a consumer product safety standard under this chapter is in effect and applies to a risk of injury associated with a consumer product, no State or political subdivision of a State shall have any authority either to establish or to continue in effect any provision of a safety standard or regulation which prescribes any requirements as to the performance, composition, contents, design, finish, construction, packaging, or labeling of such product which are designed to deal with the same risk of injury associated with such consumer product, unless such requirements are identical to the requirements of the Federal standard.

(b) Consumer product safety requirements which impose performance standards more stringent than Federal standards

Subsection (a) of this section does not prevent the Federal Government or the government of any State or political subdivision of a State from establishing or continuing in effect a safety requirement applicable to a consumer product for its own use which requirement is designed to protect against a risk of injury associated with the product and which is not identical to the consumer product safety standard applicable to the product under this chapter if the Federal, State, or political subdivision requirement provides a higher degree of protection from such risk of injury than the standard applicable under this chapter.

(c) Exemptions

Upon application of a State or political subdivision of a State, the Commission may by rule, after notice and opportunity for oral presentation of views, exempt from the provisions of subsection (a) of this section (under such conditions as it may impose in the rule) any proposed safety standard or regulation which is described in such application and which is designed to protect against a risk of injury associated with a consumer product subject to a consumer product safety standard under this chapter if the State or political subdivision standard or regulation--

(1) provides a significantly higher degree of protection from such risk of injury than the consumer product safety standard under this chapter, and

(2) does not unduly burden interstate commerce.

In determining the burden, if any, of a State or political subdivision standard or regulation on interstate commerce, the Commission shall consider and make appropriate (as determined by the Commission in its discretion) findings on the technological and economic feasibility of complying with such standard or regulation, the cost of complying with such standard or regulation, the geographic distribution of the consumer product to which the standard or regulation would apply, the probability of other States or political subdivisions applying for an exemption under this subsection for a similar standard or regulation, and the need for a national, uniform standard under this chapter for such consumer product.

CREDIT(S)

(Pub.L. 92-573, § 26, Oct. 27, 1972, 86 Stat. 1227; Pub.L. 94-284, § 17(d), May 11, 1976, 90 Stat. 514.)

HISTORICAL AND STATUTORY NOTES

Revision Notes and Legislative Reports

1972 Acts. Senate Report No. 92-835 and House Conference Report No. 92-1593, see 1972 U.S. Code Cong. and Adm. News, p. 4573.

1976 Acts. Senate Report No. 94-251 and House Conference Report No. 94-1022, see 1976 U.S. Code Cong. and Adm. News, p. 993.

Amendments

1976 Amendments. Subsec. (b). Pub.L. 94-284 substituted provision that a standard provide a significantly higher degree of protection from the risk of injury for the provision that the standard imposes a higher level of performance.

Subsec. (c). Pub.L. 94-284 substituted the requirement that a state standard provide a significantly higher degree of protection from the risk of injury than the standard under this chapter for the requirement that the state standard impose a higher level of performance, eliminated the requirement of a compelling local condition, and inserted the requirement that the Commission make specific findings in determining the burden on interstate com- merce.

CODE OF FEDERAL REGULATIONS

Exemption from preemption, see 16 CFR § 1061.1 et seq.

LAW REVIEW COMMENTARIES

EXHIBIT G

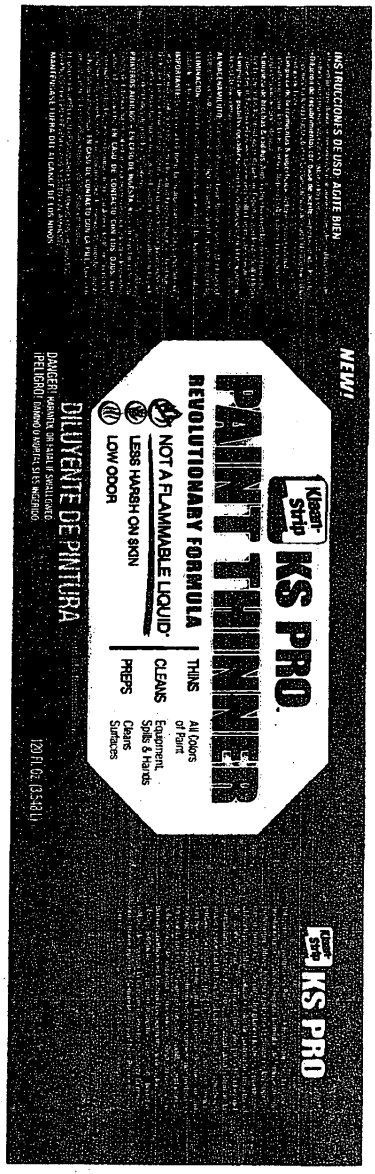

NEW!
KS PRO
PAINT THINNER
REVOLUTIONARY FORMULA
NOT A FLAMMABLE LIQUID*
LESS HARSH ON SKIN
LOW ODOR
THINS All Colors of Paint
CLEANS Equipment, Spills & Hands
PREPS Cleans Surfaces
DILUYENTE DE PINTURA
DANGER HARMFUL OR FATAL IF SWALLOWED
PELIGRO DAÑINO O MORTAL SI ES INGERIDO
KS PRO
DIRECTIONS FOR USE: SHAKE WELL
KEEP OUT OF REACH OF CHILDREN

EXHIBIT H

Fire Safety Alert

Occupational Health Surveillance Program- Massachusetts Department of Public Health
Office of the State Fire Marshal Department of Fire Services

March 2006

Wood Floor Sanders Killed When Floor Finishing Product Catches Fire-Massachusetts

Wood floor finishing can expose workers, building occupants, and homeowners to fire hazards. In Massachusetts, three wood floor sanders died within a 10 month period (September 2004 – July 2005) in two separate fires when the flammable lacquer floor sealer they were using caught fire. The sealer used in these incidents was highly flammable (flash point 9°F/-13°C). All three of the fatally injured workers were Vietnamese immigrants.

Incident 1: Two floor sanders died from burns and two were seriously burned while they were refinishing wood floors in a three-family house. The house caught fire while the workers were applying a lacquer sealer that was ignited by a pilot light in a gas stove. At the time of the fire, windows were closed and no other means of ventilation were being used.

Incident 2: One floor sander died from burns and another received minor burns while finishing wood floors that they installed in a single family house. The house caught fire while the workers were applying a lacquer sealer that was ignited by a pilot light on a gas hot water heater. The heater was located in a closet on the same level of the house where the floors were being finished. At the time of the fire, the front door was open, but windows were closed and no other means of ventilation were being used.

What is the flash point of a liquid?

The flash point is the lowest temperature at which a liquid produces enough vapor to catch fire in the presence of a flame or other ignition source. **The lower the flash point, the more flammable the liquid.** A product's flash point can be found on the *Material Safety Data Sheet* (MSDS), or product label or by calling the product manufacturer.

HOW CAN YOU HELP PREVENT FIRE DURING FLOOR FINISHING?

Use less flammable wood floor finishing products (products with flash points greater than 100°F/38°C) for indoor applications.

Extinguish all open flames and other ignition sources before beginning work.

- Extinguish gas appliance pilots (on stoves, hot water heaters, heating units, clothes dryers, and other appliances).
- Turn off and unplug cycling electrical appliances (such as refrigerators, air conditioners, heating units, hot water heaters) and other electrical devices.
- Do not light or smoke cigarettes while you are working.
- Do not turn light switches on or off during the floor finishing process; turn off power to work area, if possible.

Adequately ventilate work areas during wood floor finishing.

- Open windows; keep open during product application until product is dry.
- If electric fans are used for ventilation, they must be classified as ***explosion proof*** and be plugged in outside of the work area.

In addition, employers should:

Provide safety training to employees, as required by law,* about the hazards of the chemicals they work with and safe work practices. Training should be provided in the languages spoken by employees.

*The Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200).

Conduct a job hazard analysis before each job. Also require employees to complete a safety checklist before beginning each job.

Before starting floor finishing jobs, employers should get information on manufacturer's safety recommendations for all products being used, ignition sources in the house and how to keep the work area ventilated. This information should be part of the safety checklist given to the work crew before going to the work site. Employers should make sure that the safety checklist has been completed before anyone starts work.

Fatality Assessment Control Evaluation (FACE) Project 617.624.5627

06/04/2010 10:39 FAX 13105523229 CASE KNOWLSON JORDAN LLP 059/059

FATALITY INVESTIGATION REPORT

FACE Facts

March 2006

Please Post

The Massachusetts Department of Public Health (MDPH), in cooperation with the National Institute for Occupational Safety and Health, conducts research-oriented investigations of fatal work-related injuries. The project, known as FACE (Fatality Assessment and Control Evaluation), seeks to identify the factors that contribute to these occupational fatalities. This alert was developed by the Massachusetts FACE Project in collaboration with the Office of the State Fire Marshal.

Please share this alert with others. This document is in the public domain and may be copied freely. It can be found along with other materials on the MDPH website at www.mass.gov/dph/bhsre/ohsp/ohsp.htm. If you have comments or questions, please call the FACE Project at 1-800-338-5223 or the Office of the State Fire Marshal at 877-9NO-FIRE.

Occupational Health Surveillance Program
Massachusetts Department of Public Health
250 Washington Street, 6th Floor
Boston, MA 02108

Some Massachusetts Health and Safety Resources

Massachusetts Division of Occupational Safety:
Offers free consultation services to help employers to improve their safety and health programs and train employees (www.mass.gov/dos/consult/index.htm)

Massachusetts Department of Industrial Accidents:
Has grants available for providing workplace health and safety training to employers/employees in companies covered by the Massachusetts Workers' Compensation Insurance Law (www.mass.gov/dia/Safety/index.htm)

Office of the State Fire Marshal:
Works to preserve life and property from fire and explosion by prevention, engineering, education, and enforcement (www.mass.gov/dfs/osfm/exec/index.htm)

Occupational Safety and Health Administration (OSHA):
Hazard Communication Standard (29 CFR 1910.1200) (http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10099)

Responses to Comment Letter #3
(W.M. Barr & Company, Inc., June 4, 2010)

3-1 See responses to Comments 3-4 and 3-5.

3-2 See responses to Comments 3-6, 3-7, and 3-8.

3-3 Consistent with CARB's Consumer Product Regulation, the SCAQMD has modified its rule to avoid any significant adverse fire hazard impacts. In addition, SCAQMD staff has worked closely with CARB staff, fire officials, and the regulated community to evaluate all proposed strategies and alternatives.

3-4 California Health and Safety Code §41712(f), which governs regulations to control VOCs in consumer products, only bars the SCAQMD from adopting consumer product regulations that differ from regulations *adopted* by CARB. First, the SCAQMD is not adopting Rule 1143 for the first time, but is amending it. Moreover, as further explained in the letter from CARB's counsel Bob Jenne (see Appendix E), CARB regulations are not adopted until all rule revisions are finalized, and the CARB Executive Officer has approved the rule. See CARB Resolution 09-51, which was attached to W.M. Barr's comment letter as Exhibit A, directing its Executive Officer to take final action to adopt the amendments after making appropriate modifications. At present, CARB's Executive Officer has not yet taken final action to adopt the "Proposed Amendments to the Regulation for Reducing Emissions From Consumer Products," which was attached to W.M. Barr's comment letter as Exhibit B. Thus, in the absence of that final action, PAR 1143 is not preempted by California Health and Safety Code §41712(f).

