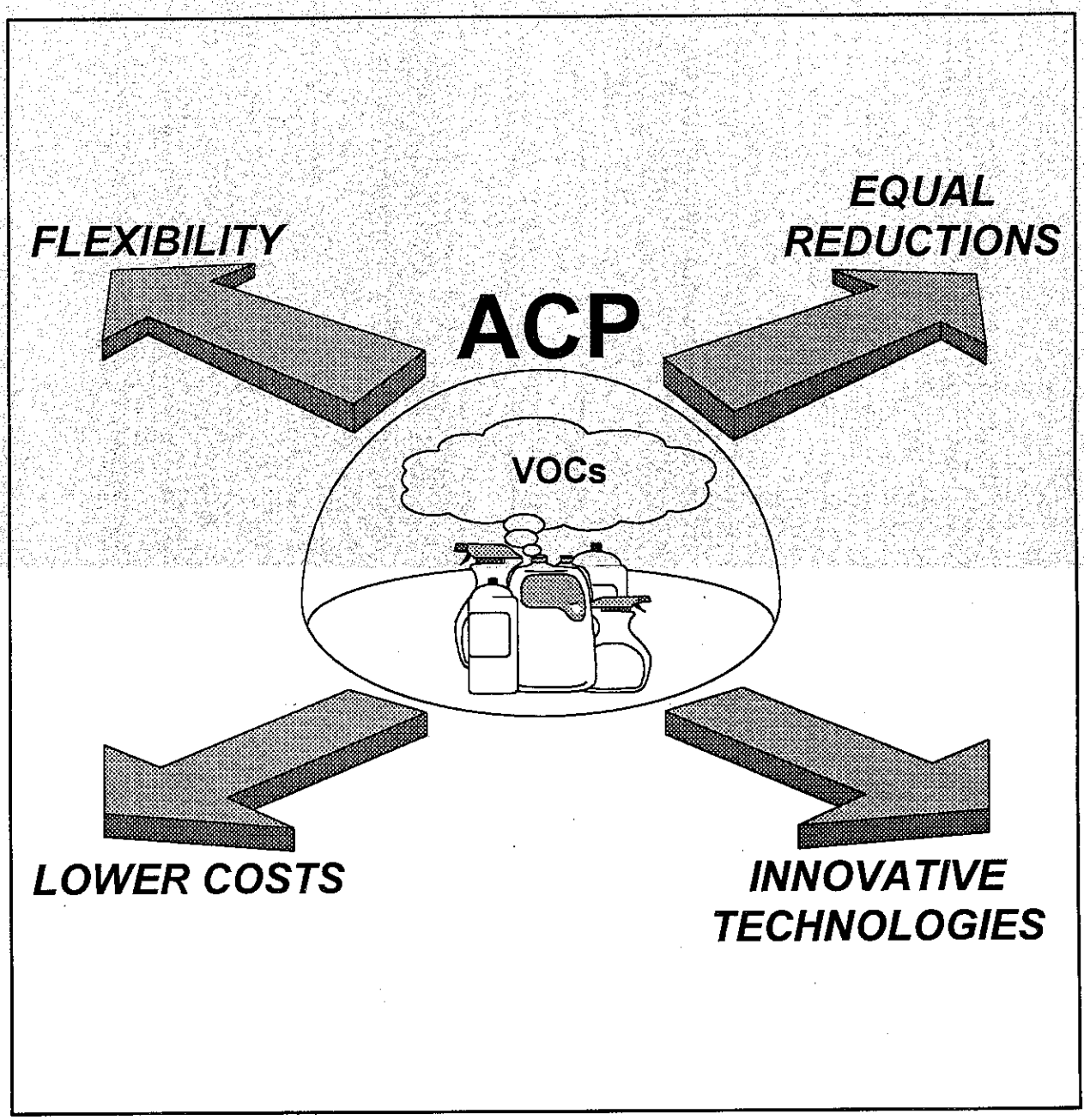
# PROPOSED ALTERNATIVE CONTROL PLAN REGULATION FOR CONSUMER PRODUCTS

## STAFF REPORT




State of California
California Environmental Protection Agency
AIR RESOURCES BOARD
Stationary Source Division
August 1994

State of California
AIR RESOURCES BOARD

# Staff Report: Initial Statement of Reasons for Proposed Rulemaking

**Public Hearing to Consider**

PROPOSED ALTERNATIVE CONTROL PLAN REGULATION
FOR CONSUMER PRODUCTS

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# TABLE OF CONTENTS


| | | Page |
|---|---|---|
| I. | Introduction and Summary | I.1 |
| | A. Introduction and Summary | I.1 |
| | B. Recommendations | I.14 |
| II. | Ambient Air Quality and the Need for Emission Reductions | II.1 |
| | A. Air Quality | II.1 |
| | B. Consumer Product VOC Emissions - Contribution to Ozone and $PM_{10}$ Formation | II.5 |
| | C. Authority to Regulate Consumer Products - California Clean Air Act | II.6 |
| | D. Existing Regulations | II.6 |
| III. | The Need for Regulatory Flexibility | III.1 |
| | A. Current Regulatory Approach: Command-and Control with Flexibility | III.1 |
| | B. Lower Overall Costs Through Additional Flexibility | III.2 |
| IV. | The Alternative Control Plan. | IV.1 |
| | A. Development of the ACP | IV.1 |
| | B. ACP Program Goals | IV.3 |
| | C. General Concepts and Elements | IV.4 |
| V. | Summary of the Proposed Regulation | V.1 |
| | A. Purpose | V.1 |
| | B. Applicability | V.1 |
| | C. Definitions | V.3 |
| | D. Requirements and Process for Approval of an ACP | V.6 |
| | E. ACP Approval Timeframes | V.8 |
| | F. Recordkeeping and Availability of Requested Information | V.8 |
| | G. Violations | V.9 |
| | H. Surplus Reductions and Surplus Trading | V.10 |
| | I. Reconciliation of Shortfalls | V.13 |
| | J. Additional Provisions | V.14 |
| VI. | Impacts Assessment | VI.1 |
| | A. Environmental Impacts | VI.1 |
| | B. Economic and Consumer Impacts | VI.8 |

## LIST OF TABLES


| Table | | Page |
|---|---|---|
| II-A | Ambient Air Quality Standards for Ozone and $PM_{10}$ | II.2 |
| VI-A | Consumer Product Industries with Businesses Potentially Affected by the ACP | VI.10 |
| VI-B | Breakdown of Firms by Number of Employees | VI.13 |
| VI-C | Breakdown of Firms by Market Share (As A Percentage Of The Market Sales) | VI.15 |
| VI-D | Market Share Distribution by Individual Product Category | VI.16 |
| VI-E | Financial and Economic Profile of Affected Industries | VI.21 |


## LIST OF FIGURES


| Figure | | Page |
|---|---|---|
| II-A | Most Californians Breather Unhealthy Air Many Days of the Year | II.2 |
| II-B | Geographic Prevalence of Ozone in California | II.3 |
| II-C | Geographic Prevalence of $PM_{10}$ in California | II.4 |
| VI-A | Relative Market Presence of Small Businesses and Products Marketed by Small Businesses | VI.14 |


## ATTACHMENTS


References
Bibliography
Appendices

A. Proposed Alternative Control Plan Regulation
B. Section 41712 - Health and Safety Code
C. Existing Consumer Products Regulations
D. Notices for Workshops 1-7
E. ACP Workshop Attendees
F. Preliminary Sample ACP Plan presented at the April 19, 1994 workshop
G. California Government Code, section 11342 (Definition of "Small Businesses")
H. October 1993 ACP Business Survey

# I.

## INTRODUCTION AND SUMMARY

This report presents the Air Resources Board (ARB) staff's recommendations for market-based consumer products regulation, called the Alternative Control Plan (ACP).

By design, the voluntary-entry ACP regulation will supplement the existing consumer product regulations by providing manufacturers with additional flexibility for formulating products. Regulatory language (included in Appendix C) is proposed for implementing this program as an amendment to Subchapter 8.5, Title 17, California Code of Regulations (CCR) (commencing with section 94500). As such, the proposed regulation is designed to meet the requirements of the California Clean Air Act and be consistent with the requirements of the existing consumer product regulations.

Highlights of the proposed ACP regulation are:

- It provides greater flexibility to manufacturers in meeting the VOC standards.
- It provides consistent definitions with previous regulations.
- It specifies a clear process for obtaining approval of an emissions limiting plan.
- It specifies how violations are to be reasonably assessed.
- It establishes an emission reduction credit trading system for use by small businesses.
- It provides for clear recordkeeping.

Presented below is an overview which briefly discusses the following: (1) why consumer products are regulated; (2) why there is a need for the Alternative Control Plan; (3) what the ACP is; (4) what the potential environmental and economic impacts from the implementation of the ACP are; (5) whether the ACP is consistent with applicable regulations and the Board's plan for regulating consumer products; and (6) how the proposed ACP regulation and accompanying staff report were developed.

For clarity, the discussion is presented in question-and-answer format using commonly asked questions about the ACP. It should be noted that this summary provides only brief discussions on these topics. The reader is directed to subsequent chapters in the main body of the report for more detailed discussions.

## 1. Why are consumer products regulated?

**Ambient Air Quality**: California continues to have severe air quality problems, and emissions from consumer products contribute to these problems. The most pervasive of the air pollutants in California are ozone, a major respiratory irritant that is the primary constituent of photochemical "smog", and $PM_{10}$, minute particulate matter of 10 microns or less equivalent aerodynamic diameter which penetrate into the deepest regions of the lung.

To protect public health, state and federal ambient air quality standards for these pollutants have been established. Despite previous regulatory efforts which have achieved significant emission reductions over the last 30 years, widespread and frequent exceedances of the ambient air quality standards continue to occur throughout California.

**Emissions:** Consumer products are widely distributed, chemically-formulated goods that contain varying quantities of volatile organic compounds (VOCs). In the presence of sunlight, the VOCs from consumer products and other sources react with oxides of nitrogen ($NO_x$) to form ozone. Volatile organic compounds have also been found to be a source of $PM_{10}$, either through condensation of the VOCs or complex reactions of VOCs with other compounds in the atmosphere.

Although they are clearly not the only sources of VOCs, consumer products nevertheless are significant area-wide contributors to California's air quality problems. In general, the VOC emissions from consumer products are directly proportional to population. Hence, the use of consumer products by 30 million people in California results in an estimated 250 tons per day of VOC emissions, which is approximately 10 percent of the total non-vehicular VOC emissions in the state.

This makes consumer products one of the largest categories of non-vehicular, anthropogenic (man-made) VOC emissions in California. By comparison, the use of architectural and industrial maintenance (AIM) coatings, another large category of solvent-use VOC emissions, results in approximately 190 tons VOC emissions per day (1989 ARB Emissions Inventory).

**California Clean Air Act:** In 1988, the Legislature enacted the California Clean Air Act (CCAA), 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, 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 and technologically and commercially feasible. 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.

Section 41712 defines a consumer product as any chemically formulated product used by household and institutional consumers, including but not limited to, detergents; cleaning compound; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. The definition specifically excludes other paint products, furniture coatings and architectural coatings.

## 2. What has the ARB accomplished to date in reducing VOC emissions from consumer products?

In July 1989, the ARB approved the Consumer Products Control Plan, which outlined various strategies for developing command-and-control and market-based programs to reduce VOC emissions from consumer products. Building on these strategies, the ARB adopted, over a three year period, regulations on antiperspirants and deodorants (November 1989) and 26 other product categories (Phases I-II, October 1990 and January 1992, respectively; sections 94500-94517, Title 17, CCR). The regulations contain requirements which are phased in each year from 1993 to the year 2000. Upon full implementation, these regulations are designed to achieve a reduction of 60 tons per day of VOCs, or approximately 30% of the consumer products emissions inventory.

The existing regulations were adopted in accordance with the CCAA requirements for reducing VOC emissions from consumer products. To achieve additional required emission reductions, the staff is currently developing a regulation to reduce VOC emissions from aerosol paint products for the ARB's consideration in late 1994.

The existing consumer product regulations reduce VOC emissions primarily through "command-and-control." Under this type of approach, the regulations specify maximum allowable VOC content limits (by weight percent) for individual product categories.

Although the existing regulations employ the command-and-control approach, they also provide flexibility to manufacturers. First, the regulations specify performance standards which must be met, but they do not specify how products are to be reformulated to meet the standards. Manufacturers are free to meet the VOC content limits however they see fit, provided their products do not exceed the limits.

Moreover, the existing regulations provide additional flexibility through the Innovative Products provision. This provision allows the sale of products which exceed the limits but, through special formulation or packaging, emits less VOCs than a representative product which meets the applicable limit.

Despite the built-in flexibility, there is room for providing additional flexibility in order to improve the effectiveness of the consumer products program. Our purpose is to achieve this higher level of efficiency and additional flexibility through the availability of the proposed ACP regulation.

### 3. What is the Alternative Control Plan?

The proposed ACP is a voluntary, market-based regulation which employs the well-established concept of an aggregate emissions cap or "bubble." An emissions bubble places an overall limit on the aggregate emissions from a group of products, rather than placing a limit on the VOC content or emissions from each individual product. As such, the proposed ACP will supplement the existing regulations, providing an unprecedented level of flexibility to participating manufacturers. By design, the ACP will provide this additional flexibility while also being equivalent to the existing regulations in reducing emissions.

Manufacturers who voluntarily choose to enter the ACP program would select the products and formulate a detailed ACP bubble program ("ACP plan") for those products. Approval of an ACP plan would be contingent on whether it satisfactorily meets the proposed approval process requirements.

An approvable ACP plan must demonstrate that the total VOC emissions under the bubble would not exceed the emissions that would have resulted had the products been formulated to meet the VOC standards. In addition, the proposed plan must be based on accurate and enforceable records of ACP product sales in California to ensure that all emission reductions will be real and quantifiable.

Once approved, the manufacturer must sell its products in accordance with the conditions contained within the ACP plan. Under an approved ACP plan, the manufacturer could sell products that exceed the VOC standards specified in the existing regulations, provided that the emissions from these high-VOC products will be sufficiently offset by the emissions from products reformulated to "overcomply" with the VOC standards. Overall, compliance with approved ACP plans will ensure that the total VOC emissions from the selected products will be no greater than the aggregate emissions that would have occurred from those products had they been reformulated to meet the existing VOC standards.

## 4. What are the goals for the ACP?

Early in the development process, the ARB staff and workshop participants identified the need for developing goals for the ACP. Through several workshops, a set of common goals was developed which were mutually agreeable to both the ARB staff and interested parties. These common goals guided the development of the ACP throughout the rest of the rulemaking process and state that the ACP should:

- be a voluntary alternative to the VOC standards in the existing regulations,
- be fair,
- be flexible,
- allow for growth of product sales while achieving emission reductions,
- apply to as many types of consumer products as possible,
- be enforceable, and
- be binding for both the ARB and the participant.

We believe that the proposed ACP regulation successfully incorporates all of these goals.

## 5. Why are we proposing the ACP regulation for the ARB's consideration?

We are proposing the ACP regulation for several reasons: (1) to provide a higher degree of compliance flexibility for meeting the existing consumer product regulations as requested by manufacturers, (2) to achieve equivalent emission reductions by utilizing market forces, and (3) to lower the manufacturers' overall cost of reducing VOC emissions from consumer products, thereby reducing overall societal cost impacts to consumers. We believe that these objectives can be achieved through the effective use of emissions bubbling that would be allowed under the proposed ACP.

Although the existing command-and-control approach is relatively simple to implement, its use of market forces is not necessarily maximized. The proposed ACP is intended to harness these market forces. By using market forces in a regulatory program such as the ACP, the ARB can obtain equivalent emission reductions from consumer products, while providing greater flexibility to manufacturers at lower overall compliance costs.

The ACP would provide greater flexibility to manufacturers because it would be a voluntary alternative to meeting the VOC standards for each and every product, and it would be an alternative to formulating products to meet the Innovative Products provision. The ACP also would provide additional flexibility by allowing manufacturers to choose the appropriate combination of reformulations using the concept of emissions bubbling to meet a specified ACP emissions limit.

Upon implementation of the proposed ACP regulation, consumer product manufacturers will have the opportunity to determine the appropriate combination of available emission reduction programs for its products that will minimize its overall compliance costs. Ultimately, regulated manufacturers may find that the lowest overall costs result from a combination of compliance with the VOC standards for some products, the Innovative Products provision for other products, and the ACP requirements for the remaining products.

The proposed ACP uses the concept of emissions bubbling, sometimes known as emissions averaging. This concept has been used in various environmental regulatory programs for years and has recently been in the forefront of air pollution regulatory programs. Emissions bubbles have been used in California for reducing air pollution under the New Source Review program (NSR) and Alternative Emission Control Plans (AECPs). In use since the 1970's, the NSR program incorporates concepts similar to the emissions bubble in the proposed ACP regulation (e.g., "trigger levels," "netting," and "emissions offsets"). Similarly, AECPs have been used in several California districts to provide stationary facilities more flexibility in meeting the district regulations. Primarily used by facilities which apply VOC-containing coatings, AECPS were designed to allow emissions averaging across different production lines using different coatings, a concept very similar to the ACP program. This provided manufacturers which flexibility in deciding which coatings containing varying levels of VOCs could be used on any given day.

The United States Environmental Protection Agency (U.S. EPA) has also used emissions bubbling and similar programs for reducing lead in gasoline, reducing acid rain, and increasing automobile fuel efficiencies (corporate average fuel economy or CAFE). In addition, the U.S. EPA is currently evaluating the feasibility of using emissions averaging to help reduce VOC emissions from architectural and maintenance coatings.

The U.S. EPA's leaded gasoline phasedown program is widely-recognized as a successful use of emissions averaging. Researchers such as Anderson, Kerr, and others have documented transactions of lead allocations occurring under the leaded gasoline phasedown program, which by itself is an indicator of cost savings to industry. The U.S. EPA has estimated that refiners saved at least $226 million under that program, an estimate based solely on the volume of lead allocations that were banked (approximately 10 billion grams of lead allocations).

At the local level, an emissions bubbling program called the Regional Clean Air Incentives Market (RECLAIM), adopted by the South Coast Air Quality Management District (SCAQMD), became effective on January 1, 1994. RECLAIM combines the emissions bubbling concept with tradeable allocations/credits to help achieve district-wide reductions in $NO_x$ and oxides of sulfur ($SO_x$) emissions. The SCAQMD has estimated that its RECLAIM program will save 42 percent, or $58 million per year, of the annual cost of reducing $NO_x$ and $SO_x$ emissions from 1994 to the year 2000, when compared to the command-and-control measures in its 1991 air quality management plan.

Under the ACP, emissions bubbling will achieve cost savings for manufacturers by enabling them to determine which product lines will yield the least-cost emission reductions. Because of this flexibility, the ACP provides an inherent economic advantage in comparison to command-and-control strategies. Lower overall costs are further ensured by the fact that entry into the ACP program is voluntary. Therefore, all participating manufacturers will have determined, prior to entering the program, whether the ACP program will result in clear benefits - manufacturing flexibility, economic advantages, and lower overall costs to themselves and consumers.

## 6. What are the emission reductions from the staff proposal?

As noted previously, the ACP is intended to achieve equivalency with the existing consumer product regulations. That is, the ACP is designed to limit VOC emissions from consumer products under approved emission bubbles to no more than the emissions that would have occurred from the products under the existing VOC standards without the ACP. Consequently, if all consumer product manufacturers operate under approved ACPs, the total potential emission reductions from the implementation of the ACPs would be the same as those from the existing regulations, about 60 tons per day by the year 2000.

## 7. What are the potential environmental impacts of the proposed regulation?

By design, the proposed ACP regulation limits the VOC emissions from products under an ACP to the amount that would have occurred under the existing VOC standards. Therefore, the primary environmental impact will be a statewide decrease in VOC emissions, which will be at least as much as the reductions expected from implementation of the existing consumer products regulations. Since VOCs are involved in the formation of tropospheric ozone, the reduction in VOC emissions from both the existing regulations and the ACP regulation is expected to result in a net decrease in ground-level ozone and a positive impact on air quality and public health.

The staff have determined that no significant potential adverse environmental impacts would likely occur from the implementation of the proposed ACP regulation. The staff took into consideration the potential impacts of the proposed regulation on ground-level ozone, stratospheric ozone depletion, global warming, water quality, and landfill loading.

8. **Is the proposed regulation technologically and commercially feasible?**

The proposed regulation is technologically and commercially feasible for the following reasons: (1) it is voluntary, (2) participating manufacturers who develop any new technologies under the ACP program would do so by choice, and (3) current technologies that will be used when the ACP becomes effective have already been determined by the ARB, during the rulemaking process for the Phase I-II regulations, to be commercially and technologically feasible.

9. **What are the economic impacts of the proposed regulation?**

Overall, we expect the ACP to be more cost-effective than the existing regulations for participating manufacturers. As stated previously, entry into the ACP program is completely voluntary; thus, the advantages of entering the program will be determined on a case-by-case basis by each manufacturer who wishes to participate. Because of this, it is reasonable to conclude that manufacturers will not enter the ACP program unless their overall compliance costs are less than or, at most, equal to the costs to comply with the VOC standards.

We anticipate that participating manufacturers will find overall compliance costs to be less than they would have been if they had complied with all the VOC standards. The overall cost-effectiveness for directly complying with the existing VOC standards was previously estimated by the ARB staff to range from $0.01 to $1.04 per pound of VOC reduced. Therefore, we anticipate that the overall cost-effectiveness for manufacturers participating in the ACP program should be less than $0.01 to $1.04 per pound of VOC reduced.

Similarly, we expect that the total annual cost to the entire consumer products industry, assuming all manufacturers will operate under an ACP, will be lower than the approximate 13 million to 205 million dollar cost previously estimated by the ARB staff for the entire industry to comply with the existing consumer products regulation. This range reflects the wide range of products and reformulation options available to manufacturers. It is not feasible to determine the total annual cost to manufacturers if only some participate, but we do anticipate that the total annual cost in such cases are likely to be lower than the analogous costs without the ACP program.

Moreover, the estimated average annual costs associated with reformulating a single product formulation to meet the proposed ACP regulation should be less than the $15,600 to $270,000 per product range reported for the existing command-and-control strategy. This means that any cost increases in manufacturing products under the ACP program are expected to be no greater, and will most likely be less than, the $0.01 to $0.60 per unit estimated for the Phase II regulation.

## 10. Will the ACP have adverse economic or competitiveness impacts on California businesses?

We have evaluated the potential impact of the ACP on business enterprises in California using publicly available data on California businesses and a survey we conducted in October 1993. Our analysis was conducted to meet the requirements of the Administrative Procedures Act, as amended by AB 969 and SB 513 (see Government Code, sections 11346.53 and 11346.54).

These amendments require state agencies, which are proposing to adopt or amend any administrative regulation, to assess the proposed regulation's potential for adverse economic impacts on California businesses. The amendments also require an assessment of the regulation's potential impacts on the ability of California businesses to compete with businesses in other states. In addition, new section 11346.54 requires state agencies to assess the potential impact of their regulations on California jobs and business expansion, elimination, or creation.

Based on the results of our study and the survey, we found that participating ACP manufacturers will benefit from the additional flexibility provided by the ACP. This additional flexibility is expected to induce innovations and cost savings for participating manufacturers. However, we recognize that the additional flexibility, which is the basis for the ACP, can also increase the level of competition for some products.

For non-participating manufacturers, increased competition can result when their low-VOC products compete directly in the market with high-VOC products sold under an approved ACP bubble. Since the high-VOC products may be employing older, less costly technologies, they may have a competitive advantage over newer, low-VOC products manufactured by non-ACP manufacturers. This can lead to the elimination of marginal producers for those products. Under this scenario, the proposed ACP may initially have some minor impacts on California employment and payroll.

However, we believe this is an unlikely outcome under the ACP. We determined that the potential cost differential which might result from this competition would not adversely impact small firms for the following reasons: (1) available public information indicates that there is a high level of non-price competition in the personal and household product categories, in which the majority of regulated consumer products are classified, and (2) small firms tend to fill special niches in markets where price may not be the primary competitive factor.

By their very nature, niche markets tend to be comprised of products for which brand loyalty and specific product characteristics (e.g., natural ingredients) may be more of an influence on consumer purchase patterns than price. For the consumers in these captive niche markets, premium prices may be charged for their brand loyalty. Therefore, any cost differential with competing high-VOC products may be offset by the premium prices which are charged in these niche markets.

We also found that there would be minimal impacts on the ability of California companies to compete with non-California companies. This is because the consumer product regulations apply to all regulated products, regardless of where they are manufactured. The impact of the ACP should therefore be the same for all businesses regardless of where they are located. More importantly, we determined that the added flexibility, greater innovations, and cost savings should provide long-term positive impacts on California businesses.

The cost savings made possible by the ACP should improve the profit margins for participating manufacturers, inducing the expansion of employment in existing businesses or entrance into the market by new firms. If the cost savings are passed on to consumers in the form of lower prices, there would be more money for consumers to purchase products, thereby inducing expansion of product output and employment.

Additional new jobs can also be created under the ACP's surplus reductions trading program. If the trading market is robust, past experience with programs similar to the ACP indicates that new jobs will be created to handle the trading of credits between ACP manufacturers.

**11. How does the ACP address small/one-product business concerns?**

During the development of the ACP, concerns were expressed regarding small and one-product businesses. Specifically, the concerns were that: (1) they may not be able to participate in the ACP's emissions bubbling program, (2) if their participation is not feasible, they may be at a competitive disadvantage if high VOC, non-reformulated products are allowed to remain in the market to compete against their low-VOC, complying products. In these cases, the high-VOC noncomplying products may be less costly to market than reformulated, low-VOC complying products.

We evaluated these concerns and have found, that for most manufacturers in the consumer products industry, the ACP will not have an adverse impact on their competitiveness. However, we believe there may be some validity to these concerns for certain small businesses. To provide for a more equitable program and to facilitate the participation of small and one-product businesses in the ACP program, the proposed regulation includes a provision that allows the purchase of surplus reduction credits by these businesses.

Surplus reduction credits are generated when a manufacturer's verified ACP emissions for a particular compliance period are less than the ACP Limit for that period. Upon validation and issuance of the appropriate credits by the Executive Officer, the generator of the credits is free to use or sell those credits for as long as they are valid. Surplus reduction credits can be used internally by the manufacturer which generated the credits to meet its ACP Limit for the next compliance period; those credits that are not used internally can be traded, as provided in the regulation, to other ACP participants.

Under the proposed regulation, the sale of surplus reduction credits are unconditional; any generator of valid credits may sell those credits. However, to help ensure that small businesses and businesses with limited product diversity can participate in the ACP program, the proposed regulation allows only small businesses and one-product businesses to purchase surplus reduction credits.

By limiting the purchase of surplus reduction credits to small manufacturers, we will help ensure the availability of surplus reduction credits for use by these companies. Without this limitation (i.e., unlimited trading by all companies), there would be little guarantee that surplus reduction credits would be available for small manufacturers to use. Once the ACP program is well under way and demonstrated to be effective for small manufacturers, expanding the trading program to include the purchase of credits by larger manufacturers can be considered.

With the purchase of sufficient credits and adequate emissions bubbling, participating small and one-product businesses can lower their overall compliance costs. The proposed trading mechanism should therefore help to improve the competitiveness of small and one-product businesses which may be impacted under the ACP program.

Although it has been stated previously, it should again be emphasized that entry into the ACP is voluntary and that the ACP may not be useful to every manufacturer. Clearly, the decision to participate in the ACP should be conducted on a case-by-case basis by each manufacturer. If a manufacturer, small or large, determines that the ACP is unsuitable for its purposes, there are still two other compliance options available - compliance with the VOC standards and formulation of products which can qualify as Innovative Products.

**12. How will Federal regulatory activities impact the ACP?**

There are no existing comparable federal regulations or statutes that regulate VOC emissions from consumer products. However, the U.S. EPA is mandated under the federal Clean Air Act Amendments of 1990 (CAAA, Title I, section 183) to develop regulations to reduce VOC emissions from consumer/commercial products. As defined in the CAAA, consumer and commercial products include a broader array of products than are currently regulated in the ARB consumer products regulations. In its regulatory development process, the U.S. EPA is required to study the VOC emissions from consumer/commercial products; develop an inventory of such emissions; categorize the emissions using reactivity adjustment factors; and develop regulations to control the top 80% of the reactivity-adjusted VOC emissions with consideration of specified criteria (e.g., cost-effectiveness, social and health benefits of the products, etc.). To date, the U.S. EPA has not proposed any regulation or regulatory language; it has recently just completed its inventory process and is in the process of compiling that database.

A Federal program which may affect the ACP is the U.S. EPA's Economic Incentives Program (EIP) rules (59 FR 16690; April 7, 1994). Representatives of the U.S. EPA (Region IX)

have stated that they will consider the ACP to be an economic incentives program rule if the ACP is submitted to the U.S. EPA as a revision to the California State Implementation Plan (SIP). Because the ACP will be evaluated against the EIP requirements, the ARB staff have worked closely with the U.S. EPA staff to ensure the ACP's consistency with the EIP requirements.

**13. Will this regulation affect the goals outlined in the Consumer Products Control Plan?**

The ACP is consistent with the goals contained in the consumer products control plan ("control plan"). Among its other goals, the control plan presented to the ARB in July 1989 stated that various regulatory strategies would be evaluated and implemented, if appropriate, to reduce VOC emissions from consumer products to the maximum extent feasible.

Two of the methods cited for reaching this goal are the command-and-control approach, embodied by the VOC standards in the existing regulations, and a market-based approach (emission fees or emissions bubbling). As an emissions bubbling program designed to supplement the existing regulations, the proposed market-based ACP regulation meets the goals outlined in the control plan.

**14. How did the staff develop the ACP regulation and this report?**

The staff developed the ACP regulation and this report through extensive consultations with industry and government agency representatives. Staff began exploring some preliminary concepts for the ACP in late 1991, during the rulemaking process for the Phase II amendments to the consumer products regulation. At that time, manufacturers expressed a desire to work cooperatively with the ARB staff to develop a market-based program that would achieve the same goals as the existing regulations but with greater flexibility and at a lower cost. Because the manufacturers' desire for added flexibility was consistent with the ARB's control plan for developing market-based programs, the staff began the workshop process for developing regulatory language for the ACP in January 1992.

Over the course of two and a half years, the staff held seven public workshops covering numerous drafts, regulatory concepts, and implementation issues. We conducted the first three workshops to develop the control concepts and program goals for the ACP (April 3, 1992; June 30, 1992; November 18, 1992). Based on these concepts and goals, we developed a plain language version of the ACP, which was discussed at the fourth workshop (February 24, 1993). The last three workshops were then conducted to discuss draft regulatory language for the ACP (June 23, 1993; November 9, 1993; April 19, 1994).

We also attended four meetings held by the ACP Task Force, a group comprised of industry representatives. The ACP Task Force was formed to help coordinate industry comments and responses to the staff proposals during the workshop and regulatory development process.

Participating in the workshop process were various ACP Task Force members, including representatives of the Chemical Specialties Manufacturers Association (CSMA) and the Cosmetic, Toiletry and Fragrance Association (CTFA), along with various individual company representatives. The workshops were also attended by some members of the public who were neither industry representatives nor part of the ACP Task Force.

In March 1993, the staff presented to the ARB a mid-course status report on the development of the ACP regulation. At that time, the ARB gave its approval for further developing the ACP regulation. ACP Task Force representatives who attended that ARB hearing also provided testimony supporting further development and completion of the ACP regulation.

To build on and learn from similar economic incentives programs, the staff held discussions with various regulatory agencies. In addition to discussions at the workshops, the staff also held several discussions with representatives of the U.S. EPA to ascertain their views on the ACP and to minimize any inconsistencies with the U.S. EPA's EIP rule. In addition, some of the workshops and meetings were attended by representatives of the two largest local air pollution control agencies in California, the SCAQMD and the Bay Area Air Quality Management District (BAAQMD).

An effective ACP program will depend on enforceable and comprehensive accounting systems for tracking ACP product sales into California. To determine the strengths and limitations of such tracking systems, the staff discussed with the California Department of Pesticide Regulation the existing mill tax collection system for economic poisons (i.e., pesticide products). For tracking non-pesticide products, the staff held several meetings with representatives of the two primary consumer product market surveying services, Nielsen Marketing Research and Information Resources, Incorporated.

In addition to the workshop and consultation process, the staff also researched the literature on similar, existing market-based regulatory programs, both from a theoretical and practical applications standpoint. To this end, staff reviewed the literature on California's experiences with alternative emissions control plans (AECPs), New Source Review (NSR), and the ARB's recently-approved Mobile Source Reduction Credit Guidelines. The staff also reviewed the U.S. EPA's experience with the acid rain, leaded gasoline phasedown, stratospheric ozone depleting compounds, and corporate average fuel economy (CAFE) programs.

To gain experience with local economic incentives programs, the staff participated in the development of the SCAQMD's RECLAIM program. In particular, the staff participated in the workshops held by the SCAQMD to discuss the Manufacturers Bubble Program, an emissions bubble concept similar to the ACP, which was to be a subset of the current RECLAIM program.

## RECOMMENDATIONS

We recommend that the Board approve the proposed ACP regulation presented in this report (Appendix A). The proposed regulation is technologically and commercially feasible and necessary to carry out the Board's responsibilities under Division 26 of the Health and Safety Code. Because this market-incentives program is a new approach to regulating VOC emissions, we intend to closely monitor industry efforts at meeting the requirements of the ACP regulation. We will also closely monitor the overall dynamics of the program to ensure that the emission reductions achieved by the existing consumer product regulations are not compromised.

# II.

# AMBIENT AIR QUALITY AND THE NEED FOR EMISSION REDUCTIONS

The following discussion is taken from the existing rulemaking record for the consumer product regulations, which documents the contribution of consumer product VOC emissions to the ozone and $PM_{10}$ problems in California. For a more detailed discussion on this topic, the reader is referred to the Phase I-II rulemaking records.

## A. AIR QUALITY

Two of the most ubiquitous air pollutants in California are ground-level ozone and $PM_{10}$ (particulate matter less than 10 microns equivalent aerodynamic diameter). When located in the upper atmosphere, ozone benefits plants and animals at ground-level by screening out most of the sun's harmful ultraviolet radiation. However, ozone is also a very strong oxidizing agent. When formed near ground-level as the major ingredient in photochemical "smog", ozone damages crops, structures, and the respiratory functions of humans and animals. [ARB, 1987a; ARB, 1987b] Because of their small size, $PM_{10}$ also cause significant respiratory damage by penetrating the deepest regions of the lungs. [ARB, 1991a]

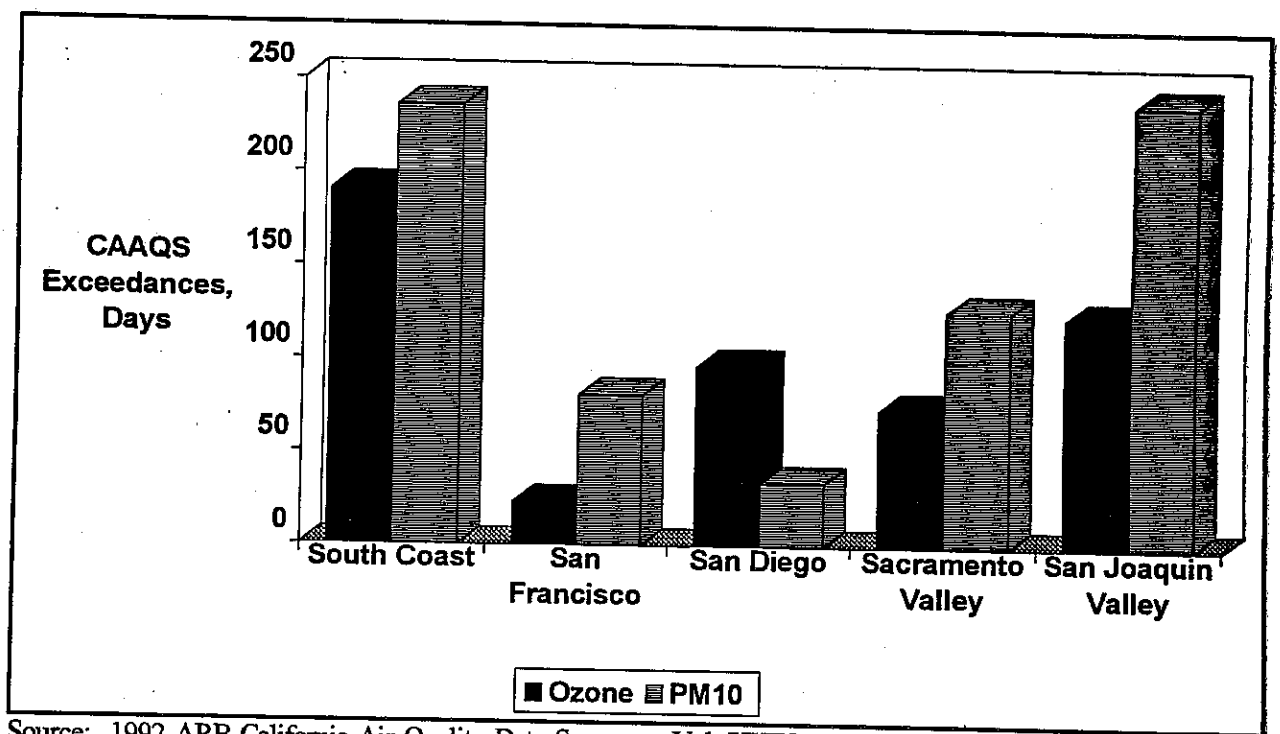
To protect California's population from the harmful effects of ozone and $PM_{10}$, the U.S. Environmental Protection Agency (U.S. EPA) and the ARB have established ambient air quality standards for these contaminants. These standards are shown in Table II-A. As this table shows, the California standards are significantly more stringent than the Federal standards for ozone and $PM_{10}$.

