

**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 I:
Executive Summary**

EXECUTIVE SUMMARY

A. INTRODUCTION

This report is the Initial Statement of Reasons for Proposed Rulemaking required by the California Administrative Procedure Act. In this report, the Air Resources Board (ARB/Board) staff presents the proposed amendments (the "2004 Amendments") to the California Regulation for Reducing Volatile Organic Compound (VOC) Emissions from Consumer Products (the "Consumer Products Regulation"), Regulation for Reducing Volatile Organic Compound Emissions from Antiperspirants and Deodorants ("Antiperspirants and Deodorants Regulation"), Regulation for Reducing the Ozone Formed from Aerosol Coating Product Emissions (the "Aerosol Coating Products Regulation") and to test Method 310. We are also proposing an Airborne Toxic Control Measure (ATCM) for Para-dichlorobenzene (PDCB) Solid Air Fresheners and Toilet/Urinal Care Products. Appendix A contains the proposed amendments.

The proposed 2004 Amendments are designed to meet the ARB's statutory requirement to achieve the maximum feasible reductions from consumer products, to meet the 2003 State and Federal State Implementation Plan for Ozone (SIP) commitments, and fulfill the requirements of a lawsuit settlement agreement with environmental groups regarding ARB's progress under the SIP (U.S. District Court, Central District of CA, Case No. CV-97-6916 JSL (SHx)).

In this Executive Summary, we provide a discussion of the staff's proposed amendments (the "2004 Amendments") to the Consumer Products Regulation, the Antiperspirants and Deodorants Regulation, the Aerosol Coating Products Regulation and test Method 310, and explain the rationale for the proposed changes. We also summarize the proposed ATCM for PDCB. A more detailed discussion in Chapter V of the Technical Support Document is intended to satisfy the requirements of Government Code section 11346.2(a)(1), which requires that a noncontrolling "plain English" summary of the regulation be made available to the public.

B. HISTORY AND BACKGROUND

1. Consumer Products Emissions

A consumer product is defined as a chemically formulated product used by household and institutional consumers. Consumer products include, but are not limited to: detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products such as antiperspirants and hairsprays; home, lawn and garden products; disinfectants; sanitizers; automotive specialty products; and aerosol paints. Emissions from other paint products, such as furniture or architectural coatings, are not part of ARB's consumer products program because local air districts regulate them.

Consumer products are a significant source of VOC emissions in California and contribute to the formation of both ozone and particulate matter pollution. Although each consumer product may seem to be a small source of emissions, the cumulative use of these products by over 35 million Californians results in significant emissions. Consumer products accounted for approximately 267 tons per day (tpd) of VOC emissions in the year 2000, which comprised about eight percent of the total man-made VOC emissions statewide. Even with significant reductions from control measures adopted by ARB factored in, due to growth, consumer products emissions are projected to be 260 tpd by 2010 and at that time make up about 12 percent of the VOC emissions projected to be emitted. Further reductions in VOC emissions from consumer products and other VOC sources are needed if ozone standards are to be achieved.

As a result of several regulations adopted by the ARB over the last fifteen plus years, emissions from consumer products and aerosol coatings have decreased significantly, and continued reductions are projected through 2005. As a result of these measures, emissions statewide from consumer products will have been reduced by over 130 tpd VOC (40 percent reduction) by 2005. Due to population growth, and without additional controls, staff expects the trend of emissions reductions to reverse once the last of the already adopted standards takes effect in 2005.

2. Consumer Product Regulations Adopted to Date

In 1988, the Legislature enacted the California Clean Air Act (CCAA or “the Act”), which declared that attainment of the California state ambient air quality standards is necessary to promote and protect public health, particularly of children, older people, and those with respiratory diseases. The Legislature also directed that these standards be attained by the earliest practicable date.

The CCAA added section 41712 to the California Health and Safety Code (HSC), which requires the ARB to adopt regulations to achieve the maximum feasible reduction in reactive organic compounds (ROCs) emitted by consumer products (note: ROC is equivalent to VOC). As part of the regulatory adoption process, the ARB must determine that adequate data exist for it to adopt the regulations. The ARB must also find that the regulations are necessary, technologically and commercially feasible, and do not eliminate a product form. In enacting section 41712, the Legislature gave the ARB clear new authority to control emissions from consumer products, an area that had previously been subject to very few air pollution control regulations.

To date, the Board has adopted the following regulations to fulfill the requirements of the California Clean Air Act as it pertains to consumer products:

- Antiperspirants and Deodorants Regulation
- Consumer Products Regulations
- Alternative Control Plan
- Aerosol Coating Products Regulation
- Hairspray Credit Program Regulation

Details pertaining to each of the above listed regulations can be found in Appendix B of the Technical Support Document for this rulemaking.

3. California's SIP and Consumer Products

On October 23, 2003, the ARB adopted *the Proposed 2003 State and Federal Strategy for the California State Implementation Plan* (Statewide Strategy) 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 Statewide Strategy ensures continued progress towards California's own health-based air quality 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 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 United States Environmental Protection Agency (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. Two specific measures and one longer term, less specific measure 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. As such there is an ongoing commitment to pursue additional technologically and commercially feasible reductions in consumer product emissions.

The proposed amendments to the Consumer Products Regulation presented in this report are intended to fulfill the commitment for SIP measure CONS-1.

On April 15, 2004, U.S. EPA designated all or parts of 35 counties nonattainment for the new eight-hour ozone standard effective June 15, 2004. Many of these areas are already nonattainment for the federal one-hour standard. New nonattainment areas include a number of rural Sierra foothill counties and additional parts of the Sacramento Valley. This action starts the transition from the one-hour standard to the eight-hour standard. The one-hour standard will be revoked on June 15, 2005, one year after the effective date of the designation, and SIPs showing how each area will meet the eight-hour standard are due by 2007. In order to maintain progress towards clean air, the federal Clean Air Act prohibits backsliding on the control program. Since the eight-hour standard is more health-protective than the federal one-hour standard, ARB expects that California will need to reduce emissions beyond the existing one-hour SIP targets.