3-5 The differences between CARB's proposed regulation and Rule 1143 are not relevant to the state law preemption analysis because CARB has not yet finalized its adoption of the proposed regulation. In addition, California Health and Safety Code §41712(f), on its face, does not preclude rule amendments. See also the response to Comment 3-4.

3-6 Contrary to the commenter's statement, compliance with the rule does not require the use of paint thinners with acetone. Rather, there are a number of alternative solvents other than acetone that may be used. However, if manufacturers choose to comply with Rule 1143 by using acetone, they may continue distributing these reformulated products using acetone in the District and later throughout all of California if the appropriate label or hang tag as required by both state law and this rule is used. The purpose of the labeling or hang tag is to alert consumers that these paint thinners have been reformulated with acetone, and do not contain the mineral spirits they may be accustomed to.

As the commenter notes, the Consumer Product Safety Commission (CPSC) implements the labeling requirements of the Federal Hazardous Substances Act

through regulations it promulgates. Under present case law, it is unclear whether CPSC's standards are simply minimum standards. See e.g. *Summerlin v. Scott Petroleum Corp.* 324 F.Supp.2d 810. Nevertheless, SCAQMD staff has spoken with CARB staff about its labeling requirement, which the SCAQMD has essentially incorporated into PAR 1143. SCAQMD staff was informed that when developing the labeling requirements in CARB's proposed consumer product regulation, CARB staff consulted with the staff from the CPSC. CARB staff explained to the CPSC that CARB's labeling requirement was designed to alert consumers that products that may previously have been formulated with mineral spirits were now reformulated with acetone to meet air quality standards. CPSC regulations do not address labeling with the name of the product ingredient such as acetone. CARB also explained that these product manufacturers also had the option of reformulating with solvents other than acetone, reformulating with acetone and complying with the labeling requirements, or reformulating with acetone and not distributing in California. Based on CARB's explanation, the CPSC staff agreed that CARB's proposed labeling requirements did not conflict with federal requirements because it alerted consumers that the product had been formulated to meet air quality standards and, therefore, did not trigger the federal preemption clause in 15 U.S.C. § 2075(a). Because the labeling requirements as described in paragraph (e)(2) of PAR 1143 are substantively identical to CARB's labeling requirements, PAR 1143's labeling requirements are not preempted by federal law. Nevertheless, to further address these concerns, additional options to the labeling requirements have been included in PAR 1143. In addition, to address concerns about uniformity with CARB's regulations, the labeling requirements in CARB's regulation are included in PAR 1143 as an option for compliance. Moreover, PAR 1143 contains a clarification that the labeling requirements are not limiting, and that manufacturers and distributors may add additional warnings if they feel it is necessary. In any event, while labeling by itself would render the project insignificant as to fire hazards, as indicated in CARB's regulation; even without the labeling requirements, the project would have insignificant fire hazard risks because of the SCAQMD's public education and outreach program.

3-7 With regard to the claim of state preemption, see response to Comment 3-4. With regard to the claim of federal preemption, see response to Comment 3-6. As stated above, the purpose of the requirement to specify acetone or to specify the fact that the product was reformulated is to alert the consumer about reformulations in the product to meet air pollution limits and that are more flammable. One option directs their attention to the CPSC-approved label. Thus, it is not surprising that CPSC regulations do not include those requirements, since they are unrelated to the concerns of the CPSC, as they confirmed with CARB staff. Additionally, it is important to note that the labeling requirements described in paragraph (e)(2) of PAR 1143 provide manufacturers with several labeling choices. Specifically, a manufacturer has the option of either: 1) attaching a "hang tag" or sticker that displays a statement that the product has been "Formulated to meet low VOC limits; see warnings on label" (see subparagraph

(e)(2)(A) of PAR 1143); 2) attaching a "hang tag" or sticker that displays a statement that the product has been "Formulated to meet low VOC limits with [the common name of the chemical compound (e.g., 'Acetone,' 'Methyl Acetate,' etc) that results in the product meeting the criteria for 'Flammable,' or 'Extremely Flammable'] (see subparagraph (e)(2)(B) of PAR 1143); 3) the product includes a hang tag as a second principal display panel with the statement that the product has been "Formulated to meet low VOC limits" placed adjacent to and associated with the required CPSC warning (see subparagraph (e)(2)(C) of PAR 1143); 4) the product's principal display panel contains the statement placed adjacent to and associated with the required CPSC warning that the product has been "Formulated to meet low VOC limits", in the same font size or larger as the principal display panel product name (see subparagraph (e)(2)(D) of PAR 1143); 5) the product labeling identifies the common name of the chemical compound that meets the flammable or extremely flammable criteria, in the same font size or larger as the principal display panel product name (see subparagraph (e)(2)(E) of PAR 1143); or, 6) the product label meets the labeling requirements in CARB's Consumer Product Regulation as specified in Title 17, CCR, §94512(e), as adopted (see subparagraph (e)(2)(F) of PAR 1143). Therefore, the labeling requirements in PAR 1143 do not mandate that a manufacturer must follow one specific course of action. Rather, a manufacturer may choose which labeling requirement to implement. Lastly, subparagraph (e)(2)(G) has been added to PAR 1143 to clarify that none of the above labeling requirements would preclude the use of any additional labeling for consumer education.

3-8 With regard to the claim of federal preemption, see responses to Comments 3-6 and 3-6.

3-9 At the public workshop for this rule proposal, W.M. Barr as well as other commenters proposed that SCAQMD staff address the potential fire risk by allowing the CARB rule to supersede the SCAQMD's proposed rule. However, as CARB stated in its letter (see Appendix B), the main way CARB's rule addresses the same fire risks as posed by PAR 1143 is through its labeling requirement, which the SCAQMD has essentially incorporated into PAR 1143. In addition, SCAQMD staff has evaluated other strategies with local fire officials, who support SCAQMD's public education and outreach awareness program, which the SCAQMD has also added to the rule. Thus, SCAQMD staff has evaluated all proposed strategies and alternatives to address the potential fire risk. To address the potential lack of consumer awareness that may occur from replacing formulations that contain combustible solvents like mineral spirits with formulations that may contain flammable and extremely flammable solvents, such as acetone, the SCAQMD revised the project as originally adopted to include consumer warning labeling requirements and a public outreach and education program for flammable and extremely flammable products. These project revisions were developed as a result of SCAQMD and CARB staff working closely with several representatives from the fire department to develop product labeling language. SCAQMD and CARB staff and fire department

representatives agree that the consumer warning labeling requirements will be effective as corrective measures to alert the consumer of product reformulations that the consumer may not normally be aware of.

SCAQMD staff and the fire department representatives have also been developing a public education and outreach program to be implemented by November 30, 2010, which will include public service announcements and brochures highlighting the fact that certain reformulated products may be flammable or extremely flammable. In a letter dated May 5, 2010, Steve Bunting, Division Chief, Fire Marshal for the Newport Beach Fire Department, provided his expert opinion about the fire hazard risk associated with PAR 1143. (See Appendix C for the full letter). Mr. Bunting stated that PAR 1143's incorporation of consumer warning label requirements along with a comprehensive public education and outreach program would greatly reduce any potential fire hazard risks associated with the rule such that they would be "mitigated 'to a less than significant level'…"

Thus, this Final Supplemental EA has been prepared to specifically analyze the effects of the revised project and how those revisions would affect the potential adverse fire hazard impacts. Contrary to the comment, SCAQMD believes that the Final Supplemental EA is adequate because PAR 1143 contains revisions to specifically address the fire hazard issue. Further, SCAQMD's review of PAR 1143 shows that because the project was modified to address the potential fire hazard impacts by including consumer warning labeling requirements and a public education and outreach program, and because CARB staff and fire department representatives agree that with these provisions in PAR 1143, the fire hazard impacts are not significant, the fire hazard impacts were determined not to have a significant adverse effect on the environment. Thus, because PAR 1143 is not expected to have significant adverse fire hazard impacts, no alternatives or mitigation measures are required to be included in this Final Supplemental EA (CEQA Guidelines §15252).

3-10 With regard to the claim of federal preemption, see responses to Comments 3-6 and 3-7.

3-11 SCAQMD staff notes that W.M. Barr, as well as other manufacturers, currently complies with the interim 300g/l limit via a product that is not flammable and without resorting to a reformulation that contains acetone. SCAQMD staff agrees that the interim limit does not raise an issue as to fire hazard impacts. SCAQMD staff also appreciates that with the upcoming final 25 g/L VOC limit, manufacturers may reformulate with acetone, even though there are other less flammable solvents available. As the commenter states, this shift poses a potential problem that was also raised by the fire officials to both CARB and the SCAQMD, in that consumers who are accustomed to using the non-flammable 300 g/L product may need to ultimately purchase a more flammable product that

contains acetone, but the labeling and outreach requirements in PAR 1143 had adequately addressed the problem.

3-12 SCAQMD staff, along with CARB staff and fire department representatives, disagree with the assertion that the consumer warning labeling requirements applicable to flammable and extremely flammable liquids reformulated to comply with the final VOC limit in Rule 1143 will not provide meaningful additional information to consumers about fire hazards. On the contrary, the additional labeling requirements in conjunction with a public education and outreach program will promote heightened awareness to consumers of new product formulations being manufactured with more flammable materials such as acetone. The idea is to alert the consumer, who may have previously used the non-flammable paint thinner, that the product has been changed to use more flammable materials such as acetone. Further, when consumers see a label or a hang-tag stating that the product has been reformulated, consumers will be alerted to read the label to see that the product is different. Once the consumer is alerted that the product is more flammable, the consumer is on notice to treat the product as a more flammable product. According to W.M. Barr's sales statistics, approximately 44.5 percent of W.M. Barr's current sales are derived from the sale of extremely flammable products, with 18.9 percent attributable to acetone sales and 25.6 percent attributable to lacquer thinner sales[10]. This means that approximately one out of every two products currently sold by W.M. Barr is currently an extremely flammable product. With the exception of the isolated incidents mentioned in its comments, W.M. Barr has provided no data to suggest that its customers are experiencing significant fire incidents.

3-13 The purpose for the labeling requirements is to alert consumers that a product has been reformulated with more flammable materials such as acetone. These labeling requirements were developed in conjunction with representatives from CARB, the CPSC, and fire authorities. As a result, consumers should treat the reformulated products as they would other flammable or extremely flammable products. This is the primary reason for the fire hazard concern expressed by Fire Marshal Steve Bunting, who believed that consumers who were accustomed to using combustible paint thinners would not be aware that their usual paint thinner had been reformulated with a more flammable product. Accordingly, the point of the labeling requirement is to alert consumers of a product change so that the consumer treats the reformulated paint thinner with the same care that he or she would treat other flammable, acetone-based products. Moreover, to the extent that W.M. Barr believes additional warning is required, PAR 1143 has been clarified to allow W.M. Barr or other manufacturers to further supplement the current CPSC warning. See also the response to Comment 3-12.