**Table II-A**
**Ambient Air Quality Standards for Ozone and $PM_{10}$**

| Pollutant | Averaging Time | State Standard | National Standard |
|---|---|---|---|
| Ozone | 1 hour | 9 pphm (180 $\mu g/m^3$) | 12 pphm (235 $\mu g/m^3$) |
| $PM_{10}$ | Annual Geometric Mean | 30 $\mu g/m^3$ | ----- |
| | 24 hour | 50 $\mu g/m^3$ | 150 $\mu g/m^3$ |
| | Annual Arithmetic Mean | ----- | 50 $\mu g/m^3$ |

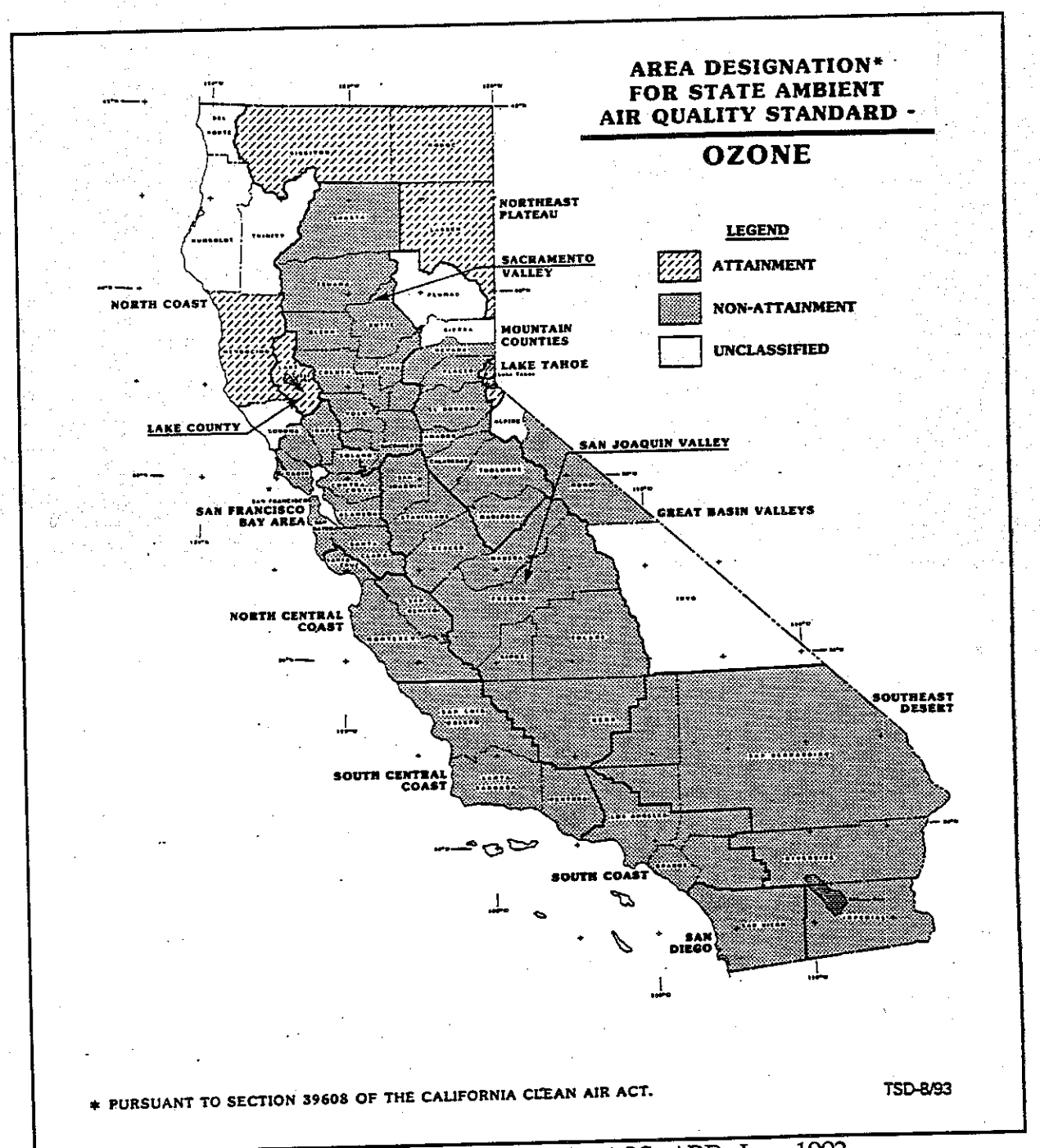
The vast majority of California's population who live in urban areas breathe unhealthy air for much of the year, as clearly shown in Figure II-A. Lastly, Figures II-B and II-C show that ozone and $PM_{10}$ are not limited to just urban areas, but can be found in nearly every county in California. As shown in these maps, 32 counties are currently designated as nonattainment for the state ozone standard, while 50 counties are designated as nonattainment for the state $PM_{10}$ standard. These counties contain over 90% of California's population, a clear indication of the extent and magnitude of the ozone and $PM_{10}$ problems in California. [ARB, 1991b]

**Figure II-A**
**Most Californians Breathe Unhealthy Air Many Days of the Year**



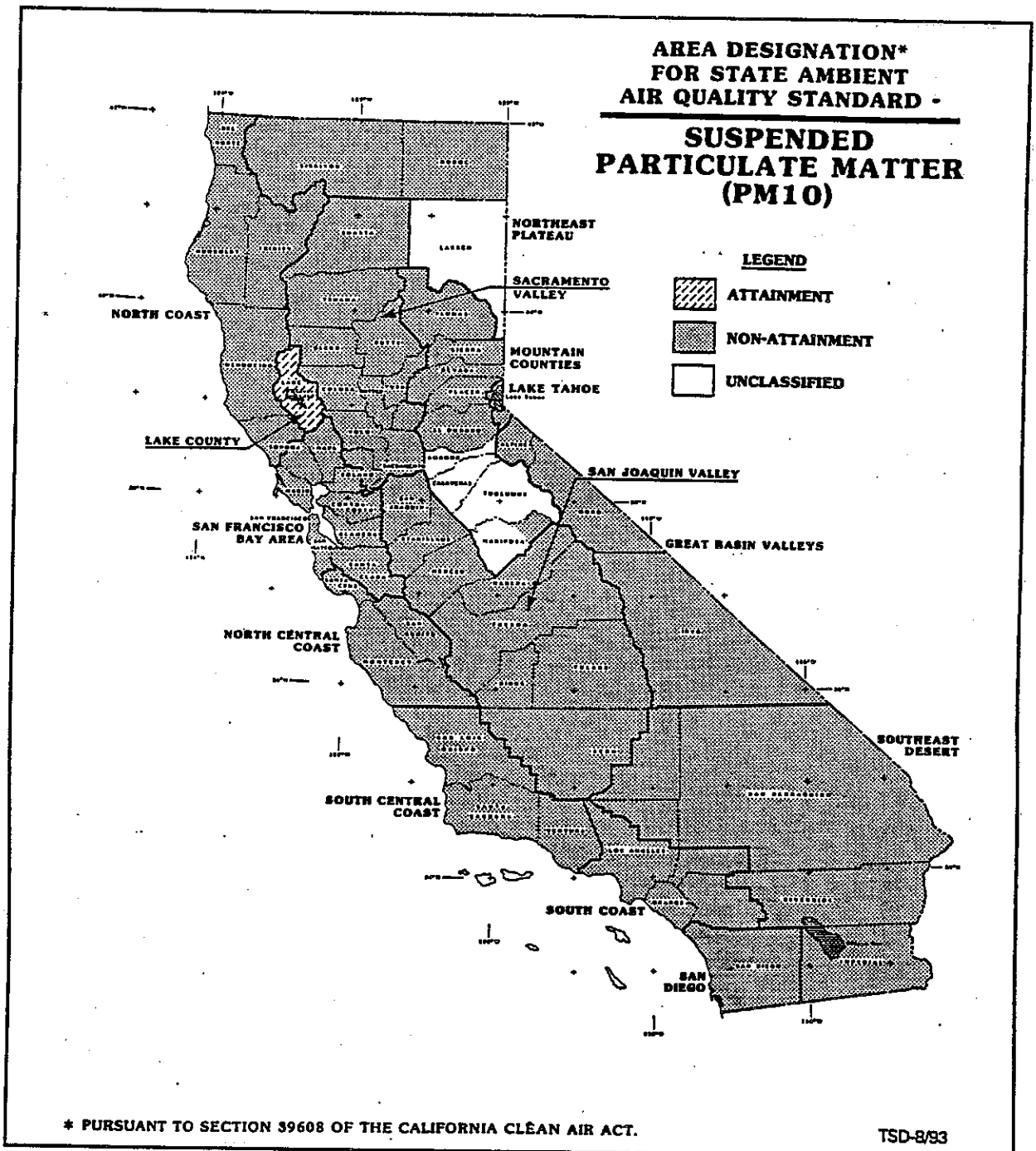

Source: 1992 ARB California Air Quality Data Summary, Vol. XXIV

Figure II-B
Geographic Prevalence of Ozone in California




Source: Area Designations for State and National AAQS, ARB, June 1992

Figure II-C
Geographic Prevalence of $PM_{10}$ in California




Source: Area Designations for State and National AAQS, ARB, June 1992

## B. CONSUMER PRODUCT VOC EMISSIONS - CONTRIBUTION TO OZONE AND $PM_{10}$ FORMATION

It has been well-established that, through a complex series of reactions in the presence of sunlight, VOCs and $NO_x$ react to form ground-level ozone. [Seinfeld, 1989] Because of this and the ambient conditions that exist in California, the current strategy to control ground-level ozone generally focuses on reducing both VOC and $NO_x$ emissions. Rigorous control strategies adopted over the past 20 years have achieved significant VOC emission reductions from vehicular, stationary, and area-wide sources.

However, it has become apparent that, with a growing human and vehicular population, additional emission reductions are needed to attain the ambient air quality standards for ozone. [SCAQMD, 1991; BAAQMD, 1991; SMAQMD, 1991; SDCAPCD, 1992] To help achieve the maximum feasible reductions in VOC emissions, solvent-use sources of VOCs, including previously unregulated consumer/commercial products, have recently been included in California's regulatory programs. [CCRa, Title 17]

In addition to their contribution to ozone formation, VOCs can also contribute to the formation of $PM_{10}$. [Shen, et al., 1975] Although a large percentage of the $PM_{10}$ in California results from incomplete combustion and wind-caused soil erosion, it has been established that VOCs can also form $PM_{10}$ through physicochemical processes involving the condensation of vapor-phase VOCs or reactions of VOCs with other chemicals present in the atmosphere. [*Id*]

Nearly all consumer products contain at least some VOCs, with the VOC content in the various product categories ranging anywhere from a few percentage up to 100% of the total product net weight. Consumer products are used in everyday life and the overall sales of consumer products are generally proportional to population. Although each unit of a consumer product may seem to be a small source of emissions, the total use of consumer products by over 30 million consumers in California results in significant VOC emissions from consumer products as a category. Thus, without a concerted emissions reduction program, the VOC emissions from consumer products will likely grow in proportion to population growth.

In 1989, the ARB staff estimated consumer product VOC emissions to be about 250 tons per day, making consumer products one of the largest sources of non-vehicular VOC emissions in California. To put it another way, consumer products comprise approximately 10% of the non-vehicular VOC emissions inventory. By comparison, architectural and industrial maintenance (AIM) coatings emit approximately 190 tons per day as a category. [ARB, 1991b, op cit. at Table A-1]

## C. AUTHORITY TO REGULATE CONSUMER PRODUCTS - CALIFORNIA CLEAN AIR ACT

In 1988, the Legislature enacted the California Clean Air Act ("the Act") to address the state's air pollution problems. In the Act, the Legislature 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.

In recognition of the contribution to air pollution from consumer products, the Act added section 41712 to the California Health and Safety Code (Appendix B). Section 41712 requires the ARB to adopt commercially and technologically feasible regulations that are necessary to achieve the maximum feasible reduction in reactive organic compound (ROC) emissions from consumer products [note: ROC is equivalent to VOC].

## D. EXISTING REGULATIONS

To fulfill the mandates of the Act, the ARB has adopted a plan and two regulations to reduce VOC emissions from consumer products. In July 1989, the Board approved the Consumer Products Control Plan ("the control plan"), which outlined the ARB's intended strategies for developing command-and-control and market-based programs for reducing VOC emissions from consumer products. [ARB, 1989]

To carry out the strategies outlined in the control plan, the Board approved a regulation on November 8, 1989 to reduce VOC emissions from antiperspirants and deodorants (AP/DO). On October 11, 1990, the Board approved a second, more comprehensive regulation to reduce VOC emissions from 16 consumer product categories (Phase I). Subsequently, the Board approved amendments to the Phase I and AP/DO regulations on January 9, 1992, adding 10 more product categories (Phase II) and improving the existing provisions. [Appendix C] To achieve additional emission reductions, the ARB staff is currently developing a regulation to reduce VOC emissions from aerosol paint products for the Board's consideration in 1994. [Simeroth, 1993]

# III.

## THE NEED FOR REGULATORY FLEXIBILITY

### A. CURRENT REGULATORY APPROACH: COMMAND-AND-CONTROL WITH FLEXIBILITY

The existing consumer product regulations achieve reductions in VOC emissions through a conceptually simple mechanism - mandatory compliance with specified VOC standards. The regulations specify standards, for a variety of product categories, in the form of maximum allowable VOC contents. These standards were determined by the Board to be technologically and commercially feasible during the development of the AP/DO and Phase I-II regulations. [ARB, 1992]

Often, the existing consumer product regulations and their VOC standards are generically referred to as the "command-and-control" regulatory approach. This terminology implies that the regulations specify exactly how manufacturers are to comply with the regulatory requirements. However, manufacturers subject to the existing consumer product regulations are free to decide how to formulate products, provided the products they sell meet the applicable VOC standards. Thus, the existing regulations already provide manufacturers with a certain degree of flexibility by specifying performance standards in the form of VOC limits rather than the steps needed to comply.

Further flexibility is provided in the existing regulation by the Innovative Product provision (IPP). [CCRb, Title 17] The ARB incorporated the IPP into the existing regulations in recognition of certain unique aspects of product formulations and packaging. The IPP allows a product to exceed the applicable VOC standard, provided that the VOC emissions from the usage of the product during its lifetime are less than the VOC emissions from a complying representative product.

This provision was incorporated into the regulations to allow the sale of products which are highly concentrated, require lower usage rates, or otherwise make more efficient use of their VOCs. Thus, the IPP provides manufacturers with additional formulation flexibility by recognizing that reductions in VOC content are not necessarily required to reduce the VOC

emissions from consumer products.

## B. LOWER OVERALL COSTS THROUGH ADDITIONAL FLEXIBILITY

Existing Regulatory Programs

For years, various environmental regulatory programs have relied on flexibility to help achieve environmental goals. Many of these programs incorporate compliance flexibility through the well-established concept of emissions bubbling. Bubbling has been used in California for reducing air pollution under the New Source Review program (NSR), Alternative Emission Control Plans (AECPs), and other types of existing programs with varying degrees of success.

The concept of New Source Review was introduced in the 1970 amendments to the federal Clean Air Act. In 1983, the ARB, U.S. EPA, and the California Air Pollution Control Officers Association (CAPCOA) jointly developed a comprehensive NSR Model Rule which integrated best available control technology (BACT) and emission offset requirements. This rule was approved by the U.S. EPA and used, in many cases, by the local districts in California to develop and revise their NSR rules. [ARB, 1988]

NSR applies the concept of "trigger levels" to the aggregate emissions from new or modified stationary facilities to determine the appropriate level of control. For example, if a major stationary source in a district were to construct a new boiler, the facility's new aggregate emissions may exceed any one of several specified trigger levels (e.g., 100 tons per year of emissions). Depending on the particular district requirements, emissions exceeding these trigger levels would then be subject to requirements for the application of BACT or emissions offsets.

NSR contains provisions which are similar to the emissions averaging allowed in the proposed ACP regulation. New or modified facilities whose unmitigated emissions would otherwise trigger the NSR requirements may "average" their emissions sufficiently to meet the requirements by reducing emissions from other sources. For example, the facility may reduce emissions from other equipment in the facility (on-site reductions to "net" out of or stay below the NSR trigger levels); reduce emissions from other equipment outside of the facility (offsite reductions); or use emission offset credits (either purchased through a community bank or other parties or by using banked credits achieved by the facility through earlier reductions).

Some local districts also implement another regulatory program, called the Alternative Emissions Control Program, which applies the concept of emissions averaging. District regulations allowing the use of AECPs generally apply to industrial coating/solvent-use manufacturing processes. These programs allow facilities to average VOC emissions across various coating lines to the level that would apply had all the coatings met each individual district regulatory standard. As such, the emissions averaging in the AECPs closely resembles the concepts involved in the ACP.

District regulatory programs using AECPs were jointly evaluated by the local districts, U.S. EPA, and the ARB in series of studies conducted from 1988 to 1990. One of these studies reviewed the effectiveness of AECPs in the aerospace industry. [U.S. EPA, ARB, 1990] The ARB staff reviewed this study to determine which findings can be applied to the ACP to maximize its effectiveness. The study found that AECPs would be improved with: (1) more accurate emissions tracking, (2) consistent reporting guidelines, (3) accurate accounting for industry growth, (4) specific operating conditions governing the activities of facilities subject to the AECPs, and (5) clear demonstrations that the AECPs will meet applicable federal Emissions Trading Policy requirements and will achieve emission reductions equivalent to the existing regulatory requirements. We designed the proposed ACP regulation to incorporate these findings.

At the local level, the SCAQMD's Regional Clean Air Incentives Market (RECLAIM) program became effective on January 1, 1994. RECLAIM combines the emissions averaging concept with decreasing baseline allocations and tradeable allocations/credits to help achieve district-wide reductions in $NO_x$ and oxides of sulfur ($SO_x$) emissions. [SCAQMD, 1993] Currently, the SCAQMD is developing a RECLAIM-type program for reducing VOC emissions within its jurisdiction. Many of the same issues and concerns that were addressed in the RECLAIM development were also addressed in the development of the ACP regulation.

At the federal level, concepts similar to emissions averaging have also been used in various well-established U.S. EPA programs for reducing lead in gasoline, reducing acid rain precursor emissions ($NO_x$ and $SO_x$) from utilities (Title IV, federal Clean Air Act), and increasing the corporate average fuel economy (CAFE) for new automobiles. The U.S. EPA is also currently evaluating the feasibility of using emissions averaging (a subset of bubbling) to help reduce VOC emissions from architectural and industrial maintenance (AIM) coatings. [U.S. EPA, 1994a]

To provide guidance to states which are developing market incentives programs, the U.S. EPA recently published their final Economic Incentives Program (EIP) rule. [U.S. EPA, 1994b] The EIP guidance rules will be used by the U.S. EPA to evaluate the ACP regulation if it is submitted as a revision to the state implementation plan (SIP) for attainment of the national ozone standard. Because of this, the ARB staff has worked diligently with the U.S. EPA staff to ensure that the ACP is consistent with the EIP guidance.

Cost Savings Through Emissions Averaging or Bubbling

The existing literature and economic theory support emissions bubbling as an effective, cost-minimizing supplemental program for reducing VOC emissions from consumer products. One example of significant cost savings achieved through a similar program is the emissions trading program conducted nationally under NSR regulations. Hahn and Hester conservatively estimate savings of $4 billion (relative to the application of mandated best available control technologies) due to emissions trading/bubbling/offsetting since NSR programs were first implemented nationwide in the mid-1970s. [Hahn, Hester, 1987]

Another regulatory program which is widely-recognized as a successful use of emissions bubbling or averaging is the U.S. EPA's leaded gasoline phasedown program. Kerr, Anderson, and others have documented robust allocations transactions occurring under the leaded gasoline phasedown program, which by itself is an indicator of significant cost savings to industry. [Kerr, 1993; Anderson, 1990] The U.S. EPA has estimated that refiners saved at least $226 million under that program, an estimate based solely on the volume of lead allocations that were banked (approximately 10 billion grams of lead allocations). [Schwartz, et al., 1985]

More recently, the South Coast AQMD developed its RECLAIM program using similar emissions bubbling concepts. The SCAQMD has estimated that its RECLAIM program will save 42 percent, or $58 million per year, of the annual cost of reducing $NO_x$ and $SO_x$ emissions from 1994 to the year 200, when compared to the command-and-control measures in its 1991 air quality management plan. [ARB, 1994a]

ACP Cost Savings

In 1990, the ARB commissioned ICF Consulting Associates, Inc. (ICF) to study the use of economic incentives to control VOC emissions from consumer products. [Gibbs, et al., 1990] ICF concluded that an economic incentives program (emissions quota system) designed for use on groups of products rather than a single product category could be effectively designed to minimize the cost impacts from the consumer product regulations. The goal of improved economic efficiencies as demonstrated by this study formed the basis for the initial development of the proposed ACP regulation.

To improve the efficiency of the command-and-control strategy, the existing consumer product regulations already have some built-in flexibility for manufacturers. This flexibility is achieved by the use of performance-based VOC standards, rather than strict prescriptive standards, and the Innovative Products provision. Even with the existing flexibility, there is clearly room for improvement. To allow a more efficient distribution of industry's resources, additional flexibility can be added to the regulations such that the mandated emission reductions are obtained from those product categories which can be reformulated at the least cost.

For example, a manufacturer of hairsprays and oven cleaners may find that it would be more cost-effective to achieve the equivalent of the mandated VOC reductions by offsetting the emissions from its high-VOC hairsprays with excess emission reductions (i.e., an overcomplying reformulation) from its oven cleaner products. This is a simple example of emissions bubbling. The proposed Alternative Control Plan's emissions bubbling program is designed to provide this additional level of flexibility, thereby allowing significant cost savings relative to the existing command-and-control program.

Under the ACP, emissions bubbling will achieve cost savings for manufacturers by enabling them to determine which product lines will yield the least-cost emission reductions. If designed correctly, emissions bubbling provides an inherent economic advantage in comparison to command-and-control strategies. Lower overall costs are further ensured by the fact that entry into the ACP program is voluntary. Therefore, all participating manufacturers will have determined, prior to entering the program, that the ACP program will result in clear benefits such as manufacturing flexibility, economic advantages and lower overall costs to themselves and consumers.

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# IV.

# THE ALTERNATIVE CONTROL PLAN

The following section discusses how the ACP and this report were developed by the ARB staff in cooperation with interested parties, what the goals for the ACP are, and the general concepts and elements of the ACP. A more detailed, section-by-section discussion of the proposed ACP regulatory language is provided in section V. The reader is also referred to the proposed ACP regulation for exact details on the regulatory language and requirements. [Appendix A]

## A. DEVELOPMENT OF THE ACP

We developed the ACP regulation and this report through extensive consultations with industry and other government regulatory representatives. Preliminary concepts for the ACP were first explored by the ARB staff in late 1991, during the rulemaking process for the Phase II amendments to the consumer products regulation. At that time, manufacturers expressed a desire to work cooperatively with the ARB staff to develop a market-based program that would achieve the same goals as the existing regulations but with greater flexibility and at a lower cost. Because the manufacturers' desire for added flexibility was consistent with the Board's consumer products control plan for developing market-based programs, the staff began the ACP workshop process in January 1992.

We developed the ACP over the course of two and a half years. In that time, we held seven public workshops to discuss numerous drafts, regulatory concepts, and implementation issues (Appendix D). We also attended four meetings held by the ACP Task Force, a group comprised of industry representatives. The ACP Task Force was formed to help coordinate industry comments and responses to the staff proposals during the workshop and regulatory development process.

Participating in the workshop process were various ACP Task Force members, including representatives of the Chemical Specialties Manufacturers Association (CSMA) and the Cosmetic, Toiletry and Fragrance Association (CTFA), along with various individual company representatives. [Appendix E] The workshops were also attended by some members of the

public who were not industry representatives or part of the ACP Task Force.

In March 1993, the ARB staff presented to the Board a mid-course status report on the development of the ACP regulation. Representatives from the ACP Task Force also provided testimony supporting further development and completion of the ACP regulation. [Knuth, 1993] Upon completion of the status report, the Board gave unanimous approval for further developing the ACP regulation. [ARB, 1993]

Because of economic analysis requirements contained in the Administrative Procedures Act (as amended in 1993), we conducted an analysis to determine if the ACP has any potential to adversely impact the economic viability and competitiveness of affected manufacturers. [AB 969, 1993; SB 513, 1993] For this analysis, we conducted a survey of over 400 manufacturers (Appendix H). From the survey results and studies using publicly-available data, we concluded that the ACP will not have any significant adverse economic or competitiveness impacts on California businesses (see section VI "Impacts" for additional details).

To build on and learn from similar economic incentives programs, we also held discussions with various regulatory agencies. In addition to discussions at the workshops, we met with representatives of the U.S. EPA on several occasions to ascertain their views on the ACP and to minimize any inconsistencies with the U.S. EPA's EIP rule. In addition, some of the workshops and meetings were attended by representatives of the SCAQMD and the BAAQMD, the two largest local air pollution control agencies in California.

An effective ACP program will depend on enforceable and comprehensive accounting systems for tracking ACP product sales into California. To determine the strengths and limitations of such tracking systems, we met with the California Department of Pesticide Regulation to discuss the existing mill tax collection system for economic poisons. For tracking non-pesticide products, the ARB staff held meetings with representatives of the two primary consumer product market surveying services, Nielsen Marketing Research (Nielsen) and Information Resources, Incorporated (IRI).

These firms provided information to the ARB staff which showed that direct, scanner-based sales data from major retailer chains are available to manufacturers for purchase. The information these firms provided also indicated that the sales data can be tailored to meet a variety of needs, including the need to obtain geographical or regional-based sales information. [Fischer, 1993; Langlois, 1993] Based on these meetings, we determined that accurate and enforceable sales record systems can potentially be obtained from firms such as Nielsen and IRI or can be made available for use in enforcing the ACP requirements.

In addition to the workshop and consultation process, we also researched the literature on similar, existing market-based regulatory programs, both from a theoretical and practical applications standpoint. To this end, we reviewed the literature on California's experiences with

AECPs, NSR, and the ARB's recently-approved Mobile Source Reduction Credit Guidelines. [ARB, 1994b] We also reviewed the U.S. EPA's experience with the acid rain, leaded gasoline phasedown, stratospheric ozone depleting compounds, and the automotive CAFE programs.

To gain experience with local economic incentives programs, we participated in the development of the South Coast Air Quality Management District's RECLAIM program. In particular, we participated in the workshops held by the SCAQMD staff to discuss the Manufacturers Bubble Program, an emissions bubbling concept similar to the ACP which was to be a subset of the overall RECLAIM program. Currently, the staff is participating in the development of the district's VOC-RECLAIM program.

## B. ACP PROGRAM GOALS

In developing the ACP, the ARB staff and workshop participants determined the need for identifying goals for the ACP. Consequently, a set of common goals was developed, through several workshops, which guided the development of the ACP throughout the rest of the rulemaking process.

The seven goals for the ACP that were mutually agreeable to the ARB staff and industry representatives state that the ACP should:

- be a voluntary alternative to the VOC standards in the existing regulations,
- be fair,
- be flexible,
- allow for growth of product sales while achieving emission reductions,
- apply to as many types of consumer products as possible,
- be enforceable, and
- be binding for both the ARB and the participant.

Although these goals may seem self-explanatory, it is nevertheless useful to discuss their basis. The first goal reflects the staff's belief that, due to the enforcement and other requirements, the most-effective use of a program like the ACP would be as an option for manufacturers, rather than a statutory requirement. Since the ACP is a voluntary option, it is up to each individual manufacturer to decide how cost-effective the ACP will be to its operations.

The second and sixth goals reflect the concern that the ACP should balance incentives with adequate safeguards, to ensure that emission reductions are achieved and that they are real. The third, fourth, and fifth goals form the basis for ensuring that the ACP be as flexible as possible without limiting the potential for product growth. By allowing product growth to occur under the ACP, we ensure that the ACP is an equivalent program to the existing command-and-control approach, under which no limit on product sales growth has been established.

Finally, the seventh goal reflects the amount of commitment which is necessary from both the industry and the ARB staff; such long-term commitment is needed to ensure the predictability of emission reductions and the availability of ACP products in the market for the manufacturers' planning purposes.

## C. GENERAL CONCEPTS AND ELEMENTS

The proposed ACP is a voluntary, market-based regulation which employs the concept of emissions bubbling. As such, it will supplement the existing regulations and provide an unprecedented level of flexibility to participating manufacturers. In terms of emission reductions, the ACP is designed to be equivalent to the existing regulations.

Manufacturers who voluntarily choose to enter the ACP program would select the products and formulate a detailed ACP bubble program for those products. Upon submittal, the proposed ACP plan would be subjected to an approval process, whereby the Executive Officer determines if the plan meets a variety of specific requirements.

The proposed ACP plan must demonstrate that the total VOC emissions from the products would not exceed the emissions that would have resulted had those products been formulated to meet the existing VOC standards. For example, an approved plan may allow a manufacturer to sell products that exceed the VOC standards specified in the existing regulations, provided that the emissions from these high-VOC products are sufficiently offset by the emissions from products reformulated to "overcomply" with the VOC standards. At the public workshop conducted on April 19, 1994, the ARB staff presented a preliminary example showing how this emissions averaging might be demonstrated (Appendix F).

In addition to demonstrating equivalence to the VOC standards, the proposed ACP plan must be based on accurate and enforceable sales records which document the sale of ACP products in California. For small businesses, a submitted ACP plan may also indicate the intended purchase of some surplus reduction credits from other ACP marketers to help meet the ACP emissions limits. Finally, the proposed ACP plan must demonstrate that the emission reductions to be achieved during the life of the ACP will be real and quantifiable.

# V.

# SUMMARY OF THE PROPOSED REGULATION

This chapter presents a plain English discussion of each section of the proposed regulation. Where applicable, key terms or concepts involved in each section are described. The discussion in this chapter is intended to satisfy the requirements of Government Code section 11343.2, which requires that a noncontrolling "plain English" summary of the regulation be made available to the public.

## A. PURPOSE (SECTION 94540)

This section states that the purpose of the ACP is to provide an emissions control program which manufacturers can voluntarily enter instead of complying with the VOC standards for consumer products. It is important to emphasize that entry into the ACP program is completely voluntary. One of the primary goals for the ACP is that the program should be a voluntary alternative to compliance with the VOC standards or the Innovative Products provision of the ARB consumer products regulations, thereby serving as one of the three basic compliance options available to manufacturers. Voluntary entry into the ACP program, however, does not mean that compliance with the program requirements is voluntary; once the manufacturer has entered the program, compliance with the ACP's requirements is mandatory until the plan is cancelled for that manufacturer (see "Additional Provisions").

## B. APPLICABILITY (SECTION 94541)

This section specifies the types of persons or businesses (i.e., the "responsible ACP party") and the types of consumer products which can participate in the ACP program. Conceptually, the responsible party is the entity who controls the manufacture and sales of a consumer product, either directly or through a contract filler/marketer/distributor. To put it another way, the responsible party for an ACP product is the entity whose name is on that product's label.

The concept of a responsible party is central to the ACP, given the multi-party manufacture/distribution/sales system which is generally found throughout the consumer products industry. Because the responsible ACP party controls the manufacture and sales of a consumer product, it is in the best position to ensure compliance with the VOC content and sales requirements that are specified in an approved ACP. Placing the requirement for accountability on the responsible ACP party is therefore critical to the effective enforcement of the ACP program.

Moreover, this provision is intended to avoid "double counting" of emission reductions achieved through approved ACPs. As stated previously, the ACP is applicable primarily to responsible parties (e.g., manufacturers/marketers) who have direct control over how a product is formulated and how much of it is produced.

The ACP is generally not intended for use by contract fillers, supermarkets, and other entities, unless they also qualify as responsible parties for their own products. Because of this, the concept of "responsible ACP party" helps to avoid the double-counting of claimed emission reductions, since an ACP product, and its associated emission reductions, can be included in only one, unique ACP -- the one granted to the manufacturer or marketer whose name is on the ACP product's label.

Besides introducing the concept of the responsible ACP party, the applicability provision also specifies that only products subject to the section 94509 of the consumer products regulation can be included in an ACP. There are several reasons for this. From the start of the development process, the ACP was always intended as a supplement to the existing consumer products regulation. As such, the ACP program was not intended, at least in the initial stages, to include other products that are not currently subject to the regulation. More importantly, the ARB staff have little or no information on the current formulation technologies for many of the unregulated products. Without this information, there would be no VOC standards for these unregulated products to serve as adequate emission reduction baselines in the ACP program. Thus, a claimed emission "reduction" occurring for an unregulated product category under the ACP may reflect a technology that was readily available to the industry and not accurately reflect the true potential for available formulation technologies to achieve emission reductions in those categories. Such a situation may result in "paper" reductions, which clearly would not provide any emission reduction benefits.

Two other product categories, antiperspirants/deodorants (AP/DO) and aerosol coating products, were excluded from inclusion in the proposed ACP regulation at this time. The ARB staff believe that incorporation of the AP/DO VOC standards into the ACP program would be very difficult. The difficulty arises from several factors: (1) the fundamental differences in definitions and format of the VOC standards between the consumer products and AP/DO regulations, (2) the compliance plans recently submitted by aerosol AP/DO manufacturers pursuant to the provisions in the AP/DO regulation, (3) the ethanol exemption for existing

products, and (4) differences in other definitions, including the AP/DO regulation's different definition for low vapor pressure (LVP) compounds. The ARB staff believe that changes to the AP/DO regulation may be required for the AP/DO requirements to be compatible with the ACP program. The feasibility of revisiting the AP/DO regulation to make such changes and other modifications is currently being evaluated by the ARB staff.

The ARB staff is currently developing a command-and-control regulation for aerosol coating products. Since the aerosol coatings regulation is still under development, a reference in the proposed ACP regulation to the aerosol coatings regulation would not be permissible to the Office of Administrative Law (OAL). We anticipate that the proposed ACP regulation will be discussed in the development process of the aerosol coatings regulation. If the ACP regulation is found to be compatible with the aerosol coatings regulation during the development process for that regulation, then appropriate modifications to include aerosol coatings in the ACP regulation can be made at a later date.