4. SIP Lawsuit and Settlement

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 which was amended in December 1999 and June 2003 (U.S. District Court, Central District of CA, Case No. CV-97-6916 JSL (SHx)). 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 one of the specific measures, the 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 proposed in this report are intended to fulfill this commitment and to partially fulfill the remaining VOC reduction commitment in the lawsuit settlement agreement.

C. SUMMARY OF PROPOSED AMENDMENTS

1. Why are we proposing amendments to the Consumer Products Regulation?

We are proposing amendments to meet our SIP commitment for 2004, termed "CONS-1," and to fulfill the conditions of a SIP lawsuit settlement agreement. These two commitments are discussed in Subsection B of this Executive Summary. Specifically, the 2004 Amendments will fulfill CONS-1, achieving at least 5 tpd VOC emission reduction statewide by 2006, and it will achieve a 2 tpd emission reduction in the South Coast Air Basin by 2010. The proposed ATCM for Para-dichlorobenzene, although being proposed to reduce the exposure of Californians to a Toxic Air Contaminant (TAC), will also result in VOC emission reductions.

2. What product categories are covered under the proposed 2004 Amendments?

The proposed 2004 Amendments will affect 18 consumer product categories. As shown in Table 1 below, these include 14 new categories, including subcategories, for which new product category definitions and VOC limits are proposed, one previously regulated category for which a more restrictive VOC limit is proposed, and two previously regulated categories for which additional requirements are proposed. Not shown in Table 1 is an additional category, Energized Electrical Cleaner, that would be subject to reporting requirements.

**Table 1
Product Categories Covered by Proposed 2004 Amendments**

New Categories with VOC Limits for Regulation	
Adhesive Remover – 4 subcategories	Footwear or Leather Care Product
Anti-Static Product	Hair Styling Product ¹
Electrical Cleaner	Graffiti Remover
Electronic Cleaner	Shaving Gel
Fabric Refresher	Toilet/Urinal Care Product
	Wood Cleaner
Previously Regulated Category with More Restrictive Limit	
Contact Adhesive ²	
Previously Regulated Categories with Additional Requirements	
Air Fresheners	General Purpose Degreasers

¹After 2006, this product category will incorporate Hair Styling Gel and include additional forms of hair styling products (i.e., liquid, semi-solid, and pump spray) but does not include Hair Spray Product or Hair Mousse.

²This product category has been separated into 2 subcategories: General Purpose and Special Purpose

3. What are the proposed VOC limits for the 15 categories?

The proposed VOC limits are shown in Table 2. Except for two categories, the effective date is December 31, 2006. Where reformulation is expected to be especially challenging, we are providing additional time in two categories, either December 31, 2008, or December 31, 2009, to comply with limits. Also, note that in the case of Shaving Gel, we are proposing a two-tiered limit to reflect technology and production challenges. Staff also proposes to perform a detailed technical and cost assessment of manufacturers' progress towards meeting the 4 percent VOC limit for Shaving Gel at least one year prior to the effective date of the second-tier limit.

4. What are the emission reduction benefits from the proposed 2004 Amendments?

The statewide VOC emissions reductions from full implementation of the proposed limits for 15 categories is estimated to be about 6.0 tpd in California by December 31, 2006. In the South Coast, the reductions will be about 2.8 tpd. These reductions meet our SIP and lawsuit settlement commitments of 5 tpd statewide by 2006. By 2010 the total expected statewide emission reductions will be about 6.9 tpd.

Table 2 summarizes the staff's proposal and the emission reductions to be achieved. Except for product categories where use of certain TACs will be prohibited, the proposed limits generally represent category VOC emission reductions from about 20 percent to 80 percent. Some of the categories affected by the TAC prohibition, may have slight VOC emission increases. The proposed ATCM for PDCB will also result in an over 95 percent emission reduction. Significant VOC emission reductions, of over 95 percent, from toilet/urinal care products and solid air fresheners will be achieved by

replacement with non-toxic, low-VOC alternative products. Total emissions from the categories proposed for regulation would be 9.5 tpd in 2006. The proposal reduces these emissions by about 65 percent upon full implementation in 2009. Further, the proposal significantly reduces emissions of several TACs. The total TAC reductions will be about 4.9 tpd in 2006 and about 5.1 tpd by 2009 statewide.

**Table 2
Proposed VOC Limits and Reductions Achieved**

Product Category	Product Form	Proposed VOC Limit (wt%)	VOC Emission Reductions (TPD)¹	TAC Emission Reductions (TPD)²
Adhesive Removers :				
Gasket or Thread Locking Adhesive Remover	All	50	-0.011 ³	0.99
Floor or Wall Covering Adhesive Remover	All	5	0.630	
General Purpose Adhesive Remover	All	20	0.258	
Specialty Adhesive Remover	All	70	0.138	
Air Freshener ⁴	--	--	0.624	0.624 ⁷
Anti-Static Product	Aerosol	80	0.057 (12/31/08)	--
	Non-aerosol	11	0.000	
Contact Adhesive :				
Contact Adhesive - General Purpose	All	55	0.003	0.007
Contact Adhesive - Special Purpose	All	80	0.000 ⁵	
Electrical Cleaner	All	45	0.070	0.48 ⁸
Electronic Cleaner	All	75	0.049	--
Fabric Refresher	Aerosol	15	0.221	--
	Non-aerosol	6	0.220	
Footwear or Leather Care Product	Aerosol	75	0.008	<0.001
	Solid	55	0.039	
	All Other Forms	15	0.060	
Graffiti Remover	Aerosol	50	0.014	0.055 ⁸
	Non-aerosol	30	0.071	
Hair Styling Product	Aerosol, Pump Spray	6	0.404	--
	All Other Forms	2	0.163	
Shaving Gel	All	7	0.124	--
		4	0.435 (12/31/09)	
Toilet/Urinal Care Product	Aerosol	10	PD ⁶	2.716 ⁷
	Non-aerosol	3	2.709	
Wood Cleaner	Aerosol	17	0.019	--
	Non-aerosol	4	0.232	
Total Reductions 2006			6.05	4.87
Total Reductions 2008			6.28	5.01
Total Reductions 2009			6.81	5.09

¹ Survey emissions adjusted for market coverage as discussed in Volume II, Chapter IV; reduction on the effective date of limits which is December 31, 2006, except where otherwise noted.