[10] Final Environmental Assessment for Proposed Rule 1143 – Consumer Paint Thinners and Multi-Purpose Solvents, Appendix B, Comment Letter #4 (W.M. Barr, December 30, 2008), Comment 4-4, p. B-46, February 2009.

3-14 The commenter fails to provide the context of the Committee Member's comment. The comment was in reference to how acetone has been in use by consumers, including himself, in a wide variety of products for over 50 fifty years, and, for that reason, its incorporation into new formulations may not be noteworthy to consumers. The Committee Member did not comment on whether a product sporting a new hang tag or label would be ignored. Moreover, the commenter's implied assertion that labeling is ineffective because nobody reads labels is contradicted by not only the expert opinion of CARB and local fire officials, but also by the National Association of State Fire Marshals. In their petition to the Federal Trade Commission (FTC) (see Appendix F), the State Fire Marshal's Association urged the FTC to adopt a labeling requirement to warn consumers of flammability concerns with furniture containing polyurethane foam. Clearly, they would not have done so, if they believed that labeling was ineffective.

As explained in responses to Comments 3-12 and 3-13, the purpose of incorporating enhanced labeling requirements in PAR 1143 is to visually alert the consumer about product reformulations. As a result of the hang tag or large font label requirements, a consumer will be alerted that the reformulated product is different and that the product is flammable or extremely flammable. Similarly, the purpose of the public education and outreach program is to get the same message out to consumers via public service announcements (PSAs) on television, radio, and the internet and via brochures. The same message will also be conveyed to representatives from variety of retail outlets and mass merchants like Home Depot, Lowe's, ACE Hardware and Orchard Supply Warehouse, so that their staff can be trained to better help consumers become knowledgeable about what they are buying. Lastly, the expert opinions expressed in letter from both CARB staff and fire officials (see Appendices B and C) conclude that the labeling and the public education and outreach requirements built into PAR 1143 effectively address any potential increased fire hazard resulting from implementation of the rule.

3-15 While the comment is correct in noting that Judge Chalfant's December 7, 2009 written decision stated that "[l]abels and warnings help minimize the prospect of accidents, but do not avoid them completely," at the time of the written decision, the version of Rule 1143 being considered by the court did not contain any of the labeling requirements that currently exist in PAR 1143. Therefore, it would be erroneous to assume that the written opinion concluded anything at all about the effective mitigation of the proposed labeling requirements included in the current version of PAR 1143. Rather, Judge Chalfant's statement lends support to the proposed labeling requirements because it recognizes the precise purpose of these requirements – "to minimize the prospect of accidents" by alerting consumers to changes in paint thinner formulations. In addition, the commentator should note that PAR 1143 now contains provisions for a public education and outreach program to further address flammability concerns.

3-16 The public education and public outreach program, if adopted, will be implemented by November 30, 2010, and will be a mandatory, not voluntary, requirement for the SCAQMD, at the urging of representatives from the fire department. Since the adoption of Rule 1143 in March 2009, SCAQMD staff has held numerous meetings (e.g., March 27, 2009, June 12, 2009, May 4, 2010, May 18, 2010, and June 30, 2010) with representatives from local fire departments and related fire agencies, and as part of this collaborative effort, has developed educational brochures intended to accompany the reformulated products at the point of sale. By November, 2010, the SCAQMD will print 25,000 of these brochures to be distributed at SCAQMD headquarters, as well as by the Fire Chiefs Association, retailers and other public events. The brochures will be made available until January, 2012 and will include background information about Rule 1143, pointers on how to reduce the fire risk from working with reformulated paint thinners and other multi-purpose solvents, as well as information about proper storage, spill containment, and disposal of these products. These brochures will also be made available for downloading from websites maintained by the SCAQMD, CARB, local fire departments and local cities until January, 2012.

SCAQMD staff is also working with select fire department personnel to develop 30-second and one-minute public service announcements (PSAs) to be available via radio, television and the internet by October, 2010. The content of these PSAs will be crafted in an informative way to alert the public of any possible changes in formulations of paint thinners and multi-purpose solvents, and will emphasize the need to review labels for products that may contain flammable or extremely flammable solvents prior to use. The same information in the PSAs will also be conveyed to representatives from a variety of retail outlets and mass merchants like Home Depot, Lowe's, ACE Hardware and Orchard Supply Warehouse, so that their staff can be trained to better help consumers become knowledgeable about what they are buying.

Lastly, SCAQMD staff intends to conduct public education and outreach at public events such as the Los Angeles County Fair, the Orange County Fair, the Riverside County Fair, the San Bernardino County Fair, and other events such as conferences, et cetera, as they get scheduled. See also the response to Comment 3-12.

3-17 With regard to the implementation of the public education and outreach program, expanded provisions for the program have been placed in PAR 1143. Although the commenter is correct that the SCAQMD cannot compel the fire departments to work with SCAQMD staff to educate the public, the SCAQMD's experience working with fire department staff to develop programs to inform the public of fire risks has been very positive, and the SCAQMD has no reason to believe that the fire departments will not continue in the future to work with SCAQMD staff to educate the public on fire risks, specifically by participating in the program set forth in PAR 1143. Moreover, based on SCAQMD's on–going meetings with

local fire officials, they are committed to ensure that this program works to minimize any fire risks. With regard to the conclusion of less than significant fire hazard impacts, see response to Comment 3-9.

3-18 The consumer products that are regulated by PAR 1143 are used in home-based settings but they may also be used in the work place. Occupational workers are protected by both Federal OSHA and CalOSHA regulations and are trained in safety procedures. Despite training, workplace accidents due to worker error may still occur. Accidents may also occur with consumers, although again, W.M. Barr has provided no data showing that consumers who currently use W.M. Barr's extremely flammable or flammable products have significant fire incidents. In any event, PAR 1143's labeling requirements are not intended to prevent all consumer incidents that currently may occur with extremely flammable and flammable products. Rather, they are intended to alert consumers of a product change, so that they can treat any flammable or extremely flammable reformulated product with the same care they have previously treated similarly flammable or extremely flammable products. Moreover, PAR 1143 contains a mandatory public education and public outreach program as a supplement to the labeling requirements to educate consumers on the proper handling of flammable and extremely flammable products. See also response to Comment 3-16.

3-19 The Fire Safety Alert provided in Exhibit H is a good example of how the brochure portion of the public education and outreach program in PAR 1143 is expected to be implemented. The educational brochures for PAR 1143 are intended to accompany the reformulated products at the point of sale. These brochures will also be distributed by the Fire Chiefs Association and will include background information about Rule 1143, pointers on how to reduce the fire risk from working with reformulated paint thinners and other multi-purpose solvents, as well as information about proper storage, spill containment and disposal of these products. See also response to Comment 3-18.

3-20 As part of the rule development process, SCAQMD staff conducted an extensive search for acetone-related fire statistics throughout California, and found that the NFPA does not keep detailed statistics of solvents responsible for fires. However, the California Governor's Office of Emergency Services (OES) was found to track these events via their Hazardous Materials Spill Report system. Reports received by OES from January 2002 through December 9, 2008 showed that there were 31 events that involved acetone and of these, only one resulted in fire due to a mixture of acetone with other chemicals on-site[11]. The majority of the acetone release events reported during this timeframe was caused by operator error, container mishandling, railcar leaks, truck transport leaks, broken pipeline, container punctures and other container leaks, and cleaning up illicit drug laboratories.

[11] Governor's Office of Emergency Services, RIMS Archived Databases: http://www.oes.ca.gov/WebPage/oeswebsite.nsf/Content/2307FB39E91EC32C8825749E0062EF47?OpenDocument

Similarly, the California State Fire Marshal in cooperation with the National Fire Incident Report System was found to also track fire statistics, but the cause of a chemical fire was described in general terms (i.e., not one specific chemical is assigned as the main cause of the fire)[12]. For example, between 2003 and 2007, there were 179 fires in California that were attributed to maintenance shops and paint shops. Similarly, in 2008, there were 95 fires in California that were caused by a chemical reaction[13]. However, none of these statistics shared the specific origin or cause of the fires and they did not identify acetone as the source. Further, these statistics did not identify the type of business or the specific activity or event that caused the fires, so to imply without supporting evidence that acetone is the single source of these reported chemical fires, especially when there are multiple flammable and potentially explosive chemicals in use in all spectrums of commercial and industrial businesses would be misleading.

As previously mentioned in response to Comment 3-18, the purpose of the labeling is to alert consumers that previously non-flammable products have been reformulated to meet air quality requirements and that they may contain more flammable materials. In addition to CARB's labeling requirements, PAR 1143 provides other options in which a manufacturer may choose to alert consumers that these products, which may have been previously non-flammable, is now more flammable. One option is to attach a hang tag or sticker informing the consumer of the reformulation and then to direct their attention to the CPSC label regarding flammability. Most consumers already handle such products carefully; however, to remind consumers of proper handling procedures, PAR 1143 contains a mandatory public education and public outreach program as a supplement to the labeling requirements to help increase public knowledge about the new formulations and to help prevent accidents by consumers that may use these products.

3-21 The shift that the commenter is referring to is the primary reason why amendments to Rule 1143 were proposed to include additional labeling requirements as well as an extensive public education and outreach program and this Final Supplemental EA was written to specifically analyze the shift to products that may be reformulated with more flammable chemicals. Further, the proposed amendments to Rule 1143 are supported by both CARB and fire department representatives as being sufficient to address the potential fire hazard impacts (see Appendices B and C, respectively). Therefore, contrary to the comment, pursuant to CEQA Guidelines §15252, no alternatives or mitigation measures are required to be included in this Final Supplemental EA. The analysis in this document supports the conclusions regarding fire hazard impacts.

[12] From December 11, 2008 communication with William Gordon on, Office of the State Fire Marshal.
[13] California State Fire Marshal, National Fire Incident Reporting System, Fires by Are of Origin, 2003 – 2007. http://osfm.fire.ca.gov/cairs/pdf/nfirs008_firesbyareaoforigin_2003_07.pdf

APPENDIX E

LETTER FROM CALIFORNIA AIR RESOURCES BOARD

(June 29, 2010)

Air Resources Board

Mary D. Nichols, Chairman
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Linda S. Adams
Secretary for
Environmental Protection

Arnold Schwarzenegger
Governor

June 29, 2010

Mr. William B. Wong
Principal Deputy District Counsel
Office of District Counsel
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, California 91765-4178

re: Interpretation Of Health And Safety Code Section 41712(f)

Dear Mr. Wong:

I am responding to your request that I explain the regulatory adoption process of the Air Resources Board (ARB) and how it relates to the preemption language in Health and Safety Code section 41712(f). The context of your request is that the Governing Board of the South Coast Air Quality Management District (SCAQMD) is scheduled to consider the adoption of proposed amendments to Rule 1143 at a July 9, 2010, public hearing. The proposed amendments would, among other things, establish volatile organic compound (VOC) limits and labeling requirements for consumer paint thinners and multipurpose solvents.