## C. DEFINITIONS (SECTION 94542)

There are over thirty definitions which are specified in this section, most of which were established specifically for the ACP. In addition, all other applicable definitions from the existing consumer product regulations are included by reference in the ACP regulation. Among the definitions, several are critical to ensuring the effectiveness of the ACP regulation. These key definitions are discussed below:

### ACP Emissions

For the purposes of this program, the ACP Emissions are the sum of VOC emissions from every consumer product subject to an approved ACP. The VOC emissions from each product is the product of two factors: the VOC contents of the products and the "enforceable sales" of the products. In this regulation, the term "VOC content" is the amount of non-exempt VOC in a product, expressed as a percentage by weight. Enforceable sales means the amount of documented sales (from enforceable sales records) of a product in California. [Related definitions: ACP Limit, Enforceable Sales Record, Shortfalls, Surplus Reductions.]

### ACP Limit

The ACP Limit is the overall emissions limit which the ACP Emissions must not exceed in order for the responsible ACP party to comply with the regulatory requirements. As defined, the overall ACP Limit is the sum of individual emissions limits which apply to each product under an ACP bubble. Similar to the ACP Emissions, each individual emissions limit is the product of two factors: the ACP Standards and the enforceable sales of the products. In this case, the enforceable sales used to calculate the VOC emissions from a product are the same sales used in the calculation of the individual emission limits during the same compliance period.

Because product sales may fluctuate during the compliance period, basing the ACP Limit on the actual enforceable sales of the products imposes no inherent limit on a manufacturer's ability to sell products. That is, the responsible ACP party's ACP Limit can shrink or grow according to fluctuations in sales of products.

Unlike the "VOC Content" term in the ACP Emissions, the ACP Limit uses a term called the ACP Standard. The ACP Standard serves as the baseline, with which a product's VOC content is compared to determine if the product either meets or exceeds its individual emissions limit. Such a comparison is required for conducting emissions bubbling or averaging of the individual emissions limits for all the products under an ACP.

The ACP Standard is defined such that it has two possible values, depending on the particular situation. The first scenario calls for the ACP Standard being equal to the applicable VOC standard if the ACP product does not currently meet the standard. The second possible scenario is that the ACP Standard is equal to the product's VOC content, if the product already meets the applicable VOC standard. This definition is intended to ensure that the emissions under an ACP bubble would be no more than the emissions which would have occurred without the ACP.

For the ACP to be equivalent to the standards, it must be designed so that it does not encourage VOC content increases in products which already met the standards prior to the implementation of the existing regulations. Therefore, defining the ACP Standard in this way is necessary since, under the existing VOC standards, manufacturers normally would not have increased the VOC content of products which already met the standards (i.e., there were already sound economic and marketing reasons for those products to have complying VOC contents).

The bifurcation of the ACP Standard's definition ensures that all emission reductions occurring under the ACP program are real and are the result of reformulating existing products to lower VOC levels. This requirement prevents the possibility of a manufacturer taking an already compliant product, increasing its VOC content prior to the ACP's inception, then reducing the product's VOC content back down to its original level, thereby creating a "paper" reduction in VOC emissions. Such "paper" credits would clearly undermine the effectiveness of the ACP program.

It should be noted that the proposed definition for ACP Standard does not prevent and, in fact, actually encourages a manufacturer to take an already complying product and reduce its VOC content even further, thereby generating real emission reduction credits. [Related definitions: ACP Emissions, Enforceable Sales Record, Shortfalls, Surplus Reductions.]

Enforceable Sales Record

This term is used to define the types of sales records which are acceptable to the Executive Officer for tracking and verifying the enforceable sales of an ACP product. The definition for "enforceable sales record" serves as one of the two primary means for determining the compliance status of a manufacturer (the other primary tool being the VOC content determinations based on manufacturing records or laboratory analyses).

To minimize the impacts on existing product sales tracking systems, a variety of methods already in use by many manufacturers are listed which may be acceptable for use in an ACP, pending a satisfactory demonstration of the records' validity to the Executive Officer. Examples of acceptable enforceable sales records can be, but are not limited to, direct sales receipts, mill assessments on economic poisons (i.e., pesticides) issued by the California Department of Pesticide Regulation, compilations of market sales data provided by independent surveying services (e.g., Nielsen Marketing Research, Information Research, Inc., etc.), and other equivalent records.

While the acceptable records listed in this definition encompass many of the sales tracking systems already in use, language is included to allow flexibility in the use of other acceptable methods.

Responsible ACP party

This term was previously discussed in the "Applicability" section and basically refers to the person, manufacturer, or marketer who obtains approval of an ACP and is legally responsible for maintaining compliance with its requirements.

Small Businesses and One-Product Businesses

These terms are required specifically for implementing the surplus reductions (i.e., emission reduction credits) trading program. The ARB staff are proposing a limited trading program for use by small or one-product/product-line businesses in which only these businesses may purchase surplus reduction credits (there would be no limit on the size of the business selling the credits). The exception to this limitation would be surplus reductions purchased by businesses in order to reconcile any shortfalls as part of their reconciliation of shortfalls contingency plan (see section H - "Surplus Reductions and Surplus Trading"). For the purposes of this discussion, small businesses are those manufacturers/marketers which have no more than 250 employees and retail outlets with gross annual receipts of no more than $2.0 million. A complete definition for small-businesses based on California Government Code section 11342(e) is shown at the end of this report (Appendix G). One-product businesses are those which market only one product or product-line which is subject to the consumer product regulations.

Under ordinary circumstances, small/one-product businesses may be not be able to participate in the ACP program due to lack of sufficient resources or product diversity to adequately average their emissions under an ACP bubble. Designing the trading program for use by these small manufacturers may help to facilitate their participation in the program, thereby realizing the potential cost benefits associated with the program. [Related definition: Surplus Reductions.]

Compliance Period

This term is the time period which the participating responsible ACP party and Executive Officer agree is the appropriate period needed for reporting the sales of a product. It should be noted that in defining this term, we intended to minimize the impacts on existing product sales tracking systems. Thus, the compliance periods are to be determined on a case-by-case basis for each manufacturer and can be daily, monthly, quarterly, semi-annually, or annually (the maximum allowable period).

The ACP Emissions and ACP Limit are calculated at the end of each compliance period to determine if the responsible ACP party has met or exceeded the limit, whether surplus reductions were generated, or whether a shortfall situation has occurred. [Related definitions: ACP Emissions, ACP Limit.]

Shortfalls/Surplus Reductions

These terms as used for determining when a responsible ACP party's ACP Emissions either exceed or are below the applicable ACP Limit. When the ACP Emissions exceed the ACP Limit, a "shortfall" has resulted. That is, the responsible ACP party has not achieved as much emission reductions as would have occurred under the VOC standards. On the other hand, if the ACP Emissions are below the ACP Limit, the responsible ACP party has generated more emission reductions (i.e., surplus reductions) than required under the VOC standards.

These terms are important in determining whether the responsible ACP party has created tradeable surplus reductions credits, or whether compliance actions (e.g., reconciliation of shortfalls, penalties, modification/revocation/cancellation of the ACP) must be pursued to ensure that the responsible ACP party will meet the regulatory requirements. [Related definitions: ACP Emissions, ACP Limit.]

## D. REQUIREMENTS AND PROCESS FOR APPROVAL OF AN ACP (SECTION 94543)

The proposed regulation requires participating manufacturers to submit a proposed ACP (i.e., operating plan) to the Executive Officer for approval in accordance with the requirements of this section. The approval process is designed to ensure that the Executive Officer will know what to expect from a responsible ACP party which is operating under an approved ACP plan. From the approval process, detailed knowledge will be obtained relating to the products to be sold; the

sales tracking systems to be used; the emissions bubbling mechanisms involved; how the emissions bubbling will result in no more emissions than would have occurred under the VOC standards; and the contingency plan to be used for reconciling any shortfalls, should such shortfalls occur.

One of the primary objectives of the approval process requires the responsible ACP party to demonstrate, to the satisfaction of the Executive Officer, the validity of the accounting system that will be used to track product sales in California. This includes the identification of enforceable sales records and applicable compliance periods.

In addition to demonstrating that the sales records are accurate, the responsible ACP party is also required to demonstrate that the accounting system covers at least 75% of the responsible ACP party's gross California sales. For the purposes of this regulation, the gross California sales of a product is the responsible ACP party's national or regional sales of a product, apportioned by California's population relative to the national or regional population.

The requirement for the accounting system to cover at least 75% of the gross California sales will act as a "reality" check on the overall sales tracking system that will be used by the responsible ACP party. For instance, if a manufacturer relies heavily on an independent market surveying service (Nielsen, IRI, etc.) for tracking its sales under the ACP, the gross California sales demonstration may reveal that there are portions of the overall California market where significant sales of ACP products are not tracked by such services. The 75% minimum accounting requirement may reveal that these services or other forms of reporting systems may not adequately track military supplies sales, salon sales, and other industrial, institutional, or commercial accounts.

Another function of the approval process is to require the responsible ACP party to demonstrate that its emissions bubbling plan will provide effective emissions reductions. The detailed plan must demonstrate to the Executive Officer that, under emissions bubbling, the aggregate VOC emissions from the products would not be greater than the emissions that would have occurred under the VOC standards.

Within this demonstration, a small or one-product/product line business wishing to participate in the surplus reductions trading program would be required to provide written commitments from those parties which will provide the surplus reductions. The Executive Officer needs to know who will supply these small businesses with surplus reduction credits to ensure that the proposed plans will provide the required emission reductions as they are intended.

The approval process also serves to require the responsible ACP party to demonstrate the adequacy of the shortfall reconciliation plan. As discussed previously, shortfalls occur when the emissions from products sold under the approved bubble exceed the emissions limit calculated for that bubble. Because of the potential for long (e.g., one year) compliance periods and delays

in getting accurate sales information, it is possible that the manufacturer may not be aware of an impending shortfall until it is too late.

In anticipation of this possibility, the ACP approval process requires the responsible parties to provide a plan to the Executive Officer, complete with specific records to be reported, for reconciling or completely offsetting any shortfalls that might occur. Reconciliation plans must demonstrate that they can be implemented within 30 working days and that the shortfalls will be completely eliminated within 90 working days after the shortfalls are determined.

Because large shortfalls may require different reconciliation measures than small shortfalls, the approval process requires these plans to show how shortfalls of up to 5%, 10%, 15%, 25%, 50%, 75%, and 100% of the ACP Limit are to be reconciled. Complete knowledge of such "fall back" plans are required, prior to approval of proposed ACPs, to prevent abuse of the long term compliance period, ensure that implementation of the ACP regulation will provide the necessary emission reductions in a timely manner, and ensure that shortfalls will not adversely impact efforts in attaining ambient air quality standards.

## E. ACP APPROVAL TIMEFRAMES (SECTION 94544)

This section establishes the timeframes by which ACP applications are to be acted upon by the Executive Officer. Proposed ACPs are to be determined to be complete or incomplete within 30 working days of receipt by the Executive Officer. After receipt of additional information for an application that was previously found to be incomplete, the Executive Officer has an additional 30 working days to determine if the supplemental information completes the ACP application.

Once an application has been determined to be complete, the Executive Officer has 90 working days to act on the completed application. If the Executive Officer finds that the proposed ACP plan meets the requirements of the regulation, an Executive Order containing all conditions that must be met by the responsible ACP party is issued. To accommodate unforeseen situations, this section allows the Executive Officer and the responsible ACP party to mutually agree to a longer time period for the Executive Officer to take appropriate action on an ACP application.

## F. RECORDKEEPING AND AVAILABILITY OF REQUESTED INFORMATION (SECTION 94545)

This section stipulates that all information specified in the Executive Order approving an ACP is to be maintained for a minimum of three years after the records are generated. These records are required to be clearly legible and maintained in good condition during this period. Furthermore, such records are to be made available to the Executive Officer (or an authorized representative) immediately upon request, during an on-site visit to the responsible ACP party;

within five working days after receipt of a written request from the Executive Officer; or within a time period mutually agreed upon by both the Executive Officer and the responsible ACP party.

## G. VIOLATIONS (SECTION 94546)

The California Legislature has specified civil and criminal penalties that apply to any person who violates any ARB regulation, including the ACP regulation. The penalties that will apply to violations of the ACP regulation are set forth in sections 42400 to 42403 of the California Health and Safety Code.

These code sections provide that a "violation" of an ARB regulation is subject to civil and criminal penalties of $1,000 to $50,000 per violation, with the applicable monetary amount depending on the severity of the violation and various other specified criteria. These penalties are also applicable to a violation of any "order" issued by the ARB, such as an Executive Order which approves an ACP and establishes conditions for enforcing the ACP. For the purpose of determining appropriate penalties, the staff is proposing to clarify and interpret the language in the Health and Safety Code by describing the various actions that will constitute "violations" of the regulation.

Consistent with the Health and Safety Code, we are proposing that an exceedance of the ACP Limit would result in a single, separate violation for every day in the compliance period. In cases where the responsible ACP party has failed to provide information as specified in the Executive Order (i.e., resulting in days with missing data on enforceable sales records or VOC content), the proposed language requires that the ACP Emissions, for the applicable compliance period, be calculated using the "total maximum historical emissions" for the product(s) and days for which there are missing data. The calculation of ACP Emissions based on the total maximum historical emissions uses the highest historical VOC content and product sales for the product(s) with missing data, whichever is applicable. For example, if only the VOC content data is missing for an ACP product, the highest historical VOC content is used for that product in the applicable compliance period. If the ACP Emissions calculated using the total maximum historical emissions shows an exceedance of the ACP Limit, each day of the applicable compliance period would be a single, separate violation.

In addition to proposing the language addressing violations of the ACP Limit, we are proposing language that addresses administrative violations. Examples of these violations include falsification of data submitted with the ACP application, failure to properly report data (i.e., "missing" data), and the sale of invalid surplus reduction credits. In cases involving the false reporting of data contained in the ACP application, we are proposing language that would make every day an approved ACP is in effect a single, separate violation. We are also proposing language that would make each instance of failing to properly submit data (e.g., missing data, compliance data, or required data pertaining to the sale of surplus reduction credits) a single, separate violation for each day until such requirement is satisfied. In addition, the proposed

language stipulates that the sale of invalid surplus reductions constitutes a single, separate violation of the ACP regulation for each day during which the invalid surplus reductions are claimed to be applicable by the seller.

The proposed language also clarifies the date on which the applicable three-year statute of limitations begins to run (Code of Civil Procedure, section 338(k)). The statute begins to run on the date(s) when the records establishing a violation are received by the Executive Officer.

Finally, we are proposing language which makes the responsible ACP party fully liable for complying with the requirements of the ACP regulation. This provision is necessary since many participating manufacturers are likely to contract with independent market surveying services to provide sales data to the ARB. These arrangements make it necessary to make one party - the responsible ACP party - fully liable for ensuring that accurate and timely data are provided to the ARB as required by the regulation.

## H. SURPLUS REDUCTIONS AND SURPLUS TRADING (SECTION 94547)

We are proposing language that would allow the generation and trading of surplus reductions credits. Such a trading program would serve two purposes: (1) to encourage the formulation and sales of overcomplying products, and (2) to encourage participation of small businesses and one-product/product line manufacturers.

No significant adverse economic impacts on small businesses are expected to occur when the existing regulations become effective. [ARB, 1992b, op cit. at pp. 35-46] However, we recognize that some small businesses or one-product/product line businesses may have less flexibility in complying with the VOC standards relative to their larger competitors. To provide for the participation of these manufacturers in the ACP program and thereby lower their overall compliance costs, we are proposing a surplus reductions external trading program available only to small businesses and one-product manufacturers.

### Generation and Trading of Surplus Reduction Credits

Surplus reduction credits are generated when the ACP Emissions from the products sold under an ACP, during a given compliance period, are less than the ACP Limit for that period. As proposed, these credits would be issued by the Executive Officer and would be valid only when generated through sufficient reformulation of products (actual VOC content is reduced). Surplus reduction credits are not generated if the actual sales of ACP products are below the manufacturer's "projected" sales. Credits are not issued for below-projection sales because this would conflict with the goal of equivalency with the existing VOC standards and would result in "paper credits." Under the VOC standards (without the ACP program), no credits would have been given to manufacturers whose sales fall below projections. To be equivalent, therefore, no credits are to be granted for below-projection sales resulting in "paper credits."

We are proposing that surplus reduction credits be issued by the Executive Officer through a formal procedure to prevent the trades of invalid surplus reduction certificates. This procedure would ensure that prospective buyers of credits need only to contact the ARB to determine the validity of these certificates, rather than incurring large transactional costs to independently verifying their validity. Historically, these transactional costs have accounted for a large portion of the overall costs involved with previous emissions trading programs. By avoiding these costs, the proposed ACP regulation helps to minimize the overall compliance costs to manufactures.

The proposed regulation specifies that surplus reductions may be used either internally (to increase the responsible ACP party's ACP Limit) or may be traded externally under specified conditions (for small business trading programs). When traded externally, surplus reduction credits can be sold by large and small manufacturers alike, but can only be bought by small and one-product line manufacturers. The purchase of surplus reduction credits by any responsible ACP party as part of an approved reconciliation of shortfalls contingency plan is the sole exception to the surplus reductions purchase limitation (see "reconciliation of shortfalls" discussion).

Useful Lifetime of Surplus Reduction Credits

The surplus reduction credits, generated at the end of a compliance period, are proposed to be limited to an effective "lifetime" of one compliance period (i.e., the credits would expire at the end of the following compliance period, plus the time needed for approval of the credits). This condition is intended to ensure that the surplus reductions are real.

The ACP Emissions and ACP Limit are recalculated at the end of each compliance period during the life of an approved ACP. Based on the difference between the ACP Emissions and ACP Limit, the Executive Officer may determine that a shortfall has occurred or that surplus reduction credits have been generated. Because of this on-going, periodic recalculation, a surplus reduction credit generated in one compliance period may, at the end of the next compliance period: (1) reappear as a credit of the same value, or (2) be generated at a lower or higher value, or (3) not be justified because the ACP Emissions at the end of the next compliance period exceed the ACP Limit.

To account for these different possibilities, we are proposing to limit the surplus reduction credits to a nominal lifetime of one compliance period. This proposal: (1) ensures that surplus reduction credits are not limited to an arbitrarily-chosen lifetime (i.e., as long as the low-VOC, overcomplying reformulated products continue to be sold and the ACP Emissions are less than the ACP Limit, surplus reduction credits can be continually issued, reissued, or modified to reflect lower or higher levels of overcompliance); (2) ensures that the surplus reductions are real (i.e., if the surplus reductions are not regenerated in the next compliance period, the credits have essentially used up their effective life and they are simply terminated); and (3) eliminates the need to establish a banking procedure for use of the credits in later years, since credits can be

continually regenerated if the overcomplying products, upon which the credits are based, continue to be sold in sufficient quantities.

We are also proposing the lifetime limit to provide incentives for manufacturers to sell sufficient quantities of low-VOC, overcomplying products under their bubble. As industry representatives have often stated to the staff, any manufacturer can make an overcomplying product in the laboratory; however, the key is to make an overcomplying product which sells in the marketplace. [ARB, 1992b, op cit. at pp. 106-112]

This principle also applies to emissions averaging programs like the ACP. In other words, it would make little sense, from an air quality standpoint, to have an emissions averaging program like the ACP (as opposed to VOC content averaging) which provides incentives to a manufacturer (e.g. credits) simply for formulating an overcomplying product. The motivation for issuing such credits should be based on whether the overcomplying products are actually being produced and sold in quantities sufficient to replace other, higher-VOC products in the marketplace.

External Trading of Surplus Reductions to Address Small Business Concerns

To ensure accountability and enforceability, the proposed regulation would require all participating manufacturers, including small/one-product businesses, to obtain and comply with their own individual ACPs. However, these businesses would then be able to purchase, sell, or otherwise trade surplus reductions with other participating ACP manufacturers.

To help ensure that surplus reduction credits are available for trading, we are proposing to limit the purchasing of credits, at least initially, to small and one-product businesses. Large manufacturers would still be able to generate credits for selling, but they would not be able to purchase them, at least in the initial stages of the ACP program. Companies not meeting the definitions for small or one-product businesses would not be allowed to buy surplus reductions from similar manufacturers at this time.

Limiting the trading program (i.e., buying credits) to small/one-product businesses at the start of the ACP program will provide additional flexibility to small businesses, thereby helping them to successfully participate in the ACP program. This will also allow the ARB and the consumer products industry to become familiar with surplus reductions trading. The familiarization process is important given the relative novelty of the program to both the ARB and the consumer products industry.

Publication of certain non-confidential information relating to these transactions (e.g., cost and poundage of the credits involved) will enable the ARB staff and industry to determine the cost-effectiveness of the surplus reductions trading program. Once the ARB and small/one-product businesses have more experience with the trading program, we will evaluate the feasibility of expanding the trading program to include a larger universe of companies.

Other External Trading Programs

The proposed language also allows an ACP responsible ACP party, who generates surplus credits, to trade such credits to help reconcile shortfalls in another responsible ACP party's ACP (see "Reconciliation of Shortfalls"). Such a contingency provision is intended to provide manufacturers with an available option for reconciling shortfalls.

Transaction Reporting Requirements

The proposed regulation contains requirements for the reporting of surplus reduction credit transactions. These requirements, which are applicable to both the buyer and seller of the credits, are intended to ensure that ARB and the parties involved can validate and track such transactions. The reporting requirements are also intended to provide the ARB and other parties interested in surplus reductions trading with sufficient information to determine whether the external trading program is effective.

## I. RECONCILIATION OF SHORTFALLS (SECTION 94548)

The proposed regulation provides manufacturers with an opportunity to correct unforeseen situations which result in an exceedance of the ACP limit at the end of a compliance period. As discussed previously, the responsible ACP party which does not meet its ACP limit at the end of a compliance period is subject to potential violation penalties. However, the proposed regulation would allow continued operation of an approved ACP if the penalties and the shortfall are adequately reconciled.

The proposed ACP approval process requires that the responsible ACP party submit a reconciliation of shortfalls plan for Executive Officer approval. The reconciliation plan must demonstrate that a shortfall, in specified increments of up to 100% of the calculated ACP limit for a given compliance period, can be rectified within 90 working days of the shortfall determination. The requirement for pre-approval of a reconciliation plan, before the actual ACP plan becomes effective, ensures that both the responsible ACP party and the Executive Officer know exactly what steps will be taken if a shortfall does occur. Thus, a pre-approved reconciliation plan makes it very difficult for a manufacturer to justify a delay in the reconciliation of a shortfall.

In the event of a shortfall during the operation of an ACP plan, the approved reconciliation of shortfalls plan is to be completely implemented within 30 working days such shortfalls are determined by the Executive Officer. Furthermore, any such shortfalls are required to be completely rectified by the responsible ACP party within 90 working days using the reconciliation plan. By having a pre-approved reconciliation plan before an actual shortfall occurs, the lag time between the shortfall occurrence and its reconciliation is minimized.

It should be noted at this point that we designed the reconciliation requirements to be as effective, but non-prescriptive, as possible. This ensures that participating manufacturers are provided with flexibility in identifying reconciliation measures which have lower costs or are less disruptive than product recalls. For example, an approved reconciliation plan may commit the responsible ACP party to purchase enough surplus reduction credits from another manufacturer to reconcile the shortfalls (Note: use of surplus credits in this type of reconciliation plan would require an established commitment from both purchaser and seller of the credits prior to approval of the reconciliation plan). Depending on its particular situation, a manufacturer may also choose product recalls as a viable method of reconciling shortfalls.

To ensure the effectiveness of the reconciliation provision, we are proposing a limit on the total amount of shortfall that can occur in any compliance period. Under our proposal, the total shortfall in any compliance period would be limited to 20% of the ACP Limit. Responsible ACP parties who exceed this limit on shortfalls face possible cancellation of their ACPs by the Executive Officer. In addition, responsible ACP parties who demonstrate a recurring pattern of noncompliance without showing that steps have been taken to prevent such noncompliance also face possible cancellation of their ACPs (see "Additional Provisions - Cancellation of an ACP"). These limits and conditions will help to prevent misuses of the reconciliation provision.

## J. ADDITIONAL PROVISIONS (SECTIONS 94549-94555)

Notification of Modifications by the Responsible ACP Party (Section 94549)

To provide as much manufacturing flexibility as possible, we are proposing language that specifies the situations when the responsible ACP party does not need to notify the Executive Officer in advance of changes to an ACP. Changes to an ACP which do not require advanced notification and pre-approval are changes to the product [formulation, VOC Content, LVP Content, form, function, applicable category(ies)], date-codes, or recommended usage directions. These changes must be reported to the Executive Officer within 15 working days from the date such a change occurs. In addition to such notifications, the responsible ACP party must also fully explain the nature of the modifications; the extent to which the ACP product formulation, VOC Content, LVP Content, or recommended usage directions will be changed; the extent to which the ACP Emissions and ACP Limits specified in the Executive Order will be changed for the applicable compliance period(s); and the effective date and corresponding date-codes for the modifications.

In addition to the situations described above, it is conceivable that, after its proposed ACP has been approved by the Executive Officer, the responsible ACP party may learn of changes to the information which it submitted pursuant to the ACP approval process. In these situations, we are proposing language to require the responsible ACP party to notify the Executive Officer within 15 working days from the date such information is known to the responsible ACP party.

To ensure the effectiveness of the ACP program, we are also proposing language for situations that require advanced notification and approval from the Executive Officer before modifications to an approved ACP can be implemented by the responsible ACP party. Specifically, the responsible ACP party must notify the Executive Officer, adequately describe, and obtain written approval for any proposed modification to the enforceable sales records (e.g., format of the records, the third-party supplying the records, the population sampling procedures for projecting sales, etc.) or to the reconciliation of shortfalls plan (sources of surplus credits to be purchased, type of product recall, etc.). The responsible ACP party would have the burden of proving that the proposed changes will meet the requirements of the proposed ACP regulation. Until such proposed modifications are approved in writing by the Executive Officer, the responsible ACP party would have to meet all existing conditions in the Executive Order. We believe that advanced notification and Executive Officer approval of these types of modifications are necessary to ensure that the changes will not adversely affect the effectiveness or enforceability of the ACP plan.

Modification of an ACP by the Executive Officer (Section 94550)

We are proposing language that would allow the Executive Officer to modify an approved ACP if: (1) the Enforceable Sales for a product are no longer at least 75.0% fo the Gross California Sales for that product, (2) the information submitted during the ACP approval process is no longer valid, or (3) the sale of products under an approved ACP is resulting in an exceedance of the ACP Limits specified in the applicable Executive Order. In these situations, the proposed language provides the responsible ACP party with the opportunity for a public hearing before its ACP can be modified. A second scenario in which the Executive Officer can modify an approved ACP is when the ARB changes the existing VOC standards in subsequent rulemaking. Unlike the previous situation, however, the Executive Officer would not be required to provide the responsible ACP party with an opportunity for a public hearing. Since the proposed ACP regulation is intended to be equivalent to the VOC standards in emission reductions, any changes to the VOC standards must be accompanied by corresponding changes in all approved ACPs, thereby eliminating any need for a public hearing to determine whether such changes to the ACP are necessary.

Cancellation of an ACP (Section 94551)

We are proposing language to enable the cancellation of an approved ACP. The proposal requires approved ACPs to remain in effect until at least one of the following occurs: (1) the ACP reaches its expiration date, as specified in the Executive Order, (2) the ACP is modified by the responsible ACP party and the modification is approved by the Executive Officer, pursuant to section 94549 ("Notice of Modification by the Responsible ACP Party"), (3) the ACP is modified by the Executive Officer, pursuant to section 94550 ("Modification of an ACP by the Executive Officer"), (4) an existing VOC standards is modified by the ARB in future rulemaking and the responsible ACP party informs the Executive Officer that its ACP will terminate on the effective date of the modified standard, or (5) the ACP is cancelled pursuant to subsection (b) of this section.

Subsection 94551(b) specifies that the Executive Officer will cancel an ACP if any of the following conditions occur: (1) the responsible ACP party adequately demonstrates an extraordinary economic hardship from continued operation under the ACP, (2) operation under the ACP has resulted in a shortfall of 20.0% or more of the applicable ACP Limit, (3) the responsible ACP party has failed to implement the reconciliation of shortfalls plan or the plan fails to achieve complete reconciliation of all shortfalls, as required in the proposed regulation, or (4) the responsible ACP party has demonstrated a recurring pattern of noncompliance of violations of the ACP regulatory requirements and has consistently failed to take the necessary steps to correct those violations. The proposal also specifies that a public hearing shall be available to the responsible ACP party before its ACP can be cancelled. In addition, the proposal requires that, without a valid replacement ACP, the responsible ACP party whose ACP is cancelled shall reconcile all remaining shortfalls and bring all ACP products into compliance with the VOC standards immediately upon the effective date of the cancellation. Finally, the proposal specifies that cancellation or modification of an ACP will not have any effect on any violations or penalties incurred by the responsible ACP party (i.e., all such violations and penalties must be resolved as specified by the Executive Officer).

Treatment of Information (Sections 94552)

We are proposing language that requires all submitted information, except for specific information identifying participating ACP manufacturers and certain types of surplus reductions trading information, to be handled by the Executive Officer in accordance with the requirements specified in Title 17, California Code of Regulations (sections 91000-91022). We are proposing to make the specified surplus reductions and responsible ACP party information public information to facilitate industry's participation in the ACP program. Publishing this information will also enable the ARB to serve as an information clearinghouse for those parties wishing to purchase surplus reduction credits.

Other Applicable Requirements (Section 94553)

We are proposing language which specifies that all applicable requirements in the existing regulations remain in effect for all applicable consumer products, regardless of whether they are subject to an approved ACP. That is, a responsible ACP party's ACP products and other consumer products not subject to an approved ACP must still meet the requirements in the existing consumer products regulations regarding date-coding; the prohibition of new and increased uses of stratospheric ozone depleting compounds; the emissions limit for charcoal lighter material products sold in the South Coast Air Quality Management District (SCAQMD); and other applicable provisions. In addition, the proposal specifies reporting requirements that apply when an approved ACP is transferred during a change of company ownership or buyout. In these situations, the responsible ACP party and the party to which the ACP is being transferred must separately notify the Executive Officer, in writing, of the transfer. The transferee must also provide a written declaration to the Executive Officer, stating that it will comply with the requirements of the ACP, the Executive Order, and the ACP regulation.

Federal Enforceability (Section 94554)

The proposed language was taken directly from equivalent language incorporated into the existing consumer product regulations. The proposal is intended to clarify that the United States Environmental Protection Agency (U.S. EPA) is not limited to the conditions and enforcement requirements specified by the Executive Officer in an approved ACP which has not been approved by the U.S. EPA as a amendment to the State Implementation Plan (SIP).

Federal Clean Air Act Requirements (Section 94555)

This section states that, unless the U.S. EPA finds otherwise, products sold in California under an approved ACP are not subject to the federal permit requirements under Title V of the Clean Air Act (as amended in 1990). However, the section also states that the manufacturing facilities from which ACP products are produced may be subject to Title V requirements, depending upon whether the facilities meet certain applicability requirements specified in Title V.

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# VI.

# IMPACTS ASSESSMENT

## A. ENVIRONMENTAL IMPACTS

### Summary of Environmental Impacts

ARB staff has conducted an analysis of the potential environmental impacts of the proposed ACP regulation. Based on our analysis, we have determined that the ACP regulation will not have any significant adverse impacts on the environment. We conducted our analysis with consideration of potential impacts on water quality, landfill loading, and air quality. The following discussion provides the basis for our findings.

### Legal Requirements Applicable to the Environmental Impacts Analysis

On January 1, 1994, the requirements of SB 919 became effective (Stats. 1993, Chapter 1131). Among other provisions, SB 919 amended the California Environmental Quality Act (CEQA) by adding new Public Resources Code section 21159. With respect to the ACP regulation, Public Resources Code section 21159 requires the ARB to conduct an environmental analysis which includes, at a minimum, all of the following: (1) an analysis of the reasonably foreseeable environmental impacts of the methods of compliance, (2) an analysis of the reasonably foreseeable feasible mitigation methods, and (3) an analysis of the reasonably foreseeable alternative means of compliance with the regulation.

Environmental Impacts Analysis

In analyzing the environmental impacts of the ACP regulation, it is important to keep in mind that the ACP regulation is designed to provide manufacturers an alternative to complying with the VOC standards of the existing ARB consumer products regulations (sections 94507-94517, Title 177, CCR). The Board has already determined, as part of the Phase I and Phase II rulemaking actions, that the consumer products regulations would have no significant adverse environmental impacts. [ARB, 1992a] Rather, the consumer products regulations would result in beneficial environmental impacts due to a reduction in VOC emissions as manufacturers reformulate their products to comply with the Phase I-II VOC requirements. To reformulate products in order to participate in an ACP, manufacturers will be relying on the same formulation technologies that will be used to meet the existing VOC standards. The possible impacts of these technologies have already been thoroughly analyzed as part of the Phase I-II rulemakings. [*Id.*]

Since the ACP regulation is specifically designed to achieve VOC emissions reductions that are equivalent to the emission reductions achieved by the existing consumer products regulations, it is reasonable to expect that there will also be no significant adverse impacts as a result of the ACP regulation. In reaching this conclusion, staff considered the possibility that by entering into an ACP, manufacturers might conceivably do something differently that they would not have done if the existing consumer products standards were the only available option. Because of its formulation flexibility, it could be argued that the ACP might have adverse environmental impacts if manufacturers reformulate or market products in ways that would not have occurred under the existing regulations.

Potential scenarios under this possibility which we have identified and evaluated include: (1) the potential substitution of VOCs for 1,1,1-trichloroethane (TCA) in ACP products, (2) the possible use of stratospheric ozone depleters and greenhouse gases, and (3) the possible formation of localized geographical VOC "hotspots." Each of these issues is discussed in more detail under the section below entitled "Findings." The basic conclusion of ARB staff is that adverse environmental impacts will not result in any of these areas.

Public Resources Code section 21159 also requires an analysis of the reasonably foreseeable mitigation measures and alternative means of compliance. Since the alternative to using the ACP regulation is compliance with the existing consumer products regulations, ARB staff expects that no significant adverse impacts will occur due to the "reasonably foreseeable alternative means of compliance" with the ACP regulation. In addition, there are no reasonably foreseeable mitigation measures, since the ARB's environmental analysis concludes that the ACP regulation will have no significant adverse impacts on the environment. Because of the analysis' conclusion, there are no adverse impacts that would require mitigation.

Findings

*Impacts on Water Quality and Landfills*

Impacts on water quality and landfills were analyzed in the Phase I-II rulemaking actions, in which the Board concluded that no significant adverse impacts would occur on water quality and landfill loading. These same conclusions hold true for the ACP regulation because, as noted above, manufacturers reformulating products under the ACP will rely on the same technologies which would be used for complying with the existing standards. ARB staff was unable to identify any scenario in which compliance with the ACP regulation, instead of the existing consumer products regulations, would result in any different water quality or landfill impacts.

*Impacts on Ground-Level Ozone and $PM_{10}$*

As stated previously, we have designed the ACP to achieve the same VOC emission reductions as would have occurred under the existing consumer product regulations. Overall reductions in ground-level ozone and $PM_{10}$ levels should be the same under the ACP as it would have been under the existing regulations. Therefore, the ACP should have a neutral impact on ground-level ozone and $PM_{10}$ relative to the existing regulations.

We believe that the ACP's impacts on ground-level ozone and $PM_{10}$ should be neutral even if manufacturers replace ozone-depleting compounds, such as 1,1,1-trichloroethane (TCA), with VOCs in ACP products. TCA is used in several consumer product categories subject to the Phase I-II regulations. Under the federal Clean Air Act, the U.S. EPA established production and use phaseout schedules for specific ozone-depleting compounds, including TCA.

