State of California
AIR RESOURCES BOARD

Initial Statement of Reasons for Proposed Amendments to the California Aerosol Coating Products, Antiperspirants and Deodorants, and Consumer Products Regulations, Test Method 310, and Airborne Toxic Control Measure for Para-dichlorobenzene Solid Air Fresheners and Toilet/Urinal Care Products

Volume II:
Technical Support Document

I.

INTRODUCTION

A. OVERVIEW

In Volume II of the Initial Statement of Reasons (ISOR) for Proposed Amendments to the California Aerosol Coating Products, Antiperspirants and Deodorants, and Consumer Products Regulations, Test Method 310, and Airborne Toxic Control Measure (ATCM) for Para-dichlorobenzene Solid Air Fresheners and Toilet/Urinal Care Products, we present our technical justification and analysis of the proposed 2004 Amendments to the consumer products regulations. The proposed 2004 Amendments (Appendix A) are intended to fulfill the CONS-1 commitment of the consumer products element in the State Implementation Plan (SIP), and fulfill the requirements of a SIP lawsuit settlement agreement reached with environmental groups.

Included in this technical support document is the following information:

- a discussion of the process used to develop the proposed amendments;
- a discussion of the technical basis for the proposed amendments;
- a review of the emissions from the proposed categories for regulation and the overall need for the emission reductions;
- a description of the proposed amendments and the consumer product categories proposed for regulation;
- an assessment of the need for an ATCM to control emissions of para-dichlorobenzene from consumer products;
- an analysis of the environmental and expected economic impacts from the proposed amendments; and
- a discussion of future activities.

B. ENABLING LEGISLATION

In 1988, the California Clean Air Act (CCAA or “the Act) became law to address the State’s serious air pollution problems and the inability of many areas in California to attain the state and federal ambient air quality standards. The CCAA added section 41712 to the California Health and Safety Code (HSC) which, along with subsequent amendments, requires the Board to adopt regulations to achieve the maximum feasible

reduction in volatile organic compound (VOC) emissions from consumer products, if the Board determines that adequate data exist to establish both of the following:

- The regulations are necessary to attain state and federal ambient air quality standards; and

- the regulations are commercially and technologically feasible.

The Act further stipulates that regulations adopted must not eliminate any product form, and that recommendations from health professionals must be considered when developing VOC control measures for health benefit products. In enacting section 41712, the Legislature gave the ARB authority to control emissions from a very diverse number of products sold statewide to household and commercial consumers.

In addition, the ARB was given authority to develop control measures under the California Toxic Air Contaminant Identification and Control Program. The California Toxic Air Contaminant (TAC) Identification and Control Program (Program), established under California law by Assembly Bill 1807 (Stats. 1983, Ch. 1047) and set forth in HSC sections 39650-39675, requires the ARB to identify and control air toxicants in California. In the federal Clean Air Act Amendments of 1990, the United States Environmental Protection Agency (U.S. EPA) identified PDCB as a hazardous air pollutant (HAP) because evidence indicated the substance may have adverse effects on human health or the environment. In accordance with HSC section 39650(b), which requires the Board to designate federal HAPs as TACs, the Board identified PDCB as a TAC in 1993.

Following the identification of a substance as a TAC, HSC section 39665 requires ARB, with participation of the air pollution control and air quality management districts and in consultation with affected sources and interested parties, to prepare a report on the need and appropriate degree of regulation for that substance. HSC section 39665(b) requires that this "needs assessment" address, among other things, the technological feasibility of proposed ATCMs and the availability, suitability, and relative efficacy of substitute products or processes of a less hazardous nature.

Once ARB has evaluated the need and appropriate degree of regulation for a TAC, HSC section 39666 requires ARB to adopt regulations (ATCMs) to reduce emissions of the TAC. For a TAC where there is no threshold exposure level below which no significant adverse health effects are specified, HSC section 39666 (c) requires that the ATCM be designed to reduce emissions to the lowest level achievable through the application of best available control technology or a more effective control method. Cost, health risk, environmental impacts, and other specified factors must be taken into account when designing the control measure.

C. BACKGROUND

1. Consumer Product Regulations Adopted to Date

To date, the Board has taken several actions to fulfill the legislative mandate pertaining to the regulation of consumer products. Three regulations have been adopted setting limits for a total of 47 consumer product categories and 36 categories of aerosol coatings. In addition, two voluntary regulations (Article 4, sections 94540-94555, the Alternative Control Plan and Article 5, sections 94560-94575, the Hairspray Credit Program) have been adopted to provide compliance flexibility to companies. A complete summary of the regulation adopted and dates of regulatory amendments are provided in Appendix B.