Some industry representatives have asserted that Health and Safety Code section 41712(f) preempts SCAQMD from adopting the proposed amendments to Rule 1143. For the reasons discussed below, we have concluded that section 41712(f) does not preempt SCAQMD from taking this action.

Background

I would like to first provide some background on Health and Safety Code section 41712 and the regulations adopted by ARB under this section. In 1988, the Legislature enacted the California Clean Air Act of 1988 (the "Act"; Stats. 1988, Chapter 1568). The Act added a number of new provisions to the Health and Safety Code, including section 41712. Section 41712 requires ARB to adopt regulations to achieve the maximum feasible reduction in VOCs emitted by consumer products.

To implement section 41712, ARB has adopted regulatory standards for numerous categories of consumer products. Most of these standards are contained in ARB's "Regulation for Reducing Emissions from Consumer Products" (the "consumer products regulation;" sections 94507-94517, title 17, California Code of Regulations.

Preemption of District Rules

As you know, Health and Safety Code section 41712(f) contains language limiting the authority of local air pollution control and air quality management districts (districts) to regulate consumer products. Section 41712(f) currently states:

> "(f) A district shall adopt no regulation pertaining to disinfectants, nor any regulation pertaining to a consumer product that is different than any regulation adopted by the state board for that purpose."

The language above has gone through several iterations over the years. The original version of this language was included in the California Clean Air Act of 1998, and was amended in 1992 by AB 2783 (Sher, Stats. 1992, ch. 945). After the 1992 amendments, the language read as follows:

> "(e) A district shall adopt no regulation relating to a consumer product that is different than any regulation adopted by the state board for that purpose."

The 1992 language is essentially the same as the current language, except that the current language prohibits any regulation of disinfectants by the districts. The language regarding disinfectants was added in 1997 (Stats. 1997, ch. 689) and is not relevant to this analysis. The critical question is how the language restricts districts from regulating consumer products that are not disinfectants.

On December 3, 1992, ARB Chief Counsel Michael P. Kenny issued a legal opinion which directly addressed this question in the context of whether SCAQMD could legally adopt a VOC regulation for a category of consumer products (aerosol coatings) that ARB had not yet regulated. The legal opinion is attached to this letter. It discusses the legislative history of the preemption language in Health and Safety Code section 41712 and other legal precedents, and reaches two conclusions. The first conclusion is that until ARB has adopted a VOC regulation for a particular category of consumer products (e.g., aerosol paints), districts retain their existing legal authority to adopt a regulation for that category. The second conclusion is that if a district adopts a regulation for a product category that has not been regulated by ARB, and then ARB subsequently adopts a regulation for this product category, the district regulation remains legally effective and is not preempted by the subsequent ARB adoption

When does ARB "adopt" a regulation?

From the discussion above, the critical issue in a preemption analysis is whether ARB has "adopted" a regulatory standard for a particular category of consumer products. If ARB has not adopted a regulatory standard for a product category, then SCAQMD is free to do so. Following is a description of ARB's regulatory adoption process.

ARB's regulatory adoption process is governed by the provisions of the California Administrative Procedure Act (APA; Government Code section 11340 et seq.) and the Health and Safety Code. Section 39601(a) of the Health and Safety Code requires ARB to adopt regulations in accordance with the APA, which establishes a detailed administrative process for the adoption of regulations by State agencies. The process begins when a State agency makes a proposed regulation available for a 45-day public comment period (Government Code § 11346.4). A public hearing is then held. If the State agency wishes to make changes to its original proposal, the changes (except for nonsubstantial or solely grammatical changes) must be made available for a 15-day public comment period before the agency can adopt the proposed regulation (Government Code § 11346.8(c)). If the State agency decides to make additional changes after the first 15-day comment period, the additional changes must then be made available for a second 15-day comment period. It is not uncommon for two or three 15-day comment periods to occur before an agency ultimately adopts the proposed regulation. The process is designed to ensure that a State agency does not take final action to adopt a proposed regulation before it has a chance to fully consider public comments made on the proposal.

ARB has followed APA procedures for all the regulations it has adopted over the past three decades. At a Board hearing to consider a proposed regulation, the Board often wishes to make changes to the original proposal. To comply with APA requirements, the Board cannot adopt such changes without first making them available for an additional 15-day public comment period. The Board accomplishes this by delegating to its Executive Officer the responsibility to make the modified regulatory text available for one or more 15-day public comment periods, to consider such written comments as may be submitted during this period, to make modifications as appropriate in light of the comments received, and then to either adopt the regulations or present them to the Board for further consideration if warranted. This delegation to the Executive Officer is specifically authorized by sections 39515 and 39516 of the Health and Safety Code.

At the end of this process (i.e., after the close of the 15-day comment period and after all comments have been considered) the Executive Officer—acting on behalf of the Board under the authority delegated to him or her by the Board—will sign an Executive Order that adopts the proposed regulation. Then ARB staff submits the final rulemaking package to the State Office of Administrative Law (OAL) for approval. The proposed regulation becomes legally effective under State law once it is approved by OAL.

Has ARB adopted a regulation establishing regulatory requirements for paint thinners and multipurpose solvents?

The answer is no; ARB has not yet adopted regulatory requirements for paint thinners or multipurpose solvents. Here is what has happened so far in the regulatory adoption process described above. On August 7, 2009, ARB staff issued a 45-day notice proposing a variety of amendments to ARB's consumer products regulation. These amendments included proposed VOC standards and labeling requirements for multipurpose solvents and paint thinners, which had not previously been regulated by the Board. A public hearing on staff's proposal was held on September 24, 2009. At the conclusion of the hearing, the Board approved Resolution 09-51, in which the Board directed the Executive Officer to take final action to adopt the proposed amendments with various modifications, after making the modified regulatory language available for an additional 15-day public comment period. Resolution 09-51 further directed the Executive Officer to consider such written comments as may be submitted during this period, to make modifications as appropriate in light of the comments received, and then to either adopt the regulations or present them to the Board for further consideration if the Executive Officer determines that this is warranted.

On January 14, 2010, the modified regulatory language was made available for a 15-day public comment period. The Executive Officer then determined that it was appropriate to propose additional modifications, which were made available for a second 15-day public comment period which began on June 28, 2010, and will end on July 13, 2010. The Executive Officer has not yet signed an Executive Order adopting the proposed amendments because he will first need to consider all relevant comments received during this second 15-day comment period. This means that the Executive Order adopting the amendments will not be signed before SCAQMD's July 9, 2010, public hearing, because the second 15-day comment period will not conclude until July 13, 2010. In other words, ARB has not yet adopted the proposed amendments regarding multipurpose solvents and paint thinners, and will not adopt them before July 9, 2010. Our best estimate at this time is that ARB's adoption of the proposed amendments will not take place until late July or early August of 2010.

Conclusion

Since ARB has not yet adopted regulatory requirements for the consumer product categories of paint thinners and multipurpose solvents, SCAQMD is free to do so and is not preempted by Health and Safety Code section 41712(f). If SCAQMD adopts these requirements before ARB does, then the SCAQMD requirements remain in effect and are not preempted when ARB ultimately does adopt regulatory requirements for these products.

I hope this letter is of use to you. If you have any questions, please feel free to call me at (916) 322-3762 or send me an email at rjenne@arb.ca.gov.

Sincerely,

Robert Jenne

Robert Jenne
Assistant Chief Counsel
OFFICE OF LEGAL AFFAIRS

STATE OF CALIFORNIA
AIR RESOURCES BOARD
2020 L STREET
P.O. BOX 2815
SACRAMENTO, CA 95812

PETE WILSON, Governor

December 3, 1992

Peter M Greenwald, District Counsel
South Coast AQMD
21865 E. Copley Dr.
Diamond Bar, CA 91765-4182

Regulation of Aerosol Paints

Dear Mr. Greenwald:

You have requested a legal opinion on the authority of the South Coast Air Quality Management District (SCAQMD) to adopt an aerosol coatings regulation in light of recent amendments to Health and Safety Code section 41712(e) (AB 2783, Sher; Stats. 1992, ch. 945). Specifically, you wish to know the opinion of the Air Resources Board (ARB) on two related issues:

(1) Does the SCAQMD have the authority to adopt an aerosol coatings regulation as long as the ARB has not previously adopted such a regulation? What is the status of the SCAQMD authority once the ARB has adopted such a regulation?

(2) If the SCAQMD adopts an aerosol coatings regulation, what is the effect on this regulation if the ARB subsequently adopts a different aerosol coatings regulation? Is the SCAQMD regulation preempted by the subsequent ARB adoption, or does the SCAQMD regulation remain legally effective?

To answer these questions, we carefully researched both the text and legislative history of AB 2783 and the California Clean Air Act of 1988 (Stats. 1988, ch. 1568). Our conclusions are as follows:

(1) Until the ARB formally adopts a regulation relating to aerosol coatings, the SCAQMD retains its existing authority to adopt an aerosol coatings regulation. However, once the ARB adopts an aerosol coatings regulation, Health and Safety Code section 41712(e) prohibits the subsequent adoption of a different aerosol coatings regulation by the SCAQMD.

(2) If the SCAQMD adopts an aerosol coatings regulation prior to any ARB adoption of a different regulation, the SCAQMD regulation remains legally effective and is not preempted by the subsequent ARB adoption.

The rationale for each of these conclusions can be briefly summarized AB 2783 made several changes to the language of Health and Safety Code section 41712; the definition of "consumer product" was amended to include "aerosol paints", and the limited preemption language in section 41712(e) was modified to delete the opening phrase "... Prior to January 1, 1994 .. ". Health and Safety Code section 41712(e) now reads as follows:

> "A district shall adopt no regulation relating to a consumer product which is different than any regulation adopted by the state board for that purpose "

Regarding the first issue mentioned above, by its terms, the language in section 41712(e) does not restrict district authority unless the ARB has already adopted a regulation "for that purpose". The ARB Legal Office has long taken the position that the qualifying phrases "... regulation relating to a consumer product .." (e.g., not a regulation relating to consumer products in general) and ".. for that purpose ..." indicate that the restriction on district action applies only to the regulation of those specific consumer product categories (e.g , hairsprays, glass cleaners, etc) for which volatile organic compound (VOC) standards have already been specified in an ARB regulation. The language does not restrict district authority to regulate a particular consumer product category unless it has already been regulated by the ARB. However, once the ARB has adopted a VOC regulation for a particular category of consumer products (e.g., aerosol paints), Health and Safety Code section 41712(e) clearly prohibits local districts from subsequently adopting any VOC regulation that is different than the ARB regulation for that category.