Because of its ozone-depleting potential and significant usage volume, TCA was initially targeted for production phaseout in the year 2002. However, recent measurements of the rate of ozone depletion has resulted in an accelerated phaseout schedule for TCA, which mandates complete shutdown of TCA production except for certain essential uses by the end of 1995. [U.S. EPA, 1993]

Due to the accelerated phaseout schedule for TCA, concerns have been raised regarding the possible substitution of VOC solvents for TCA in ACP products. As the supply of TCA dwindles, manufacturers may substitute VOCs in place of TCA in some of their ACP products. We accounted for this possibility, during the rulemaking process for Phase I-II, by developing VOC standards based on complying products which do not rely on the use of TCA.

Even if a participating ACP manufacturer were to increase an ACP product's VOC content in response to the TCA phaseout, the overall emissions from that manufacturer's ACP should not increase. The proposed ACP regulation prohibits the overall emissions under the manufacturer's

ACP plan from exceeding the level of emissions that would have occurred under the VOC standards. In this case, an increase in an ACP product's VOC content must be accompanied by a corresponding decrease in VOC emissions from other products within the approved ACP plan. Therefore, the overall VOC emissions from approved ACPs should not increase from what they would have been under the existing regulations.

*Other Air Quality Impacts*

To determine other potential air quality impacts, we evaluated the possible formulation scenarios described previously. Our determinations based on these scenarios are described as follows.

Stratospheric Ozone Depletion

It is well established in the literature that certain chlorinated and other halogenated compounds contribute to the depletion of the stratospheric ozone layer. To help reduce and prevent further damage, section 94509(e) in the existing regulation prohibits any new or increased use of 1,1,1-TCA and any other ozone-depleting compounds in products subject to the existing regulations. Since this requirement would also apply to the ACP regulation, we expect no increase in emissions of ozone-depleting compounds in ACP products.

Global Warming

Although it is not yet fully accepted by the scientific community, the theory of global warming warrants an evaluation of potential impacts from the use of certain compounds in ACP products. Of primary concern are certain propellants, including chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and carbon dioxide. These compounds absorb infrared energy and can therefore potentially contribute to global warming when emitted in significant quantities.

CFCs are methane or ethane compounds in which all of the hydrogen atoms have been replaced with chlorine and fluorine. Nearly all uses of CFCs in aerosol products in the U.S. have been banned or eliminated since 1978. Because of this, we anticipate no significant global warming to occur due to the use of CFCs in ACP products.

Similar to CFCs, HCFCs are also methane or ethane derivatives which contain hydrogen in addition to chlorine and fluorine atoms. Initially, these compounds were viewed by some manufacturers as feasible replacements for CFCs in aerosol products. However, recent amendments to the FCAA specify a phaseout schedule for these compounds which will limit their usefulness as replacement propellants. In addition, their high costs (relative to hydrocarbon propellants) and limited availability tend to restrict the use of HCFCs. For these reasons, we

believe that the use of HCFCs under the ACP will have minimal impacts on global warming.

HFCs are non-chlorinated methane and ethane derivatives which contain hydrogen and fluorine. It is generally accepted by the scientific community that HFCs, because they lack chlorine, probably do not significantly contribute to ozone depletion. Since they are not considered to be ozone depleters, HFCs are not scheduled for phaseout under the FCAA requirements.

However, this does not necessarily indicate a potential for significant use of HFCs in ACP products. Currently, the primary HFC being used or being considered for use in consumer products is HFC-152a (1,1-difluoroethane). However, because of its cost (e.g., HFC-152a currently costs approximately $2.00 per pound, several times the cost of hydrocarbon propellants), we believe that manufacturers will exhaust all other available formulation options before using HFC-152a or any other HFC in large quantities of ACP products.

Even if HFCs are used as replacement propellants in some ACP products, overall HFC emissions and their impacts on global warming should still be negligible. In this case, only a few tons per day of HFCs would be emitted to the atmosphere. [ARB, 1991a, op cit. at p. VI-11] By comparison, nearly 100 million tons of carbon dioxide, the primary man-made greenhouse gas of concern, are emitted into the atmosphere each day from existing processes.

Perfluorocarbons are hydrocarbon compounds in which all of the hydrogen atoms in the molecule have been replaced by fluorine. These products may find future use in consumer products since they share many properties with CFCs, such as high density, high dielectric strength, high thermal stability, low surface tension, low chemical reactivity, and non-flammability. Additionally, they have zero ozone-depleting potential and are not considered to be VOCs. Perfluorocarbons have been recommended to replace CFCs in "special complex, delicate-parts cleaning in the electronics, medical and precision metalworking industries." [Koelsch, 1993]

It should be noted that some scientists have estimated potentially long atmospheric lifetimes for certain perfluorocarbons. For example, Ravishankara, et al., estimates that perfluoromethane ($CF_4$) may have an atmospheric lifetime of over 6 million years before being photolyzed in the upper atmosphere. [Ravishankara, et al., 1993]

We believe that, because of their high cost and limited availability, it is extremely unlikely that significant quantities of perfluorocarbon compounds will be used under the ACP program. In addition, the performance characteristics and toxicity of perfluorocarbon compounds are relatively unproven in consumer products. Because of these reasons, it is very likely that manufacturers will exhaust all other available technologies before resorting to the use of these chemicals.

Carbon dioxide is currently used in limited applications as a propellant in consumer products. We do not expect the use of carbon dioxide as a propellant in ACP products to add to global warming. This finding is based on the fact that the majority of carbon dioxide propellant used in the U.S. are recycled by-products from existing industrial/chemical processes.

Creation of Localized VOC Hotspots

It has been suggested that differences in geographical distribution patterns of ACP products can potentially lead to the formation of localized VOC "hotspots." In other words, a working ACP bubble may show that the VOC emissions statewide are in compliance with the ACP requirements. However, significant quantities of high-VOC products may be distributed disproportionately to one area of California versus other areas, possibly resulting in localized VOC hotspots.

We evaluated this concern and determined that no significant adverse impacts would likely result from the implementation of the ACP regulation. For the reasons described in the following discussion, we believe it is highly unlikely for high-VOC products to be distributed to the same location in sufficient quantities and used at the same time to form localized hotspots. More importantly, the regional nature of VOC emissions from consumer products precludes the likelihood of hotspots formation.

Discussions with Nielsen Research Marketing; Information Resources, Incorporated; and industry representatives indicate that manufacturers generally do not have sufficient control of the geographic distribution of products to purposely create hotspots by sending more of a high-VOC product to one area versus another. [Fischer, 1993b; Wilson, 1993] Moreover, the ARB staff is not aware of any data available at this time which indicate that the per-capita use of consumer products in certain areas of California are significantly greater than per capita consumption in other areas of the state.

Furthermore, products which are sold at one point in a day are not necessarily used at that time or even in the same day. Consumer product usage during the year depends more on established consumer use patterns rather than a manufacturer's sales patterns. For example, a can of hairspray purchased on one day may take up to five months to be used up.

Most importantly, we should emphasize that hotspots are, by definition, localized concentrations of pollutants in the air. However, consumer products are area-wide sources of VOCs, making VOC emissions from consumer products a regional phenomena. In other words, localized hotspots are most likely to form in specific geographic locations, not wide areas or air basins. Thus, we believe that the regional nature of consumer product sales makes it highly unlikely that VOC hotspots will form under the ACP regulation.

Although hotspots formation under the ACP is highly unlikely, we believe that the proposed ACP requirements contain sufficient safeguards to detect such an occurrence. We recognize that current market conditions may change in the future. Such unforeseen changes may result in significant geographical differences in per capita use of an ACP product. In these cases, the Executive Officer can require additional geographical use pattern data from the responsible ACP party. Representatives from Nielsen and IRI have stated that, with additional cost, this level of detail in the reporting of product sales data is possible. With this additional information, appropriate modifications to the approved ACP can be made to ensure that localized hotspots do not form.

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## B. ECONOMIC AND CONSUMER IMPACTS

Summary of Economic Impacts

Overall, the staff expects the ACP to have beneficial economic impacts as compared to the existing consumer products regulations. There is a significant volume of literature which clearly demonstrate that economic benefits can be achieved through programs which provide increased manufacturing and marketing flexibililty like the proposed ACP regulation. Since entry into the ACP program is completely voluntary, the advantages of entering the program will be determined on a case-by-case basis by each manufacturer who wishes to participate. It is therefore reasonable to conclude that individual manufacturers will not enter the ACP program unless they believe their compliance overall costs will be less than or, at most, equal to the costs to comply with the existing regulations.

Because of the ACP positive impacts on lowering overall compliance costs, we anticipate that the overall cost-effectiveness for participating ACP manufacturers should be lower than the $0.01 to $1.04 per pound of VOC reduced estimated by staff for manufacturers to comply directly with each of the VOC standards in the consumer products regulations. Similarly, we expect that the total annual cost to the entire consumer product industry, assuming that some manufacturers choose to operate under an ACP, will be lower than the approximate 13 million to 205 million dollars estimated for compliance with the consumer products regulations. This range reflects the wide range of products and reformulation options available to manufacturers.

We also determined that the proposed regulatory action will not have a significant adverse economic impact on the ability of California businesses to compete with businesses in other states, or on directly affected private persons. The proposed ACP should have minor or positive impacts on the creation or elimination of jobs within the State of California, minor or positive impacts on the creation of new businesses and the elimination of existing businesses within the State of California, and minor or positive impacts on the expansion of businesses currently doing business within the State of California. As explained below, however, it is possible that some individual businesses (i.e., the competitors of participating ACP businesses) may be adversely affected by the proposed regulatory action, even though the overall economic impact of the ACP will be positive.

The following discussion provides the basis for our findings. The discussion is separated into the identification or analysis of the following: (1) the legal requirements that apply to the economic impact analysis; (2) the proposed ACP's potential impacts on businesses, including an evaluation of concerns raised during the ACP development process regarding the ACP's potential impacts on small business competitiveness; (3) the potential impacts on consumers; (4) the potential impacts on employment; (5) the potential impacts on business creation, elimination, and expansion; and (6) the potential impacts on interstate business comptetitiveness.

Legal Requirements Applicable to the Economic Impacts Analysis

Prior to January 1, 1994, the California Administrative Procedure Act (APA; Government Code section 11340 et seq.) required state agencies to assess the potential for adverse economic and cost impacts of proposed regulations on California businesses. In 1993, the California Legislature enacted SB 513 (Stats. 1993, Chapter 1063) and AB 969 (Stats. 1993, Chapter 1038), which became legally effective on January 1, 1994. SB 513 and AB 969 amended the APA to add additional economic analysis requirements to the ones that already existed.

AB 969 requires state agencies, in assessing a proposed regulation's potential for an adverse economic impact on businesses, to consider whether the proposed action may also have an adverse economic impact on the ability of California businesses to compete with businesses in other states. As part of this evaluation state agencies must consider, but shall not be limited to, information supplied by interested parties. SB 513 requires state agencies proposing to adopt a regulation to consider whether and to what extent it will affect: (1) the creation or elimination of jobs within California, (2) the creation of new businesses or the elimination of existing businesses within California, and (3) the expansion of businesses currently doing businesses within California.

Economic Impacts Analysis

This section evaluates the potential economic impact of the proposed ACP on California businesses. To conduct this analysis, the ARB staff relied on both publicly available information on California businesses and the consumer products market, the results of the 1991 ARB consumer products registration, and the results of a survey conducted by the ARB staff in October 1993. The 1993 survey covered businesses which may potentially operate under approved ACP bubbles or can otherwise be affected by the proposed ACP. The analysis presents our findings in the following areas: (a) the types of businesses that may be affected by the ACP; (b) the overall potential impacts on business, including a detailed discussion on a concern raised in the ACP development process regarding the ACP's potential impacts on small business intramarket competitiveness; (c) the potential impacts on consumers; (d) the potential impacts on employment; (e) the potential impacts on business creation, elimination, and expansion; and (f) the potential impact on interstate business competitiveness.

Findings

*Affected Businesses*

Any business which manufactures or markets consumer products subject to the requirements of the ARB consumer products regulations (sections 94509(a) and (h), Title 17, California Code of Regulations) can potentially be affected by the proposed ACP regulation. Overall, there are two types of firms that can be affected: (1) manufacturers who directly participate in the ACP program and (2) non-participating manufacturers who compete in the market with participating ACP manufacturers. Our analysis evaluates the impacts on both types of affected businesses.

The affected businesses fall into different industry classifications. A list of these industries which we have been able to identify is provided in Table VI-A.

**Table VI-A**
**Industries with Businesses Potentially Affected by the ACP**

| SIC Code | Industry |
|---|---|
| 2841 | Soap and Other Detergents |
| 2842 | Polishes and Sanitation Goods |
| 2843 | Surface Active Ingredients |
| 2844 | Toilet Preparations |
| 2861 | Gum and Wood Chemicals |
| 2865 | Cyclic Crudes and Intermediates |
| 2869 | Industrial Organic Chemicals, NEC* |
| 2879 | Agricultural Chemicals, NEC* |
| 2899 | Chemical Preparations, NEC* |

*NEC = Not Elsewhere Classified

*Potential Impact On Business*

Overall Impacts

The proposed ACP is most likely to have a beneficial impact on most of the affected firms. This is because the ACP is voluntary and imposes no additional costs on firms to comply with the present consumer products VOC standards. On the contrary, the ACP provides businesses with greater flexibility to meet the standards, thereby inducing innovations and cost savings. Such flexibility is the basis for market-based regulatory programs such as the ACP and is one of the keys to its success. The literature is replete with various analyses which demonstrate the economic benefits obtained from the increased manufacturing and marketing flexibililty afforded by market-based programs like the proposed ACP regulation. [For a good discussion on the theory of emissions averaging programs for consumer products, see U.S. EPA, 1992] Since individual firms can choose whether or not they will participate in the ACP program, it is reasonable to conclude that a company will not participate unless the company concludes that its participation would have favorable economic impacts.

Small Business Competitiveness Concern

All firms, however, may not be affected equally by the proposed ACP. Concerns have been expressed that the proposed ACP could adversely impact small or one-product businesses. In essence, the concern is that multi-product firms may, because of their diversity, benefit more from the ACP than would small businesses. That is, large manufacturers operating under approved ACPs may be able to lower their production costs to a greater degree than small manufacturers, whether the small firms are operating under their own approved ACPs or manufacturing products to comply with the existing VOC standards.

If the large manufacturers are then able to pass some of these cost savings to consumers in the form of lower prices, the small firms would face increased competition from the resulting price differential. For those small businesses which cannot match the price cuts introduced by the large manufacturers, this scenario could lead to the loss of market share and reduced profitability. In some extreme cases, this could even force some marginal firms out of business.

It is possible that the potential for this type of adverse competitiveness impact can also apply to medium and even some large manufacturers. However, we believe this concern is most applicable to small or one-product businesses. By their nature, some small businesses do not have the product diversity or resources which are comparable to their larger competitors. Thus, we evaluated this concern with consideration to small businesses.

We have evaluated this concern and have determined that such a scenario and its claimed impacts are unlikely to happen for the majority of consumer products manufacturers. However, it is possible that a few manufacturers may be adversely affected by the ACP regulation. We arrived at these conclusions by assessing the likely impacts the ACP may have on California business enterprises, including small businesses, using the results of a survey conducted by the staff and publicly available information. Our analysis is described in the following discussion.

Analysis of the Small Business Competitiveness Concern

This concern was raised at various times during the ACP development process. However, no concrete economic data, specific to the individual parties which raised the concern, were provided or made available to the ARB staff for verification of this concern. Nevertheless, we recognize the need to address this concern and have therefore evaluated the ACP's potential competitiveness impacts on small businesses using the best data available to us. This analysis is provided in the following discussion.

The competitiveness concern described previously hinges on the characteristics of the markets in which the personal care and household products are sold. The more price-competitive the market, the greater the significance of the concern. Conversely, if the market is not very price-competitive, the impact from the small business concern becomes less likely.

To assess the small business concern and determine the extent of this competition in the personal-care and household product markets, we used the following approach in our analysis:

(1) A review of the ARB's consumer product registration and mailing list databases revealed a universe of 810 firms which have registered products that are subject to the existing consumer product regulations and can therefore be affected by the ACP. Out of these, 190 were determined to be California firms. A market analysis survey was then conducted on 316 of the potentially affected firms (Appendix H). A total of 217 firms (41 in California) returned the completed surveys - a response rate of about 69 percent (47 percent for California firms).

(2) The results of the survey questionnaire were tabulated to provide information on the number of firms and the market shares by the product category and by the number of employees. Market share is defined here as the percentage of total sales of a product category sold by a firm.

(3) The number of firms, along with their market shares, was used as indicators of the level of competition in each product category. A high level of competition is indicated when there is a large number of firms in a product category, with a small market share for each firm.

(4) The extent of adverse impact on the small firms depends on the level of competition and the ability of large firms to influence the market price for all firms.

Data

The ARB survey results are shown in Tables VI-B and VI-C. An analysis of the data from this survey indicates that the data are statistically representative of the consumer products industry (Appendix H). Table VI-B shows that there are a large number of firms in each general product category and in each size category. For example, out of 87 firms reported selling automotive products, 43 have 100 or less employees, 14 have between 100 and 250 employees, 4 have between 250 and 500 employees, and 26 have more than 500 employees. These results indicate a high level of competition in the product categories subject to the consumer product regulations.

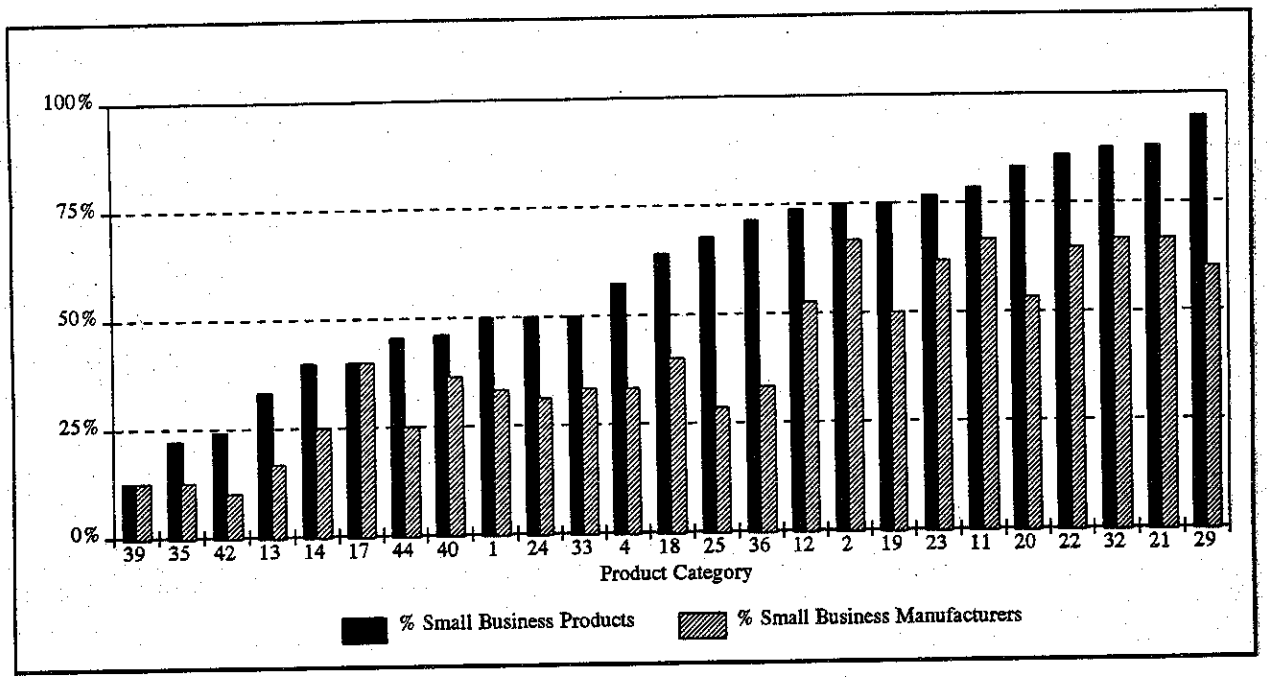
**Table VI-B**
**Breakdown of Firms by Number of Employees**

| General Product Category | Number of Companies with the Following Employees | | | | |
|---|---|---|---|---|---|
| | Less than 100 | 100-250 | 250-500 | Greater than 500 | Total |
| Automotive | 43 | 14 | 4 | 26 | 87 |
| Household | 67 | 23 | 7 | 29 | 126 |
| Personal | 46 | 19 | 5 | 27 | 97 |
| Pesticides | 49 | 17 | 6 | 26 | 98 |
| Miscellaneous | 44 | 10 | 4 | 21 | 79 |

The assumption of a high level of competition in the consumer products industry can be further supported when the results in Table VI-B are broken down into the individual product categories subject to the proposed ACP regulation (Figure VI-A). This breakdown can be used to determine the relative presence of small businesses and products made by small businesses in the market. For simplification, small businesses in this discussion are defined as businesses which reported having fewer than 250 employees.

Figure VI-A shows the number of products marketed by small businesses as a percentage of all the products reported by the survey respondents (solid black bars). Also shown are the number of small businesses as a percentage of all businesses which responded to the survey (diagonal striped bars). For example, in the category of air fresheners (product code 2), 75% of all product brand names marketed by the ACP survey respondents are products made by small businesses; in this category, 67% of the respondents are small businesses.

**Figure VI-A**
**Relative Market Presence of Small Businesses and Products Marketed by Small Businesses**




Sampling Error = ± 6%

Product Categories
1 = Cooking Sprays, 2 = Air Fresheners, 4 = Brake Cleaners, 11 = Washer Fluid, 12 = Bath/Tile Clnr, 13 = Carb/Choke, 14 = Charc. Lighter
17 = Dusting Aids, 18 = Engine Degrs, 19 = Fabric Protec., 20 = Floor Polishes, 21 = Furn. Maint., 22 = G. P. Cleaners, 23 = Glass Cleaners
24 = Hair Gels, 25 = Hair Sprays, 29 = Adhesives, 32 = Insecticides, 33 = Insect Replnts, 35 = Laundry Prewash, 36 = Laundry Starch
39 = Nail Polish Removers, 40 = Oven Cleaners, 42 = Personal Fragrances, 44 = Shaving Cream

Figure VI-A clearly shows that there is a high level of competition in the product categories subject to the proposed ACP regulation, since there are significant percentages of small businesses and small business products (i.e., greater than 25% relative to the total number of businesses and product brand names surveyed) in each of the product categories. The exceptions to this are nail polish removers (category 39), laundry prewashes (category 35), and personal fragrance products (category 42). It should be noted that for personal fragrance products, a large portion of the registration data was received fairly recently and have therefore not yet been entered into the database. In addition, many of these products are exempted from the VOC standards based on the exemption for existing products (section 94510). Therefore, the competitiveness concern (the marketability of low-VOC products versus lower cost, high-VOC ACP products) is minimal for this category.

Table VI-C shows the market shares (as a percentage of the total market sales) of the firms in Table VI-B for each product category and each size category. For example, 43 small firms with 100 or less employees control about 46 percent of the market share for automotive products in 1992. Similarly, 26 large firms with more than 500 employees control about 33 percent of the market share.

**Table VI-C**
**Breakdown of Firms by Market Share**
**(As a Percentage of Total Market Sales)**

| General Product Category | Market Share of Companies with the Following Employee Workforces | | | |
|---|---|---|---|---|
| | Less than 100 | 100-250 | 250-500 | Greater than 500 |
| Automotive | 46% | 15% | 6% | 33% |
| Household | 53 | 20 | 6 | 21 |
| Personal | 41 | 18 | 15 | 27 |
| Pesticides | 53 | 18 | 5 | 24 |
| Miscellaneous | 54 | 16 | 5 | 25 |

The data in Table VI-C can be further broken down to show the relative distribution of market shares within each individual product category subject to the existing regulation. As shown in Table VI-D, nearly all of the product categories can be characterized as having many firms with small market shares each (i.e., market share less than 20% of the total market surveyed). In this case, market share is defined as the percentage of the market by weight which is represented by a firm's total product sales within each category. For example, Table VI-D shows that, out of the 32 firms responding to the survey who manufacture glass cleaners (Category 23), 29 firms have market shares (by weight) of less than 10% each.

**Table VI-D**
**Market Share Distribution by Individual Product Category**

| Product Category Code | Number of Firms Responding to Survey | Number of Firms with Market Share (by weight) | | |
|---|---|---|---|---|
| | | Less than 10% | 10% - 20% | Greater than 20% |
| 1 | 3 | 1 | 1 | 1 |
| 2 | 3 | 0 | 2 | 1 |
| 4 | 9 | 7 | 0 | 2 |
| 11 | 8 | 5 | 1 | 1 |
| 12 | 16 | 14 | 0 | 2 |
| 13 | 11 | 9 | 1 | 1 |
| 14 | 4 | 2 | 0 | 2 |
| 17 | 5 | 4 | 0 | 1 |
| 18 | 13 | 12 | 0 | 1 |
| 19 | 4 | 3 | 0 | 1 |
| 20 | 14 | 13 | 0 | 1 |
| 21 | 14 | 12 | 1 | 1 |
| 22 | 30 | 28 | 0 | 2 |
| 23 | 32 | 29 | 2 | 1 |
| 24 | 15 | 12 | 0 | 3 |
| 25 | 13 | 11 | 0 | 2 |
| 29 | 10 | 9 | 0 | 1 |
| 32 | 3 | 1 | 0 | 2 |
| 33 | 8 | 7 | 0 | 1 |
| 35 | 8 | 7 | 0 | 1 |
| 36 | 4 | 2 | 0 | 2 |
| 39 | 8 | 6 | 0 | 2 |
| 40 | 11 | 10 | 0 | 1 |
| 42 | 10 | 8 | 1 | 1 |
| 44 | 9 | 7 | 0 | 2 |

Product Categories
1 = Cooking Sprays, 2 = Air Fresheners, 4 = Brake Cleaners, 11 = Washer Fluid, 12 = Bath/Tile Clnr, 13 = Carb/Choke, 14 = Charc. Lighter
17 = Dusting Aids, 18 = Engine Degrs, 19 = Fabric Protec., 20 = Floor Polishes, 21 = Furn. Maint., 22 = G. P. Cleaners, 23 = Glass Cleaners
24 = Hair Gels, 25 = Hair Sprays, 29 = Adhesives, 32 = Insecticides, 33 = Insect Replnts, 35 = Laundry Prewash, 36 = Laundry Starch
39 = Nail Polish Removers, 40 = Oven Cleaners, 42 = Personal Fragrances, 44 = Shaving Cream

When combined, the survey results compiled in Tables VI-B, VI-C, and VI-D and Figure VI-A show that, for nearly all product categories, there are large numbers of manufacturers with a small market share for each. Other studies in the literature also support this finding. [U.S. EPA, 1992] The survey results, however, do not provide information on whether the competition in these markets is based on price or other non-price factors. We obtained information on the type of competition in these markets from available public sources. Such information indicate that there is a high level of non-price competition for personal and household products. [Gibbs, op cit. at p. 53; Henderson, 1994; Branna, 1994]

Given the survey results and the publicly available information, we assumed that the following conditions hold in the real world:

(1) No single firm controls most of the market shares in any product category.

(2) Each manufacturer/marketer has some influence over the price at which it sells its brand of product.

With these assumptions, we determined that the proposed ACP would likely have minimal impacts on most small businesses. Some small firms, however, might experience adverse impacts from increases in price competition for the following reasons.

First, the ACP may result in a cost-of-production differential between the one-and multi-product firms if the ACP benefits multi-product firms more than one-product firms. The cost differential could allow the large firms to lower their product prices relative to the small firms and capture a larger market share for their products. Second, the multi-product firms may decide to expand the market shares for their products. Under the ACP's emissions averaging, multi-product firms may expand the market shares of their low VOC products in order to sell their high VOC products. In either of these scenarios, the result could be that some marginal firms might not be able to withstand the increased competition, and they might lose market share. In extreme cases, these marginal firms may even be forced out of the market.

We believe these scenarios are unlikely to occur to a significant degree for the following reasons. As stated previously, public information indicates that there is a high level of non-price competition in the markets for personal care and household products. In these markets, the manufacturers and marketers rely heavily on non-price strategies to establish brand loyalty, such as advertising and the introduction of new products. Second, small firms tend to fill special market niches, in which price may not be the primary factor. [*Id.*] For example, it is common knowledge that health-conscientious consumers are willing to pay premium prices for products made with natural ingredients.

Non-price factors, such as brand loyalty and special niches, would allow firms to create a captive market where consumers prefer their particular brand over competing brands. Consumers in these captive markets are willing to pay premium charges for these products. For these reasons, we believe the potential cost differential between one- and multi-product firms, which might result from the proposed ACP regulation, would not necessarily cause extreme hardship on small or one-product firms.

Other Available Studies on Small Business Competitiveness

To evaluate the proposed ACP's potential impacts on small business competitiveness, we also reviewed the socioeconomic impacts analysis conducted by the South Coast Air Quality Management District (SCAQMD) for their Regional Clean Air Incentives Market (RECLAIM) program. As discussed in Chapter III, the RECLAIM program employs emissions averaging and credit trading concepts which are similar to those in the proposed ACP regulation. We reviewed the RECLAIM analysis because: (1) it is probably the most comprehensive socioeconomic impacts analysis conducted for an emissions trading program to date; (2) RECLAIM shares many common features and concepts with the ACP; (3) the socioeconomic impacts analysis evaluates impacts to industries in the district by Standard Industrial Code (SIC), including SIC 28 (Chemicals and Allied Products), which encompasses small consumer products manufacturers in the district; (4) although RECLAIM currently controls different pollutants ($NO_x$ and $SO_x$) than the ACP (VOCs), the flexibility afforded by RECLAIM can result in cost savings for affected industries which can be passed to customers, thereby raising the same type of competitiveness concerns as those claimed for the ACP program; and (5) although similar to the ACP program, RECLAIM is inarguably more complicated and stringent than the ACP in terms of the mandated rates of emission reductions and recordkeeping/reporting requirements for affected businesses; thus, RECLAIM is probably more expensive to implement than the ACP. It is therefore reasonable to assume that the impacts projected for consumer product manufacturers operating in the RECLAIM program probably represent a worst-case scenario for ACP participants.

The SCAQMD staff conducted their analysis using a 53-industry economic-demographic forecasting and simulation (EDFS) model developed by Regional Economic Models, Inc. (REMI). In determining RECLAIM's impacts on the affected industries' competitiveness, the REMI model assumes that national industries absorb additional production costs incurred as a result of the RECLAIM regulation, while regional (local) industries pass these costs to consumers. Thus, the REMI model assumes that production cost changes will impact the profits of national companies and the selling prices of regional industries. [SCAQMD, 1993b] Discussions with ACP workshop participants indicate that this assumption is fairly reasonable and applicable to the consumer products industry.

As projected by the REMI model, both national and local SIC 28 industries should experience average increases or decreases of less than one percent in their profits and selling prices. [*Id.*, at pp. 6-19 to 6-20] These minor or positive impacts on the competitiveness of affected industries based on the REMI modeling is consistent with the conclusions drawn in our analysis. Although it is clear that RECLAIM differs from the ACP in several ways ($NO_x$/$SO_x$ control versus VOCs, stationary sources versus area-wide sources, etc.), the results of the RECLAIM socioeconomic impacts analysis suggest that, even under a very complicated and stringent environmental protection program like RECLAIM, the competitiveness of affected industries will not necessarily be adversely impacted. Thus, it would seem reasonable to project that a simpler program, like the ACP, should also have minor or positive impacts on the competitiveness of consumer product manufacturers, even small businesses. This is especially true given the additional flexibility and potential cost savings the proposed ACP regulation makes available to all consumer product manufacturers, regardless of their size.

Addressing the Small Business Competitiveness Concern - Surplus Credits Trading Program

Although the previous analysis clearly demonstrates that the proposed ACP regulation would most likely have a beneficial impact on most businesses, we recognize that some businesses may be adversely impacted. To mitigate any potential adverse economic impacts on small businesses and to encourage their participation in the ACP program, we have incorporated a surplus credits trading program targeted specifically for small businesses.

As discussed in Chapters IV and V, a provision that allows only small businesses to purchase surplus reduction credits is included in the proposed ACP regulation. By making the purchase of credits available only to small businesses, we help to ensure that an adequate supply of these credits is available to small businesses for their use. The purchase of such credits can help small businesses to participate in the ACP program by helping them to meet their emissions limits, thereby helping to lower their overall compliance costs through the additional formulation flexibility afforded by the proposed ACP regulation.

***Potential Impact On Consumers***

For consumers, the potential impact of the proposed ACP depends partly on whether the affected firms pass the cost savings to consumers. In the short term, the proposed ACP is unlikely to cause a major change in prices for personal-care and household consumer products. Rather, we expect the ACP to lower the compliance costs for businesses in the long run because of the increased flexibility and induced innovations. Therefore, we believe the ACP will benefit consumers because most businesses would pass on at least part of their cost savings to consumers, either through improved products or lower prices.

As discussed previously, a small firm might be adversely affected by the ACP regulation if the firm operates in a highly competitive market where consumers choose a product solely on the basis of price rather than brand. However, this scenario is based on the assumption that the market is homogeneous. That is, consumers would perceive all competing products in a market as being essentially equivalent, with the only difference in products being the prices charged for the products. A slightly higher price for a product would, in this case, cause the consumer to completely abandon it in favor of a lower-priced product.

We believe the scenario described in the previous paragraph is unlikely. The existence of niche markets and the wide selection of different products with varying prices indicate that consumers, in general, do not perceive the current market to be homogeneous. In the personal-care and household consumer markets, some firms have been able to differentiate their products in the eyes of consumers and command brand loyalty based on the perception of higher quality. More recently, some manufacturers have used claims of environmental "friendliness" to differentiate their products from competing products.

Also, casual consumers usually lack sufficient information to compare products and choose a product based on its price and quality. Comprehensive price comparisons are difficult for the typical consumer because retail outlets do not carry all available brands of a product at the same time. In addition, it is doubtful if the typical consumer can conduct a comprehensive product quality comparison, because he/she is probably not familiar with all the technical ingredients on the label and how they affect product quality.

Brand loyalty, niche markets, and the lack of information would allow firms to maintain some independent control over their product prices. In other words, it is reasonable to assume that casual consumers may not be very price responsive to price changes occurring under the ACP, at least in the short run. Thus, we project the proposed plan would cause no major change in product prices in the short run. Over the long term, we anticipate that the plan would lower the cost of compliance to businesses because it increases flexibility and innovation. In most likelihood, most businesses would pass on at least part of their cost savings to consumers in the form of lower prices or improved products.

***Potential Impact On Employment***

According to the U.S. Department of Commerce, employment in the affected industries totaled less than 19,000 in 1990 (Table VI-E). This represents about 1 percent of total manufacturing jobs in California. These employees, working in about 564 establishments across the state, generated slightly less than $600 million in payroll, accounting for less than 1 percent of total California non-farm payroll in 1990. Since the contribution of the affected industries to the California economy is marginal, we expect that the impact of the proposed control plan on California employment and payroll to be minor.

**Table VI-E**
**Financial and Economic Profile of Affected Industries**

| SIC | Number of Employees | | Payroll | | Establishment | |
|---|---|---|---|---|---|---|
| | 1990 Total | CA Share (% of US) | Total ($ million) | CA Share (% of US) | Total Number | CA Share (% of US) |
| 2841 | 2,757 | 8.8 | 90.5 | 8.6 | 99 | 13.8 |
| 2842 | 1,800 | 8.4 | 54.4 | 9.0 | 80 | 12.6 |
| 2843 | 268 | 3.0 | 7.7 | 2.3 | 13 | 6.6 |
| 2844 | 6,525 | 10.3 | 175.6 | 9.7 | 133 | 19.5 |
| 2861 | < 20* | 0.7 | @ | @ | 1 | 1.3 |
| 2865 | <2,500* | 10.7 | @ | @ | 12 | 6.5 |
| 2869 | <2,500* | 2.4 | @ | @ | 45 | 6.9 |
| 2879 | 955 | 5.6 | 30.7 | 5.0 | 30 | 12.7 |
| 2899 | 3,251 | 8.1 | 97.9 | 31.9 | 151 | 11.4 |
| Total | **18,847** | **6.0#** | **586.5** | **5.8** | **564** | **12.0** |

Notes: * Exact figures were not available
@ Data were not available due to confidentiality
# Estimate

Sources: U.S. Department of Commerce, 1990 California County Business Patterns; U.S. Industrial Outlook 1993.