2. Air Toxics Control Measures Adopted to Date

Once the ARB has evaluated the need and appropriate degree of regulation for a Toxic Air Contaminant (TAC), State law (HSC section 39666) requires the ARB to adopt regulations to reduce emissions of the TAC to the maximum extent feasible in consideration of cost, risk, and other factors specified in HSC section 39665. To date, the ARB has developed 19 ATCMs. A list of the ATCMs is provided in Table I-1.

Table I-1
List of Current Airborne Toxic Control Measures

CCR Number	Title of ATCM	Date of Adoption
17 CCR 93101	Benzene ATCM for Retail Service Stations	May 13, 1988
17 CCR 93102	Hexavalent Chromium ATCM for Decorative and Hard Chrome Plating and Chromic Acid Anodizing Facilities	February 18, 1988 *amended:* May 21, 1998
17 CCR 93103	Chromate Treated Cooling Towers	March 9, 1989
17 CCR 93104	Dioxins ATCM for Medical Waste Incinerators	July 13, 1990
17 CCR 93105	Abestos ATCM for Construction, Grading, Quarrying, and Surface Mining Operations	July 26, 2001
17 CCR 93106	Asbestos ATCM for Surfacing Applications	July 20, 1990 *amended:* July 20, 2000
17 CCR 93107	ATCM for Emissions of Toxic Metals from Non-ferrous Metal Melting	January 14, 1993
17 CCR 93108 17 CCR 93108.5	Ethylene Oxide ATCM for Sterilizers and Aerators: Parts 1 and 2	May 21, 1998 *effective:* January 28, 1999
17 CCR 93109	ATCM for Emissions of Perchloroethylene from Dry Cleaning Operations	October 14, 1993

17 CCR 93110	Environmental Training Program Regulation for Perchloroethylene Dry Cleaning Operations	October 14, 1993
17 CCR 93111	ATCM for Emissions of Chlorinated Toxic Air Contaminants from Automotive Maintenance and Repair Activities	April 27, 2000
17 CCR 93112	ATCM for Emissions of Hexavalent Chromium and Cadmium from Motor Vehicle and Mobile Equipment Coatings	September 20, 2001
17 CCR 93113	ATCM to Reduce Emissions of Toxic Air Contaminants from Outdoor Residential Waste Burning	February 2, 2003
13 CCR Chapter 10, Article 1, Section 2480	ATCM to Limit School Bus Idling and Idling at Schools	December 12, 2002
17 CCR 93114	ATCM for non-vehicular diesel engines	July 24, 2003*
13 CCR 2020, 2021, 2021.1, 2021.2	ATCM for on-road heavy-duty residential and commercial solid waste collection vehicles	September 25, 2003*
17 CCR 93115	Airborne Toxic Control Measure for Stationary Compression Ignition Engines	February 26, 2004*
13 CCR Chapter 3, Division 3, Article 4, Section 2022	ATCM for in-use diesel-fueled transportation refrigeration units (TRU) and TRU generator sets, and facilities where TRUs operate	February 26, 2004*
17 CCR 93116, 93116.1, 93116.2, 93116.3, 93116.4, and 93116.5	ATCM for portable diesel-fueled engines	February 26, 2004*

* Indicates an ATCM that is not yet approved by the Office of Administrative Law

3. Consumer Products and the State Implementation Plan

2003 State and Federal Strategy and 2003 South Coast SIP

On October 23, 2003, the ARB adopted *the Proposed 2003 State and Federal Strategy for the California State Implementation Plan* (Statewide Strategy, 2003) which reaffirms the ARB's commitment to achieve the health-based air quality standards through specific near-term actions and the development of additional longer-term strategies. The Statewide Strategy identifies the Board's near-term regulatory agenda

to reduce ozone and particulate matter by establishing enforceable targets to develop and adopt new measures for each year from 2003 to 2006, including commitments for the Board to consider 19 specific measures. It also sets into motion a concurrent initiative to identify longer-term solutions to achieve the full scope of emission reductions needed to meet federal air quality standards in the South Coast and San Joaquin Valley by 2010. In addition to meeting federal requirements, this Strategy ensures continued progress towards California's own health-based standards.

The ARB and local air districts are in the process of updating the California SIP to show how each region in the state will meet the federal air quality standards. The measures outlined in the adopted Statewide Strategy are being incorporated into these SIP revisions. The South Coast's 2003 Air Quality Management Plan (SCAQMD, 2003) was adopted by the South Coast Air Quality Management District Governing Board on August 1, 2003. The ARB approved the local SIP element on October 23, 2003, and on January 9, 2004, the ARB submitted to the U.S. EPA both the Statewide Strategy and the 2003 South Coast SIP as revisions to the California SIP. The new SIP updates all elements of the approved 1994 SIP and includes additional consumer products measures. Upon approval by U.S. EPA, the 2003 SIP will replace the State's commitments in the 1994 SIP. The ARB is currently working with the San Joaquin Valley Unified Air Pollution Control District on a revision to the San Joaquin Valley's ozone SIP. The revised San Joaquin Valley SIP is scheduled for consideration by the District's Governing Board and by the ARB later this year.