Regarding the second issue, the language of section 41712(e) does not specifically state that a previously adopted district regulation is automatically preempted by the subsequent ARB adoption of a different regulation. Section 41712(e) merely provides that "... A district shall adopt no regulation ..." that is different from any ARB regulation. The Legislature did not state, as it could easily have done, that a district "... shall not adopt or enforce any regulation ..." that is different from an ARB regulation. The use of the term "enforce", or similar language, would have made it clear that previously adopted district regulations were preempted once the ARB acted to adopt its own regulation.

From the foregoing analysis, it is apparent that the language of section 41712 contains significant ambiguities. In an attempt to clarify these ambiguities, we have reviewed the legislative history of both AB 2783 and the California Clean Air Act of 1988, which enacted the original version of Health and Safety Code section 41712. Unfortunately, there is nothing in the legislative history of either bill which is dispositive in answering the specific questions posed above. It is possible to surmise that section

41712(e) was intended to promote some kind of statewide uniformity in consumer product regulations However, the unusual and ambiguous wording of the language makes it unclear as to exactly how preexisting district regulations should be treated. In light of the textual ambiguities and the lack of any useful guidance in the legislative history, the question is to what extent it is appropriate to conclude that the Legislature intended to repeal by implication the districts' longstanding authority (see Health and Safety Code section 39002, 41508) to regulate aerosol paints as nonvehicular emission source categories.

The California Supreme Court has addressed a similar question in the case of Western Oil and Gas Association v. Monterey Bay Unified Air Pollution Control 49 Cal.3d 408; 261 Cal Rptr. 384, 77 P.2d 157 (Aug. 1989). In the WOGA case, the Court discussed the circumstances under which it may validly be concluded that a statute operates to preempt or repeal by implication the authority of local air pollution control districts to control nonvehicular sources. In discussing the applicable precedents the Court stated as follows:

> "... All presumptions are against repeal by implication ... The presumption against implied repeal is so strong that 'To overcome the presumption the two acts must be irreconcilable, clearly repugnant, and so inconsistent that the two cannot have concurrent operation' ... There must be no possibility of concurrent operation ... implied repeal should not be found unless ... the later provision gives undebatable evidence of an intent to supersede the earlier .." 49 Cal.3d 408, 419-420.

With respect to aerosol paints, it is apparent that one cannot conclude with certainty that the Legislature intended to automatically preempt district regulations which were adopted before the ARB adopts its own aerosol paint regulation. Based on the principles set forth in the WOGA case, it is clear that we must therefore conclude that preemption of aerosol paints is limited to the circumstances discussed above.

The ARB Office of Legal Affairs plans to issue a more complete legal analysis which explains in greater detail the rationale for the conclusions set forth in this letter. While we would ordinarily set forth a full legal analysis at the same time as our conclusions, we wished to let you know our legal conclusions as soon as possible given the fact this issue will be considered by the SCAQMD Governing Board in just a few days.

Please give me a call at (916) 322-2884 if you would like to discuss these issues further, or if you have any additional questions.

Sincerely,

Michael P. Kenny
General Counsel

rcj/rej/B95798

STATE OF CALIFORNIA
AIR RESOURCES BOARD
2020 L STREET
P.O. BOX 2815
SACRAMENTO, CA 95812

PETE WILSON, Governor

December 3, 1992

Peter M. Greenwald, District Counsel
South Coast AQMD
21865 E. Copley Dr.
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Please give me a call at (916) 322-2884 if you would like to discuss these issues further, or if you have any additional questions.

Sincerely,

Michael P. Kenny
General Counsel

rcj/rej/B95798

APPENDIX F

JOINT PETITION OF THE NATIONAL ASSOCIATION OF STATE FIRE MARSHALS AND FEDERAL TRADE COMMISSION

(March 8, 1999)

FP 99-1

National Association of State Fire Marshals

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PETER G. SPARBER
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Legislative Representative

GEORGE KEELEY
Keeley, Kuenn & Reid
General Counsel

March 8, 1999

1999 MAR -8 P 4:15
CPSC/OFFICE OF THE SECRETARY

Donald S. Clark, Secretary
Office of the Secretary
Federal Trade Commission
Sixth St. and Pennsylvania Ave., N.W
Washington, DC 20580

Ms. Sadye E. Dunn, Secretary
Office of the Secretary
U.S. Consumer Product
Safety Commission
Washington, DC 20207

Re: Petition for Rulemaking:
Fire Hazard Warning Label on
Certain Upholstered Furniture

Dear Mr. Clark and Ms. Dunn:

The National Association of State Fire Marshals files this joint petition for rulemaking with the Federal Trade Commission ("FTC") and the Consumer Product Safety Commission ("CPSC") pursuant to 16 CFR Part 1 and 16 CFR 1051. Reference hereafter to the "Commission" shall mean the FTC and the CPSC.

The National Association of State Fire Marshals ("NASFM") represents the most senior fire official of each of the 50 states and the District of Columbia. Our members typically have statutory responsibility for code enforcement, fire incidence data, training, fire investigation and other matters pertaining to public safety. As such, our organization carefully monitors commercial, regulatory and other developments that may impact the severity and frequency of fire losses.

CPSA 6 (b)(1) Cleared FP 99-1
3/22/99
No Mfrs/PrvtLblrs or Products Identified
Excepted
Firms Notified,

Background

In 1993, the National Association of State Fire Marshals petitioned the CPSC (Petition FP 93-1) to issue a flammability standard for upholstered furniture incorporating the requirements of three standards now in effect in the State of California. Specifically, the petition urged the Commission to issue a flammability standard incorporating the requirements of Technical Bulletins 116, 117 and 133, issued by the Bureau of Home Furnishings and Thermal Insulation of the State of California. (58 FR 42301).

These standards specify tests to measure the (a) resistance of components of upholstered furniture to ignition by small open-flame sources and cigarettes; (b) resistance of finished items of upholstered furniture to ignition by cigarettes; and (c) resistance of finished items of furniture to ignition from large open-flame sources. The California standards also contain labeling requirements.

In support of the petition, NASFM provided information about deaths and injuries from fires involving upholstered furniture in California and in the rest of the United States. The petition asserted that although deaths and injuries from fires involving upholstered furniture in the United States declined appreciably from 1980 through 1989, during the same period the numbers of deaths and injuries from upholstered furniture fires declined at a much faster rate in California.

NASFM provided data showing that the rate of fire deaths associated with upholstered furniture in the United States, excluding California, decreased from 4.97 per million people in 1980 to 3.04 per million in 1989, a decline of 39 percent. By comparison, in 1980 the rate of fire deaths associated with upholstered furniture in California was 1.14 per million people and in 1989 it was 0.41 per million, a decline of 64 percent.

Thus, according to the data, *non-Californians are over 7 times more likely to die in upholstered furniture fires than Californians*. In providing these data, NASFM is not in this petition advocating indirectly the adoption of California's upholstered furniture flammability standards. Here is our point: Particularly if it appears that American consumers outside of California are not as safe as Californians from upholstered furniture fires, shouldn't they at the very least be warned about the known fire hazards posed by these consumer items?

Nature of the Hazard

A common consumer product application of polyurethane foam is its use in upholstered furniture. Upholstered furniture may be ignited by smoldering cigarettes,

small open flames (candles, matches and cigarette lighters, often as a result of child play), and large open flames when other household items are first ignited. Once ignited, non-fire resistant polyurethane foam (hereafter "polyurethane foam") burns rapidly, emitting large quantities of toxic gases such as carbon monoxide and cyanide. Polyurethane foam's rapid rate of intense heat release typically raises the room temperature to the point of flashover — that is, the point at which all contents of the room are ignited. Clearly, polyurethane foam poses a hazard, in effect making small fires very large, and very deadly, very quickly. The textiles used in upholstered furniture may ignite easily, but provide little fuel and energy to the fire by themselves.

Scope of the Hazard

According to the United States Consumer Product Safety Commission's most recent estimates of fire loss, upholstered furniture and mattresses/bedding account for roughly 10 percent of America's 428,000 residential fires each year. Approximately 4,300 Americans are seriously injured in these fires. Serious burns often require years of hospitalization, multiple surgeries, and physical and emotional therapy.

Most telling, fires started in home furnishings containing polyurethane foam account for 16 percent of all residential fire deaths, making these items one of the most dangerous of all products under the CPSC's jurisdiction.

According to the CPSC, the following losses occurred as a result of 13,100 residential fires in 1996 involving upholstered furniture (*1996 Residential Fire Loss Estimates*):

Upholstered Furniture Fires

	Open flame ignition	Smoldering ignition	Other Ignition	Total
Deaths	90	470	90	650
Injuries	410	940	290	1,640
Property Damage	$61 million	$98 million	$95 million	$253 million

The Technology Exists to
Make Furniture Safer From Fire

Upholstered furniture in nursing homes, hospitals, prisons and other institutional settings, as well as the seats of airplanes, automobiles, boats and other modes of transportation are required to meet flammability standards far more stringent than those required for furniture manufactured for the American home. Much of the time, these standards are met with polyurethane foam that is treated to resist ignition. The technology exists to make the foam, and, thus, the upholstered furniture that contains the foam, safer.

Manufacturers Are Aware of the Hazard

According to documents we have obtained (enclosed), foam producers generally provide warning notices with each batch of polyurethane foam provided to upholstered furniture manufacturers. We include one of the many available examples here:

> WARNING
> **All Polyurethane Foam Can Burn!**
>
> In case of fire, serious personal injury or death can result from extreme heat, rapid oxygen depletion and the production of toxic gases. When ignited, polyurethane foam, like other organic materials, can burn rapidly and generate thick dark smoke and toxic gases leading to confusion, incapacitation, and even death.
>
> Do not expose polyurethane foam to any intense radiant heat or open flames, such as space heaters, open burning operation, cigarettes, welding operations, naked lights, matches, electric sparks or other intense heat sources.
>
> **Depending upon the intended use of the polyurethane foam, suitable warnings should be passed on to the ultimate product users.** (emphasis added)

Notably, to our knowledge, these warning labels are not shared by the upholstered furniture manufacturers or their retailer customers with consumers who purchase furniture containing these products. This appears to us a gross failure to discharge the manufacturer/retailer's duty to warn.

Commission Rule Needed to
Compel Hazard Disclosure to Consumers

Danger and safety problems with products has compelled the Federal Trade Commission to adopt a disclosure doctrine to require warnings. Failure to warn users of products of dangers that might result from the use of the products has been found to be an unfair practice under section 5 of the Federal Trade Commission Act. For example, the failure of a manufacturer of gasoline engine powered tractors to disclose to customers that the tractors were subject to fuel geysering (forceful ejection of hot fuel through a loosened gas cap) was an unfair practice in violation of Section 5 of the FTC Act. *International Harvester Co.*, 104 FTC 949.

Turning to the CPSC, upholstered furniture is a "product" of "interior furnishing" as those terms are defined in sections 2(e) and 2(h) of the Flammable Fabrics Act, 15 USC 1191(e) and (h). The CPSC has authority under section 4(a) of the Flammable Fabrics Act to issue a "flammability standard or other regulation, including labeling" for a product of interior furnishing if the CPSC determines that such a standard "is needed to adequately protect the public against unreasonable risk of the occurrence of fire leading to death or personal injury, or significant property damage." 15 USC 1193(a). Clearly, the consuming public needs to be informed as to the extent of the fire hazard involved in the use of non-fire resistant polyurethane foam.