In the long run, we expect that the ACP will provide cost savings to affected industries, thereby improving their profit margins. The increase in profit margins eventually leads to the creation of new jobs. Additional jobs may also be created in businesses which would handle the trading of surplus reduction credits.

***Potential Impact On Business Creation, Elimination, and Expansion***

Since the ACP allows businesses greater flexibility to meet the VOC standards for their products, it is most likely to induce cost savings. The cost savings, whether they are kept by the affected businesses or passed on to consumers in the form of lower prices, would result in an expansion of output and employment in the affected industry or other industries. To the extent that the affected firms are able to keep the cost savings in the business, their profit margins would go up, inducing existing firms to expand or new firms to enter. However, if the cost savings are passed partially or fully on to consumers in the form of lower prices, the consumers would have more money to spend on other products, inducing an expansion of output and employment in the industries producing those products.

The proposed ACP may, however, potentially increase the level of competition for some products, resulting in the elimination of some firms. This may happen if some large firms decide to expand the market share for their products which meet the VOC standards in order to sell their products which do not meet the standards. In this case, marginal firms may find it difficult to compete with the larger firms. Thus, the sum total of products produced for California will stay the same, but the products may be manufactured by fewer firms.

The proposed ACP may have some positive impacts on business expansion and the creation of new jobs in the non-manufacturing sector. Under the ACP, the trading of surplus reduction credits is allowed between qualified ACP manufacturers. In the past, the implementation of trading programs similar to that allowed under the ACP program often resulted in the formation of new businesses which handled the credit transactions. Based on this experience, the ARB staff believes that the proposed ACP may result in the creation of new businesses and jobs which will handle the trading of surplus reduction credits between ACP manufacturers.

*Potential Impact On Interstate Business Competitiveness*

The ACP would have a minimal impact, if any, on the ability of California businesses to compete with businesses in other states. Because the ACP covers all consumer products sold in California which are subject to the existing regulations, the ACP's impact should be the same for all manufacturers, regardless of their location. In addition, Table VI-D shows that only 12 percent of potentially affected businesses are located in California. These businesses employ less than 19,000 or about 6 percent of total U.S. employment in affected industries. Thus, the ACP's impact on interstate competitiveness would be minimal, since most businesses that may be affected by the ACP are located outside of California.

This conclusion is further supported by the literature. A detailed and comprehensive study conducted by Dr. Stephen M. Meyer documents the negligible impacts environmental regulations have on interstate business competitiveness. Dr. Stephen's study, Environmentalism and Economic Prosperity: Testing the Environmental Impact Hypothesis is perhaps the most comprehensive macroeconomic analysis of state-by-state economic trends and environmental program effects conducted to date.

As the title suggests, the basis for Dr. Meyer's study was to test the frequently asserted thesis that "strong environmental policies, rigorously enforced, inhibit economic growth and development, stifle employment and reduce competitiveness...." [Meyer, 1992] Dr. Meyer's approach to determining the validity of this assertion was to compare, through rigorous statistical analyses, state-by-state trends in various economic indicators (overall economic growth, employment growth, construction employment growth, manufacturing labor productivity growth, and overall labor growth). He compared these economic trends in states with strong environmental programs (e.g., California was ranked 2nd overall in the nation at the time of the

study) versus states with "weak" environmental programs (e.g., Alabama was ranked 50th), for a recent period with good economic growth (1982-1989) and the recessionary period of 1990-1991.

The results of Dr. Meyer's studies clearly demonstrate that, based on trends in each of the economic indicators, states with strong environmental policies and programs did not exhibit a reduction in economic growth or development as compared to states with weak environmental programs. [*Id.*, at p.42] This fact was demonstrated for both the good economic growth period and the recent recessionary period. [Meyer, 1993] In fact, the trends clearly show a consistent positive correlation between the states' environmental efforts and their economic performance, although one should not infer that stringent environmental programs necessarily stimulate economic growth. Even after conducting additional analyses to update the original 1992 study, Dr. Meyer's central findings remain unchanged:

> "At a minimum we can conclude that shifts in environmental policy, whether intended to extend environmental control or reduce it, have no discernable effect on state economic performance. If environmentalism does have negative economic effects they are so marginal and transient that they are completely lost in the noise of much more powerful domestic and international economic influences. The environmental impact hypothesis, while theoretically intriguing, has no empirical foundation and focuses attention on what is certainly one of the least influential factors affecting the pace of economic growth and development." [emphasis added] [*Id.*, op cit. at p.10]

Consistent with the conclusions reached in our analysis, Dr. Meyer's study demonstrates that, overall, we can expect the proposed ACP to have minor or positive impacts on the interstate competitiveness of affected consumer product industries.

*Overall Conclusions*

Overall, most affected businesses will benefit from the ACP. The ACP imposes no additional costs to businesses to comply with the VOC standards. Rather, it provides businesses with greater flexibility to meet the standards, thereby inducing innovations and cost savings. Concerns have been raised that the ACP may put some small businesses at a competitive disadvantage relative to the large businesses. According to the ARB survey of affected businesses and other available public information, the potential cost differential which might result from competition under the ACP between small and large firms would not necessarily cause extreme hardship on small firms. However, the proposed ACP regulation may increase the level of competition for some products, and may lead to the elimination of some marginal producers for those products. The proposed ACP may have minor impacts on California employment and payroll. However, the impact is expected to be positive in the long run. The plan should also have minimal impacts, if any, on the ability of California businesses to compete with businesses in other states.

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# Appendix A

Proposed Alternative Control Plan Regulation

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**PROPOSED**

# ALTERNATIVE CONTROL PLAN REGULATION FOR CONSUMER PRODUCTS

Adopt new Article 4. Alternative Control Plan, Sections 94540-94555, Title 17, California Code of Regulations, to read as follows:

## SUBCHAPTER 8.5 CONSUMER PRODUCTS

### Article 4. Alternative Control Plan

### 94540. Purpose

The purpose of this article is to provide an alternative method to comply with the VOC standards for consumer products that are specified in Title 17, California Code of Regulations, Division 3, Chapter 1, Subchapter 8.5, Article 2, sections 94507-94517. This alternative is provided by allowing responsible ACP parties the option of voluntarily entering into an "alternative control plan" (ACP) for consumer products, as specified in this article.

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

### 94541. Applicability

Only responsible ACP parties for consumer products may enter into an ACP. An ACP shall include only those consumer products which are subject to the VOC standards specified in section 94509, Title 17, California Code of Regulations.

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

**94542. Definitions**

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

(1) "ACP Emissions" means the sum of the VOC emissions from every ACP product subject to an Executive Order approving an ACP, during the compliance period specified in the Executive Order, expressed to the nearest pound of VOC and calculated according to the following equation:

$$ACP\ Emissions = (Emissions)_1 + (Emissions)_2 + \cdots + (Emissions)_N$$

where,

$$Emissions = \frac{[VOC\ Content]\ x\ [Enforceable\ Sales]}{100}$$

For all products except for charcoal lighter material products:

$$VOC\ Content = \frac{[(B - C)\ x\ 100]}{A}$$

A = net weight of unit (excluding container and packaging)
B = total weight of all VOCs per unit, as defined in subsection (a)(31) of this section
C = total weight of all exempted VOCs per unit, as specified in section 94510

For charcoal lighter material products only:

$$VOC\ Content = \frac{[Certified\ Emissions\ x\ 100]}{Certified\ Use\ Rate}$$

Certified Emissions = the emissions level for products approved by the Executive Officer under section 94509(h), as determined pursuant to South Coast Air Quality Management District Rule 1174 Ignition Method Compliance Certification Protocol (Feb. 27, 1991), expressed to the nearest 0.001 pound $CH_2$ per start.

Certified Use Rate = the usage level for products approved by the Executive Officer under section 94509(h), as determined pursuant to South Coast Air Quality Management District Rule 1174 Ignition Method Compliance Certification Protocol (Feb. 27, 1991), expressed to the nearest 0.001

pound certified product used per start.

For all products:

Enforceable Sales = the total amount of an ACP product sold for use in California, during the applicable compliance period specified in the Executive Order approving an ACP, as determined through enforceable sales records (expressed to the nearest pound, excluding container and packaging).

1,2,...N = each product in an ACP up to the maximum N.

(2) "ACP Limit" means the maximum allowable ACP Emissions during the compliance period specified in an Executive Order approving an ACP, expressed to the nearest pound of VOC and calculated according to the following equation:

$$ACP\ Limit = (Limit)_1 + (Limit)_2 + \ldots + (Limit)_N$$

where,

$$Limit = \frac{[ACP\ Standard]\ x\ [Enforceable\ Sales]}{100}$$

Enforceable Sales = the total amount of an ACP product sold for use in California, during the applicable compliance period specified in the Executive Order approving an ACP, as determined through enforceable sales records (expressed to the nearest pound, excluding container and packaging).

ACP Standard = either the ACP product's Pre-ACP VOC Content or the applicable VOC standard specified in section 94509, whichever is the lesser of the two.

Pre-ACP VOC Content = the lowest VOC content which the ACP product had between January 1, 1990 and the effective date of this article based on either the data on the product obtained from the March 12, 1991 Air Resources Board Consumer Products Survey or other accurate records available to the Executive Office, whichever yields the lowest VOC content for the product.

1,2,...N = each product in an ACP up to the maximum N.

(3) "ACP Product" means any "consumer product" subject to the VOC standards specified in section 94509, except those products that have been exempted under section 94510, or exempted as Innovative Products under section 94511.

(4) "ACP Reformulation" or "ACP Reformulated" means the process of reducing the VOC Content of an ACP product, within the period that an ACP is in effect, to a level which is less than the current VOC content of the product.

(5) "ACP Standard" means either the ACP product's Pre-ACP VOC Content or the applicable VOC standard specified in section 94509, whichever is the lesser of the two.

(6) "Alternative Control Plan" or "ACP" means any emissions averaging program approved by the Executive Officer pursuant to the provisions of this article.

(7) "Compliance Period" means the period of time, not to exceed one year, for which the ACP Limit and ACP Emissions are calculated and for which compliance with the ACP Limit is determined, as specified in the Executive Order approving an ACP.

(8) "Contact Person" means a representative(s) that has been designated by the responsible ACP party for the purpose of reporting or maintaining any information specified in the Executive Order approving an ACP.

(9) "Date-Code" means the day, month and year on which the ACP product was manufactured, filled, or packaged, or a code indicating such a date.

(10) "Enforceable Sales" means the total amount of an ACP product sold for use in California, during the applicable compliance period specified in the Executive Order approving an ACP, as determined through enforceable sales records (expressed to the nearest pound, excluding product container and packaging).

(11) "Enforceable Sales Record" means a written, point-of-sale record or any other Executive Officer-approved system of documentation from which the mass, in pounds (less product container and packaging), of an ACP product sold to the end user in California during the applicable compliance period can be accurately documented. For the purposes of this article, "enforceable sales records" include, but are not limited to, the following types of records:

(A) accurate records of direct retail or other outlet sales to the end user during the applicable compliance period;

(B) accurate compilations, made by independent market surveying services, of direct retail or other outlet sales to the end users for the applicable compliance period, provided that a detailed method which can be used to verify any data comprising such summaries is submitted by the responsible ACP party and approved by the Executive Officer;

(C) any other accurate product sales records approved by the Executive Officer as meeting the criteria specified in this subsection (a)(11).

(D) for pesticides only, accurate mill assessment records for economic poisons, verified by the California Department of Pesticide Regulations, which cover the sales of ACP pesticide products during the applicable compliance period.

(12) "Executive Order" means the document signed by the Executive Officer which includes the conditions and requirements of the ACP, and which allows manufacturers to sell ACP products in California pursuant to the requirements of this article.

(13) "Gross California Sales" means the estimated total California sales of an ACP product during a specific compliance period (expressed to the nearest pound), based on either of the following methods, whichever the responsible ACP party demonstrates to the satisfaction of the Executive Officer will provide an accurate California sales estimate:

(A) apportionment of national or regional sales of the ACP product to California sales, determined by multiplying the average national or regional sales of the product by the fraction of the national or regional population, respectively, that is represented by California's current population; or

(B) any other documented method which provides an accurate estimate of the total current California sales of the ACP product.

(14) "LVP" or "LVP Compound" means a low vapor pressure VOC which:

(A) has a vapor pressure less than 0.1 mm Hg at 20 degrees Centigrade, or
(B) if the vapor pressure is unknown, has more than 12 carbon atoms.

(15) "LVP Content" means the total weight, in pounds, of LVP compounds in an ACP product multiplied by 100 and divided by the product's total net weight (in pounds, excluding container and packaging), expressed to the nearest 0.1.

(16) "Missing Data Days" means the number of days in a compliance period for which the responsible ACP party has failed to provide the required Enforceable Sales or VOC Content data to the Executive Officer, as specified in the Executive Order approving an ACP.

(17) "One-product business" means a responsible ACP party which sells, supplies, offers for sale, or manufactures for use in California:

(A) only one distinct consumer product, sold under one product brand name, which is subject to the requirements of section 94509, or

(B) only one distinct product line subject to the requirements of section 94509, in which all the ACP products belong to the same product category(ies) and the VOC Contents in the products are within 98.0% and 102.0% of the arithmetic mean of the VOC Contents over the entire product line.

(18) "Pre-ACP VOC Content" means the lowest VOC content of an ACP product between January 1, 1990 and January 1, 1995, based on either the data on the product obtained from the March 12, 1991 Air Resources Board Consumer Products Survey or other accurate records available to the Executive Officer, whichever yields the lowest VOC content for the product.

(19) "Product Line" means a group of products of identical form and function belonging to the same product category(ies).

(20) "Reconcile" or "Reconciliation" means to provide sufficient VOC emission reductions to completely offset any shortfalls generated under the ACP during an applicable compliance period.

(21) "Reconciliation of Shortfalls Plan" means the plan to be implemented by the responsible ACP party when shortfalls have occurred, as approved by the Executive Officer pursuant to section 94543(a)(7)(J).

(22) "Responsible ACP Party" means the company, firm or establishment which is listed on the ACP product's label. If the label lists two or more companies, firms, or establishments, the "responsible ACP party" is the party which the ACP product was "manufactured for" or "distributed by", as noted on the label.

(23) "Retail Outlet" means any establishment at which consumer products are sold, supplied, or offered for sale directly to consumers.

(24) "Shortfall" means the ACP Emissions minus the ACP Limit when the ACP Emissions were greater than the ACP Limit during a specified compliance period, expressed to the nearest pound of VOC. "Shortfall" does not include emissions occurring prior to the date that the Executive Order approving an ACP is signed by the Executive Officer.

(25) "Small Business" shall have the same meaning as defined in Government Code Section 11342(e).

(26) "Surplus Reduction" means the ACP Limit minus the ACP Emissions when the ACP Limit was greater than the ACP Emissions during a given compliance period, expressed to the nearest pound of VOC. "Surplus Reduction" does not include emissions occurring prior to the date that the Executive Order approving an ACP is signed by the Executive Officer.

(27) "Surplus Trading" means the buying, selling, or transfer of Surplus Reductions between responsible ACP parties.

(28) "Total Maximum Historical Emissions" (TMHE), means the total VOC emissions from all ACP products for which the responsible ACP party has failed to submit the required VOC Content or Enforceable Sales records. The TMHE shall be calculated for each ACP product during each portion of a compliance period for which the responsible ACP has failed to provide the required VOC Content or Enforceable Sales records. The TMHE shall be expressed to the nearest pound and calculated according to the following calculation:

$$TMHE = (MHE)_1 + (MHE)_2 + \cdots + (MHE)_N$$

$$MHE = \left[\frac{Highest\ VOC\ Content \times Highest\ Sales}{100 \times 365}\right] \times Missing\ Data\ Days$$

where,

Highest VOC Content = the maximum VOC content which the ACP product has contained in the previous 5 years, if the responsible ACP party has failed to meet the requirements for reporting VOC Content data (for any portion of the compliance period), as specified in the Executive Order approving the ACP, or
the current actual VOC Content, if the responsible ACP party has provided all required VOC Content data (for the entire compliance period), as specified in the Executive Order.

Highest Sales = the maximum one-year Gross California Sales of the ACP product in the previous 5 years, if the responsible ACP party has failed to meet the requirements for reporting Enforceable Sales records (for any portion of the compliance period), as specified in the Executive Order approving the ACP, or
the current actual one-year Enforceable Sales for the product, if the responsible ACP party has provided all required Enforceable Sales records (for the entire compliance period), as specified in the Executive Order approving the ACP.

Missing Data Days = the number of days in a compliance period for which the responsible ACP party has failed to provide the required Enforceable Sales or VOC Content data as specified in the Executive Order approving an ACP.

1, 2, ..., N = each product in an ACP, up to the maximum N, for which the responsible ACP party has failed to submit the required Enforceable Sales or VOC Content data as specified in the Executive Order approving an ACP.

(29) "VOC Content" means the total weight of VOC in a product, expressed to the nearest 0.1 pounds of VOC per 100 pounds of product and calculated according to the following equation:

For all products except for charcoal lighter material products:

$$VOC\ Content = \frac{[(B - C)\ x\ 100]}{A}$$

A = net weight of unit (excluding container and packaging)
B = total weight of all VOCs per unit, as defined in section 94542(a)(31)
C = total weight of all exempted VOCs per unit, as specified in section 94510

For charcoal lighter material products only,

$$VOC\ Content = \frac{[Certified\ Emissions\ x\ 100]}{Certified\ Use\ Rate}$$

Certified Emissions = the emissions level for products approved by the Executive Officer under section 94509(h), as determined pursuant to South Coast Air

Quality Management District Rule 1174 Ignition Method Compliance Certification Protocol (Feb. 27, 1991), expressed to the nearest 0.001 pound $CH_2$ per start.

Certified Use Rate = the usage level for products approved by the Executive Officer under section 94509(h), as determined pursuant to South Coast Air Quality Management District Rule 1174 Ignition Method Compliance Certification Protocol (Feb. 27, 1991), expressed to the nearest 0.001 pound certified product used per start.

(30) "VOC Standard" means the maximum allowable VOC content for an ACP product, determined as follows:

(A) the applicable VOC Standard specified in section 94509, for all consumer products except for charcoal lighter material;

(B) for charcoal lighter material products only, the VOC Standard for the purposes of this article shall be calculated according to the following equation:

$$VOC\ Standard = \frac{[0.020\ pound\ CH_2\ per\ start\ x\ 100]}{Certified\ Use\ Rate}$$

where,

0.020 = the certification emissions level for the Executive Officer-approved product, as specified in section 94509(h).

Certified Use Rate = the usage level for products approved by the Executive Officer under section 94509(h), as determined pursuant to South Coast Air Quality Management District Rule 1174 Ignition Method Compliance Certification Protocol (Feb. 27, 1991), expressed to the nearest 0.001 pound certified product used per start.

(31) "Volatile Organic Compound" or "VOC" shall have the same meaning as defined in section 94508(a)(90).

(32) "Working Day" means any day between Monday through Friday, inclusive, except for days that are federal holidays.

(b) The definitions set forth in section 94508, Title 17, California Code of Regulations, shall also apply to this article.

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

**94543. Requirements and Process for Approval of an ACP**

(a) To be considered by the Executive Officer for approval, an application for a proposed ACP shall be submitted in writing to the Executive Officer by the responsible ACP party and shall contain all of the following:

(1) an identification of the contact persons, phone numbers, names and addresses of the responsible ACP party which is submitting the ACP application and will be implementing the ACP requirements specified in the Executive Order;

(2) a statement of whether the responsible ACP party is a small business or a one-product business, as defined in section 94542(a)(17) and (25);

(3) a listing of the exact consumer product brand name, form, available variations (flavors, scents, colors, sizes, etc.), and applicable product category(ies) for each distinct product that is proposed for inclusion in the ACP;

(4) for each proposed consumer product identified in subsection (a)(3) of this section, a demonstration to the satisfaction of the Executive Officer that the enforceable sales records to be used by the responsible ACP party for tracking product sales meet the minimum criteria specified in subsection (a)(4)(E) of this section. To provide this demonstration, the responsible ACP party shall do all of the following:

(A) provide the contact persons, phone numbers, names, street and mail addresses of all persons and businesses who will provide information that will be used to determine the Enforceable Sales;

(B) determine the Enforceable Sales of each product using enforceable sales records as defined in section 94542(a)(11);

(C) demonstrate, to the satisfaction of the Executive Officer, the validity of the Enforceable Sales based on enforceable sales records provided by the contact persons or the responsible ACP party;

(D) calculate the percentage of the Gross California Sales, as defined in section 94542 (a)(13) which is comprised of Enforceable Sales;

(E) determine which consumer products have Enforceable Sales which are 75.0% or more of the Gross California Sales. Only consumer products meeting this criteria shall be allowed to be sold in California under an ACP.

(5) for each of the consumer products identified in subsection (a)(4)(E) of this section, the inclusion of the following:

(A) legible copies of the existing labels for each product;

(B) the VOC Content and LVP Content for each product. The VOC Content and LVP Content shall be reported for two different periods, as follows:

1. the VOC and LVP contents of the product at the time the application for an ACP is submitted, and

2. any VOC and LVP contents of the product, which have occurred at any time within the four years prior to the date of submittal of the application for an ACP, if either the VOC or LVP contents have varied by more than plus/minus ten percent (± 10.0%) of the VOC or LVP Contents reported in subsection (a)(5)(B)1. of this section.

(6) a written commitment obligating the responsible ACP party to date-code every unit of each consumer product approved for inclusion in the ACP. The commitment shall require the responsible ACP party to display the date-code on each consumer product container or package no later than 5 working days after the date an Executive Order approving an ACP is signed by the Executive Officer.

(7) an operational plan covering all the products identified under subsection (a)(4)(E) of this section for each compliance period that the ACP will be in effect. The operational plan shall contain all of the following:

(A) an identification of the compliance periods and dates for the responsible ACP party to report the information required by the Executive Officer in the Executive Order approving an ACP. The length of the compliance period shall be chosen by the responsible ACP party provided, however, that no compliance period shall be longer than 365 days. The responsible ACP party shall also choose the dates for reporting information such that all required VOC Content and Enforceable Sales data for all ACP products shall be reported to the Executive Officer at the same time and at the same frequency;

(B) an identification of specific enforceable sales records to be provided to the Executive Officer for enforcing the provisions of this article and the Executive

Order approving an ACP. The enforceable sales records shall be provided to the Executive Officer no later than the compliance period dates specified in subsection (a)(7)(A) of this section;

(C) for a small business or a one-product business which will be relying to some extent on Surplus Trading to meet its ACP Limits, a written commitment from the responsible ACP party(ies) that they will be transfer the Surplus Reductions to the small business or one-product business upon approval of the ACP;

(D) for each ACP product, all VOC content levels which will be applicable for the ACP product during each compliance period. The plan shall also identify the specific method(s) by which the VOC Content will be determined and the statistical accuracy and precision (repeatability and reproducibility) calculated for each specified method.

(E) the projected Enforceable Sales for each ACP product at each different VOC Content for every compliance period that the ACP will be in effect;

(F) a detailed demonstration showing the combination of specific ACP reformulations or Surplus Trading (if applicable) that is sufficient to ensure that the ACP Emissions will not exceed the ACP Limit for each compliance period that the ACP will be in effect, the approximate date within each compliance period that such reformulations or Surplus Trading are expected to occur, and the extent to which the VOC Contents of the ACP products will be reduced (i.e., by ACP reformulation). This demonstration shall use the equations specified in section 94542(a)(1) and (a)(2) for projecting the ACP Emissions and ACP Limits during each compliance period. This demonstration shall also include all VOC Content levels and projected Enforceable Sales for all ACP products to be sold in California during each compliance period;

(G) a certification that all reductions in the VOC Content of a product will be real, actual reductions that do not result from changing product names, mischaracterizing ACP product reformulations that have occurred in the past, or any other attempts to circumvent the provisions of this article;

(H) written explanations of the date-codes that will be displayed on each ACP product's container or packaging;

(I) a statement of the approximate dates by which the responsible ACP party plans to meet the applicable VOC standards for each product in the ACP;

(J) an operational plan ("reconciliation of shortfalls plan") which commits the responsible ACP party to completely reconcile any shortfalls in any and all cases, even, to the extent permitted by law, if the responsible ACP party files for bankruptcy protection. The plan for reconciliation of shortfalls shall contain all of the following:

1. a clear and convincing demonstration of how shortfalls of up to 5%, 10%, 15%, 25%, 50%, 75% and 100% of the applicable ACP Limit will be completely reconciled within 90 working days from the date the shortfall is determined;

2. a listing of the specific records and other information that will be necessary to verify that the shortfalls were reconciled as specified in this subsection (a)(7)(J);

3. a commitment to provide any record or information requested by the Executive Officer to verify that the shortfalls have been completely reconciled.

(8) a declaration, signed by a legal representative for the responsible ACP party, which states that all information and operational plans submitted with the ACP application are true and correct.

(b) (1) In accordance with the time periods specified in section 94544, the Executive Officer shall issue an Executive Order approving an ACP which meets the requirements of this article. The Executive Officer shall specify such terms and conditions as are necessary to ensure that the emissions from the ACP consumer products do not exceed the emissions that would have occurred if the consumer products subject to the ACP had met the VOC standards specified in section 94509. The ACP shall also include:

(A) only those consumer products for which the Enforceable Sales are at least 75.0% of the Gross California Sales, as determined in subsection (a)(4)(E) of this section.

(B) a reconciliation of shortfalls plan meeting the requirements of this article;

(C) operational terms, conditions, and data to be reported to the Executive Officer to ensure that all requirements of this article are met.

(2) The Executive Officer shall not approve an ACP submitted by a responsible ACP party if the Executive Officer determines, upon review of the responsible ACP party's compliance history with past or current ACPs or the requirements for consumer

products (specified in sections 94507-94517, Title 17, California Code of Regulations), that the responsible ACP party has a recurring pattern of violations and has consistently refused to take the necessary steps to correct those violations.

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.

**94544. ACP Approval Timeframes**

(a) The Executive Officer shall take appropriate action on an ACP within the following time periods:

(1) Within 30 working days of receipt of an ACP application, the Executive Officer shall inform the applicant in writing that either:

(A) the application is complete and accepted for filing, or

(B) the application is deficient, and identify the specific information required to make the application complete.

(2) Within 30 working days of receipt of additional information provided in response to a determination that an ACP application is deficient, the Executive Officer shall inform the applicant in writing that either:

(A) the additional information is sufficient to make the application complete, and the application is accepted for filing, or

(B) the application is deficient, and identify the specific information required to make the application complete.

(3) If the Executive Officer finds that an application meets the requirements of section 94543 of this article, then he or she shall issue an Executive Order in accordance with the requirements of this article. The Executive Officer shall act to approve or disapprove a complete application within 90 working days after the application is deemed complete.

(b) Before the end of each time period specified in this section, the Executive Officer and the responsible ACP party may mutually agree to a longer time period for the Executive Officer to take the appropriate action.

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.

**94545. Recordkeeping and Availability of Requested Information**

(a) All information specified in the Executive Order approving an ACP shall be maintained by the responsible ACP party for a minimum of three years after such records are generated. Such records shall be clearly legible and maintained in good condition during this period.

(b) The records specified in subsection (a) of this section shall be made available to the Executive Officer or his or her authorized representative:

(1) immediately upon request, during an on-site visit to a responsible ACP party, or

(2) within five working days after receipt of a written request from the Executive Officer, or

(3) within a time period mutually agreed upon by both the Executive Office and the responsible ACP party.

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.

**94546. Violations**

(a) Any person who commits a violation of this article is subject to the penalties specified in Health and Safety Code, section 42400 et seq. Failure to meet any requirement of this article or any condition of an applicable Executive Order shall constitute a single, separate violation of this article for each day until such requirement or condition is satisfied, except as otherwise provided in subsections (b) through (h) of this section.

(b) False reporting of any information contained in an ACP application, or any supporting documentation or amendments thereto, shall constitute a single, separate violation of the requirements of this article for each day that the approved ACP is in effect.

(c) Any exceedance during the applicable compliance period of the VOC content specified for an ACP product in the Executive Order approving an ACP shall constitute a single, separate violation of the requirements of this article for each ACP product which exceeds the specified VOC Content that is sold, supplied, offered for sale, or manufactured for use in California.

(d) Any of the following actions shall each constitute a single, separate violation of the requirements of this article for each day after the applicable deadline until the requirement is satisfied:

(1) Failure to report data (i.e., "missing data") or failure to report data accurately (i.e., "inaccurate data") in writing to the Executive Officer regarding the VOC content, LVP Content, Enforceable Sales, or any other information required by any deadline specified in the applicable Executive Order;

(2) False reporting of any information submitted to the Executive Officer for determining compliance with the ACP requirements;

(3) Failure to completely implement the reconciliation of shortfalls plan that is set forth in the Executive Order, within 30 working days from the date of written notification of a shortfall by the Executive Officer;

(4) Failure to completely reconcile the shortfall as specified in the Executive Order, within 90 working days from the date of written notification of a shortfall by the Executive Officer.

(e) False reporting or failure to report any of the information specified in section 94547(b)(9), or the sale or transfer of invalid Surplus Reductions, shall constitute a single, separate violation of the requirements of this article for each day during the time period for which the Surplus Reductions are claimed to be valid.

(f) Any exceedance of the ACP Limit for any compliance period that the ACP is in effect shall constitute a single, separate violation of the requirements of this article for each day of the applicable compliance period. The Executive Officer shall determine whether an exceedance of the ACP Limit has occurred as follows:

(1) If the responsible ACP party has provided all required information for the applicable compliance period specified in the Executive Order approving an ACP, then the Executive Officer shall determine whether an exceedance has occurred using the Enforceable Sales records and VOC Content for each ACP product, as reported by the responsible ACP party for the applicable compliance period;

(2) If the responsible ACP party has failed to provide all the required information specified in the Executive Order for an applicable compliance period, the Executive Officer shall determine whether an exceedance of the ACP Limit has occurred as follows:

(A) for the missing data days, the Executive Officer shall calculate the total maximum historical emissions, as specified in section 94542(a)(28);

(B) for the remaining portion of the compliance period which are not missing data days, the Executive Officer shall calculate the emissions for each ACP product using the Enforceable Sales records and VOC Content that were reported for that portion of the applicable compliance period;

(C) the ACP Emissions for the entire compliance period shall be the sum of the total maximum historical emissions, determined pursuant to subsection (f)(2)(A), and the emissions determined pursuant to subsection (f)(2)(B);

(D) the Executive Officer shall calculate the ACP Limit for the entire compliance period using the ACP Standards applicable to each ACP product and the Enforceable Sales records specified in subsection (f)(2)(B). The Enforceable Sales for each ACP Product during missing data days, as specified in subsection (f)(2)(A), shall be zero (0);

(E) an exceedance of the ACP Limit has occurred when the ACP Emissions, determined pursuant to subsection (f)(2)(C), exceeds the ACP Limit, determined pursuant to subsection (f)(2)(D).

(g) In assessing the amount of penalties for any violation occurring pursuant to subsections (a) - (f) of this section, the circumstances identified in Health and Safety Code section 42403(b) shall be taken into consideration.

(h) A cause of action against a responsible ACP party under this section shall be deemed to accrue on the date(s) when the records establishing a violation are received by the Executive Officer.

(i) The responsible ACP party is fully liable for compliance with the requirements of this article, even if the responsible ACP party contracts with or otherwise relies on another person to carry out some or all of the requirements of this article.

NOTE: Authority cited: Sections 39600, 39601, and 41712, Health and Safety Code. Reference: Sections 39002, 39600, 40000, 41712, 42400-42403, 42404.5, Health and Safety Code; and section 338(k), Code of Civil Procedure.

**94547. Surplus Reductions and Surplus Trading**

(a) The Executive Officer shall issue Executive Orders (Surplus Reduction Certificates) which establish and quantify, to the nearest pound of VOC reduced, any Surplus Reductions achieved by a responsible ACP party operating under an ACP. The Surplus Reductions can be bought from, sold to, or transferred to a responsible ACP party operating under an ACP, as provided in subsection (b) of this section. All Surplus Reductions shall be calculated by the Executive Officer at the end of each compliance period within the time specified in the approved ACP. Surplus Reduction Certificates shall not constitute instruments, securities, or any other form of property.

(b) The issuance, use, and trading of all Surplus Reductions shall be subject to the following provisions:

(1) For the purposes of this article, VOC reductions from sources of VOCs other than consumer products subject to the VOC standards specified in section 94509 may not be used to generate Surplus Reductions;

(2) Surplus Reductions are valid only when generated by a responsible ACP party, and only while that responsible ACP party is operating under an approved ACP;

(3) Surplus Reductions are valid only after the Executive Officer has issued an Executive Order pursuant to subsection (a) of this section.

(4) Any Surplus Reductions issued by the Executive Officer may be used by the responsible ACP party who generated the surplus until the reductions expire, are traded, or until the ACP is cancelled pursuant to section 94551;

(5) Surplus Reductions cannot be applied retroactively to any compliance period prior to the compliance period in which the reductions were generated;

(6) Except as provided in subsection (b)(7)(B) of this section, only small or one-product businesses selling products under an approved ACP may purchase Surplus Reductions. An increase in the size of a small business or one-product business shall have no effect on Surplus Reductions purchased by that business prior to the date of the increase.

(7) While valid, Surplus Reductions can be used only for the following purposes:

(A) to adjust either the ACP Emissions of either the responsible ACP party who generated the reductions or the responsible ACP party to which the reductions were traded, provided the Surplus Reductions are not to be used by any

responsible ACP party to further lower its ACP Emissions when its ACP Emissions are equal to or less than the ACP Limit during the applicable compliance period; or

(B) to be traded for the purpose of reconciling another responsible ACP party's shortfalls, provided such reconciliation is part of the reconciliation of shortfalls plan approved by the Executive Officer pursuant to section 94543(a)(7)(J).

(8) A valid Surplus Reduction shall be in effect starting five (5) days after the date of issuance by the Executive Officer, for a continuous period equal to the number of days in the compliance period during which the Surplus Reduction was generated. The Surplus Reduction shall then expire at the end of its effective period.

(9) At least five (5) working days prior to the effective date of transfer of Surplus Reductions, both the responsible ACP party which is selling Surplus Reductions and the responsible ACP party which is buying the Surplus Reductions shall, either together or separately, notify the Executive Officer in writing of the transfer. The notification shall include all of the following:

(A) the date the transfer is to become effective;
(B) the date the Surplus Reductions being traded are due to expire;
(C) the amount (in pounds of VOCs) of Surplus Reductions that are being transferred;
(D) the total purchase price paid by the buyer for the Surplus Reductions;
(E) the contact persons, names of the companies, street and mail addresses, and phone numbers of the responsible ACP parties involved in the trading of the Surplus Reductions;
(F) a copy of the Executive Officer-issued Surplus Reductions Certificate, signed by both the seller and buyer of the certificate, showing transfer of all or a specified portion of the Surplus Reductions. The copy shall show the amount of any remaining non-traded Surplus Reductions, if applicable, and shall show their expiration date. The copy shall indicate that both the buyer and seller of the Surplus Reductions fully understand the conditions and limitations placed upon the transfer of the Surplus Reductions and accept full responsibility for the appropriate use of such Surplus Reductions as provided in this section.

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.

**94548. Reconciliation of Shortfalls**

(a) At the end of each compliance period, the responsible ACP party shall make an initial calculation of any shortfalls occurring in that compliance period, as specified in the Executive Order approving the ACP. Upon receipt of this information, the Executive Officer shall determine the amount of any shortfall that has occurred during the compliance period, and shall notify the responsible ACP party of this determination.