² Based on survey emissions; reduction on the effective date of limits which is December 31, 2006.

³ VOC emission increase as result of prohibition on use of certain specified TACs.

⁴ Currently a regulated category; with elimination of the exemption for 98% para-dichlorobenzene (PDCB) products, additional reductions will be achieved from replacement with lower VOC air fresheners.

⁵ No reductions; Contact Adhesive was separated into two subcategories and the existing 80% VOC limit was retained for this subcategory.

⁶ PD = Protected Data; reductions omitted to protect manufacturers' confidential information.

⁷ PDCB emissions are also included in VOC Emission Reductions.

⁸ Trichloroethylene emissions are also included in VOC Emission Reductions.

5. What other amendments to the Aerosol Coating Products Regulation, the Antiperspirants and Deodorants Regulation, the Consumer Products Regulation, and test Method 310 are being proposed?

We are proposing to make changes to the most restrictive limit, product date coding, reporting requirements, and sell-through provisions, certain category definitions, test methods, and other minor changes. All of these proposals are designed to improve enforceability of the regulation and ensure that anticipated emission reductions are achieved and maintained.

a. Most Restrictive Limit

The current most restrictive limit provision only applies to representations made on the principal display panel (typically the front label) of the product. Staff proposes that for products manufactured on or after January 1, 2007, category determinations be made based on representations made anywhere on the label, packaging, and all affixed labels or stickers. This proposed language is consistent with a similar provision in the Aerosol Coating Products Regulation.

b. Product Date Coding

Under the current language of the Consumer Products Regulation, products are required to clearly display the date of manufacture or a code indicating the date on all containers. Staff is proposing to require that companies use either the date of manufacture, a specified code, or annually provide an explanation of the code designating the date of manufacture. In addition, an updated explanation would need to be provided any time a code-date is changed. This is proposed such that sell-through products are clearly identified and removed from shelves as appropriate. The options for date coding are included to provide flexibility to the industry. Staff is also proposing that all date codes are public information that may not be claimed as confidential.

c. Reporting Requirements

The proposed amendments would clarify that when information is not submitted by a primary responsible party, any person who holds that information is required to submit it to ARB upon request. This provision ensures complete data are obtained to estimate emissions or set new VOC limits.

d. Sell-through Notification

A written notification provision is proposed that would add a requirement that any person who sells or supplies regulated consumer products during the sell-through period, must notify the purchaser of the product in writing of the date on which the sell-through period for that product will end. However, this notification is required only if the

product is non-compliant and sold or supplied to a distributor or retailer within the last six months of the sell-through period.

e. Definitions

In addition, modifications to several existing definitions are proposed. For example, we have expanded some of the product category definitions to include additional products (e.g., Hair Spray and Hair Styling Product). For other definitions, we are proposing to exclude certain products because those products have been included in their own separate category (e.g., some solid air fresheners are now under the definition of Toilet/Urinal Care Product).

Staff is also proposing to modify the definition of “Deodorant” in section 94501(d), of the Antiperspirants and Deodorants Regulation and propose a new definition in section 94508 of the Consumer Products Regulation for “Deodorant Body Spray.” The “Deodorant” definition would be modified to specify that a deodorant is any product that indicates on the label that it can be used under the arm to provide a scent or minimize odor. The proposed definition for “Deodorant Body Sprays” would clarify that these products are personal fragrance products, unless the product label implies it can be used under the arm. Any Deodorant Body Spray label which indicates or depicts that it is suitable for use in the human axilla would be considered a “Deodorant” as defined in section 94501(d). Because the proposed modifications to the Deodorant definition may require some products’ labels to be modified, staff is also proposing that the definition would not become effective until January 1, 2006. Staff intends to survey the proposed category “Deodorant Body Spray” to obtain 2003 calendar year formulation and sales data later this year. Staff will use the survey data to determine the most appropriate regulatory strategy. Until such time as an appropriate regulatory strategy is determined, Deodorant Body Sprays will continue to be required to meet a 75 percent by weight VOC limit, equivalent to the limit for “Personal Fragrance Products” containing 20 percent or less by weight fragrance.

f. Test Methods

We are also proposing minor amendments to test Method 310 to include updates to test method citations and dates. Within the Test Methods section of the Aerosol Coating Products Regulation, the Antiperspirants and Deodorants Regulation, and the Consumer Products Regulation, we are proposing to update the date on which Method 310 was last amended. Because Method 310 is proposed for amendment in this rulemaking, within the “Test Method” sections a placeholder for the new effective date for ARB Method 310 is provided. An additional amendment in the Aerosol Coating Products Regulation would update the method whereby acid content in aerosol coatings is determined.

g. Other Minor Changes

Several other minor changes are being proposed that would not substantially affect parties subject to the Regulation, but serve to simplify, clarify, or better organize the Regulation.

6. Will the proposed amendments reduce emissions of Toxic Air Contaminants?

Yes. The proposed regulatory action will also prohibit the use of three TACs, methylene chloride, perchloroethylene, and trichloroethylene in seven categories. The seven categories are Adhesive Removers (including subcategories); Contact Adhesive; General Purpose Degreasers; Electrical Cleaner; Electronic Cleaner; Footwear or Leather Care Product; and Graffiti Remover. However, for safety reasons, the prohibition will not apply to electrical cleaner products used exclusively for cleaning energized equipment. This prohibition will result in TAC emission reductions of about 559 tons per year in 2006. Reductions in VOC TACs are also expected. The proposed action will also prohibit use of a fourth TAC, para-dichlorobenzene.