Together with significant reductions from stationary industrial facilities, mobile sources, and other areawide sources, the reductions in the consumer products element of the SIP are an essential part of California's effort to attain the air quality standards. The following two measures from the Statewide Strategy and the 2003 South Coast SIP are intended to reduce emissions from consumer products:

- **Measure CONS-1: Set New Consumer Products Limits for 2006.** The ARB committed to develop a measure to be proposed to the Board between 2003 and 2004, and implemented by 2006, that would achieve VOC emission reductions from consumer products of at least 2.3 tons per day (tpd) in the South Coast Air Basin in 2010. Statewide, this measure would achieve 5.3 tpd in emission reductions by 2010.

- **Measure CONS-2: Set New Consumer Products Limits for 2008-2010.** The ARB committed to develop new consumer product category limits to be proposed to the Board between 2006 and 2008, with implementation in 2008 and 2010, that would achieve VOC emission reductions from consumer products of between 8.5 tpd and 15 tpd in the South Coast Air Basin in 2010. Statewide, this measure would achieve 20-35 tpd in emission reductions by 2010.

- **Further Reductions from Consumer Products.** In addition, it is expected that further emission reductions will be needed from all source categories, including

consumer products, to meet the long-term emission reduction targets included in the South Coast SIP.

The amendments to the consumer products regulation proposed in this document are intended to fulfill the commitment for SIP measure CONS-1.

4. SIP Lawsuit Settlement Agreement

In 1997, three environmental groups (Communities for a Better Environment, the Coalition for Clean Air, and the Natural Resources Defense Council) filed a complaint in the United States District Court for the Central District of California. The lawsuit was filed against the ARB, the South Coast Air Quality Management District, and the U.S. EPA related to California's progress in achieving the 1994 SIP commitments. The ARB reached a settlement agreement with these groups in January 1999. The settlement agreement was amended in June 2003. Although the 2003 SIP revision is intended to replace the State's original commitments under the 1994 SIP for the South Coast, the settlement agreement will remain in place until the ARB fulfills its obligations under the agreement.

The agreement includes a list of measures to be considered by the ARB and a schedule. In this list of specific measures, ARB staff committed to propose to the Board by June 30, 2004, a control measure for a 2 tpd VOC emission reduction in the South Coast Air Basin if feasible. The implementation period for the control measure is 2006. The amendments to the Consumer Products Regulation proposed in this report are intended to fulfill the 2 tpd commitment and to partially fulfill the remaining VOC reduction commitment in the lawsuit settlement agreement.

5. National Consumer Products Regulations

On September 11, 1998, the U.S. EPA promulgated a national consumer products regulation, the "National Volatile Organic Compound Emission Standards for Consumer Products (40 CFR Part 59, Subpart C, Sections 59.201 et seq.; see the September 11, 1998, Federal Register, Vol. 63, No. 176, pages 48819-48847)." This action promulgates national VOC emission standards for 24 categories of consumer products. The rule became effective on September 11, 1998, and the VOC limits became effective on December 10, 1998. There are similarities and differences between the California and national consumer products regulations; however, the national rule does not preclude states from adopting more stringent regulations.

Although the national regulation is similar in many aspects to the California regulation, it is less effective in reducing VOC emissions from consumer products. The national regulation does not include second tier standards, mid-term measure categories, or aerosol coatings. The national regulation will achieve a 20 percent reduction in VOC emissions while California's existing consumer products and aerosol coatings regulations achieve a 40 percent reduction. Because California has unique air quality problems, we must reduce VOC emissions from consumer products to the

maximum extent feasible to attain the federal and state ambient air quality standards for ozone.

REFERENCES

Proposed 2003 State and Federal Strategy for the California State Implementation Plan; released August 25, 2003; adopted by ARB on October 23, 2003.
(Statewide Strategy, 2003)
http://www.arb.ca.gov/planning/sip/stfed03/stfed03.htm

2003 South Coast Air Quality Management Plan
2003 Final Air Quality Management Plan; adopted by the South Coast Air Quality Management District Governing Board on August 1, 2003. (SCAQMD, 2003)
http://www.aqmd.gov/aqmp/AQMD03AQMP.htm