(b) The responsible ACP party shall implement the reconciliation of shortfalls plan as specified in the Executive Order approving the ACP, within 30 working days from the date of written notification of a shortfall by the Executive Officer;

(c) All shortfalls shall be completely reconciled within 90 working days from the date of written notification of a shortfall by the Executive Officer, in accordance with the reconciliation of shortfalls plan specified in the Executive Order approving the ACP.

(d) All requirements specified in the Executive Order approving an ACP, including all applicable ACP Limits, shall remain in effect while any shortfalls are in the process of being reconciled.

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

**94549. Notification of Modifications to an ACP by the Responsible ACP Party**

(a) Modifications That Do Not Require Executive Officer Pre-Approval: The responsible ACP party shall notify the Executive Officer, in writing, of any change in an ACP product's: (1) product name, (2) product formulation, (3) product form, (4) product function, (5) applicable product category(ies), (6) VOC Content, (7) LVP Content, (8) date-codes, or (9) recommended product usage directions, no later than 15 working days from the date such a change occurs. For each modification, the notification shall fully explain the following:

(A) the nature of the modification;
(B) the extent to which the ACP product formulation, VOC Content, LVP Content, or recommended usage directions will be changed;
(C) the extent to which the ACP Emissions and ACP Limit specified in the Executive Order will be changed for the applicable compliance period; and
(D) the effective date and corresponding date-codes for the modification.

(b) Modifications That Require Executive Officer Pre-Approval: The responsible ACP party may propose modifications to the Enforceable Sales records or reconciliation of shortfalls plan specified in the Executive Order approving the ACP. Any such proposed modifications shall be fully described in writing and forwarded to the Executive Officer. The responsible ACP party shall clearly demonstrate that the proposed modifications will meet the requirements of this article. The Executive Officer shall act on the proposed modifications using the procedure set forth in section 94544. The responsible ACP party shall meet all applicable requirements of the existing ACP until such time as any proposed modification(s) is approved in writing by the Executive Officer.

(c) Other Modifications: Except as otherwise provided in subsections (a) and (b) of this section, the responsible ACP party shall notify the Executive Officer, in writing, of any information learned of by the responsible ACP party which may alter any of the information submitted pursuant to the requirements of section 94543. The responsible ACP party shall provide such notification to the Executive Officer no later than 15 working days from the date such information is known to the responsible ACP party.

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

**94550. Modification of an ACP by the Executive Officer**

(a) If the Executive Officer determines that: (1) the Enforceable Sales for an ACP product are no longer at least 75.0% of the Gross California Sales for that product, or (2) the information submitted pursuant to the approval process set forth in section 94543 is no longer valid, or (3) the ACP Emissions are exceeding the ACP Limit specified in the Executive Order approving an ACP, then the Executive Officer shall modify the ACP as necessary to ensure that the ACP meets all requirements of this article and that the ACP Emissions will not exceed the ACP Limit. The Executive Officer shall not modify the ACP without first affording the responsible ACP party an opportunity for a public hearing in accordance with the procedures specified in Title 17, California Code of Regulations, Division 3, Chapter 1, Subchapter 1, Article 4 (commencing with section 60040), to determine if the ACP should be modified.

(b) If any applicable VOC standards specified in section 94509 are modified by the Air Resources Board in a future rulemaking, the Executive Officer shall modify the ACP Limit specified in the Executive Order approving an ACP to reflect the modified VOC standards as of their effective dates.

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

**94551. Cancellation of an ACP**

(a) An ACP shall remain in effect until:

(1) the ACP reaches the expiration date specified in the Executive Order

(2) the ACP is modified by the responsible ACP party and approved by the Executive Officer, as provided in section 94549;

(3) the ACP is modified by the Executive Officer, as provided in section 94550;

(4) the ACP includes a product for which the VOC standard specified in section 94509 is modified by the Air Resources Board in a future rulemaking, and the responsible ACP party informs the Executive Officer in writing that the ACP will terminate on the effective date(s) of the modified standard;

(5) the ACP is cancelled pursuant to subsection (b) of this section.

(b) The Executive Officer shall cancel an ACP if any of the following circumstances occur:

(1) the responsible ACP party demonstrates to the satisfaction of the Executive Officer that the continuation of the ACP will result in an extraordinary economic hardship;

(2) the responsible ACP party violates the requirements of the approved ACP, and the violation(s) results in a shortfall that is 20.0% or more of the applicable ACP Limit (i.e., the ACP Emissions exceed the ACP Limit by 20.% or more );

(3) the responsible ACP party fails to meet the requirements of section 94548 (Reconciliation of Shortfalls) within the time periods specified in section 94548.

(4) the responsible ACP party has demonstrated a recurring pattern of violations and has consistently failed to take the necessary steps to correct those violations.

(c) The Executive Officer shall not cancel an ACP pursuant to subsection (b) of this section without first affording the responsible ACP party an opportunity for a public hearing in accordance with the procedures specified in Title 17, California Code of Regulations, Division 3, Chapter 1, Subchapter 1, Article 4 (commencing with section 60040), to determine if the ACP should be cancelled.

(d) The responsible ACP party for an ACP which is cancelled pursuant to this section and who does not have a valid ACP to immediately replace the cancelled ACP shall meet all of the following requirements:

(1) all remaining shortfalls in effect at the time of ACP cancellation shall be reconciled in accordance with the requirements of section 94548, and

(2) all consumer products subject to the ACP shall be in compliance with the applicable VOC standards immediately upon the effective date of ACP cancellation.

(e) Any violations incurred pursuant to section 94546 shall not be cancelled or in any way affected by the subsequent cancellation or modification of an ACP pursuant to section 94549, 94550 or 94551.

NOTE: Authority cited: Sections 39600, 39601, 41511 and 41712, Health and Safety Code. Reference: Sections 39002, 39600, 40000, 41511, 41712, 42400-42403, Health and Safety Code.

**94552. Treatment of Information**

The information required by sections 94543 (a)(1)-(a)(2) and 94547(b)(9) is public information which may not be claimed as confidential. All other information submitted to the Executive Officer to meet the requirements of this article shall be handled in accordance with the procedures specified in Title 17, California Code of Regulations, sections 91000-91022.

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.

**94553. Other Applicable Requirements**

(a) Unless otherwise specified in the Executive Order approving an ACP, all applicable requirements specified in Title 17, California Code of Regulations, Division 3, Chapter 1, Subchapter 8.5, Article 2, (commencing with section 94507), shall remain in effect for all consumer products subject to an ACP.

(b) All applicable requirements specified in Title 17, California Code of Regulations, Division 3, Chapter 1, Subchapter 8.5, Article 2, (commencing with section 94507), shall remain in effect for all consumer products which are not subject to an ACP.

(c) The provisions of this article notwithstanding, the requirements of the South Coast Air Quality Management District Rule 1174 shall remain in effect for all charcoal lighter material products sold, supplied, offered for sale, or manufactured for use in the South Coast Air Quality Management District (as defined in section 40410 of the Health and Safety Code).

(d) A responsible ACP party may transfer an ACP to another responsible ACP party, provided that all of the following conditions are met:

(1) The Executive Officer shall be notified, in writing, by both responsible ACP parties participating in the transfer of the ACP and its associated Executive Order. The written notifications shall be postmarked at least five (5) working days prior to the effective date of the transfer and shall be signed and submitted separately by both responsible parties. The written notifications shall clearly identify the contact persons, business names, mail and street addresses, and phone numbers of the responsible parties involved in the transfer.

(2) The responsible ACP party to which the ACP is being transferred shall provide a written declaration stating that the transferee shall fully comply with all requirements of the Executive Order approving the ACP and this article.

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.

**94554. 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 this article. Within 180 days of a request from a responsible ACP party whose ACP has been approved by the Executive Officer, an ACP 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 ACP as a revision to the applicable implementation plan, the Executive Officer shall hold a public hearing on the proposed revision. 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 94543(b). The decision may approve, disapprove, or modify an ACP previously granted pursuant to section 94543.

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

**94555. Federal Clean Air Act Requirements**

(a) Unless otherwise determined by the U.S. Environmental Protection Agency, products sold, supplied, offered for sale, or manufactured for use in California under the requirements of an ACP are not subject to the requirements of Title V of the Federal Clean Air Act (42 U.S.C. sections 7661-7661f).

(b) Nothing in this article shall be construed to modify or in any way affect any requirements of the federal Clean Air Act, including but not limited to Title V of the federal Clean Air Act, which are applicable to the construction or operation of the responsible ACP party's manufacturing facility or to any other activities of the responsible ACP party.

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

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# Appendix B

Section 41712 - Health and Safety Code

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taking into account the age and physical condition of the affected vessels, vessel safety and operational requirements, and technological feasibility.

Following completion of such study, the state board shall conduct a public hearing to consider and, if appropriate, adopt a compliance schedule by which various classes of vessels will be brought into compliance with the standards specified in Section 41701 on and after January 1, 1984. Prior to taking any action to adopt any such compliance schedule, the state board shall report the results of its study to the Legislature, and in no event shall such study be filed with the Legislature later than January 1, 1983. The report shall also address emissions from diesel powered vessels.

(Added by Stats. 1978, Ch. 1131.)

41705. Section 41700 shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

(Added by Stats. 1975, Ch. 957.)

41706. (a) The Legislature hereby finds and declares that recent evidence indicates that lead compounds emitted into the air by nonvehicular sources accumulate in and upon vegetation in the vicinity of such sources, pose a grave threat to the health of animals which consume such vegetation, and constitute a potential human health hazard.

(b) Every district shall establish emission standards for lead compounds emitted into the air from nonvehicular sources. Where a district has failed to establish such standards, the state board shall establish such standards for that district.

(Added by Stats. 1975, Ch. 957.)

41707. Notwithstanding the provisions of this chapter restricting burning, the state board, after consultation with the district in which the burning is to take place, may issue permits for experimental burning designed to develop new or improved techniques of burning to reduce emissions, except that no experimental burning may create a nuisance.

(Added by Stats. 1975, Ch. 957.)

41708. Any district may adopt a rule or regulation for the control of volatile organic compound emissions from cutback asphalt paving material based on local considerations, including, but not limited to, the degree of air pollution resulting from such paving material, the economic impact of the rule and regulation, and the feasibility of implementing the rule and regulation.

The state board shall not override or otherwise amend any action taken by a district relating to the use of cutback asphalts.

(Added by Stats. 1979, Ch. 967.)

41712. (a) The state board shall adopt regulations to achieve the maximum feasible reduction in reactive organic compounds emitted by consumer products, if the state board determines that adequate data exists for it to adopt the regulations.

(b) The state board shall not adopt regulations pursuant to subdivision (a) unless the regulations are technologically and commercially feasible, and necessary to carry out this division. The state board shall consider the effect that the regulations proposed for health benefit products will have on the efficacy of those products in killing or inactivating agents of infectious diseases such as viruses, bacteria, and fungi, and the impact the regulations will have on the availability of health benefit products to California consumers.

(c) For purposes of this section, a "consumer product" means 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 paint products, furniture coatings, or architectural coatings.

(d) (1) Prior to adopting regulations pursuant to this section governing health benefit products, including, but not limited to, disinfectants, the state board shall consider any recommendations received from federal, state, or local public health agencies and medical experts in the field of public health.

(2) Within 30 days after the adoption of any regulation pursuant to this section governing health benefit products, the state board shall prepare and submit to the Legislature and the Governor a report which summarizes any recommendations received pursuant to paragraph (1) and any conclusions made by the state board concerning the recommendations.

(3) For purposes of this subdivision, the following definitions apply:

(A) "Health benefit product" means an antimicrobial product registered with the Environmental Protection Agency.

(B) "Medical expert" means a physician, including a pediatrician, a microbiologist, or a scientist involved in research related to infectious disease and infection control.

(e) 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.

(f) (1) It is the intent of the Legislature that air pollution control standards affecting the formulation of aerosol paints and limiting the emissions of reactive organic compounds resulting from the use of aerosol paints be set solely by the state board to ensure uniform standards applicable on a statewide basis. A district shall not adopt or enforce any regulation regarding the reactive organic compound content of, or emissions from, aerosol paints until such time as the state board has adopted a regulation regarding those paints, and any district regulation shall not be different than the state board regulation. A district may observe and enforce a state board regulation regarding aerosol paints in the same manner as a district regulation limiting the issuance of air contaminants. This subdivision shall not apply to any district that has adopted a rule or regulation regarding aerosol paints pursuant to an order of a federal court,

until such time as the federal court has authorized the district to observe and enforce the state board regulation in lieu of the district regulation.

(2) On or before January 1, 1995, the state board shall adopt regulations requiring the maximum feasible reduction in reactive organic compounds emitted from the use of aerosol paints. The regulations shall establish final limits and require full compliance not later than December 31, 1999, and shall establish interim limits prior to that date resulting in reductions in reactive organic compounds. For the purposes of this subdivision, "maximum feasible reduction in reactive organic compounds emitted" means at least a 60 percent reduction in the emissions of reactive organic compounds resulting from the use of aerosol paints, calculated with respect to the 1989 baseline year.

(3) On or before December 31, 1998, the state board shall conduct a public hearing on the technological or commercial feasibility of achieving full compliance with the final limits by December 31, 1999. If the state board determines that a 60 percent reduction in emissions of reactive organic compounds from the use of aerosol paints is not technologically or commercially feasible by December 31, 1999, it may grant an extension of time not to exceed five years. During any such extension of time, the most stringent interim limits shall be applicable. Any regulation adopted by the state board shall include a provision authorizing the time extension and requiring a public hearing on technological or commercial feasibility consistent with this subdivision. The state board shall seek to ensure that the final limits for aerosol paints established pursuant to this subdivision do not become federally enforceable prior to the effective date established by the state board for these limits, including any extension granted under this subdivision.

(4) Reductions required for aerosol paints under this subdivision are not intended to apply to any other consumer product and the regulation of aerosol paints is not subject to subdivision (b).

(Amended by Stats. 1993, Ch. 1028, Sec. 7. Effective January 1, 1994.)

References at the time of publication (see page iii):

Regulations: 17, CCR, sections 94500, 94503.5-94517

## Article 2. Nonagricultural Burning

(Article 2 added by Stats. 1975, Ch. 957.)

41800. Except as otherwise provided in this chapter, no person shall use open outdoor fires for the purpose of disposal or burning of petroleum wastes, demolition debris, tires, tar, trees, wood waste, or other combustible or flammable solid or liquid waste; or for metal salvage or burning of motor vehicle bodies.

(Added by Stats. 1975, Ch. 957.)

41801. Nothing in this article shall be construed as limiting the authority granted under other provisions of law to any public officer to set or permit a

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# Appendix C

Existing Consumer Products Regulations

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## Final Regulation Order

# REGULATION FOR REDUCING VOLATILE ORGANIC COMPOUND EMISSIONS FROM CONSUMER PRODUCTS

Amend article 2, Consumer Products, Sections 94507-94517, Title 17, California Code of Regulations, to read as follows:

## SUBCHAPTER 8.5 CONSUMER PRODUCTS

### Article 2. Consumer Products

### 94507. Applicability

Except as provided in Section 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) "Aerosol Cooking Spray" means any aerosol product designed either to reduce sticking on cooking and baking surfaces or to be applied on food, or both.

( 2) "Aerosol Product" means a pressurized spray system that dispenses product ingredients by means of a propellant or mechanically induced force. "Aerosol Product" does not include pump sprays.

( 3) "Agricultural Use" means the use of any pesticide or method or device for the control of pests in connection with the commercial production, storage or processing of any animal or plant crop. "Agricultural Use" does not include the sale or use of pesticides in properly labeled packages or containers which are intended for: (A) Home use, (B) Use in structural pest control, or (C)

Industrial or Institutional use. For the purposes of this definition only:

"Home use" means use in a household or its immediate environment.

"Structural pest control" means a use requiring a license under Chapter 14 (commencing with Section 8500), Division 3, of the Business and Professions Code.

"Industrial use" means use for or in a manufacturing, mining, or chemical process or use in the operation of factories, processing plants, and similar sites.

"Institutional use" means use within the lines of, or on property necessary for the operation of buildings such as hospitals, schools, libraries, auditoriums, and office complexes.

( 4) "Air Freshener" means any consumer product including, but not limited to, sprays, wicks, powders, and crystals, designed for the purpose of masking odors, or freshening, cleaning, scenting, or deodorizing the air. "Air Freshener" includes dual/purpose air freshener/disinfectant products. "Air Freshener" does not include products that are used on the human body, or products that function primarily as cleaning products as indicated on a product label or advertisement.

( 5) "All Other Carbon-Containing Compounds" means all other compounds which contain at least one carbon atom and are not a "Table B" or a "LVP" compound.

( 6) "All Other Forms" means all consumer product forms for which no form-specific VOC standard is specified. Unless specified otherwise by the applicable VOC standard, "all other forms" include, but are not limited to, solids, liquids, wicks, powders, crystals, and cloth or paper wipes (towelettes).

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

( 8) "ASTM" means the American Society for Testing and Materials.

( 9) "Automotive Brake Cleaner" means a cleaning product designed to remove oil, grease, brake fluid, brake pad material or dirt from motor vehicle brake mechanisms.

(10) "Automotive Windshield Washer Fluid" means any liquid designed for use in a motor vehicle windshield washer fluid system either as an anti-freeze or for the purpose of cleaning, washing, or wetting the windshield(s). "Automotive Windshield Washer Fluid" does not include any fluid which is placed in a new motor vehicle at the time the vehicle is manufactured.

(11) "Bathroom and Tile Cleaner" means a product designed to clean tile or surfaces in bathrooms. "Bathroom and Tile Cleaner" does not include products specifically designed to clean toilet bowls or toilet tanks.

(12) "California Sales" means the sales (net pounds of product, less packaging and container, per year) in California for either the calendar year immediately prior to the year that the registration is due or, if that data is not available, any consecutive 12 month period commencing no earlier than 2 years prior to the due date of the registration. If direct sales data for California is not available, sales may be estimated by prorating national or regional sales data by population.

(13) "Carburetor-Choke Cleaner" means a product designed to remove dirt and other contaminants from a carburetor. "Carburetor-Choke Cleaner" does not include products designed to be introduced directly into the fuel lines or fuel storage tank prior to introduction into the carburetor.

(14) "Charcoal Lighter Material" means any combustible material designed to be applied on, incorporated in, added to, or used with charcoal to enhance ignition. "Charcoal Lighter Material" does not include any of the following: electrical starters and

probes, (B) metallic cylinders using paper tinder, (C) natural gas, and (D) propane.

(15) "Colorant" means any pigment or coloring material used in a consumer product for an aesthetic effect, or to dramatize an ingredient.

(16) "Construction and Panel Adhesive" means any one-component household adhesive having gap filling capabilities, and which distributes stress uniformily throughout the bonded area resulting in a reduction or elimination of mechanical fasteners. These materials are applied from 1/10 gallon or 11 fluid ounce caulking cartridges.

(17) "Consumer" means any person who seeks, purchases, or acquires any consumer product for personal, family, household, or institutional use. Persons acquiring a consumer product for resale are not "consumers" for that product.

(18) "Consumer Product" means 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; and automotive specialty products but do not include paint, furniture coatings, or architectural coatings.

(19) "Contact Adhesive" means any household adhesive that: (A) is nitrile-based, or contains polychlorobutadiene (neoprene, chloroprene, bayprene), or latex, and (B) when applied to two substrates forms an instantaneous, non-repositionable bond, and (C) when dried to touch, exhibits a minimum 30 minute bonding range, and (D) bonds only to itself without the need for reactivation by solvents or heat.

(20) "Container/Packaging" means the part or parts of the consumer or institutional product which serve only to contain, enclose, incorporate, deliver, dispense, wrap or store the chemically formulated substance or mixture of substances which is solely responsible for accomplishing the purposes for which the product was designed or intended. "Container/Packaging" includes any article onto or into which the principal display panel and other

accompanying literature or graphics are incorporated, etched, printed or attached.

(21) "Crawling Bug Insecticide" means any insecticide product that is designed for use against ants, cockroaches, or other household crawling arthropods, including, but not limited to, mites, silverfish or spiders. "Crawling Bug Insecticide" does not include products designed to be used exclusively on humans or animals.

(22) "Device" means any instrument or contrivance (other than a firearm) which is designed for trapping, destroying, repelling, or mitigating any pest or any other form of plant or animal life (other than man and other than bacteria, virus, or other microorganism on or in living man or other living animals); but not including equipment used for the application of pesticides when sold separately therefrom.

(23) "Disinfectant" means any product intended to destroy or irreversibly inactivate infectious or other undesirable bacteria, pathogenic fungi, or viruses on surfaces or inanimate objects and whose label is registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA, 7 U.S.C. 136, et seq.). "Disinfectant" does not include any of the following: (A) products designed solely for use on human or animals, (B) products designed for agricultural use, (C) products designed solely for use in swimming pools, therapeutic tubs, or hot tubs, (D) products which, as indicated on the principal display panel or label, are designed primarily for use as bathroom and tile cleaners, glass cleaners, general purpose cleaners, toilet bowl cleaners, or metal polishes.

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

(25) "Double Phase Aerosol Air Freshener" means an aerosol air freshener with the liquid contents in two or more distinct phases that requires the product container be shaken before use to mix the phases, producing an emulsion.

(26) "Dual Purpose Air Freshener/Disinfectant" means an aerosol product that is represented on the product container for use as both a disinfectant and an air freshener, or is so represented on any sticker, label, packaging, or literature attached to the product container.

(27) "Dusting Aid" means a product designed to assist in removing dust and other soils from floors and other surfaces without leaving a wax or silicone based coating. "Dusting Aid" does not include products which consist entirely of compressed gases for use in electronic or other specialty areas.

(28) "Engine Degreaser" means a cleaning product designed to remove grease, grime, oil and other contaminants from the external surfaces of engines and other mechanical parts.

(29) "Executive Officer" means the Executive Officer of the Air Resources Board, or his or her delegate.

(30) "Existing Product" means any formulation of the same product category and form sold, supplied, manufactured, or offered for sale in California prior to the effective date of this article or any subsequently introduced identical formulation.

(31) "Fabric Protectant" means a product designed to be applied to fabric substrates to protect the surface from soiling from dirt and other impurities or to reduce absorption of water into the fabric's fibers. "Fabric Protectant" does not include silicone-based products whose function is to provide water repellency, or products designed for use solely on fabrics which are labeled "for dry clean only" and sold in containers of 10 fluid ounces or less.

(32) "Flea and Tick Insecticide" means any insecticide product that is designed for use against fleas, ticks, their larvae, or their eggs. "Flea and Tick Insecticide" does not include products that are designed to be used exclusively on humans or animals and their bedding.

(33) "Flexible Flooring Material" means asphalt, cork, linoleum, no-wax, rubber, seamless vinyl and vinyl composite flooring.

(34) "Floor Polish or Wax" means a wax, polish, or any other product designed to polish, protect, or enhance floor surfaces by leaving a protective coating that is designed to be periodically replenished. "Floor Polish or Wax" does not include "spray buff products", products designed solely for the purpose of cleaning floors, floor finish strippers, products designed for unfinished wood floors, and coatings subject to architectural coatings regulations.

(35) "Flying Bug Insecticide" means any insecticide product that is designed for use against flying insects or other flying arthropods, including but not limited to flies, mosquitoes, moths, or gnats. "Flying Bug Insecticide" does not include "wasp and hornet insecticide", or products that are designed to be used exclusively on humans or animals.

(36) "Fragrance" means a substance or complex mixture of aroma chemicals, natural essential oils, and other functional components with a combined vapor pressure not in excess of 2 mm of Hg at 20°C, the sole purpose of which is to impart an odor or scent, or to counteract a malodor.

(37) "Furniture Maintenance Product" means a wax, polish, conditioner, or any other product designed for the purpose of polishing, protecting or enhancing finished wood surfaces other than floors. "Furniture Maintenance Product" does not include dusting aids, products designed solely for the purpose of cleaning, and products designed to leave a permanent finish such as stains, sanding sealers and lacquers.

(38) "Furniture Coating" means any paint designed for application to room furnishings including, but not limited to, cabinets (kitchen, bath and vanity), tables, chairs, beds, and sofas.

(39) "Gel" means a colloid in which the disperse phase has combined with the continuous phase to produce a semisolid material, such as jelly.

(40) "General Purpose Adhesive" means any non-aerosol household adhesive designed for use on a variety of substrates. "General Purpose Adhesive" does not include contact adhesives or construction and panel adhesives.

(41) "General Purpose Cleaner" means a product designed for general all-purpose cleaning, in contrast to cleaning products designed to clean specific substrates in certain situations. "General Purpose Cleaner" includes products designed for general floor cleaning, kitchen or countertop cleaning, and cleaners designed to be used on a variety of hard surfaces.

(42) "Glass Cleaner" means a cleaning product designed primarily for cleaning surfaces made of glass. Glass cleaner does not include products designed solely for the purpose of cleaning optical materials used in eyeglasses, photographic equipment, scientific equipment and photocopying machines.

(43) "Hairspray" means a consumer product designed primarily for the purpose of dispensing droplets of a resin on and into a hair coiffure which will impart sufficient rigidity to the coiffure to establish or retain the style for a period of time.

(44) "Hair Mousse" means a hairstyling foam designed to facilitate styling of a coiffure and provide limited holding power.

(45) "Hair Styling Gel" means a high viscosity, often gelatinous, product that contains a resin and is designed for the application to hair to aid in styling and sculpting of the hair coiffure.

(46) "Household Adhesive" means any household product that is used to bond one surface to another by attachment. "Household 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. "Household Adhesive" also does not include units of product, less packaging, which weigh more than one pound or consist of more than 16 fluid ounces.

(47) "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.

(48) "Household Sealants and Caulking Compounds" means any product designed to fill in cracks, close or secure an object, or to prevent seepage of moisture or air.

(49) "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.

(50) "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.

(51) "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.

(52) "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, theatres, 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.

(53) "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, identifying, or giving information with respect to the product or to the contents of the package.

(54) "Laundry Prewash" means a product that is designed for application to a fabric prior to laundering and that supplements and contributes to the effectiveness of laundry detergents and/or provides specialized performance.

(55) "Laundry Starch Product" means a product that is designed for application to a fabric, either during or after laundering, to impart and prolong a crisp, fresh look and may also act to help ease ironing of the fabric. "Laundry Starch Product" includes, but is not limited to, fabric finish, sizing, and starch.

(56) "Lawn and Garden Insecticide" means an insecticide product designed primarily to be used in household lawn and garden areas to protect plants from insects or other arthropods.

(57) "Liquid" means a substance or mixture of substances which is capable of a visually detectable flow as determined under ASTM D-4359-90. "Liquid" does not include powders or other materials that are composed entirely of solid particles.

(58) "LVP Compound" means any compound which contains at least one carbon atom and has either of the following:

(A) a vapor pressure less than 0.1 mm Hg at 20°C, or
(B) more than 12 carbon atoms, if the vapor pressure is unknown.

(59) "Manufacturer" means any person who imports, manufactures, assembles, produces, packages, repackages, or relabels a consumer product.

(60) "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.

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

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

(63) "Nonresilient Flooring" means flooring of a mineral content which is not flexible. "Nonresilient Flooring" includes terrazzo, marble, slate, granite, brick, stone, ceramic tile and concrete.

(64) "Oven Cleaner" means any cleaning product designed to clean and to remove dried food deposits from oven walls.

(65) "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.

(66) "Paint Stripper" means any product designed to strip or remove paint from a substrate without markedly affecting the substrate itself.

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

(68) "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 cologne, perfume, aftershave, and toilet water. "Personal Fragrance Product" does not include: (A) products exclusively for human axillae; (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 used primarily to alleviate skin conditions such as dryness and irritations; (E) products designed exclusively for use on human genitalia; (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.

(69) "Percent-By-Weight" means the total weight of VOC except those VOCs exempted under Section 94510, expressed as a percentage

of the total net weight of the product exclusive of the container or package as calculated according to the following equation:

$$\text{Percent-By-Weight} = \frac{B - C}{A} * 100$$

where,

A = net weight of unit (excluding container and packaging)

B = weight of VOCs, as defined in Section 94508, per unit

C = weight of VOCs, exempted under Section 94510, per unit

(70) "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 Environmental Protection Agency does not consider to be a pesticide.

(71) "Principal Display Panel or Panels" means that part, or those parts of a label that are so designed as to most likely be displayed, presented, shown or examined under normal and customary conditions of display or purchase. Whenever a principal display panel appears more than once, all requirements pertaining to the "principal display panel" shall pertain to all such "principal display panels".

(72) "Product Brand Name" means the name of the product exactly as it appears on the principal display panel of the product.

(73) "Product Category" means the applicable category which best describes the product as listed in this Section 94508.

(74) "Product Form", for the purpose of complying with Section 94513 only, means the applicable form which most accurately describes the product's dispensing form as follows:

A = Aerosol Product
S = Solid
P = Pump Spray
L = Liquid
G = Gel
O = Other

(75) "Propellant" means a liquefied or compressed gas that is used in whole or in part, such as a cosolvent, to expel a liquid or any other material from the same self-pressurized container or from a separate container.

(76) "Pump Spray" means a packaging system in which the product ingredients within the container are not under pressure and in which the product is expelled only while a pumping action is applied to a button, trigger or other actuator.

(77) "Responsible Party" means the company, firm or establishment which is listed on the product's label. If the label lists two companies, firms or establishments, the responsible party is the party which the product was "manufactured for" or "distributed by", as noted on the label.

(78) "Restricted Materials" means pesticides established as restricted materials under Title 3, California Code of Regulations, section 6400.

(79) "Retailer" means any person who sells, supplies, or offers consumer products for sale directly to consumers.

(80) "Retail Outlet" means any establishment at which consumer products are sold, supplied, or offered for sale directly to consumers.

(81) "Shaving Cream" means an aerosol product which dispenses a foam lather intended to be used with a blade or cartridge razor, or other wet-shaving system, in the removal of facial or other bodily hair.

(82) "Single Phase Aerosol Air Freshener" means an aerosol air freshener with the liquid contents in a single homogeneous phase and which does not require that the product container be shaken before use.

(83) "Solid" means a substance or mixture of substances which, either whole or subdivided (such as the particles comprising a powder), is not capable of visually detectable flow as determined under ASTM D-4359-90.

(84) "Spray Buff Product" means a product designed to restore a worn floor finish in conjunction with a floor buffing machine and special pad.

(85) "Table B Compound" means any carbon-containing compound listed as an exception to the definition of VOC in Section 94508.

(86) "Type A Propellent" means a compressed gas such as CO , N, NO, or compressed air which is used as a propellent, and is either incorporated with the product or contained in a separate chamber within the product's packaging.

(87) "Type B Propellent" means any halocarbon which is used as a propellent including chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), and hydrofluorocarbons (HFCs).

(88) "Type C Propellent" means any propellent which is not a Type A or Type B propellent, including propane, isobutane, n-butane, and dimethyl ether (also known as dimethyl oxide).

(89) "Usage Directions" means the text or graphics on the product's principal display panel, label, or accompanying literature which describes to the end user how and in what quantity the product is to be used.

(90) "Volatile Organic Compound (VOC)" means any compound containing at least one atom of carbon, except: methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, or carbonates, ammonium carbonate, 1,1,1-trichloroethane, methylene chloride, trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), chlorodifluoromethane

(HCFC-22), trifluoromethane (HFC-23), 1,1,1-trichloro-2,2,2-trifluoroethane (CFC-113), horo-1,1-difluoro-2-chloro-2,2-difluoroethane (CFC-114), chloropentafluoroethane (CFC-115), 2,2-dichloro-1,1,1-trifluoroethane (HCFC-123), 1,1,1,2-tetrafluoroethane (HFC-134a), 1,1-dichloro-1-fluoroethane (HCFC-141b), 1-chloro-1,1-difluoroethane (HCFC-142b), 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124), pentafluoroethane (HFC-125), 1,1,2,2-tetrafluoroethane (HFC-134), 1,1,1-trifluoroethane (HFC-143a), 1,1-difluoroethane (HFC-152a), and the following classes of perfluorocarbons: (A) cyclic, branched, or linear, completely fluorinated alkanes; (B) cyclic, branched, or linear, completely fluorinated ethers with no unsaturations; (C) cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and (D) sulfur-containing perfluorocarbons with no unsaturations and with the sulfur bonds only to carbon and fluorine.

(91) "Wasp and Hornet Insecticide" means any insecticide product that is designed for use against wasps, hornets, yellow jackets or bees by allowing the user to spray a high volume directed stream or burst from a safe distance at the intended pest or its hiding place.

(92) "Wax" means a material or synthetic thermoplastic substance generally of high molecular weight hydrocarbons or high molecular weight esters of fatty acids or alcohols, except glycerol and high polymers (plastics). "Wax" includes, but is not limited to, substances derived from the secretions of plants and animals such as carnuba wax and beeswax, substances of a mineral origin such as ozocerite and paraffin, and synthetic polymers such as polyethylene.

(93) "Wood Floor Wax" means wax-based products for use solely on wood floors.

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

**94509. Standards for Consumer Products**

(a) Except as provided in Sections 94510, 94511, and 94514, no person shall sell, supply, offer for sale, or manufacture for sale in California any consumer product which, at the time of sale or manufacture, contains volatile organic compounds in excess of the limits specified in the following Table of Standards after the specified effective dates.

**Table of Standards**
**Percent Volatile Organic Compounds by Weight**

| Product Category | 1/1/93 | 1/1/94 | Future Effective (Date) |
|---|---|---|---|
| Air Fresheners | | | |
| Single Phase Aerosols | 70 | | 30 (1/1/96) |
| Double Phase Aerosols | 30 | | |
| Liquids/Pump Sprays | 18 | | |
| Solids/Gels | 3 | | |
| Dual Purpose Air Freshener/ Disinfectant Aerosols | | 60 | |
| Automotive Windshield Washer Fluids: | | | |
| Type A Areas* | 35 | | |
| All Other Areas | 10 | | |
| Bathroom and Tile Cleaners | | | |
| Aerosols | | 7 | |
| All Other Forms | | 5 | |
| Engine Degreasers | 75 | | 50 (1/1/96) |

* Type A Areas include only the following: Del Norte, Shasta and TrinityCounties; the Great Basin Valley, Lake Tahoe, Mountain Counties, and Northeast Plateau Air Basins, as defined in Title 17, California Code of Regulations, Sections 60105, 60108, 60111, and 60113.

## Table of Standards
## (continued)
## Percent Volatile Organic Compounds by Weight

| Product Category | 1/1/93 | 1/1/94 | Future Effective (Date) |
|---|---|---|---|
| Floor Polishes/Waxes | | | |
| Products for Flexible Flooring Materials | | 7 | |
| Products for Nonresilient Flooring | | 10 | |
| Wood Floor Wax | | 90 | |
| Furniture Maintenance Products | | | |
| Aerosols | | 25 | |
| All Other Forms except Solid or Paste Forms | | 7 | |
| General Purpose Cleaners | | 10 | |
| Glass Cleaners | | | |
| Aerosols | 12 | | |
| All other forms | 8 | | 6 (1/1/96) |
| Hairsprays | 80 | | 55 (1/1/98) |
| Hair Mousses | | 16 | |
| Hair Styling Gels | | 6 | |
| Insect Repellents | | | |
| Aerosols | | 65 | |
| Laundry Prewash | | | |
| Aerosols/Solids | | 22 | |
| All Other Forms | | 5 | |
| Nail Polish Removers | | 85 | 75 |

**Table of Standards**
**(continued)**

**Percent Volatile Organic Compounds by Weight**

| Product Category | 1/1/93 | 1/1/94 | Future Effective (Date) |
|---|---|---|---|
| Oven Cleaners | | | |
| Aerosols/Pump Sprays | 8 | | |
| Liquids | 5 | | |
| Shaving Creams | | 5 | |

**Table of Standards**
**(Phase II)**
**Percent Volatile Organic Compounds by Weight**

| Product Category | 1/1/95 | Future Effective (Date) |
|---|---|---|
| Aerosol Cooking Sprays | 18 | |
| Automotive Brake Cleaners | | 50 (1/1/97) |
| Charcoal Lighter Material | See 94509(h) | |
| Carburetor-Choke Cleaners | 75 | |
| Dusting Aids | | |
| Aerosol | 35 | 25 (1/1/97) |
| All Other Forms | 7 | |
| Fabric Protectants | 75 | 60 (1/1/97) |

**Table of Standards**
**(Phase II - continued)**
**Percent Volatile Organic Compounds by Weight**

| Product Category | 1/1/95 | Future Effective (Date) |
|---|---|---|
| Household Adhesives | | |
| Aerosol | 75 | 25 (1/1/97) |
| Contact | 80 | |
| Construction and Panel | 40 | |
| General Purpose | 10 | |
| Insecticides | | |
| Crawling Bug | 40 | 20 (1/1/98) |
| Flea and Tick | 25 | |
| Flying Bug | 35 | |
| Foggers | 45 | |
| Lawn and Garden | 20 | |
| Laundry Starch Products | 5 | |
| Personal Fragrance Products | | |
| Products with 20% or less fragrance | 80 | 75 (1/1/99) |
| Products with more than 20% fragrance | 70 | 65 (1/1/99) |

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(b) For consumer products for which the label, packaging, or accompanying literature specifically states that the product should be diluted prior to use, the limits specified in subsection (a) shall apply to the product only after the minimum recommended dilution has taken place. For purposes of this subsection (b), "minimum recommended dilution" shall not include recommendations for incidental use of a concentrated product to deal with limited special applications such as hard-to-remove soils or stains.