7. Why are we also proposing an Airborne Toxic Control Measure (ATCM) for Para-dichlorobenzene?

PDCB is a chlorinated benzene compound designated by the International Agency for Research on Cancer to be possibly carcinogenic to humans (Group 2B). It is also a California TAC and a federal Hazardous Air Pollutant (HAP). As such, PDCB has potential carcinogenic and non-cancer health effects. The compound is widely used primarily as an air freshener in toilet and urinal deodorant blocks, as a solid air freshener, and also as the main ingredient in moth balls. Many entities have a policy against the purchase or use of PDCB products in their facilities, including the City of Seattle, Washington; Erie County, New York; the New York Department of Corrections; and the Fire Department of New York City. The state of Vermont has banned its state agencies from purchasing PDCB products. In addition, the New York State Legislature is currently considering a statewide ban on the sale or use of PDCB products in any location open to access by the public.

a. Exposure

As PDCB products are widely used as air fresheners, humans are exposure to PDCB could be substantial. Also, the use of toilet/urinal blocks leads to the ubiquitous presence of PDCB in sewage waters, and surface and ground waters. As wastewater treatment plants aerate sewage in order to promote biodegradation, as well as to strip toxic compounds from the water, the majority of the PDCB that entered the treatment plant is transferred to the air, and may affect communities in the vicinity of the treatment plant. Measurable levels of PDCB are found in breath, blood, urine and even breast milk samples and adipose tissue of most persons sampled.

Outdoor air concentrations of PDCB range from non-detectable in rural areas away from sources to measureable levels outside of homes or in urban areas where air freshener products are used. ARB in 1993, measured atmospheric concentrations of PDCB in the major population centers of California, with average concentrations of 0.142 parts per billion (ppb). This value is consistent with other measurements done in Los Angeles during 1993 that ranged from nondetectable to 0.349 ppb and in 8 locations around the U.S. with a range of 0.020 to 0.290 ppb.

Indoor air concentrations of PDCB tend to be significantly higher than ambient air concentrations. Because its major uses are for indoor air freshening and as an insect repellent, PDCB is found almost ubiquitously in indoor air. Concentrations of PDCB in a bathroom with one deodorizer block measured by Scuderi, 1986, ranged from 78 ppb to 126 ppb. A bathroom with one urinal deodorizer block and one toilet deodorizer block measured 116 to 220 ppb.

In addition, the Consumer Products Safety Commission in consultation with the U.S. EPA suggests that PDCB products be placed in trunks or other containers that can be stored in areas that are separately ventilated from the home (CPSC Document #450).

b. Regulatory Authority

The California Toxic Air Contaminant Identification and Control Program (program), established under California law by Assembly Bill 1807 (Stats. 1983, Ch. 1047) and set forth in Health and Safety Code (HSC) section 39650-39675, requires the ARB to identify and control TACs in California. Following the identification of a substance as a TAC, HSC Section 39665 requires the ARB, with the participation of the air pollution 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 the ARB has evaluated the need and appropriate degree of regulation for a TAC, HSC Section 39666 requires the ARB to adopt regulations to reduce emissions of the TAC. For a TAC where the ARB has not specified a threshold exposure level below which no significant adverse health effects are anticipated, 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; substitutes; environmental impacts; and other specified factors must be taken into account when designing the control measure.

Staff is not proposing to ban PDCB use in mothballs. The Department of Pesticide Regulation (DPR), a part of the California Environmental Protection Agency, registers PDCB use as a pesticide for control of clothes moths. ARB does not have

regulatory authority, under HSC Sections 39650-39675, to control registered pesticides and therefore, we are not addressing this use of PDCB in moth balls.

Proposed Requirements

The proposed ATCM will ban the use of PDCB in toilet/urinal blocks and solid air fresheners. Under the proposal, effective December 31, 2006, no person shall sell, supply, offer for sale, or manufacture for use in California any solid air fresheners or toilet/urinal care products that contain PDCB. Solid air fresheners or toilet/urinal care products that contain PDCB that were manufactured prior to December 31, 2006, may be sold, supplied, or offered for sale until December 31, 2007, so long as the product clearly displays the date on which the product was manufactured, or a code indicating such date. A one year sell through is proposed rather than a longer time frame, in order to reduce public exposure as soon as possible. A number of viable alternatives to PDCB toilet/urinal blocks have been brought to the market. There are also complying solid air fresheners available that do not contain PDCB.

c. Emission Reductions and Environmental Impacts

There are environmental benefits of the proposed ATCM. The first benefit is that emission reductions of 1,219 tons per year of PDCB in 2006 would be achieved. The second benefit will be a reduction in public exposure to PDCB. The risk assessment analysis that we conducted for a generic wastewater treatment plant estimated that the highest potential cancer impact, of approximately 9 per million persons, was found 20 meters downwind from the perimeter of the dechlorination process area. The best case effect on exposure, because of the ATCM, is a reduction in potential cancer risk of 9 excess cases per million people from outdoor exposure and potential cancer risk of 145 excess cancer cases per million from indoor exposure. The complete analysis is found in Chapter VII.

d. Cost

The PDCB blocks generally cost less than their non-PDCB counterparts, as little as half as much, but substantial overlap in price was seen, especially when the blocks were sold contained within a urinal screen. A review of online retailers reveal a typical PDCB 12 pack of four ounce blocks, each which will last for 30 days, with prices in the \$5 to \$8 range. Comparable prices for the non-PDCB block, albeit with screen included, average \$17 for a 12 pack with each individual block also lasting for about 30 days.

Rim hanging blocks showed similar price differentials, with a PDCB 12 pack selling for about \$9 and a non-PDCB 12 pack selling for about \$18. The price for non-PDCB blocks, though, is not always higher, with some manufacturers selling PDCB blocks saturated with an alternate fragrance, such as cherry, and contained within a screen, in the \$20 range for a 12 pack. Enzyme-containing non-PDCB blocks tend to be the most expensive, with prices running in the \$25 range for a 12 pack. As a result

of the proposed ban on PDCB in solid air fresheners and toilet/urinal care products, producers of PDCB (no California producers) may see an overall reduction in sales of as high as three percent. However, most manufacturers and distributors of PDCB products also provide the alternatives, so as a result, they should not be significantly impacted.

e. **Availability of Alternatives and Technological Feasibility of the ATCM**

The proposed ATCM would prohibit the use of PDCB in solid air fresheners and toilet/urinal care products. Compliance with the proposal will not be difficult. Numerous non-PDCB toilet/urinal care products are already available and well accepted by consumers.