Requested Relief

The National Association of State Fire Marshals believes that the withholding of these warnings by manufacturers and retailers of residential upholstered furniture containing polyurethane foam is not in conformity with the FTC Act and the Flammable Fabrics Act. Therefore, NASFM requests:

1. The Federal Trade Commission and/or the Consumer Product Safety Commission to, by rule, require upholstered furniture manufacturers and retailers to affix a label to such furniture sold in the United States containing polyurethane foam in a conspicuous place, bearing precisely the same flammability warnings provided by the polyurethane foam producers; and

2. As an interim step, NASFM requests your agencies to commence a voluntary fire hazard disclosure program with upholstered furniture manufacturers and retailers, whereby such companies would voluntarily agree with the agencies to make

adequate fire hazard disclosures to U.S. consumers pending the outcome of a decision on this petition for rulemaking.*

3. Grant such other relief as is equitable and appropriate.

Respectfully submitted,

Rocco J. Gabriele

Rocco J. Gabriele
President
The National Association of State Fire Marshals

Also in support of this petition:

The International Association of Fire Fighters, AFL-CIO-CLC

Encls.

* For the record, in July 1998 NASFM wrote to several major retailers who sell upholstered furniture nationwide. In the letters we suggested that, for the reasons cited in this petition, the upholstered furniture they sell does not contain adequate consumer warnings of the potential fire hazards posed by polyurethane foam contained in the furniture. Unfortunately, to our knowledge, none of these companies has come forward voluntarily and agreed to pass along the warnings being issued by the polyurethane foam producers.

APPENDIX G

LATE COMMENT LETTER ON THE DRAFT SUPPLEMENTAL EA AND RESPONSES TO COMMENTS

Comment Letter #4: American Coatings Association

(June 23, 2010)

Comment Letter #4
(American Coatings Association, June 23, 2010)

AmericanCoatings ASSOCIATION

June 23, 2010

Governing Board Members
c/o Saundra McDaniel, Clerk of the Boards
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

RE: SCAQMD Proposed Rule 1143 – Consumer Paint Thinners and Multi-Purpose Solvents; Proposed Amendments; ACA Comments

Dear Governing Board Member:

The American Coatings Association (ACA) [1] submits the following comments on the proposed amendments to Rule 1143 – Consumer Paint Thinners and Multi-Purpose Solvents.

As stated in previous correspondence, NPCA opposes Rule 1143 and the currently proposed amendments to this rule since the California Air Resources Board (ARB) has jurisdiction over this category of products, as consumer paint thinners and multi-purpose solvents fall under ARB's authority to regulate consumer products statewide in California. Duplicating ARB's efforts in this regard has been and will continue to be a costly and unnecessary expenditure of resources. In addition, ACA is concerned that the District failed to demonstrate that the 25 g/l limit is technologically feasible and instead supports the ARB rule since ARB is to complete a technology review before the lower limit is implemented. As such, SCAQMD should abandon Rule 1143 and allow the ARB rule to apply. 4-1

Rule 1143 Will Cause Significant Adverse Impacts to the Environment, Health and Safety

The primary effect of proposed amended Rule 1143 will be to cause the substitution of acetone in place of ordinary mineral spirits paint thinner. By far, such mineral spirits is the product that consumers buy most often for use as paint thinner or multi-purpose solvent. Mineral spirits has low toxicity, evaporates slowly, is marginally combustible, and has relatively low ozone forming potential. Acetone (an exempt VOC) evaporates very rapidly, is extremely flammable or explosive in the form of vapor or spray mist, and has ozone forming potential approximately half that of mineral spirits. 4-2

The lower ozone forming potential of acetone is offset, however, by its faster evaporation rate, which is more than 40 times greater than that of mineral spirits. This means that during typical uses in surface

[1] The American Coatings Association (ACA) is a voluntary, nonprofit trade association working to advance the needs of the paint and coatings industry and the professionals who work in it. The organization represents paint and coatings manufacturers, raw materials suppliers, distributors, and technical professionals. ACA serves as an advocate and ally for members on legislative, regulatory and judicial issues, and provides forums for the advancement and promotion of the industry through educational and professional development services.

1500 RHODE ISLAND AVENUE N.W. • WASHINGTON, DC 20005 • T 202.462.6272 • F 202.462.8549 • www.paint.org

cleaning, the amount of acetone that evaporates into the air would be 40 times greater than the amount of mineral spirits. Even with half the ozone forming potential of mineral spirits, the greater amount of acetone emitted will cause up to 20 times more ozone pollution than mineral spirits. Substitution of alternative low-VOC products with lower evaporation rates than acetone would be very unlikely, because those alternatives (e.g., aqueous cleaners, soy-based cleaners, PCBTF) are all two to four times as expensive as acetone, and less effective.

The proposed CEQA mitigation measures do not adequately address the fire and explosion risks associated with increased usage of acetone. As ARB correctly notes, the consumer labeling requirement was intended to address the specific situation where a manufacturer might retain a product identity, such as "paint thinner," but change the product to one that contains or consists of acetone. This is highly unlikely, and we are not aware of any manufacturer intending to do so. Acetone is already available, labeled as such, in the same retail outlets that sell mineral spirits. The effect of Rule 1143 will be to remove mineral spirits and leave acetone as the only viable alternative of comparable cost and effectiveness. The proposed consumer labeling requirement will not affect, in any way, the labeling or information provided for currently available acetone.

4-2 Cont'd

ACA also believes that the most efficient and effective means for reducing emissions from paint thinners and multi-purpose solvents is through reactivity-based regulations.

4-3

Consistency with CARB 15-day Notice

ACA again recommends that SCAQMD revise Rule 1143 to be as consistent with the CARB regulation as possible. As such ACA recommends SCAQMD exclude or exempt Artists Solvent/Thinner and include the following "branded solvents" language from Section (115) (B) of the CARB 15 day notice:

"(B) products labeled and used exclusively as an ingredient in a specific coating or coating line, whereby the coating would not be complete or useable without the specific ingredient"

4-4

Percent by Weight Limit

In response to ACA's May 12, 2010 comment requesting SCAQMD to change the 1143 limits from g/l to % weight to be consistent with CARB, on page 33 (h) of the staff report – The District mentions "that it agrees and has revised rule 1143 to use the percent by weight as an option…" As such, ACA suggests that SCAQMD include the 30% content by weight and 3% content by weight limits in the Section (d)(1) limit table for consistency with the CARB rule. Also, for clarification purposes, ACA recommends the following change to Section (c)(18) –

"(18) VOC CONTENT means the total weight of VOC in a product expressed as a percentage of the product weight or as a mass-~~based~~ volume concentration expressed in grams per liter of material (g/L) or pounds per gallon (lb/Gal)."

4-5

Administrative Requirements – Section (e) (2) (A) and (B)

ACA suggests SCAQMD revise Section (e) (2) (A) and (B) to make it more clear that compliance may be achieved via Section (1) or Section (2), ACA suggests the following change:

(e) Administrative Requirements

(2) Paragraph (e)(1) does not apply to products that meet ~~any of~~ either or both of the following criteria:

(A) Products which include an attached "hang tag" or sticker that displays, at a minimum, the following statement: "Formulated to meet low VOC limits; see warnings on label"; or

(B) Products where the Principal Display Panel displays, in a font size as large as or larger than the largest font size of any other words on the panel, the common name of the chemical compound (e.g., "Acetone," "Methyl Acetate," etc.) that results in the product meeting the criteria for "Flammable" or "Extremely Flammable."

4-6

Additional Typos

It is disturbing that at this point in the rulemaking process there still exist typos that resulted from obvious "cutting and pasting" of language from other regulations – specifically, Section e(11) and (f)(2)(A)(i) refer to private label "coatings"/toll manufactured "coatings" and density of the "coating," respectively. These Sections should refer to paint thinners and multipurpose solvents instead of "coatings".

4-7

Section (h) - Confidentiality of Information

It is unclear why SCAQMD has changed the language in Section (h) since the Staff Report did not include justification for this change, nor were these changes ever discussed in stakeholder meetings. Further, ACA is concerned that the proposed changes will negatively impact the industry by narrowing the type of information that is protected. For example ACA is concerned that sales data will no longer be protected as confidential information via the proposed amendments. In addition, the District's rationale for the change is very troublesome. Staff has said that the reason for the language change is that

> "our Guidelines… may allow more disclosure than state law….Under our Guidelines, we do not list confidential information as being exempt."

The District does not have the authority to disclose more information than state law allows, and the District cannot draft a provision that expands disclosure in contravention of state law. It is not clear how confidential business information would not be considered confidential in the South Coast Air Quality Management District. This entire concept is very problematic to the industry, and critical enough that it must be resolved before the amendment can proceed any further.

4-8

Definitions

Rule 1143 defines "Distributor" as follows:

"(3) DISTRIBUTOR means any person to whom a consumer products are is sold or supplied for the purposes of resale or distribution in commerce, except that manufacturers, retailers, and consumers are not distributors."

The rule also defines the term "manufacturer," but does not define the term "retailer," and the current proposed amendment would delete the definition of "consumer" – for reasons that are entirely unclear. All three of these terms should be defined in the rule to give meaning to the definition of "distributor."

4-9

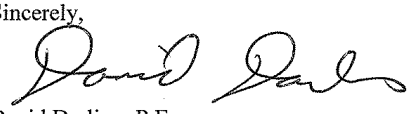
Further, the rule refers to "institutional use" several times in the definition section. In responding to a comment letter requesting a definition of "industrial use," staff also refers to "industrial users" (on page 48 of the Staff Report), implying a distinction between institutional users and industrial users. ACA suggests that the District define what these terms mean, because they are critical to the applicability of Rule 1143.

In addition, with regard to the definition of "Consumer Paint Thinners" – ACA recommends that the District add the following language to the definition:

"Consumer Paint Thinners" also do not include any product making any representation that the product may be used as, or is suitable for use as a consumer product which qualifies under another definition in California Code of Regulations Title 17, § 94508 as of the date of adoption.

Thank you for your consideration of our views. If you have any questions regarding this letter or the issues raised, please feel free to call me at (202) 462-6272.