(c) Notwithstanding the provisions of Section 94509(a), a consumer product manufactured prior to each of the effective dates specified for that product in the Table of Standards may be sold, supplied, or offered for sale for up to eighteen months after each of the specified effective dates. This subsection (c) does not apply to any product with a specified effective date of 1/1/93 that is sold, supplied, or offered for sale in the Bay Area Air Quality Management District. This subsection (c) also does not apply to any consumer product which does not display on the product container or package the date on which the product was manufactured, or a code indicating such date.

(d) For those consumer products that are registered under the Federal Insecticide, Fungicide, and Rodenticide Act, (FIFRA; 7 U.S.C. Section 136-136y), the effective date of the VOC standards specified in subsection (a) is one year after the date specified in the Table of Standards. For those consumer products that are registered under FIFRA, the eighteen month period provided in subsection (c) shall also begin one year after the date specified in the Table of Standards.

(e) Effective January 1, 1993, for any consumer product for which standards are specified under subsection (a), no person shall sell, supply, offer for sale, or manufacture for sale in California any consumer product which contains any of the following ozone-depleting compounds: CFC-11 (trichlorofluoromethane), CFC-12 (dichlorodifluoromethane), CFC-113 (1,1,1-trichloro-2,2,2-trifluoroethane), CFC-114 (1-chloro-1,1-difluoro-2-chloro-2,2-difluoroethane), CFC-115 (chloropentafluoroethane), halon 1211 (bromochlorodifluoromethane), halon 1301 (bromotrifluoromethane), halon 2402 (dibromotetrafluoroethane), HCFC-22 (chlorodifluoromethane), HCFC-123 (2,2-dichloro-1,1,1-trifluoroethane), HCFC-124 (2-chloro-1,1,1,2-tetrafluoroethane), HCFC-141b (1,1-dichloro-1-fluoroethane), HCFC-142b (1-chloro-1,1-difluoroethane), 1,1,1-trichloroethane, and carbon tetrachloride.

(f) The requirements of section 94509(e) shall not apply to any existing product formulation that complies with the Table of Standards which is sold, supplied, offered for sale in California prior to the effective date of this article, or any product formulation that is sold, supplied, or offered for sale in California prior to the effective date of this article that is reformulated to meet the Table of Standards, as long as the ozone depleting compound content of the reformulated product does not increase.

(g) The requirements of section 94509(e) shall not apply to any ozone depleting compounds that may be present as impurities in a consumer product in an amount equal to or less than 0.01% by weight of the product.

(h) Requirements for Charcoal Lighter Material

(1) Regulatory Standards

(A) In all areas of California except the South Coast Air Quality Management District (SCAQMD), after January 1, 1993, no person shall sell, supply, or offer for sale any charcoal lighter material product unless at the time of the transaction:

1. the manufacturer or distributor of the charcoal lighter material has been issued a currently effective certification pursuant to subsection (h)(2).

2. the charcoal lighter material meets the formulation criteria and other conditions specified in the applicable Executive Order issued pursuant to subsection (h)(2).

3. the product usage directions for the charcoal lighter material are the same as those provided to the Executive Officer pursuant to subsection (h)(2)(C).

(B) In the South Coast Air Quality Management District, the regulatory standards specified in subsection (h)(1)(A) shall be applicable upon the effective date of this subsection.

(2) Certification Requirements

(A) No charcoal lighter material formulation shall be certified under this subsection unless the applicant for certification demonstrates to the Executive Officer's satisfaction that the VOC emissions from the ignition of charcoal with the charcoal lighter material are less than or equal to 0.020 pound of VOC per start, using the procedures specified in the South Coast Air Quality Management District Rule 1174 Ignition Method Compliance Certification Protocol, dated February 27, 1991 (the "SCAQMD Rule 1174 Testing Protocol").

(B) The Executive Officer may approve alternative test procedures which are shown to provide equivalent results to those obtained using the SCAQMD Rule 1174 Testing Protocol.

(C) A manufacturer or distributor of charcoal lighter material may apply to the Executive Officer for certification of a charcoal lighter material formulation in accordance with this subsection (h)(2). The application shall be in writing and shall include, at a minimum, the following:

1. the results of testing conducted pursuant to the procedures specified in SCAQMD Rule 1174 Testing Protocol.

2. the exact text and/or graphics that will appear on the charcoal lighter material's principal display panel, label, and any accompanying literature. The provided material shall clearly show the usage directions for the product. These directions shall accurately reflect the quantity of charcoal lighter material per pound of charcoal that was used in the SCAQMD Rule 1174 Testing Protocol for that product, unless:

   i) the charcoal lighter material is intended to be used in fixed amounts independent of the amount of charcoal used, such as certain paraffin cubes, or

   ii) the charcoal lighter material is already incorporated into the charcoal, such as certain "bag light", "instant light" or "match light" products.

3. For a charcoal lighter material which meets the criteria specified in subsection (h)(2)(C)2.i, the usage instructions provided to the Executive Officer shall accurately reflect the quantity of charcoal lighter material used in the SCAQMD Rule 1174 Testing Protocol for that product.

4. Any physical property data, formulation data, or other information required by the Executive Officer for use in determining when a product modification has occurred and for use in determining compliance with the conditions specified on the Executive Order issued pursuant to section (h)(2).

(D) Within 30 days of receipt of an application, the Executive Officer shall advise the applicant in writing either that it is complete or that specified additional information is required to make it complete.

Within 30 days of receipt of additional information, the Executive Officer shall advise the applicant in writing either that the application is complete, or that specified additional information or testing is still required before it can be deemed complete.

(E) If the Executive Officer finds that an application meets the requirements of this subsection (h)(2), then he or she shall issue an Executive Order certifying the charcoal lighter material formulation and specifying such conditions as are necessary to insure that the requirements of this subsection (h) are met. The Executive Officer shall act on a complete application within 90 days after the application is deemed complete.

(3) Notice of Modifications

For any charcoal lighter material for which certification has been granted pursuant to subsection (h)(2), the applicant for certification shall notify the Executive Officer in writing within 30 days of: (i) any change in the usage directions, or (ii) any change in product formulation, test results, or any other information submitted pursuant to subsection (h)(2) which may result in VOC emissions greater than 0.020 pound of VOC per start.

(4) Revocation of Certification

If the Executive Officer determines that any certified charcoal lighter material formulation results in VOC emissions from the ignition of charcoal which are greater than 0.020 pound of VOC per start, as determined by the SCAQMD Rule 1174 Testing Protocol and the statistical analysis procedures contained therein, the Executive Officer shall revoke or modify the certification as is necessary to assure that the charcoal lighter material will result in VOC emissions of less than or equal to 0.020 pound of VOC per start. The Executive Officer shall not revoke or modify the prior certification without first affording the applicant for the certification an opportunity for a hearing in accordance with the procedures specified in Title 17, California Code of Regulations, Division 3, Chapter 1, Subchapter 1, Article 4 (commencing with section 60040), to determine if the certification should be modified or revoked.

(5) Notwithstanding any other provision of this subsection 94509(h), charcoal lighter material products manufactured prior to January 1, 1993, may be sold, supplied, or offered for sale until July 1, 1994, in all areas of California except the South Coast Air Quality Management District. Charcoal lighter material products subject to SCAQMD Rule 1174 and sold, supplied, or offered for sale in the South Coast Air Quality Management District shall meet the requirements of section 94509(h) upon the effective date of this subsection, regardless of the date on which the products were manufactured.

NOTE: Authority cited: Sections 39600, 39601, and 41712, Health and Safety Code. Reference: Sections 39002, 39600, 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(a) or 94509(h), 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) The requirements of 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 requirements of Section 94509(a) shall not apply to any VOC which:

(1) has a vapor pressure of less than 0.1 mm Hg at 20 degrees Centigrade, or

(2) consists of more than 12 carbon atoms, if the vapor pressure is unknown.

(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 136/136y).

(f) The requirements of 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 requirements of Section 94509(a) shall not apply to air fresheners and insecticides containing at least 98% paradichlorobenzene.

(h) The requirements of Section 94509(a) shall not apply to:

(1) existing personal fragrance products or personal fragrance products in development on or before April 1, 1992, provided that both (i) the registration data specified in section 94513 is submitted for every such product by the date specified in section 94513(a), or prior to July 1, 1993, whichever date occurs later, and (ii) such product is sold in California prior to January 1, 1994. For the purposes of this subsection, a product "in development" means:

(A) a product which a fragrance materials manufacturer is designing at the request of a personal fragrance product manufacturer, or

(B) a product which is the subject of a written marketing profile or other documentation authorizing the creation and marketing of the product.

(2) Personal fragrance products in development may be registered to qualify for this exemption under hypothetical trade names or pseudonyms, provided that the actual trade name is supplied to the Executive Officer within 30 days of marketing such products, or January 1, 1994, whichever occurs first.

(i) The requirements of section 94509(a) shall not apply to adhesives sold in containers of 1 fluid ounce or less.

(j) The requirements of Section 94509(a) shall not apply to any VOC which is a fragrance in a personal fragrance product.

(k) The requirements of 94509(a) shall not apply to bait station insecticides. For the purpose of this section, bait station insecticides are containers enclosing an insecticidal bait that is not more than 0.5 ounce by weight, where the bait is designed to be ingested by insects and is composed of solid material feeding stimulants with less than 5 percent (%) active ingredients.

(l) The 1/1/99 VOC limits specified in Section 94509(a) for personal fragrance products shall not apply to such products which have been sold in California prior to 1/1/99.

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 requirements of 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 standards 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 standards specified in section 94509(a). VOC emissions shall be calculated using the following equation:

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

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 standard 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.

(b) For the purposes of this section, "representative consumer product" means a consumer product which meets all of the following criteria:

(1) the representative product shall be subject to the same VOC limit in Section 94509(a) as the innovative product,

(2) the representative product shall be of the same product form as the innovative product, unless the innovative product uses a new form which does not exist in the product category at the time the application is made.

(3) the representative product shall have at least similar efficacy as other consumer products in the same product category based on tests generally accepted for that product category by the consumer products industry.

(c) A manufacturer shall apply in writing to the Executive Officer for any exemption claimed under subsection (a). The application shall include the supporting documentation that demonstrates the emissions from the innovative product, including the actual physical test methods used to generate the data and, if necessary, the consumer testing undertaken to document product usage. In addition, the applicant must provide any information necessary to enable the Executive Officer to establish enforceable conditions for granting the exemption including the VOC content for the innovative product and test methods for determining the VOC content. All information submitted by a manufacturer pursuant to this section shall be handled in accordance with the procedures specified in Title 17, California Code of Regulations, Sections 91000-91022.

(d) Within 30 days of receipt of the exemption application the Executive Officer shall determine whether an application is complete as provided in section 60030(a), Title 17, California Code of Regulations.

(e) Within 90 days after an application has been deemed complete, the Executive Officer shall determine whether, under what conditions, and to what extent, an exemption from the requirements of Section 94509(a) will be permitted. The applicant and the Executive Officer may mutually agree to a longer time period for reaching a decision, and additional supporting documentation may be submitted by the applicant before a decision has been reached. The Executive Officer shall notify the applicant of the decision in writing and specify such terms and conditions that are necessary to insure that emissions from the product will meet the emissions reductions specified in subsection (a), and that such emissions reductions can be enforced.

(f) In granting an exemption for a product the Executive Officer shall establish conditions that are enforceable. These

conditions shall include the VOC content of the innovative product, dispensing rates, application rates and any other parameters determined by the Executive Officer to be necessary. The Executive Officer shall also specify the test methods for determining conformance to the conditions established. The test methods shall include criteria for reproducibility, accuracy, sampling and laboratory procedures.

(g) For any product for which an exemption has been granted pursuant to this section, the manufacturer shall notify the Executive Officer in writing within 30 days of any change in the product formulation or recommended product usage directions, and shall also notify the Executive Officer within 30 days if the manufacturer learns of any information which would alter the emissions estimates submitted to the Executive Officer in support of the exemption application.

(h) If VOC standards are lowered for a product category through any subsequent rulemaking, all innovative product exemptions granted for products in the product category, except as provided in this subsection (h), shall have no force and effect as of the effective date of the modified VOC standard. This subsection (h) shall not apply to those innovative products which have VOC emissions less than the appropriate lowered VOC standard and for which a written notification of the product's emissions status versus the lowered VOC standard has been submitted to and approved by the Executive Officer at least 60 days before the effective date of such standard.

(i) If the Executive Officer believes that a consumer product for which an exemption has been granted no longer meets the criteria for an innovative product specified in subsection (a), the Executive Officer may modify or revoke the exemption as necessary to assure that the product will meet these criteria. The Executive Officer shall not modify or revoke an exemption without first affording the applicant an opportunity for a public hearing held in accordance with the procedures specified in Title 17, California Code of Regulations, Division 3, Chapter 1, Subchapter 1, Article 4 (commencing with Section 60040), to determine if the exemption should be modified or revoked.

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

## 94512. Administrative Requirements

(a) **Most Restrictive Limit.** Notwithstanding the definition of "product category" in Section 94508, if anywhere on the principal display panel of any consumer product, any representation is made that the product may be used as, or is suitable for use as a consumer product for which a lower VOC standard is specified in Section 94509(a), then the lowest VOC standard shall apply. This requirement does not apply to general purpose cleaners.

(b) **Code-Dating.** Each manufacturer of a consumer product subject to Section 94509(a) or 94509(h) shall clearly display on each consumer product container or package, the day, month, and year on which the product was manufactured, or a code indicating such date. This date or code shall be displayed on each consumer product container or package no later than twelve months prior to the effective date of the applicable standard specified in section 94509. The requirements of this provision shall not apply to personal fragrance products of 2 milliliters or less, which are offered to consumers free of charge for the purpose of sampling the product.

(c) If a manufacturer uses a code indicating the date of manufacture, for any consumer product subject to section 94509(a) or 94509(h) an explanation of the code must be filed with the Executive Officer of the ARB no later than twelve months prior to the effective date of the applicable standard specified in section 94509.

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

## 94513. Registration

(a) No later than 90 days after the effective date of this section 94513, all responsible parties for the following household and I&I products must register products that are sold in the State of California during the calendar year prior to the year the registration is due: (1) products for which a VOC standard is specified in Section 94509(a), (2) products approved as an innovative product under Section 94511, and (3) products claiming exemptions under Section 94510(f), Section 94510(g), or Section 94510(h). All registrations shall include the following information:

(1) the name of the responsible party and the party's 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 subject to registration and upon request by the Executive Officer, 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;

(8) for registrations submitted by two companies, an identification of the company which is submitting relevant data separate from that submitted by the responsible party. All registration information from both companies shall be submitted by the date specified in Section 94513(a);

(9) for each product brand name and form, the net percent by weight of the total product, less container and packaging, comprised of the following, rounded to the nearest one-tenth of a percent (0.1%):

(A) Total Table B Compounds
(B) Total LVP Compounds that are not fragrances
(C) Total All Other Carbon-Containing Compounds that are not fragrances
(D) Total All Non-Carbon-Containing Compounds
(E) Total Fragrance
(F) For products containing greater than two percent by weight fragrance, but excluding "personal fragrance products":
  (i) the percent of fragrance that are LVP compounds, and
  (ii) the percent of fragrance that are all other carbon-containing compounds
(G) For "personal fragrance products", the density of the fragrance
(H) Total Paradichlorobenzene

(10) for each product brand name and form, the identity, including the specific chemical name and associated Chemical Abstract Services (CAS) number, of the following:

(A) Each Table B Compound

(B) Each LVP Compound that is not a fragrance

(11) if applicable, the weight percent comprised of propellent for each product;

(12) if applicable, an identification of the type of propellent (Type A, Type B, Type C, or a blend of the different types);

(b) In addition to the requirements of section 94513(a)(10), the responsible party shall report or shall arrange to have reported to the Executive Officer the net percent by weight of each ozone-depleting compound which is (1) listed in section 94509(e) and (2) contained in a product subject to registration under section 94513(a) in any amount greater than 0.1 percent by weight.

(c) Upon 90 days written notice, the Executive Officer may also require any manufacturer to supply all or part of the registration data listed in Section 94513(a) for any consumer product or products that the Executive Officer may specify.

(d) All information submitted by manufacturers pursuant to Section 94513 shall be handled in accordance with the procedures specified in Title 17, California Code of Regulations, Sections 91000-91022.

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) 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 variance application shall set forth:

(1) the specific grounds upon which the variance is sought;

(2) the proposed date(s) by which compliance with the provisions of Section 94509 will be achieved, and

(3) a compliance report reasonably detailing the method(s) by which compliance will be achieved.

(b) Upon receipt of a variance application containing the information required in subsection (a), the Executive Officer shall hold a public hearing to determine whether, under what conditions, and to what extent, a variance from the requirements in Section 94509 is necessary and will be permitted. A hearing shall be initiated no later than 75 days after receipt of a variance application. 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 every person who requests such notice, not less than 30 days prior to the hearing. The notice shall state that the parties may, but need not be, represented by counsel at the hearing. At least 30 days prior to the hearing, the variance application shall be made available to the public for inspection. Information submitted to the Executive Officer by a variance applicant may be claimed as confidential, and such information shall be handled in accordance with the procedures specified in Title 17, California Code of Regulations, Sections 91000-91022. The Executive Officer may consider such confidential information in reaching a decision on a variance application. Interested members of the public shall be allowed a reasonable opportunity to testify at the hearing and their testimony shall be considered.

(c) No variance shall be granted unless all of the following findings are made:

(1) that, because of reasons beyond the reasonable control of the applicant, requiring compliance with Section 94509 would result in extraordinary economic hardship.

(2) that the public interest in mitigating the extraordinary hardship to the applicant by issuing the variance outweighs the public interest in avoiding any increased emissions of air contaminants which would result from issuing the variance.

(3) that the compliance report proposed by the applicant can reasonably be implemented, and will achieve compliance as expeditiously as possible.

(d) Any variance order shall specify a final compliance date by which the requirements of Section 94509 will be achieved. Any variance order shall contain a condition that specifies increments of progress necessary to assure timely compliance, and such other conditions that the Executive Officer, in consideration of the testimony received at the hearing, finds necessary to carry out the purposes of Division 26 of the Health and Safety Code.

(e) A variance shall cease to be effective upon failure of the party to whom the variance was granted to comply with any term or condition of the variance.

(f) Upon the application of any person, the Executive Officer may review, and for good cause, modify or revoke a variance from requirements of Section 94509 after holding a public hearing in accordance with the provisions of subsection (b).

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

**94515. Test Methods**

(a) Testing to determine compliance with the requirements of this article, shall be performed using one or more of the following analytical methods which are incorporated by reference herein: (1) Method 24-24A, Part 60, Title 40, Code of Federal Regulations, Appendix A, July 1, 1988; (2) Method 18, Federal Register 48, no. 202, October 18, 1983; (3) Method 1400, NIOSH Manual of Analytical Methods, Volume 1, February 1984; or (4) Environmental Protection Agency Method 8240 "GC/MS Method for Volatile Organics," September 1986. 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.

(b) Testing to determine compliance with the requirements of this article may also be demonstrated through calculation of the volatile organic compound content from records of the amounts of constituents used to make the product. Compliance determination based on these records may not be used unless the manufacturer of a consumer product keeps accurate records for each day of production of the amount and chemical composition of the individual product constituents. These records must be kept for at least three years.

(c) Testing to determine whether a product is a liquid or solid shall be performed using ASTM D4359-90 (May 25, 1990), which is incorporated by reference herein.

(d) Testing to determine compliance with the certification requirements for charcoal lighter material shall be performed using the procedures specified in the South Coast Air Quality Management District Rule 1174 Ignition Method Compliance Certification Protocol (February 28, 1991), which is incorporated by reference herein.

(e) Testing to determine distillation points of petroleum distillate-based charcoal lighter materials shall be performed using ASTM D86-90 (Sept. 28, 1990), which is incorporated by reference herein.

(f) Testing to determine the percent by weight of fragrance in personal fragrance products shall be performed according to the Association of Official Analytical Chemists (AOAC) Official Method of Analysis No. 932.11, 1990, "Essential Oil in Flavor Extracts and Toilet Preparations, Babcock Method" (AOAC Official Methods of Analysis, 15th Edition, 1990), which is incorporated by reference herein.

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

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# Appendix D

Notices for Workshops 1-7

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PETE WILSON, Governor

STATE OF CALIFORNIA

AIR RESOURCES BOARD
1102 Q STREET
P.O. BOX 2815
SACRAMENTO, CA 95812

March 4, 1992

Dear Sir or Madam:

I am requesting your participation in developing the regulatory concepts and language of an Alternative Compliance Plan (ACP) for use with the existing California statewide consumer products regulation. The staff of the Air Resources Board (ARB) intend to have a series of consultation meetings to consider public comments on developing the ACP. If we are successful in developing the ACP, we hope to propose a workable ACP provision with appropriate language for our Board's consideration, as part of or in addition to the existing Consumer Products VOC Regulation (Article 2, Consumer Products, Sections 94507-94517, Title 17, California Code of Regulations).

The consultation meeting will be held at:

South Coast Air Quality Management District (Headquarters)
Conference Room CC-6 - Lobby Level
21865 E. Copley Drive
Diamond Bar, CA 91765

**Friday, April 3, 1992**
**8:30 AM - 5:00 PM**

As you may know, the Air Resources Board recently adopted several regulations to reduce the emissions of volatile organic compounds (VOCs) from the use of consumer products. These regulations employ traditional command-and-control type VOC limits on 27 consumer product categories. In addition, they also incorporate an Innovative Products provision which allows additional flexibility for manufacturers to meet these standards. To help maximize emission reductions from consumer products, we wish to explore the feasibility of incorporating additional flexibility for manufacturers in complying with the VOC standards. One possible way to achieve added flexibility while reducing emissions involves the use of an ACP program.

For your convenience, I have enclosed an agenda that includes the issues and questions we intend to address. I have also included a preliminary discussion draft of an ACP provision that includes several concepts which we are currently exploring. At this time, the language in the draft ACP document encompasses the concept of regulating a manufacturer's "bubble" of product emissions. However, please note that none of the language or concepts in the draft discussion ACP is concrete at this point. The enclosed dicussion draft ACP is intended only as a catalyst for initiating productive discussions.

Also, please note that the draft ACP language refers to portions of the existing consumer products regulation. Copies of the consumer product regulation will be provided upon request. If you wish to have a copy of this regulation for your reference, please contact Theresa Dade of my staff at (916) 327-1530. If you cannot attend the meeting but would like to participate in the development of the ACP or if you have any questions, please feel free to submit written comments to Peggy Vanicek, Manager of the Solvents Control Section or call her at (916) 322-8283.

Thank you for your consideration. I look forward to reviewing and discussing any ideas you may have on the ACP.

Sincerely,

Ronald A. Friesen, Assistant Chief
Stationary Source Division

Enclosures

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

PETE WILSON, Governor

June 4, 1992

Dear Sir or Madam:

I am requesting your participation in further developing the regulatory concepts and language of an Alternative Compliance Plan (ACP) for use with the existing California statewide consumer products regulation. This will be the second in a series of meetings being conducted by the staff of the Air Resources Board (ARB) to consider public comments on developing the ACP. If we are successful in developing the ACP, we hope to propose a workable ACP provision with appropriate language for our Board's consideration, as part of or in addition to the existing Consumer Products VOC Regulation (Article 2, Consumer Products, Sections 94507-94517, Title 17, California Code of Regulations).

The second consultation meeting will be held at:

State Library and Courts Building
914 Capitol Mall, Room 500
Sacramento, CA 958184

**Tuesday June 30, 1992**
**8:30 AM - 5:00 PM**

As you may know, the Air Resources Board recently adopted several regulations to reduce the emissions of volatile organic compounds (VOCs) from the use of consumer products. These regulations employ traditional command-and-control type VOC limits on 27 consumer product categories. In addition, they also incorporate an Innovative Products provision which allows additional flexibility for manufacturers to meet these standards. To help maximize emission reductions from consumer products, we wish to explore the feasibility of incorporating additional flexibility for manufacturers in complying with the VOC standards. One possible way to achieve added flexibility while reducing emissions involves the use of an ACP program.

For your convenience, I have attached a summary of the issues that were raised at the previous consultation meeting. The summary includes a discussion of each issue that has been prepared by my staff to further elucidate our perspective on each particular issue. I have also attached an an agenda for the upcoming meeting. We are currently in the process of modifying the previous draft ACP to incorporate and address several of the issues raised at the last meeting. I will forward a copy of this new version to you once it is completed or, at the very least, will have it available for your review and comment at the upcoming meeting.

At this time, the language in the draft ACP document currently encompasses the concept of regulating a manufacturer's "bubble" of product emissions. However, please note that none of the language or concepts in any of the drafts of the ACP published to date is concrete at this point. These drafts are intended to serve as a catalyst for initiating fruitful discussions. Also, please note that the draft ACP language refers to portions of the existing consumer products regulation. Copies of the consumer product regulation will be provided upon request. If you wish to have a copy of this regulation for your reference, please contact Theresa Dade of my staff at (916) 327-1530.

If you cannot attend the meeting but would like to participate in the development of the ACP or if you have any questions, please feel free to submit written comments to Peggy Vanicek, Manager of the Solvent Section or call her at (916) 322-8283.

Thank you for your consideration. I look forward to reviewing and discussing any ideas you may have on the ACP.

Sincerely,

Ronald A. Friesen, Assistant Chief
Stationary Source Division

Attachments

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

PETE WILSON, Governor

October 22, 1992

Dear Sir or Madam:

I am requesting your participation in further developing the regulatory concepts and language of a market-based Alternative Compliance Plan (ACP) for use with the existing California statewide consumer products regulation. This will be the third in a series of workshops being conducted by the staff of the Air Resources Board (ARB/Board) to consider public comments on developing the ACP. As indicated at the previous workshops, if we are successful in developing the ACP, we will propose a workable ACP provision with appropriate language for our Board's consideration, as part of, or in addition to, the existing Consumer Products Regulation (Article 2, Consumer Products, Sections 94507-94517, Title 17, California Code of Regulations).

The third workshop will be held at:

Edmund G. "Pat" Brown Building
505 Van Ness Avenue, Auditorium
San Francisco, CA 94102

**Wednesday - November 18, 1992**
**8:30 AM - 5:00 PM**

As you may know, the ARB recently approved regulations to reduce the emissions of volatile organic compounds (VOCs) from the use of consumer products. These regulations employ traditional command-and-control type VOC limits on 27 consumer product categories. In addition to the VOC standards, the regulations also incorporate an Innovative Products Provision which allows additional flexibility for manufacturers to meet these standards. To help maximize emission reductions from consumer products, we are continuing to explore the feasibility of incorporating market-based programs into the regulations. We hope that such market-based programs can be designed to achieve our goals while providing additional flexibility for manufacturers to reduce their VOC emissions.

At the upcoming workshop, we will present several new concepts for your consideration for inclusion in the ACP. These new concepts take into account many of the concerns raised in our two previous consultation meetings. Although we are presenting these new concepts for discussion, you should note that we are still gathering information and comments on the "shrinking bubble" concept which we previously discussed. Prior to the San Francisco workshop, we will forward you a summary of the concepts and discussion items for the workshop. In addition, we will also be forwarding a meeting agenda at that time. Please note that all language and concepts

in the drafts of the ACP, published to date or to be forwarded to you, are draft and for discussion purposes only.

If you cannot attend the meeting but would like to participate in the development of the ACP or if you have any questions, please contact either Peggy Vanicek, Manager, Solvent Control Section, Stationary Source Division at (916) 322-8283, or Floyd Vergara at (916) 327-1503.

Thank you for your consideration. I look forward to reviewing and discussing any ideas you may have on the ACP.

Sincerely,

Ronald A. Friesen
Assistant Chief
Stationary Source Division

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

PETE WILSON, Governor

November 2, 1992

Dear Sir or Madam:

As you may recall, the California Air Resources Board (ARB) provided notice to you on October 22, 1992, of the upcoming third workshop to discuss several new concepts for possible use with the Alternative Compliance Plan (ACP). If successfully developed, the ACP will serve as a supplement to the ARB statewide consumer product regulations.

The material enclosed with this notice is a summary of the items to be discussed at this workshop. In addition, also enclosed is an agenda for the meeting. As a reminder, the workshop will be held at the following address and time:

Edmund G. "Pat" Brown Building
505 Van Ness Avenue, Auditorium
San Francisco, CA 94102

**Wednesday - November 18, 1992**
**8:30 AM - 5:00 PM**

Please note that all language and concepts in the drafts of the ACP published to date are draft and are to be used for discussion purposes only.

If you cannot attend the meeting but would like to participate in the development of the ACP or if you have any questions, please contact either Peggy Vanicek, Manager, Solvent Control Section, Stationary Source Division at (916) 322-8283, or Floyd Vergara, Air Resources Engineer Associate, at (916) 327-1503.

Thank you for your consideration. I look forward to reviewing and discussing any ideas you may have on the ACP.

Sincerely,

Ronald A. Friesen
Assistant Chief
Stationary Source Division

Attachments

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PETE WILSON, Governor

STATE OF CALIFORNIA

**AIR RESOURCES BOARD**
2020 L STREET
P.O. BOX 2815
SACRAMENTO, CA 95812

February 5, 1993

Dear Sir or Madam:

I am requesting your participation in further developing the regulatory concepts and language of a market-based Alternative Compliance Plan (ACP) for use with the existing California statewide consumer products regulation. This will be the fourth in a series of workshops being conducted by the staff of the Air Resources Board (ARB/Board) to consider public comments on developing the ACP. As indicated at the previous workshops, if we are successful in developing the ACP, we will propose a workable ACP provision with appropriate language for our Board's consideration, as part of, or in addition to, the existing Consumer Products Regulation (Article 2, Consumer Products, sections 94507-94517, Title 17, California Code of Regulations).

The fourth workshop will be held on the following date and time and at the following address:

Library and Courts Building
914 Capitol Mall, Room 500
Sacramento, CA 95814

**Wednesday - February 24, 1993**
**10:00 AM - 5:00 PM**

As you may know, the ARB recently adopted regulations to reduce the emissions of volatile organic compounds (VOCs) from the use of consumer products. These regulations employ traditional command-and-control type VOC limits on 27 consumer product categories. In addition to the VOC standards, the regulations also incorporate an Innovative Products Provision which allows additional flexibility for manufacturers to meet these standards for individual products. To help maximize emission reductions from consumer products, we are continuing to explore the feasibility of incorporating broad market-based programs into the regulations. We hope that such market-based programs can be designed to achieve our goals while providing additional flexibility for manufacturers to reduce their VOC emissions.

In the workshops held to date, we presented three emission reduction concepts for the ACP. These concepts include the Maximum Allowable Emissions (MAE), the Shrinking Sales-Weighted Average (SWA) VOC Content, and the Early-Excess Compliance/Delayed Compliance concepts. There was a general concensus at the third workshop that further development of all three concepts into regulatory language should be pursued in future workshops. The purpose of the upcoming workshop will be to present some suggested plain language for discussion to further develop the control elements and associated regulatory elements of the ACP, such as tracking,

enforcement, approval of ACPs, trading of emissions, and reconciliation of shortfalls. Although we are presenting language for discussion to further develop the ACP, you should note that we are still gathering information and comments on any additional concepts or variations on the concepts discussed to date which you may wish to propose.

Enclosed with this notice are the suggested plain language for discussion at the workshop and a tentative agenda. Please note that all language and concepts in the drafts of the ACP, published to date or to be forwarded to you, are draft and for discussion purposes only.

There is no need to notify us if you will be attending the workshop. However, if you will be attending the workshop and you wish to make a presentation, or if you have any questions, please contact either Peggy Vanicek, Manager, Solvents Control Section, Stationary Source Division at (916) 322-8283, or Floyd Vergara, Air Resources Engineering Associate, Solvents Control Section, at (916) 327-1503.

Thank you for your consideration. I look forward to reviewing and discussing any ideas you may have on the ACP.

Sincerely,

Ronald A. Friesen
Assistant Chief
Stationary Source Division

Enclosure

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

PETE WILSON, Governor

May 24, 1993

Dear Sir or Madam:

I am requesting your participation in further developing the regulatory concepts and language of a market-based Alternative Control Plan (ACP) for use with the existing California statewide consumer products regulation. This will be the fifth in a series of workshops being conducted by the staff of the Air Resources Board (ARB/Board) to consider public comments on developing the ACP. As indicated at the previous workshops, if we are successful in developing the ACP, we will propose a workable ACP provision with appropriate language for our Board's consideration to supplement the existing Consumer Products Regulation (Article 2, Consumer Products, sections 94507-94517, Title 17, California Code of Regulations).

The fifth workshop will be held on the following date and time and at the following address:

Air Resources Board
Board Hearing Room (Lower Level)
2020 'L' Street
Sacramento, CA 95814

**Wednesday - June 23, 1993**
**9:30 AM - 5:00 PM**

As you may know, the ARB recently adopted regulations to reduce the emissions of volatile organic compounds (VOCs) from the use of consumer products. These regulations employ traditional command-and-control type VOC limits on 27 consumer product categories. In addition to the VOC standards, the regulations also incorporate an Innovative Products Provision which allows additional flexibility for manufacturers to meet these standards for individual products. To help maximize emission reductions from consumer products, we are continuing to explore the feasibility of incorporating broad market-based programs into the regulations. We hope that such market-based programs can be designed to achieve our goals while providing additional flexibility for manufacturers to reduce their VOC emissions.

The purpose of the upcoming workshop will be to present preliminary draft language for discussion to further develop the control elements and associated regulatory elements of the ACP, such as tracking, enforcement, approval of ACPs, trading of emissions, and reconciliation of shortfalls. Although we are presenting preliminary draft language for discussion, you should note that we are still gathering information and comments on any additional concepts or variations on the concepts discussed to date which you may wish to propose.

Enclosed with this notice are the preliminary draft language for discussion at the workshop and a tentative agenda. Please note that all language and concepts in the drafts of the ACP, published to date or to be forwarded to you, are draft and for discussion purposes only.

There is no need to notify us if you will be attending the workshop. However, if you wish to make a presentation, or if you have any questions, please contact either Peggy Taricco, Manager, Solvents Control Section, Criteria Pollutants Branch, Stationary Source Division at (916) 322-8283, or Floyd Vergara, Air Resources Engineering Associate, Solvents Control Section, Criteria Pollutants Branch, Stationary Source Division, at (916) 327-1503.

Thank you for your consideration. I look forward to reviewing and discussing any ideas you may have on the ACP.