As with the toilet/urinal care products, there are many non-PDCB air fresheners available. The traditional room air fresheners that are available are fragrance pearls and potpourri. There are also solid/gel room air fresheners available at stores for general consumers and for janitorial supplies.

8. Who would be affected by these proposed amendments?

The proposed 2004 Amendments would apply to anyone who sells, supplies, offers for sale, or manufactures consumer products for use in the state of California that are subject to the proposed amendments. The primary impact would be on manufacturers and marketers of consumer products, which will have to reformulate some of their products. There may also be an impact on distributors and retailers, who must ensure that they are selling or supplying complying products. In addition, since some products will have to be reformulated, suppliers of chemicals, propellants, containers, valves, and other components may be impacted, depending on whether there is an increased or decreased demand for their products. Finally, consumers may have to pay more for some consumer products, or may have to make some adjustments to their use of the reformulated products.

9. Will the provisions in the existing Consumer Products Regulation apply to the product categories?

Yes. The existing provisions in the Consumer Products Regulation (such as the low vapor pressure VOC exemption, innovative products provision, and variance provision) will apply to the categories proposed for regulation.

10. Will the Alternative Control Plan (ACP) be available to the proposed product categories?

Yes. The ACP will allow manufacturers to submit plans to “average” the emissions from any combination of consumer products subject to the VOC limits in section 94509 of the Consumer Products Regulation, including the proposed new product categories. However, manufacturers cannot submit plans which include both

consumer products, subject to section 94509 “Innovative Products Provision,” or aerosol coating products (aerosol paints) subject to section 94522.

D. REGULATORY DEVELOPMENT PROCESS AND EVALUATION OF ALTERNATIVES

1. How did ARB staff develop the Proposed 2004 Amendments?

In 2002, a subcommittee of the Consumer Products Working Group, the Consumer Products Regulation Workgroup (CPRWG) was formed to serve as a forum for communication during the survey and 2004 Amendments development process. Participation was open to any member of the public.

ARB staff began the process to develop the 2004 Amendments with a comprehensive survey of select categories of consumer products, the “2001 Consumer and Commercial Products Survey” (2001 Survey). Numerous meetings were held with the CPRWG while developing the 2001 survey.

This survey collected sales and formulation information on about 48 different consumer product categories and provided ARB staff with technical information that was used to develop the proposed 2004 Amendments. Four public meetings of the CPRWG were conducted from March 2003 through March 2004 while developing the 2004 Amendments. During the first workgroup meeting, we discussed the results of the 2001 Survey, and discussed an initial prioritization of consumer product categories for regulation development. At the next three workgroup meetings, staff discussed various regulatory proposals. On March 11, 2004, ARB held a public workshop for the 2004 Amendments. A chronology of the meetings and public workshop held is shown in Table 3.

To solicit additional information and comments, staff held or participated in numerous individual meetings, teleconferences, and video conferences with industry representatives. Staff also analyzed survey data, performed shelf surveys, and researched technical literature, patents, and trade journals during the development of the proposed amendments.

**Table 3
Chronology of Public Meetings and Workshops**

Date	Meeting	Location
March 11, 2003	1 st Public Workgroup Meeting for the CPRWG	Sacramento, CA with teleconference available
October 21, 2003	2 nd Public Workgroup Meeting for the CPRWG	Sacramento, CA with teleconference available
December 16, 2003	3 rd Public Workgroup Meeting for the CPRWG	Sacramento, CA with teleconference available
March 10, 2004	4 th Public Workgroup Meeting for the CPRWG	Sacramento, CA with teleconference available
March 11, 2004	Public Workshop on the proposed amendments	Sacramento, CA with videoconference available

2. Who has actively participated in the process?

Consumer product manufacturers, chemical producers, and marketers, and their trade associations, have been the most active in the process. The trade associations include the following:

- Consumer Specialty Products Association
- Cosmetic, Toiletry, and Fragrance Association
- National Paint and Coatings Association
- Adhesives and Sealants Council
- Chlorobenzene Producers Association
- American Beauty Association
- International Sanitary Supply Association
- Automotive Specialty Products Association
- Soap and Detergent Association
- Automotive Aftermarket Industry Association
- American Pet Products Manufacturers

In addition, representatives from local air districts and agencies, including the South Coast Air Quality Management District and the Los Angeles County Sanitation District, and U.S. EPA as well as many other individual consumer product manufacturers were involved in the process.

ARB staff maintains a mailing list of over 3,000 companies and interested parties, including environmental organizations, which received information throughout the development of the proposed amendments. In addition, we have established an electronic list serve to allow subscribers to receive pertinent information with over 650 subscribers.

3. How did ARB staff evaluate alternatives and choose the product categories proposed for regulation?

ARB staff began the selection process by reviewing all the consumer product categories included in the 2001 Survey, including both unregulated categories and previously regulated categories. Staff then eliminated from consideration:

(1) categories where very little or no potential for emission reductions existed, (2) categories where adequate data were not obtained for pursuing emission reductions, and (3) categories where the technical justification for setting new VOC limits could not be completed in the required timeframe. The remaining 20 categories were proposed for regulation at the first public workgroup meeting.

At the second, third, and fourth public workgroup meetings, staff presented regulatory proposals for discussion. After each workgroup meeting, staff modified the proposals, as appropriate, based on the comments and technical information received from industry and staff investigations. During this process, several categories were postponed for consideration for the reasons given above. As mentioned previously, the current proposal would affect 18 categories, including 14 new categories, including subcategories, for which new product category definitions and VOC limits are proposed; one previously regulated category for which a more restrictive VOC limit is proposed; two previously regulated categories for which additional requirements are proposed; and an additional category, Energized Electrical Cleaner, that would be subject to reporting requirements.