Sincerely,



David Darling, P.E.
Director, Environmental Affairs

Cc: Board Member Assistants/Consultants
Dr. Barry Wallerstein

*** Sent via email ***

4

Responses to Comment Letter #4
(American Coatings Association, June 23, 2010)

4-1 SCAQMD staff believes there is a need for Rule 1143 – Consumer Paint Thinners and Multi-Purpose Solvents. When fully implemented, this rule will reduce VOC emissions by an additional 3.81 tons per day by 2012 in the South Coast Air Basin as compared to the California Air Resources Board's rule, which equates to 1,391 tons per year and 6,953 tons by the time CARB's final limit is fully implemented. Given the extreme non-attainment status of the South Coast Air Basin in respect to the 8-hour ozone standards and the fact that its 16.5 million residents experience the highest ozone and PM2.5 exposure rates in the nation, the emission reductions mentioned are needed to protect public health and help the region make early progress toward compliance with federal 8-hour ozone and PM2.5 air quality standards. In addition, Control Measure CTS-04 of the 2007 AQMP specifically calls for emission reductions from consumer paint thinners and multi-purpose solvents that, at the time of the March 6, 2009 adoption of Rule 1143, were not regulated by CARB. Further, Rule 1143 will help achieve the 1-hour ozone standard, which will mean that the fees imposed by §185 of the Clean Air Act will no longer be applicable. The residents living in the South Coast jurisdiction will benefit from the reduction of an additional 3.81 tons per day of VOC emissions by 2012, which is part of a key strategy included in the 2007 AQMP.

SCAQMD staff believes that the 25 g/L VOC standard, effective January 1, 2011, is "technologically feasible." SCAQMD staff has determined that the 25 g/L VOC limit is technologically feasible, as referenced by both Table 1 in the Staff Report and Table 3 of the Supplemental EA for PAR 1143, which identifies several soy and exempt-solvent technologies that are commercially available and feasible, several that are formulated with PCBTF that has a similar flashpoint as mineral spirits and several that rely on acetone as the primary solvent. These products can be used as multi-purpose solvents and paint thinners. A more comprehensive list of clean air solvents, as well as other compliant products, was also included in the March 2009 Final Staff Report and these products have been available and in use for more than ten years. SCAQMD staff agrees that CARB included a technology review for paint thinners in the September 2009 amendment to the Consumer Products Rule, but also clarified in a recent letter that "we [CARB] recognize that, based on previous SCAQMD regulations, many coatings sold within the District are waterborne." SCAQMD staff has worked closely with CARB staff and has held numerous meetings to draft language for PAR 1143 that is consistent with CARB's regulation. As a result of these meetings with CARB and fire authorities, new language has been added to PAR 1143 to make it more consistent with CARB's Consumer Product Regulation on labeling, while also addressing fire risks better by informing consumers of possible formulation changes.

4-2 With regard to evaporation rates and the viability of a reactivity-based ozone control strategy, see response to Comment 2-1. Regarding the adequacy of the CEQA document to address the fire and explosion risks associated generally with increased usage of acetone, see also the response to Comment 3-9. Moreover, since the SCAQMD exempted acetone as a VOC in November 1995, based on similar prior actions from CARB and USEPA, many products such as lacquers have increasingly used acetone to meet air quality limits. SCAQMD staff is unaware of any increased incidents of fire resulting from that increased usage. CARB staff, likewise, did not find the general increased usage of acetone to raise a significant fire concern; but instead, was concerned about those consumers accustomed to purchasing mineral spirit-based paint thinners switching to paint thinners reformulated with more flammable solvents such as acetone.

SCAQMD staff agrees with the comment that more acetone may be used to reformulate PAR 1143-compliant products; however, compliance with the rule does not require the use of acetone. Rather, there are a number of alternative solvents other than acetone that may be used. The commenter's assumption that the "[S]ubstitution of alternative low-VOC products with lower evaporation rates than acetone would be very unlikely, because those alternatives (e.g., aqueous cleaners, soy-based cleaners, PCBTF) are all two to four times as expensive as acetone, and less effective" is unsubstantiated and incorrect. In fact, several manufacturers have already formulated cleaning solvents and thinners using aqueous formulations and bio-based technology such as using methyl esters (e.g., soy-, coconut- and rapeseed-based formulations). Several of these products have been certified by the SCAQMD pursuant to the CAS program and are currently available to the consumer. Specifically, there are 171 certified CAS solvents to date and 102 of these products can be used in the consumer market for compliance with PAR 1143. The CAS product list is frequently reviewed and updated to reflect any new findings, especially those that may be directly applicable to the products that would be subject to PAR 1143 requirements. In addition, 62 other products have been identified that meet the proposed final VOC limits, but are currently not certified under the CAS program. Thus, acetone is not the only viable substitute for mineral spirits.

Lastly, as the commenter notes, "Acetone is already available, labeled as such, in the same retail outlets that sell mineral spirits." As noted in the prior Final EA for the March 2009 Rule 1143 adoption, the SCAQMD found that generally any increased usage of acetone would raise insignificant fire risks. In its ruling, the Superior Court found the Final EA[1] inadequate only as to the potential fire risk associated with consumers who are accustomed to using paint thinners with mineral spirits switching to a reformulated paint thinner with more flammable acetone. This was the risk that concerned the local fire officials. As also noted by the commenter, CARB addressed this specific risk by either disallowing the sale

[1] Final Environmental Assessment for: Proposed Rule 1143 – Consumer Paint Thinners and Multi-Purpose Solvents, SCAQMD No. 11112008BAR, State Clearinghouse No: 2008111052, February 2009.

of acetone-based paint thinner labeled as "paint thinner," or if still sold labeled as "paint thinner," requiring additional labeling to alert the consumer of a product change. CARB worked with both local and state fire officials to arrive at this solution to avoid significant fire risks. SCAQMD staff is pleased to learn that the commenter believes that paint thinner manufacturers, a number of which are part of the American Coatings Association, intend to comply with both CARB and the SCAQMD's proposed warning requirement by not labeling acetone-based paint thinner as "paint thinner." Fire officials agree with CARB that this will appropriately alert consumers. However, both CARB and the SCAQMD's rules provide equally viable options for those manufacturers who choose to sell acetone-based paint thinners labeled as "paint thinners." Thus, they may incorporate appropriate language on hang-tags or their labeling to alert consumers that the product has been changed.

4-3 SCAQMD supports a reactivity-based approach to control ozone and in fact has committed staff to study the effects of a reactivity based approach by actively participating in the North American Research Strategy for Tropospheric Ozone (NARSTO) work related to reactivity. SCAQMD staff also continues to participate in the following committees: Applications Benefits, Near Term Science, Toxics, Atmospheric Chemistry and the PM. One of the main concerns SCAQMD staff has is the potential constituents that may have toxicity associated with some VOC containing compounds that have a low MIR value. SCAQMD staff also recognizes that the three percent limit is feasible for Consumer Paint Thinners and Multi-Purpose Solvents. The manufacturers of compliant thinners have been able to match the evaporation rate of conventional high-VOC paint and lacquer thinners by using soy-based methyl ester technology or by using exempt solvents such as PCBTF and acetone. Furthermore, Table 1 of the Final Staff Report for PAR 1143 identifies currently available products that use soy, acetone, and PCBTF technology.

4-4 PAR 1143 has been revised for consistency with the CARB approved Consumer Product Regulation and the "15-Day Notice" changes with considerations for overall clarity and enforceability. SCAQMD staff recognizes that PAR 1143 does not currently take into consideration the artist materials industry. SCAQMD staff has been working with art and craft associations such as the Art and Creative Materials Institute (ACMI) and the National Art Materials Trade Association (NAMTA) to better understand their concern and their request regarding a possible exemption for artist solvents. SCAQMD staff will continue to work with both trade associations to understand the technical concerns and develop a proposed amendment addressing artist solvents, with a potential public hearing for late 2010. SCAQMD staff recognizes that products used by artists are labeled pursuant to ASTM D4236-95, and require review by a toxicologist, and also recognizes that artist solvents are substantially higher in cost compared to regular solvents regulated by PAR 1143.

SCAQMD staff is uncertain how a branded solvent which is an essential component of a coating would be classified as a consumer multi-purpose solvent or consumer paint thinner. Assuming that a branded solvent is one of the components of a multi-component coating, then that product would be regulated by the applicable coating rule. For example, the isocyanate used to catalyze a two-component polyurethane coating would not be considered a paint thinner or multi-purpose solvent. Furthermore, PAR 1143 includes exemptions for thinners exclusively labeled for industrial maintenance coatings and clean-up solvents exclusively labeled for polyurea and polyaspartic coatings. Therefore, SCAQMD staff does not believe an additional exemption for "branded solvents" is necessary.

4-5 PAR 1143 will continue to identify the mass-based concentration limits but has also been revised to allow VOC labeling requirements to include percent by weight. Additionally, PAR 1143 will allow the percent by weight as an option for VOC determination and labeling but will maintain the mass-based concentration method for VOC determination and labeling. The mass-based concentration limit will have a final VOC limit of 25 g/L, effective January 1, 2011.

SCAQMD staff has added a definition for "VOC Content" that includes a percent by weight method for VOC determination. However, SCAQMD staff has also retained "grams of VOC per liter of material" for mass-based concentration method of VOC determination.

4-6 SCAQMD staff has revised subdivision (e) in PAR1143 for consistency with CARB's Consumer Product Regulation, and to further enhance clarity. Subdivision (e) provides labeling options to inform consumers of possible reformulations with flammable or extremely flammable solvents.

4-7 In response to the comment, paragraph (e)(11) and clause (f)(2)(A)(i) have been revised to replace the term "coating" with the term "product" instead.

4-8 PAR 1143 subdivision (h) has been revised. The reason for this change is to clarify that the SCAQMD processes Public Records Act (PRA) requests pursuant to SCAQMD Guidelines, which like the PRA, does not create a separate exempt category for confidential business information. In the past, those claiming an exemption for confidential business information have been able to justify non-disclosure as a trade secret pursuant to SCAQMD Guidelines. The proposed change to PAR 1143 does not change this practice; if confidential business information is justified to be exempt as a trade secret, SCAQMD will not disclose this information unless ordered to by a court. SCAQMD's legal counsel had proposed this revision to minimize any perceived ambiguity that the SCAQMD was creating a new category of exempt records. In addition, the SCAQMD may also be able to withhold confidential information pursuant to the balancing test provided for under both the PRA and the SCAQMD's Guidelines. As a result, the SCAQMD may be able to withhold disclosure of non-trade secret but confidential

information if adequate justification is provided by the submitting party to enable non-disclosure under the balancing test.

4-9 The definition for "Distributor" has been revised for clarity and now reads: "DISTRIBUTOR means any person to whom consumer products are sold or supplied for the purposes of resale or distribution in commerce, except that manufacturers, retailers and consumers are not distributors."

SCAQMD staff does not believe that a definition for "Retailer" is necessary. However, for further clarification, SCAQMD staff has revised PAR1143 by removing the definition of "Consumer" and adding new definitions for "Manufacturer" and "Responsible Party." SCAQMD staff believes that the current version of these definitions in PAR 1143 is clear.

SCAQMD staff does not believe that a definition of "Institutional Use" is necessary. SCAQMD staff does not intend to limit the rule to residential settings, but would include institutions such as general cleaning at hospitals and government agencies that is not already subject to Regulation XI rules.

SCAQMD staff has revised the definitions to be as consistent as possible with CARB's Consumer Product Regulation, as well as provide clarity for compliance purposes. However, staff does not support adding the recommended language to the definition of "Consumer Paint Thinners" as it could create a loophole that would allow any paint thinner to escape the rule limits by representing that it could also be used for another less stringently regulated purpose.