4. How were the proposed VOC limits in the proposed 2004 Amendments established?

The proposed VOC limits are the product of extensive research and analysis of data by staff and interaction with the affected consumer products industry, as discussed in the response to question number three. Although the proposed limits were based on factors unique to each individual category, the following general guiding principles were applied:

- technological and commercial feasibility - assuring that reformulation technologies will be available by the effective date for each proposed limit and that the basic consumer market demand can be met on that date;
- emission reductions achieved - assuring that our overall proposal will achieve the maximum feasible reduction as required by state law;
- preservation of product forms - assuring that each existing product form (e.g. liquid, semi-solid, solid, aerosol) is able to reformulate to meet the proposed VOC limit; and,

- minimize potential for use of Toxic Air Contaminants - assuring that the proposed limit can be met with formulations that do not rely on the increased use of Toxic Air Contaminants.

E. COMPLIANCE WITH THE PROPOSED 2004 AMENDMENTS

1. How will manufacturers comply with the proposed 2004 Amendments?

Manufacturers of non-complying products will need to reformulate their products to meet the applicable VOC limits. Manufacturers have the flexibility to choose any formulation that meets the applicable VOC limits, and the reformulation options vary with each product category (see Chapter VI of the Technical Support Document). In general, VOC solvents or propellants will need to be replaced, or partially replaced, with non-VOC ingredients. This may require switching to a water-based formulation using acetone or another exempt solvent, increasing product solids, or formulating with a non-VOC propellant. Manufacturers may also need to change the valve, container, delivery system, or the other components of the consumer product depending on the individual formulation. ARB staff has proposed VOC limits that can be met without the increased use of TACs.

2. Are there alternative compliance options to the proposed VOC limits?

Yes. Manufacturers can comply with the proposed amendments through the use of the Innovative Products Provision (IPP), or the Alternative Control Plan (ACP). The IPP allows manufacturers of “innovative products” to comply with the Consumer Products Regulation if they demonstrate through clear and convincing evidence that their product will result in less VOC emissions than a complying product that meets the applicable VOC limit. The innovative product may result in less emissions due to some characteristic of the product formulation, design, delivery system, or other factors.

The ACP allows manufacturers to average the emissions from products above and below the applicable VOC limits, as long as the overall emissions are less than or equal to the emissions that would have occurred had all the products complied with the VOC limits. Manufacturers must submit an application which includes the VOC content of the products in the plan, a method of verifying the sales of each product in the plan, and other information necessary to track overall emissions.

3. Are the VOC limits for the proposed amendments technologically and commercially feasible?

As explained in detail in Chapters III and VI of the Technical Support Document, all the VOC limits proposed are technologically and commercially feasible. The proposed limits were targeted towards the lowest VOC content technology within a product category which would adequately perform the intended function. In doing this,

we ensured that the various product forms within each category would be preserved, and the proposed limits could be met without the use of TACs. ARB staff will track manufacturers' progress in meeting the proposed VOC limits, as we have done in past regulatory efforts for consumer products. If manufacturers encounter unanticipated but insurmountable difficulties, we will consider proposing amendments to the Consumer Products Regulation to address them.

As shown in Table 4, our survey results demonstrate that products are available that comply with the proposed limits for most of the product categories. While there are no complying products currently available in the market place for Gasket or Thread Locking Adhesive Remover, Aerosol Graffiti Remover, Aerosol Hair Styling Product, Pump Spray Toilet/Urinal Care Product and Aerosol Wood Cleaners, lower emission technology exists for achieving the proposed weight percent VOC limits. The complying market shares listed in Table 4 vary widely with each category (as in previous regulations) because the proposed limits were developed after considering a variety of factors unique to each category. These factors include the availability of reformulation options that may not be used in current products, the variety of product types in a given category, patents that may restrict some reformulation options, and economic issues.

Also note that we are providing until December 31, 2006, to allow time for reformulation in all categories, except Aerosol Anti-static Product and the second-tier limit for Shaving Gel (see Table 2 of this Executive Summary). To comply with challenging VOC limits, the Aerosol Anti-static Product category will be given until December 31, 2008, and Shaving Gel products will be given until December 31, 2009. In addition, staff will also perform a detailed technical assessment of manufacturers progress in meeting the 4 percent VOC limit for Shaving Gels at least one year prior to the effective date of the second-tier limit.

**Table 4
Summary of Complying Products**

Product Category	Product Form	Proposed VOC Limit (wt%)	Number of Complying Products/ Total	Complying Market Share (%) ¹
<u>Adhesive Removers:</u>				
Gasket or Thread Locking Adhesive Remover	All	50	0/15	0
Floor or Wall Covering Adhesive Remover	All	5	9/28	42
General Purpose Adhesive Remover	All	20	4/43	11
Specialty Adhesive Remover	All	70	3/19	6
Air Freshener ²	--	--		
Anti-Static Product	Aerosol	80	3/8	2
	Non-aerosol	11	13/13	100
<u>Contact Adhesive:</u>				
Contact Adhesive - General Purpose	All	55	5/13	80
Contact Adhesive - Special Purpose	All	80	12/12	100
Electrical Cleaner	All	45	22/88	7
Electronic Cleaner	All	75	47/106	52
Fabric Refresher	Aerosol	15	2/16	1
	Non-aerosol	6	47/61	97
Footwear or Leather Care Product	Aerosol	75	11/17	82
	Solid	55	19/25	39
	All Other Forms	15	113/162	87
Graffiti Remover	Aerosol	50	0/35	0
	Non-aerosol	30	4/30	11
Hair Styling Product	Aerosol	6	PD/1	PD
	Liquid	2	81/113	57
	Pump Spray	6	92/126	62
	Semi-solid	2	348/390	97
	Solid	2	61/99	99
Shaving Gel	All	7	15/27	34
		4	1/27	0
Toilet/Urinal Care Product	Aerosol	10	PD/1	PD
	Foam	3	PD/2	PD
	Gel	3	PD/2	PD
	Liquid	3	123/141	98
	Pump Spray	3	PD/2	PD
	Solid	3	73/116	59
	Other	3	2/2	100
Wood Cleaner	Aerosol	17	0/4	0
	Non-aerosol	4	32/40	90

PD = Protected Data; data omitted to protect manufacturers' confidential information.

¹ Complying market share is based on sales rather than number of products.

² We are not proposing a new limit for the category.

F. ECONOMIC IMPACTS

1. Will the proposed amendments be cost-effective?

Cost-effectiveness is one measure of a regulation's efficiency in reducing a given amount of pollutant (often reported in "dollars (to be) spent per pound of pollutant reduced"). The determination of cost-effectiveness is well-established and often used to compare a proposed regulation's cost-efficiency with those of other regulations. To determine the cost-effectiveness of the proposed regulation, we relied on specific formulation data from the "2001 Consumer and Commercial Products Survey," industry journals/literature such as the Chemical Market Reporter for ingredient unit prices, discussions with industry representatives, and the cost analyses conducted for the existing ARB consumer products program. Based on our analyses, we estimate the cost-effectiveness of the proposed VOC limits is about \$2.00 per pound of VOC reduced. This estimated cost-effectiveness value is consistent with existing ARB regulations and control measures. For example, for the 1997 Hairspray Regulation, and the 1995 Aerosol Coating Products Regulation the cost-effectiveness was about \$2.25 and \$3.00 per pound of VOC reduced, respectively. Further, the cost-effectiveness of the recent Inboard Marine and Transit Bus Measures were each determined to be approximately \$2.00 per pound of ozone precursor reduced. In our proposal we have included a second tier limit of 4 percent VOC for Shaving Gel effective December 31, 2009. This second tier limit would increase the overall cost effectiveness of the regulation to about \$2.40 per pound of VOC reduced. Because staff believes that the second tier limit is challenging, and may require significant effort for industry to comply, we commit to perform a detailed technical assessment of the proposed limit at least one year prior to the December 31, 2009, effective date. Based on the results of the technical assessment, staff may consider modifying the second tier proposal.

We estimate that the total cost incurred by industry to comply with this regulation is about \$8 million per year. The second tier Shaving Gel limit would increase the overall cost of the regulation to about \$10 million. These cost estimates are based on assumptions specific to each category depending on reformulation needs. For some categories it was assumed that manufacturers would either drop certain products or undergo minor product formulation changes, and for other categories manufacturers would undergo complete production line overhaul and equipment replacement rather than simple re-tooling.

2. Will consumers have to pay more for consumer products subject to the 2004 Amendments?

Consumers may have to pay more for some products subject to the proposed amendments, depending on the extent to which manufacturers are able to pass along their costs to consumers. As explained in Chapter VIII of the Technical Support Document, the average increase in cost per unit to the manufacturer is estimated to be about \$0.16. These estimated cost per unit values are consistent with existing ARB regulations and control measures. For example, for the 1989 Antiperspirants and

Deodorants Regulation, and the 1995 Aerosol Coatings Products Regulation, the increased cost to manufacturers were about \$0.25 and \$0.30 respectively.

3. What are the expected economic impacts of the proposed regulation on businesses?

In our economic impacts analysis, we evaluated the proposed VOC limits for potential impacts on profitability and other aspects of businesses subject to the limits (with particular attention to California businesses), the cost-effectiveness of the limits, and the estimated cost impacts to consumers. To conduct our analysis, we relied on a combination of publicly available financial databases (*Dun and Bradstreet, Ward's Business Directory of U.S. Manufacturing Industries*), the ARB's 2001 Consumer and Commercial Products Survey, industry journals/literature such as the *Chemical Market Reporter*, discussions with industry representatives, and the cost analyses conducted for the existing ARB consumer products program.

Based on our analysis, we expect most manufacturers to be able to absorb the added costs of the proposed regulation without an adverse impact on their profitability. In addition, as explained in more detail below, we found that the proposed amendments are cost-effective relative to similar ARB regulations or measures, and the impacts to consumers are consistent with existing ARB regulations.

We estimated the change in "return-on-owners equity" (ROE) as an indicator of the limits' potential impacts on business profitability. The cost to comply with the proposed regulation, through increased research and development, equipment purchase and other investment costs, is presumed to impact a business' ROE and therefore its profitability. The cost to reformulate non-complying products for a typical company was used to determine total annual reformulation costs. Our analysis indicates the estimated change in ROE can vary from essentially no change to 6.9 percent change. The average change in ROE is about 0.7 percent, relative to the ROE before the proposed amendments would take effect. This estimated change in ROE is well within the change in ROE estimated for ARB's existing consumer products and motor vehicle programs.

Our ROE analysis for the proposed limits may overestimate the impact on business because it assumes that all of the costs of the proposed limits will be absorbed by manufacturers. In reality, we expect that at least some of the investment costs to comply with the proposed limits will be passed on to consumers. The analysis also does not quantify the extent of cost mitigation due to "technology-transfer" between product lines and from third-party manufacturers (i.e., contract fillers) who fill essentially equivalent products for a number of competing businesses.

While we expect that most businesses will be able to absorb the costs of the proposed amendments without significant adverse impacts on their profitability, there is the possibility that some individual businesses will be adversely affected by this regulatory action. Therefore, it is possible that the proposed amendments may have a

significant adverse impact on some businesses that are not in a market position to invest monies to develop new low VOC products, or to absorb the increased cost resulting from their compliance with the proposed regulation.

Based on our analysis, we do not expect the proposed amendments to have a significant impact on employment, or business creation, elimination, or expansion. We also do not expect the regulation to have a significant impact on the competitiveness of California businesses compared with those outside of California. This is because all companies that sell these products in California would have to meet the proposed requirements, whether located in California or outside of California.

The VOC limits in the proposed amendments will primarily impact consumer product manufacturers and marketers (companies which contract out the manufacturing of their products). However, we recognize that other industries could also be impacted to a lesser amount which is difficult to quantify. These industries include distributors, retailers, and “upstream” suppliers who supply containers, valves, solvents, propellants, and other chemicals used in consumer products.