Comment Letter #5
(American Chemistry Council, June 29, 2010)

June 29, 2010

Via E-mail

Governing Board Members
c/o Saundra McDaniel, Clerk of the Board
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Re: Comments on Proposed Amended Rule 1143 – Consumer Paint Thinners and Multi-purpose Solvents

Dear Governing Board Members:

The Solvents Industry Group ("SIG")[1] of the American Chemistry Council is pleased to submit the following comments on South Coast Air Quality Management District's ("South Coast" or "District") Proposed Amended Rule 1143 ("PAR 1143"), Consumer Paint Thinners and Multi-Purpose Solvents ("MPS").[2] The proposal would re-establish, ultra-low, mass-based volatile organic compound ("VOC") standards for multi-purpose solvents and paint thinners. As solvent manufacturers that conduct business in the District, SIG members would be significantly and negatively affected by this unbalanced proposed regulation. As discussed in previous comments, SIG requests that the District suspend consideration of the proposed amendments based on the following concerns:

- California Air Resources Board ("CARB") has already adopted VOC standards for consumer paint thinners and multi-purpose solvents, and thus South Coast does not have the legal authority to promulgate its Tier 2 standards for this category;
- Duplicating CARB's efforts in this regard has been and continues to be a costly and unnecessary expenditure of resources.

5-1

[1] SIG members include The Dow Chemical Company, ExxonMobil Chemical Corporation, Shell Chemical LP, and Eastman Chemical Company.

[2] Notice of Public Workshop, Proposed Amended Rule 1143 – Consumer Paint Thinners and Multi-purpose Solvents (Apr. 2010), available at http://www.aqmd.gov/pub_edu/notice_ 1143_Apr_28_10.html; Draft Proposed Amended Rule 1143 – Consumer Paint Thinners and Multi-purpose Solvents (June 2010), available at http://www.aqmd.gov/rules/proposed/1143/ PAR1143_6-4-10_PW.pdf; Draft Proposed Amended Rule 1143 – Consumer Paint Thinners and Multi-purpose Solvents (July 2010), available at http://www.aqmd.gov/rules/proposed/1143/ PAR1143_7-9-10_PW.pdf.

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- Reactivity-based standards more effectively reduce the ozone-forming potential of solvent-based products while providing formulators with greater flexibility to produce products that meet performance and safety specifications.[3]

- The District has not met its legal burden of demonstrating that its proposed regulations are commercially and technologically feasible.

- South Coast's proposed Tier 2 standards likely will lead to the formulation of products that pose higher fire risks for consumers than would a reactivity-based approach. Nor does the District's proposal adequately mitigate these potential public safety risks through an implementation schedule that affords time for public education.

- SIG urges the District, if it cannot be convinced to abandon the re-establishment of the Tier 2 standard, to at least adopt the same implementation schedule as CARB since it would provide consumers with meaningful advance educational materials.

5-1 (cont'd)

General Position

SIG's research and investigations, as well as many other independent studies, including those undertaken by CARB, Dr. William Carter, the University of North Carolina, and Georgia Tech, have consistently concluded that the most efficient and cost effective means of regulating consumer products emissions and obtaining meaningful ozone reductions is through reactivity-based regulations. Mass-based approaches, in stark contrast, are outdated, inefficient, needlessly rigid, and potentially counterproductive to the overall goal of ozone reduction. SIG strongly supports the adoption of reactivity-based standards either as the sole compliance option or at least as an alternative compliance option for product categories, including paint thinners and multipurpose solvents. SIG appreciates the willingness of the District to work with us and leave open the door to future reactivity-based standards. However, we believe that the time to act on reactivity is now, not down the road after products have already been reformulated in response to the Tier 2 standards.

5-2

SIG disagrees with South Coast's view that it has the legal authority to "re-establish" the Tier 2 standards that the Los Angeles County Superior Court recently vacated. *See W.M. Barr & Co. v. South Coast Air Quality Management District*, Case No.: BS1198969. CARB has already adopted regulations governing the same source categories that PAR 1143 proposes to regulate.[4] CARB's recent adoption of those regulations precludes South Coast from "re-establishing" the 25 g/L VOC standard. Specifically, CAL. HEALTH & SAFETY CODE § 41712(f) unambiguously prohibits a district from adopting a "regulation pertaining to . . . a consumer product that is different than any regulation adopted by [CARB] for that purpose" (emphasis added). Yet, that

5-3

[3] *See* William P. L. Carter, *Development of Ozone Reactivity Scales for Volatile Organic Compounds*, 44 J. Air & Waste Mgmt. Ass'n 881 (1994); A. Russell *et al.*, *Urban Ozone Control and Atmospheric Reactivity of Organic Gases*, 269 Science 491 (1995).

[4] CARB amended its Regulation for Reducing Emissions from Consumer Products on September 24, 2009 to impose VOC standards for multi-purpose solvents and thinners.

is precisely what South Coast seeks to do in promulgating PAR 1143.[5] Once the Los Angeles County Superior Court vacated and severed the Tier 2 standard, that provision was void *ab initio*. It is of no consequence that other provisions of Rule 1143 that pre-date CARB's regulations governing multi-purpose solvents and thinners remain in effect. Those portions were severed by the Los Angeles County Superior Court and thus would not exempt PAR 1143 from preemption. At bottom, there can be no doubt that the District's re-establishment of PAR 1143 would be the adoption of a consumer product regulation that differs from one already adopted by CARB—again, something expressly prohibited by § 41712(f).

5-3 (cont'd)

South Coast also has failed to demonstrate that its 25 g/L VOC standard, effective January 1, 2011, constitutes "best available control technology" and is " "technically feasible" as required by CAL. HEALTH & SAFETY CODE §§ 40440 and 41712(b)(2). Availabilty and feasibility must be determined as of the date of adoption of a regulation, not in the future when a standard becomes effective. *Cf. Nat'l Paint & Coatings Ass'n v. S. Coast Air Quality Mgmt. Dist.*, 100 Cal. Rptr. 3d 35, 50-51 (Cal. Ct. App. 2009) (interpreting terms "best available" and "achievable" within a statute to allow the district "to require the best of what exists, not what might conceivably come on the market"). SIG has repeatedly raised concerns that the Tier 2 standards are not currently feasible and would compromise product performance, particularly for thinners. CARB too has recognized this concern, and as a result has agreed to "reassess the feasibility" of its own 3 percent by weight VOC limit in 2012 before the standard takes effect.[6] This acknowledgement by CARB alone demonstrates that the Tier 2 standard (which is more stringent than CARB's 3 percent standard) is not currently feasible and hence barred by § 41712(b)(2). In its Preliminary Draft Staff Report, South Coast attempts to summarily demonstrate feasibility by listing Clean Air Solvent products that purportedly are in the marketplace now and meet the 25 g/L VOC standard. However, the mere listing of products, without a more robust analysis, does not establish feasibility, particularly in light of the feasibility concerns raise by both SIG and CARB.

5-4

SIG is also concerned that the PAR 1143 Environmental Assessment (EA) continues to be deficient. For instance, the EA does not address the potential benefits associated with a reactivity-based program. Such an analysis will show that a reactivity-based approach would result in a greater reduction of ozone forming potential without the increased fire risk associated with the mass-based Tier 2 limit. This comparative analysis would provide the Governing Board with meaningful information about the alternative approaches for achieving its ozone reduction goals and whether it should readopt the Tier 2 standards.

5-5

Lastly, the increased public safety risk associated with the Tier 2 standard is not properly being addressed, and poses an unnessary risk to public safety. The District's current proposal mandates that the Tier 2 limit take effect just months after its adoption. Such an approach is not likely to sufficiently address the increased public fire hazards created by PAR 1143, and poses an

5-6

[5] The "Non-Duplication" finding on page 10 of South Coast's Preliminary Draft Staff Report indicates that PR 1143 "does not impose the same requirement as any existing state or federal regulation." But that is precisely what section 41712(f) prohibits, *i.e.*, the District's adoption of a regulation pertaining to consumer products that is "different than any regulation adopted by" CARB.

[6] *See* CARB Initial Statement of Reasons for Proposed Amendments to the California Consumer Products Regulations, Technical Support Document at 62, 103.

unnecessary risk to public safety. If SCAQMD moves forward with the re-establishment of the mass based Tier 2 limits, SCAQMD should adopt a three-year phase in period that builds in sufficient time for a public education outreach program to alert the public to the additional safety hazards of using more flammable products that will result from the adoption of the tier 2 limits, as well as to allow sufficient time for alternatives to be developed. For these reason, SIG urges the District, if it cannot be convinced to abandon the re-establishment of the Tier 2 standard, to at least adopt the same implementation schedule as CARB.

5-6 (cont'd)

SIG remains committed to working with South Coast on these issues and looks forward to continued dialogue in this area. If you have any questions, please contact me at (703) 741-5612 or Leslie_Berry@americanchemistry.com.

Sincerely,

Leslie Berry

Leslie Berry
Solvents Industry Group Manager,
Chemical Products and Technology

Responses to Comment Letter #5

(American Chemistry Council, June 29, 2010)

5-1 Regarding whether SCAQMD has the authority to re-adopt the 25 g/L VOC limit, see response to Comment 3-4. With regard to duplicating CARB efforts and the necessity of PAR 1143, see response to Comment 1-1. Regarding reactivity-based standards as they relate to ozone-forming potential and fire hazards, see responses to Comments 2-1 and 2-3. Regarding the feasibility demonstration of PAR 1143, implementation timing of the public education and outreach program, and adoption of the same implementation schedule as CARB, see response to Comment 2-2.

5-2 Regarding the adoption of reactivity-based standards, see responses to Comments 2-1 and 2-3.

5-3 Regarding whether SCAQMD has the authority to re-adopt the 25 g/L VOC limit, see response to Comment 3-4

5-4 The commenter misreads the requirements of California Health and Safety Code §§40440 and 41712(b). First, §41712(b) applies to CARB and not the SCAQMD. Second, §40440 does not require the SCAQMD to demonstrate that its 25 g/L VOC limit constitutes best available control technology (BACT). The case cited by commenter, NPCA v. SCAQMD, has been accepted for review by the California Supreme Court and therefore, may not be cited as precedent. Moreover, even under the appellate court's decision, evidence that the 25 g/L VOC limit has been achieved by at least one source is sufficient to support the limit. Thus, evidence that the marketplace already has products meeting the 25 g/L VOC limit is relevant under the appellate court decision. As stated earlier, §41712(b) applies to CARB's consumer product rulemaking and it requires that CARB determine prior to adopting its limits that the adopted limits are "commercially and technologically feasible and necessary." CARB must make that finding irrespective of any future technology assessment. Thus, CARB has found its three percent limit to be both technologically and commercially feasible. Contrary to the commenter's assertion, the SCAQMD's proposed 25 g/L VOC limit is virtually identical to CARB's three percent limit.

5-5 See responses to Comments 2-1 and 2-3.

5-6 See response to Comment 2-2.