Distributors and retailers could be impacted if some manufacturers decide to carry a dual inventory of products (one for California and one for the rest of the nation). However, most manufacturers have indicated that they will not manufacture California and 49-state products because dual-distribution systems are expensive to establish and maintain. Another potential cost to distributors or retailers would be the implementation of procedures to ensure that non-complying products are not sold past the three year “sell-through period.” However, based on retail sell-through data obtained during the development of ARB’s existing consumer products regulations, we believe the existing three year sell-through period should provide ample time to allow for the sale of non-complying products.

Upstream suppliers could be impacted because manufacturers will be purchasing some different solvents, propellants, and other materials for their reformulated products. They may also purchase different containers, valves, or other components for their reformulated products. However, we do not expect these changes to result in a major impact on the affected industries because chemical companies generally supply many different industries, and because many of the upstream suppliers also provide the alternative products which will be used in the reformulated products. In fact, we expect some upstream suppliers will benefit since the proposed limits are likely to create new or increased demand for materials to be used in compliant formulations.

G. ENVIRONMENTAL IMPACTS

1. What are the expected environmental benefits of reducing VOCs in the 2004 Amendments?

One of the environmental benefits of the 2004 Amendments will be a reduction in the formation of ground level ozone because the proposed VOC limits result in

reductions of ozone precursors (VOC) of 6.8 tpd statewide by December 31, 2009, based on the 2001 survey results. We also expect no adverse impact and most likely a positive impact on secondary organic aerosol formation. VOCs are a source of particulate matter (PM), namely secondary organic aerosols, either through condensation of the VOCs or complex reactions of VOCs with other compounds in the atmosphere. In general, depending on reformulation options chosen, secondary organic aerosols will be reduced.

2. Will Toxic Air Contaminants be reduced?

Another benefit of these amendments would be a reduction in TACs emissions of 1,778 tons per year in 2006. Due to the prohibition of use of methylene chloride, perchloroethylene, and trichloroethylene in seven categories, we estimate that there will be a reduction of 559 tons per year of these TACs. Para-dichlorobenzene emissions will be reduced by 1,219 tons per year in 2006 as the result of this rulemaking.

3. Will this proposal reduce the cancer health risk?

Yes. Staff estimates that in the seven categories where staff proposes prohibitions of methylene chloride, perchloroethylene, and trichloroethylene, for a given category, up to 64 chances of potential excess cancer cases per million persons would be avoided statewide. As for para-dichlorobenzene, we estimate that 9 potential excess cancers per million persons would be avoided statewide. These estimates are based on outdoor, near-source, exposure over a 70 year lifetime. Further, for reductions of para-dichlorobenzene, we estimate that there would be 145 potential excess cancer cases per million avoided as a result of indoor exposure.

4. How would the 2004 Amendments proposal reduce the risk to public health by reducing VOCs?

While we cannot accurately assess potential risk reduction due to reducing VOC and PM emissions, it has long been known that exposure to ground level ozone and PM have adverse impacts on public health. Research has shown that, when inhaled, ozone and PM can cause respiratory problems, aggravate asthma, and impair the immune system. Any reduction in PM or ozone precursors, namely VOCs, results in improving health in California.

5. Are there any potential negative environmental impacts?

We examined the potential effect of the proposed regulation on global warming, stratospheric ozone depletion, the use of TACs, and the impacts on water quality and solid waste disposal. Based on our analysis, as detailed in Chapter IX of the Technical Support Document, we do not expect any significant adverse environmental impacts to result from the proposed 2004 Amendments. Staff does acknowledge a slight erosion of VOC emissions reductions due to the prohibition of methylene chloride, perchloroethylene, and trichloroethylene. Also there is a possibility of a slight increase

in global warming potential of certain aerosol products if hydrofluorocarbon (HFC) 152a is used as a reformulation option.

6. How does the proposal relate to ARB's goals on environmental justice?

This proposal is consistent with the ARB's Environmental Justice Policy to reduce health risks in all communities, including low-income and minority communities. Generally, use of consumer products is fairly uniform across the State, tracking with housing units, and their emissions are spread over the course of a day, rather than concentrated at a particular time of day. For these reasons, we do not believe that people of any given race, culture, or income would be more impacted than any others would. All Californians should benefit equally from the reduction in VOC emissions from the consumer product categories proposed for regulation, as well as from the prohibition on use of chlorinated solvents that are TACs in the categories containing them.

Because the proposed limits for toilet/urinal care products effectively prohibit the use of PDCB, we would expect to nearly eliminate PDCB from waste water influent and effluent levels. As a result, PDCB concentrations in the air near Publicly Owned Treatment Works (POTWs) will be reduced. The lowering of PDCB levels in effluents from POTWs across the state would provide an environmental benefit to the communities where they are located.

H. FUTURE PLANS

During the summer of 2004, staff will begin developing the 2003 Consumer and Commercial Products Survey (2003 Survey). The 2003 Survey will be comprehensive in nature and will be used as the basis for upcoming rulemakings in 2005 and 2006. In addition, staff has committed to another survey in 2006 for the 2005 sales year, which will be used as the basis for another rulemaking in 2008. For each of these future activities staff will consult with interested parties through the same workgroup process (see Chapter II) used to develop the 2004 Amendments.

I. RECOMMENDATION

We recommend that the Board adopt the proposed 2004 Amendments to the three Consumer Products Regulations, the ATCM for para-dichlorobenzene, and the revisions to test Method 310.

REFERENCES

Consumer Products Safety Commission and Environmental Protection Agency, The Guide to Indoor Air Quality, CSPC Document #450.
<http://www.cpsc.gov/cpsc/pub/pubs/450.html> (CSPC Document #450)

Settlement Agreement, with amendments, in *Coalition for Clean Air, Inc. et al. v. South Coast Air Quality Management District, et al.* (U.S. District Court, Central District of CA, Case No. CV-97-6916 JSL (SHx))