Sincerely,

Dean C. Simeroth, Chief
Criteria Pollutants Branch
Stationary Source Division

Enclosures

STATE OF CALIFORNIA

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

PETE WILSON, Governor

August 24, 1993

Dear Sir or Madam:

This is to inform you of the Air Resources Board's (ARB) continuing efforts to develop the Alternative Control Plan (ACP) and to request your comments on the most recent draft language. As you will recall, the ACP is being developed as a market-based incentives program to supplement the existing statewide regulation to reduce volatile organic compound (VOC) emissions from consumer/commercial products. To develop the ACP, we have held five public workshops to date, and have discussed various concepts and versions of regulatory language.

Enclosed is the latest preliminary draft copy of the ACP. Note that this preliminary draft is not to be quoted or cited. This draft has been mailed to all interested parties who have placed themselves on our ACP mailing list. As with previous drafts, we have attempted to incorporate, as appropriate, the comments on the ACP that we have received from industry and government representatives. In lieu of having another workshop at this time, we are soliciting comments on the draft language from the interested parties on the ACP mailing list. These comments will be used to modify the draft ACP, as appropriate, for further discussion at the next public workshop. The next workshop is tentatively scheduled for mid-October 1993. As such, we would request that you submit any comments you may have by September 8, 1993, so that we can consider them before sending out a modified draft for the public workshop. If you cannot provide your comments by this date, please forward them to the ARB staff as soon as possible, so that we can evaluate them accordingly.

Please forward any comments or questions you may have on the preliminary draft ACP in writing, by telephone, or by facsimile, to: Floyd Vergara, Air Resources Engineering Associate, Solvents Control Section, Criteria Pollutants Branch, Stationary Source Division, Air Resources Board, at (916) 327-1503 or Peggy Taricco, Manager, Solvents Control Section, Criteria Pollutants Branch, Stationary Source Division, at (916) 322-8283, or by facsimile at (916) 445-5023. You may also reply in writing to the following address:

**Attn: Solvents Control Section/ACP**
**Air Resources Board**
**P.O. Box 2815**
**Sacramento, CA 95812-2815**

Thank you for your consideration. I look forward to any comments you may have on the preliminary draft ACP.

Sincerely,

Dean C. Simeroth, Chief
Criteria Pollutants Branch
Stationary Source Division

Enclosure

PETE WILSON, Governor

STATE OF CALIFORNIA

**AIR RESOURCES BOARD**
2020 L STREET
P.O. BOX 2815
SACRAMENTO, CA 95812

October 13, 1993

Manufacturers/Marketers of Consumer Products
Manufacturers/Marketers of Antiperspirants/Deodorants
Manufacturers/Marketers of Aerosol Coatings
Applicable Regulatory Agencies
All Other Interested Parties

Dear Sir or Madam:

I am requesting your participation in further developing the language of the market-based Alternative Control Plan (ACP) regulation for use with the existing California statewide consumer product regulations. The upcoming workshop will be the sixth and possibly final workshop being conducted by the staff of the Air Resources Board (ARB/Board) to consider public comments on developing the ACP. As indicated at the previous workshops, if we are successful in developing the ACP, we will propose a workable ACP regulation with appropriate language for our Board's consideration in March 1994. The Board-approved ACP regulation will supplement the existing Consumer Product Regulations and, if approved by the Board, the aerosol coating products regulation currently being developed by the ARB staff (Articles 1-2, sections 94500-94517, Title 17, California Code of Regulations; Article 3, Aerosol Coating Products [tentative]).

The sixth workshop will be held on the following date and time and at the following address:

Air Resources Board
Board Hearing Room (Lower Level)
2020 'L' Street
Sacramento, CA 95814

**Tuesday - November 9, 1993**
**9:30 AM - 5:00 PM**

As you may know, the ARB has adopted regulations to reduce the emissions of volatile organic compounds (VOCs) from the use of consumer products. These regulations employ traditional command-and-control type VOC limits on 27 consumer product categories. In addition, the ARB staff is currently developing a statewide regulation for aerosol coating products using a similar approach. To help maximize emission reductions, we are developing the market-based ACP regulation for use with the consumer product regulations and the aerosol paint products regulation. We hope that

market-based programs such as the ACP can be designed to achieve our goals while providing additional flexibility and lower costs for manufacturers to reduce their VOC emissions.

Attached with this notice is a tentative agenda for the workshop. As you may recall, we recently published a notice, dated August 24, 1993, in which we requested your comments on the preliminary draft ACP that was enclosed with that notice. We are currently evaluating the comments we have received in response to that notice. Upon completion of our review, we will incorporate the comments, where appropriate, into the draft regulation. The modified draft regulation will then be forwarded to you prior to the workshop for discussion at the meeting. Although we are presenting the modified draft language for discussion at the workshop, you should note that we are still gathering information and comments on any additional language or concepts you may wish to discuss.

There is no need to notify us regarding your attendance of the workshop. However, if you wish to make a presentation, or if you have any questions, please contact either Peggy Taricco, Manager, Solvents Control Section, Criteria Pollutants Branch, Stationary Source Division at (916) 322-8283, or Floyd Vergara, Air Resources Engineering Associate, Solvents Control Section, Criteria Pollutants Branch, Stationary Source Division, at (916) 327-1503.

Thank you for your consideration. I look forward to reviewing and discussing any ideas you may have on the ACP.

Sincerely,

Ronald A. Friesen
Assistant Chief
Stationary Source Division

Attachment

STATE OF CALIFORNIA

PETE WILSON, Governor

**AIR RESOURCES BOARD**
2020 L STREET
P.O. BOX 2815
SACRAMENTO, CA 95812

October 22, 1993

Manufacturers/Marketers of Consumer Products
Manufacturers/Marketers of Antiperspirants/Deodorants
Manufacturers/Marketers of Aerosol Coatings
Applicable Regulatory Agencies
All Other Interested Parties

Dear Sir or Madam:

Attached for your review is the latest draft regulatory language which the Air Resources Board (ARB/Board) staff are proposing for the Alternative Control Plan (ACP). As you may recall, we are currently developing the market-based ACP regulation for our Board's consideration in March 1994. The Board-approved ACP regulation will supplement the existing Consumer Product regulations and, if approved by the Board, the aerosol coating products regulation currently under development by the ARB staff.

As a reminder, we will be discussing this draft of the ACP at the upcoming 6th ACP workshop which we have scheduled at the following time and address:

Air Resources Board
Board Hearing Room (Lower Level)
2020 'L' Street
Sacramento, CA 95814

**Tuesday - November 9, 1993**
**9:30 AM - 5:00 PM**

Please note that, subsequent to this workshop, we will issue the proposed ACP regulation for the formal 45 day public notice and comment period pursuant to the California Administrative Procedure Act.

There is no need to notify us regarding your attendance of the workshop. However, if you wish to make a presentation, or if you have any questions or comments on the draft ACP, please contact either Peggy Taricco, Manager, Solvents Control Section, Criteria Pollutants Branch, Stationary Source Division at (916) 322-8283, or Floyd Vergara, Air Resources Engineering Associate, Solvents Control Section, Criteria Pollutants Branch, Stationary Source Division, at (916) 327-1503.

Thank you for your consideration. I look forward to reviewing and discussing any ideas you may have on the ACP.

Sincerely,

Ronald A. Friesen
Assistant Chief
Stationary Source Division

Attachment

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

PETE WILSON, Governor

January 26, 1994

Manufacturers/Marketers of Consumer Products
Manufacturers/Marketers of Antiperspirants/Deodorants
Manufacturers/Marketers of Aerosol Coatings
Interested Regulatory Agencies
All Other Interested Parties

Dear Sir or Madam:

This is to inform you of the Air Resources Board (ARB/Board) staff's continuing efforts to develop the Alternative Control Plan (ACP) regulation and to request your comments on the enclosed draft regulatory language. We are also requesting your comments on the enclosed chapter describing the draft regulation that will be included in the Staff Report. The Staff Report will provide the technical support for the regulation. The ACP is being developed as a market-based program that will supplement the existing statewide regulations to reduce volatile organic compound (VOC) emissions from consumer/commercial products. The ACP is intended to provide manufacturers with the maximum degree of flexibility in choosing the least-cost route to reformulation of their products. We last discussed the draft ACP at a public workshop on November 9, 1993. We are soliciting your comments to prepare for the next workshop.

As with previous drafts of the ACP regulation, we have reviewed the comments received as a result of the last workshop and have modified the draft language. The modifications have been underlined for your convenience. The enclosed chapter of the Staff Report is intended to help the reader understand the purpose and elements of the draft ACP regulation.

Please also note that we have removed all references to aerosol paints in the enclosed draft ACP regulation. This was necessary because the aerosol paints regulation will not be considered by the Board at the same time as the ACP but will be considered later in the year. As such, the ACP regulation would not be approvable by the Office of Administrative Law (OAL) if it contains references to a regulation which has not yet been adopted at the time of the ACP's adoption. However, we do anticipate amending the ACP regulation to include aerosol paints on schedule with the development of the aerosol paints regulation.

To date, we have held six public workshops in which we discussed various concepts and versions of regulatory language with the workshop

participants. We intend to hold a seventh workshop in mid-March 1994. We anticipate presenting a proposed ACP regulation to the Board at its July 1994 hearing. Prior to this, the Staff Report will be completed and provided to the public for comment.

The current draft revised ACP regulation and chapter describing the regulation are being provided to all interested parties on our ACP mailing list. We request that you submit any comments you may have on the draft ACP or the chapter by February 14, 1994 so that we can consider them before sending out modified drafts for the next public workshop. If you would prefer to submit oral comments or if you have any questions, please contact Floyd Vergara, of my staff, at (916) 327-1503. If you have any written comments or questions, please provide them to Peggy Taricco, Manager, Solvents Control Section by facsimile at (916) 445-5023, or at the following address:

**Peggy Taricco, Manager**
**Solvents Control Section/ACP Comments**
**Stationary Source Division**
**Air Resources Board**
**P.O. Box 2815**
**Sacramento, CA 95812-2815**

Thank you for your consideration. We look forward to continuing to work with you on the draft ACP.

Sincerely,

Genevieve Shiroma

Genevieve A. Shiroma, Chief
Toxic Air Contaminant
Identification Branch

Enclosures

cc: Floyd Vergara, ARB
Peggy Taricco, ARB

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

PETE WILSON, Governor

March 28, 1994

Manufacturers/Marketers of Consumer Products
Manufacturers/Marketers of Antiperspirants/Deodorants
Manufacturers/Marketers of Aerosol Coatings
Interested Regulatory Agencies
All Other Interested Parties

Dear Sir or Madam:

This is to inform you of a workshop that will be conducted by the Air Resources Board's (ARB) staff on April 19, 1994, as part of a continuing effort to develop the Alternative Control Plan (ACP) regulation. The ACP is being developed as a market-based, emissions "bubbling" program that will supplement the existing statewide regulation to reduce volatile organic compound (VOC) emissions from consumer/commercial products. The ACP is intended to help manufacturers minimize their compliance costs by providing them with additional product formulation flexibility. We have scheduled this next workshop, which will be the seventh conducted to date, at the following time and address:

Library and Courts Building
914 Capitol Mall, Room 500
Sacramento, CA 95814

**Tuesday - April 19, 1994**
**9:30 AM - 5:00 PM**

Enclosed for your review are the draft ACP regulation and accompanying draft Staff Report that will be discussed at this workshop. An agenda will be available on the day of the workshop. An earlier version of the draft ACP was last discussed at the sixth public workshop on November 9, 1993. On January 26, 1994, we released a revised draft of the ACP regulation and a chapter from the draft Staff Report for written comments. The draft ACP language that accompanies this notice incorporates some of the comments we received since January 26, 1994. These changes have been underlined for your convenience. Similarly, chapter V of the enclosed draft Staff Report is identical to the chapter released previously, except for the addition of a new subsection F (Recordkeeping) and two new explanatory paragraphs at the end of subsection G (Violations).

There is no need to notify us regarding your plans to attend the workshop. However, if you wish to make a presentation or if you have any questions, please contact Mr. Floyd Vergara, Air Resources Engineering Associate, Solvents Control Section, at (916) 327-1503. If you cannot attend the workshop but would like to provide comments, you can contact

Mr. Vergara for verbal comments or provide written comments to the following address:

Ms. Peggy Taricco, Manager
Solvents Control Section/ACP Comments
Stationary Source Division
Air Resources Board
P.O. Box 2815
Sacramento, CA 95812-2815

Thank you for your consideration. We look forward to continuing to work with you on the draft ACP regulation and the draft Staff Report.

Sincerely,

Genevieve Shiroma

Genevieve A. Shiroma, Chief
Toxic Air Contaminant
Identification Branch

Enclosures

STATE OF CALIFORNIA—CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
PETE WILSON, Governor

AIR RESOURCES BOARD
2020 L STREET
P.O. BOX 2815
SACRAMENTO, CA 95814-2815

June 30, 1994

Manufacturers/Marketers of Consumer Products
Interested Regulatory Agencies
All Other Interested Parties

Dear Sir or Madam:

This is to inform you of the Air Resources Board (ARB/Board) staff's continuing efforts to develop the Alternative Control Plan (ACP) regulation and to request your comments on the enclosed draft regulatory language. The ACP is being developed as a market-based program that will supplement the existing statewide regulations to reduce volatile organic compounds (VOC) emissions from consumer/commercial products. The ACP is intended to provide manufacturers with the maximum degree of flexibility in choosing the least-cost route to reformulation of their products.

To date, we have held seven public workshops in which we discussed various concepts and versions of regulatory language with the workshop participants. We last discussed the draft ACP regulation at a public workshop on April 19, 1994. Based on the comments received as a result of that workshop, the draft ACP regulation has been revised. We are soliciting your written comments on this latest ACP regulation to help us prepare our recommendations on this draft regulation to the Board in late September 1994.

Please note that the draft ACP regulation enclosed with this letter has been modified based on comments received since the last public workshop. The majority of modifications have been made to delete extraneous language and to clarify the intent of the provisions. However, there are three areas in the regulation where we are proposing more substantial changes. For your convenience, these proposed changes are briefly summarized below:

1. Section 94543(b)(2) - "Requirements and Process for Approval of an ACP"

The new subsection 94543(b)(2) was added to allow the Executive Officer to deny approval of a new ACP application if the applicant has shown a recurring pattern of noncompliance with previous or existing ACPs or with the requirements of the consumer products regulation.

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2. Section 94551(b)(4) - "Cancellation of an ACP"

Similar to the proposed change discussed previously, section 94551(b)(4) was clarified to allow the Executive Officer to cancel an ACP if the responsible ACP party has shown a recurring pattern of noncompliance and has not shown that the necessary steps to prevent noncompliance have been taken. This new language replaces the previous language which required the cancellation of an ACP in all situations in which 4 or more violations have occurred. We believe the modified provisions in sections 94543(b)(2) and 94551(b)(4) are more flexible than the previous language, while ensuring that those manufacturers who have failed to demonstrate their good faith effort in complying with the regulations are prevented from taking advantage of the ACP program.

3. Section 94546(f) and (g) - "Violations"

Section 94546(f) was drafted to clarify how violations based on an exceedance of the ACP Limit are to be determined in cases where the responsible ACP party has failed to provide required information for at least a portion of a compliance period. The previous language did not clearly specify how emission exceedances were to be determined in these cases.

Section 94546(g) was modified from previous language in response to comments provided by the U.S. Environmental Protection Agency (USEPA). The USEPA stated that the previous language for calculating the number of violation-days did not meet their legal requirements under the federal Clean Air Act for enforceability and for ensuring sufficient deterrence to noncompliance. The new proposed language provides manufacturers with the option of choosing a calculational methodology for determining the number of emissions limit violations based on the absolute size of an emissions exceedance, rather than the ratio of the exceedance to the emissions limit in the previous method.

To meet the USEPA's requirements, we are proposing language which is based on the current language in the Health and Safety Code (HSC) (i.e., any emissions limit exceedance would be a single, separate day of violation for each day in the compliance period). It would specify the HSC language as the default case, but would allow manufacturers who fully comply with all recordkeeping/reporting requirements the option to determine the number of emission violations using a specified increment.

Manufacturers who have exceeded their emission limits and have not fully complied with all reporting/recordkeeping requirements would be subject to the default case.

This approach is modeled after the penalty provisions specified in the South Coast Air Quality Management District's (SCAQMD) Regional Clean Air Incentives Market (RECLAIM) program. We believe the proposed revised language serves as an effective deterrence to large emission exceedances, while still providing a specific mechanism that would ensure a certain, fair, and emissions-proportional basis for the treatment of relatively small exceedances.

The current draft revised ACP regulation is being provided to all interested parties on our ACP mailing list. We request that you submit any comments you may have on the draft ACP regulation by **July 20, 1994** so that we can consider them and make appropriate revisions before the proposed ACP regulation is published as part of the formal 45-day comment period prior to the September 1994 hearing. If you would prefer to submit oral comments or if you have any questions, please contact Mr. Floyd Vergara of my staff, at (9160 327-1503. If you have any written comments or questions, please provide them to Ms. Peggy Taricco, Manager, Solvents Control Section, by facsimile at (916) 445-5023 or at the following address:

**Ms. Peggy Taricco, Manager**
**Solvents Control Section/ACP Comments**
**Stationary Source Division**
**Air Resources Board**
**P.O. Box 2815**
**Sacramento, CA 95812-2815**

Thank you for your consideration. We look forward to continuing to work with you on the draft ACP regulation.

Sincerely,

Genevieve Shiroma, Chief
Toxic Air Contaminant Identification Branch

Enclosure

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# Appendix E

ACP Workshop Attendees

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# 1ST ACP WORKSHOP ATTENDEES
(APRIL 3, 1992)

| Attendee | Company |
|---|---|
| Robert Olivero | S. C. Johnson Wax |
| Janet Martinez | The Clorox Co. |
| Eileen Moyer | Reckitt and Colman Inc. |
| Barbara Popek | Lehn and Fink |
| Bruce Howard | The Aerosol Group |
| Phil Geis | Procter and Gamble |
| Doug Raymond | Specialties Div. of Sherwin Williams |
| Bob Graham | Specialties Div. of Sherwin Williams |
| Tom Donegan | CTFA |
| Steve Sanchez | WAIB |
| Walter Lim | Aerosol Services |
| Kevin Loftus | The Gillette Company |
| George Cook | Randlett Associate |
| Laurie Carrigan | Randlett Associate |
| Mike Thompson | CSMA |
| Dan Knuth | 3M |
| Randy Ward | Cal. Env. Advocate/Estee Lauder |
| Jim Mattesich | CTFA |
| Madelyn Harding | Sherwin-Williams |
| Johm Kusz | Safety-Kleen |
| John Ungvarsky | USEPA, Region IX |

2ND ACP WORKSHOP ATTENDEES
(JUNE 30, 1992)

| Attendee | Company |
|---|---|
| Robert Olivero | S. C. Johnson Wax |
| Janet Martinez | The Clorox Co. |
| Lin Stripling | Chevron Chemical |
| Charlie Duckworth | Chemsico, Inc. |
| Hugh W. Ellsgesser | Consumer Alert |
| Richard Quatrale | Cosmair/L'Oreal |
| Bryan Ruble | Drackett |
| Howard Baker | ICMAD |
| Paul Robinson | Aeropres Corp. |
| David Waddell | Helene Curtis |
| Bill Lane | Scott's Liquid Gold, Inc. |
| B.L. Jennison | BAAQMD |
| Mike Lorang | Steiner Co. |
| Eileen Moyer | Reckitt and Colman Inc. |
| Barbara Popek | Lehn and Fink |
| Bruce Howard | The Aerosol Group |
| Phil Geis | Procter and Gamble |
| Doug Raymond | Specialties Div. of Sherwin Williams |
| Bob Graham | Specialties Div. of Sherwin Williams |
| Tom Donegan | CTFA |
| Richard Sedlak | SDA |
| Steve Sanchez | WAIB |
| Walter Lim | Aerosol Services |
| Kevin Loftus | The Gillette Company |
| George Cook | Randlett Associate |
| Mike Thompson | CSMA |
| Dan Knuth | 3M |
| Randy Ward | Cal. Env. Advocate/Estee Lauder |
| Jim Mattesich | CTFA |
| John Kusz | Safety-Kleen |
| Ray Miles | WD-40 |
| John Ungvarsky | USEPA, Region IX |
| Dave Hodges | USEPA, Region IX |
| Constance Huffman | Retired |
| Greg Halcomb | KMS Research, Inc. |
| Mohsen Nazemi | SCAQMD |
| Roye Jackson | ARB/Compliance Division |
| Scott Pattison | Consumer Alert |
| Tom Probst | Seaquist Valve |
| George Allen | CTFA |

3RD ACP WORKSHOP ATTENDEES
(NOVEMBER 18, 1992)

| Attendee | Company |
|---|---|
| Janet Martinez | The Clorox Co. |
| Bruce Varner | Helene Curtis |
| Richard Quatrale | Cosmair/L'Oreal |
| Roger Vanderlaan | Sprayon |
| Bryan Ruble | Drackett |
| Ed Apple | S.C. Johnson |
| Kelly Wee | BAAQMD |
| Mike Lorang | Steiner Co. |
| Eileen Moyer | Reckitt and Colman Inc. |
| Barbara Popek | Lehn and Fink |
| Phil Barroca | South Coast AQMD |
| James Skiles | CTFA |
| Bill Metzger | Chemisco |
| Bruce Howard | The Aerosol Group |
| Phil Geis | Procter and Gamble |
| Louie Gonzales | Safeway, Inc. |
| Richard Sedlak | SDA |
| Walter Lim | Aerosol Services |
| Ken Lim | Aerosol Services |
| Mike Thompson | CSMA |
| Dan Knuth | 3M |
| Randy Ward | Cal. Env. Advocate/Estee Lauder |
| Ray Miles | WD-40 |
| Dave Hodges | USEPA, Region IX |
| Roye Jackson | ARB/Compliance Division |
| Cheryl Griffin | ARB/Compliance Division |
| Allan Roundy | ARB/Compliance Division |
| Tom Probst | Seaquist Valve |
| Frank Goldberg | Technical Concepts |
| Heidi Green | Armor All |
| Keith Moorman | DeMert and Dougherty |
| Carol Kuczoba | Environmental Health Network |

# 4TH ACP WORKSHOP ATTENDEES
(FEBRUARY 24, 1993)

| Attendee | Company |
|---|---|
| Phil Geis | Procter and Gamble |
| John Wood | Dow Brands |
| Barbara Popek | L&F Products |
| Janet Martinez | The Clorox Co. |
| Bryan Ruble | Drackett |
| Phil Barroca | South Coast AQMD |
| Heidi Green | Armor All |
| Lin Stripling | Chevron Chemical |
| Dave Hodges | USEPA, Region IX |
| Eileen Moyer | Reckitt and Colman, Inc. |
| Madelyn Harding | Sherwin Williams |
| Mike Lorang | Steiner Co., Inc. |
| Gail Briggs Young | Orchard Supply Hardware |
| Richard Sedlak | Soap and Detergents Assocaition |
| Sally Barron | ARB/Compliance Division |
| R. Neil Nipper | ARB/Compliance Division |
| Roye Jackson | ARB/Compliance Division |
| John Kusz | Safety-Kleen Corp. |
| Joanna Chen | Safeway, Inc. |
| Randy Ward | Estee Lauder |
| Tim Espasandin | Orchard Supply Hardware |
| Jim Skiles | CTFA |
| Mike Thompson | CSMA |
| Allan Roundy | ARB/Compliance Division |
| Maria Diaz | Latham and Watkins |
| Joyce Graf | CTFA |
| Tom Probst | Seaquist Valve/WAIB |
| Jim Mattesich | Livingston and Mattesich |
| Dan Knuth | 3M |

5TH ACP WORKSHOP ATTENDEES
(JUNE 23, 1993)

| Attendee | Company |
|---|---|
| Janet Martinez | The Clorox Co. |
| Eileen Moyer | Reckitt and Colman Inc. |
| Bryab Ruble | S.C. Johnson Wax |
| Bruce Howard | The Aerosol Group |
| Phil Geis | Procter and Gamble |
| Doug Raymond | Specialties Div. of Sherwin Williams |
| Bob Graham | Specialties Div. of Sherwin Williams |
| Tom Donegan | CTFA |
| Steve Sanchez | WAIB |
| Walter Lim | Aerosol Services |
| Kevin Loftus | The Gillette Company |
| Mike Thompson | CSMA |
| Dan Knuth | 3M |
| Randy Ward | Cal. Env. Advocate/Estee Lauder |
| Jim Mattesich | CTFA |
| Dave Hodges | USEPA, Region IX |
| Phil Barroca | South Coast AQMD |

6TH ACP WORKSHOP ATTENDEES
(NOVEMBER 9, 1993)

| Attendee | Company |
|---|---|
| Janet Martinez | The Clorox Co. |
| Bryan Rublé | S.C. Johnson Wax |
| Doug Raymond | Specialties Div. of Sherwin Williams |
| Barry Ziman | CSMA |
| Dan Knuth | 3M |
| Randy Ward | Cal. Env. Advocate/Estee Lauder |
| Steven Laczynski | Estee-Lauder |
| Eve Stromquist | The Flecto Co. |
| Susan Smith | Plasti-Kote |
| R. Neil Nipper | ARB/Compliance Division |
| Erik Beck | USEPA, Region IX |
| Prabhleen S. Gill | Sun Deep Cosmetics |

7TH ACP WORKSHOP ATTENDEES
(APRIL 19, 1994)

| Attendee | Company |
|---|---|
| Frank J. Goldberg | Technical Concepts L.P. |
| Bryan Ruble | S.C. Johnson Wax |
| Janet Martinez | The Clorox Co. |
| Eileen Moyer | Reckitt and Colman Inc. |
| Doug Raymond | Specialties Div. of Sherwin Williams |
| Tom Donegan | CTFA |
| Matt Dustin | California Paint Council |
| Mike Thompson | CSMA |
| Dan Knuth | 3M |
| R. Neil Nipper | ARB/CD |
| Paula Barraza | ARB/CD |
| Randy Ward | Cal. Env. Advocate/Estee Lauder |
| Jim Mattesich | CTFA |
| Reza Mahdavi | ARB/RD |
| Erik Beck | USEPA/Region IX |

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# Appendix F

Preliminary Sample ACP Plan presented at April 19, 1994 workshop

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**Project Description:** Applicant is a medium-sized manufacturer. Three-product ACP plan will be operational from 1/1/95 to 1/1/98. By 1/1/98, all three products will be in compliance with the applicable VOC standards. The applicant will not be purchasing Surplus Reduction Credits as part of its overall ACP plan. Applicant will be using a combination of direct invoice records (drop shipments) and third-party market surveying services to provide Enforceable Sales records. The applicant wants a 1-year reporting (i.e., compliance) period, starting on January 1st of each year after approval of the ACP.

Table A. ACP Responsible Party Information

| Applicant Information | | Reference Section(s) |
|---|---|---|
| - contact person<br>- phone number<br>- company name<br>- business address<br>- mailing address (if different from above) | Mr. John Doe<br>(222) 444-5555 x-66<br>Universal Products<br>1234 Compliance Way<br>Anywhere, CA 95818 | 94543(a)(1) |
| Is the applicant a small business or a one-product business? | No | 94543(a)(2)<br>94542(a)(19)<br>94542(a)(29) |

Table B. ACP Products Information

| Product No. | Exact Brand Name | available flavors | available scents | available colors | available sizes | Reference Section(s) |
|---|---|---|---|---|---|---|
| 1a<br>1b | A-1 Engine Degreaser (aerosol) | N/A | N/A | N/A | 16 oz<br>32 oz | 94543(a)(3) |
| 2a<br>2b | Acme Carb and Choke Cleaner (aerosol) | N/A | N/A | N/A | 16 oz<br>32 oz | 94543(a)(3) |
| 3a<br>3b | "I Can See Clearly Now" Glass Cleaner (liquid) | N/A | Ammonia<br>Lemon | Blue<br>Clear | 24 oz<br>24 oz | 94543(a)(3) |

| Responsible Party Identification Number: For ARB Use Only | ACP001 |
|---|---|

Table C. Determination of Enforceable Sales

| Product No. | Exact Brand Name | available sizes | Calif. Sales, No. of units (1) | Oz/Unit (2) | Oz/Lb (3) | Enforceable Calif. Sales, Pounds/Yr (4) = (1) x (2) / (3) | Reference Section(s) |
|---|---|---|---|---|---|---|---|
| 1a<br>1b | A-1 Engine Degreaser (aerosol) | 16 oz<br>32 oz | 250,000<br>375,000 | 16<br>32 | 16<br>16 | 250,000<br>750,000 | 94543(7) |
| 2a<br>2b | Acme Carb and Choke Cleaner (aerosol) | 16 oz<br>32 oz | 250,000<br>375,000 | 16<br>32 | 16<br>16 | 250,000<br>750,000 | 94543(7) |
| 3a<br>3b | "I Can See Clearly Now" Glass Cleaner (liquid) | 24 oz<br>24 oz | 333,333<br>333,000 | 24<br>24 | 16<br>16 | 500,000<br>500,000 | 94543(7) |

Table D. Comparison of ACP Product Enforceable Sales To Gross California Sales

| Product No. | Exact Brand Name | available sizes | Enforceable CA Sales, lb/yr | National Sales lbs/yr | Gross CA Sales, 11% of National Sales | 75% Gross CA Sales lbs/yr | Meets 75% Gross Sales Reqmt? | Reference Section(s) |
|---|---|---|---|---|---|---|---|---|
| 1a<br>1b | A-1 Engine Degreaser (aerosol) | 16 oz<br>32 oz | 250,000<br>750,000 | 2,400,000<br>8,500,000 | 264,000<br>935,000 | 198,000<br>701,250 | Yes<br>Yes | 94543(4) |
| 2a<br>2b | Acme Carb and Choke Cleaner (aerosol) | 16 oz<br>32 oz | 250,000<br>750,000 | 2,400,000<br>8,500,000 | 264,000<br>935,000 | 198,000<br>701,250 | Yes<br>Yes | 94543(4) |
| 3a<br>3b | "I Can See Clearly Now" Glass Cleaner (liquid) | 24 oz<br>24 oz | 500,000<br>500,000 | 4,850,000<br>4,850,000 | 533,500<br>533,500 | 400,125<br>400,125 | Yes<br>Yes | 94543(4) |

Note: (1) See Appendix A for demonstration provided to Executive Officer dated December 1, 1994 for validation of Enforceable Sales and Gross California Sales and information on provider of Enforceable Sales data.

| Responsible Party Identification Number: For ARB Use Only | ACP001 |
|---|---|

Table E. ACP Operational Plan - Projected VOC Content

| Product No. | Exact Brand Name | available sizes | Current VOC Content, wt% (E)(1) | 1996 VOC Content, wt% wt% | 1997 VOC Content, wt% | 1998 VOC Content, wt% | 1999 VOC Content, wt% | Reference Section(s) |
|---|---|---|---|---|---|---|---|---|
| 1a<br>1b | A-1 Engine Degreaser (aerosol) | 16 oz<br>32 oz | 75<br>75 | 75<br>75 | 75<br>75 | 50<br>50 | 50<br>50 | 94543(7) |
| 2a<br>2b | Acme Carb and Choke Cleaner (aerosol) | 16 oz<br>32 oz | 75<br>75 | 50<br>50 | 50<br>50 | 50<br>50 | 50<br>50 | 94543(7) |
| 3a<br>3b | "I Can See Clearly Now" Glass Cleaner (liquid) | 24 oz<br>24 oz | 8<br>8 | 5<br>5 | 5<br>5 | 5<br>5 | 5<br>5 | 94543(7) |

Table F. ACP Operational Plan - Projected Enforceable Sales

| Product No. | Exact Brand Name | available sizes | Current Enf. Sales lb/yr | 1996 Enf. Sales, lb/yr | 1997 Enf. Sales, lb/yr | 1998 Enf. Sales, lb/yr | 1999 Enf. Sales, lb/yr | Reference Section(s) |
|---|---|---|---|---|---|---|---|---|
| 1a<br>1b | A-1 Engine Degreaser (aerosol) | 16 oz<br>32 oz | 250,000<br>750,000 | 275,000<br>775,000 | 300,000<br>800,000 | 325,000<br>825,000 | 350,000<br>850,000 | 94543(7) |
| 2a<br>2b | Acme Carb and Choke Cleaner (aerosol) | 16 oz<br>32 oz | 250,000<br>750,000 | 275,000<br>775,000 | 300,000<br>800,000 | 325,000<br>825,000 | 350,000<br>850,000 | 94543(7) |
| 3a<br>3b | "I Can See Clearly Now" Glass Cleaner (liquid) | 24 oz<br>24 oz | 500,000<br>500,000 | 525,000<br>525,000 | 550,000<br>550,000 | 575,000<br>575,000 | 600,000<br>600,000 | 94543(7) |

Comments:

| Responsible Party Identification Number: For ARB Use Only | ACP001 |
|---|---|

## 1995 ACP Emissions

| Product | Calculation (Per Section 94542(a)) [VOC Content] x [Enforceable CA Sales] / 100 | ACP Emissions |
|---|---|---|
| 1a | (75) x 250,000 / 100 | 187,500 |
| 1b | (75) x 750,000 / 100 | 562,500 |
| 2a | (75) x 250,000 / 100 | 187,500 |
| 2b | (75) x 750,000 / 100 | 562,500 |
| 3a | (8) x 500,000 / 100 | 40,000 |
| 3b | (8) x 500,000 / 100 | 40,000 |

TOTAL 1995 ACP EMISSIONS = 1,580,000

| Responsible Party Identification Number: For ARB Use Only | ACP001 |
|---|---|

## 1995 ACP Limit

| Product | Calculation (Per Section 94542(a)) [ACP Standard] x [Enforceable CA Sales] / 100 | ACP Limit |
|---|---|---|
| 1a | (75) x 250,000 / 100 | 187,500 |
| 1b | (75) x 750,000 / 100 | 562,500 |
| 2a | (75) x 250,000 / 100 | 187,500 |
| 2b | (75) x 750,000 / 100 | 562,500 |
| 3a | (8) x 500,000 / 100 | 40,000 |
| 3b | (8) x 500,000 / 100 | 40,000 |

TOTAL 1995 ACP LIMIT = 1,580,000

| Responsible Party Identification Number: For ARB Use Only | ACP001 |
|---|---|

## 1996 ACP Emissions

| Product | Calculation (Per Section 94542(a)) $\frac{[\text{VOC Content}] \times [\text{Enforceable CA Sales}]}{100}$ | ACP Emissions |
|---|---|---|
| 1a | $\frac{(75) \times 275000}{100}$ | 206,250 |
| 1b | $\frac{(75) \times 775,000}{100}$ | 581,250 |
| 2a | $\frac{(50) \times 275,000}{100}$ | 137,500 |
| 2b | $\frac{(50) \times 775,000}{100}$ | 387,500 |
| 3a | $\frac{(5) \times 525,000}{100}$ | 26,250 |
| 3b | $\frac{(5) \times 525,000}{100}$ | 26,250 |

TOTAL 1996 ACP EMISSIONS = 1,365,000

| Responsible Party Identification Number: For ARB Use Only | ACP001 |
|---|---|

## 1996 ACP Limit

| Product | Calculation (Per Section 94542(a)) [ACP Standard] x [Enforceable CA Sales] / 100 | ACP Limit |
|---|---|---|
| 1a | (50) x 275000 / 100 | 137,500 |
| 1b | (50) x 775,000 / 100 | 387,500 |
| 2a | (75) x 275,000 / 100 | 206,250 |
| 2b | (75) x 775,000 / 100 | 581,250 |
| 3a | (6) x 525,000 / 100 | 31,500 |
| 3b | (6) x 525,000 / 100 | 31,500 |

TOTAL 1996 ACP LIMIT = 1,375,500

| Responsible Party Identification Number: For ARB Use Only | ACP001 |
|---|---|

## 1997 ACP Emissions

| Product | Calculation (Per Section 94542(a)) [VOC Content] x [Enforceable CA Sales] / 100 | ACP Emissions |
|---|---|---|
| 1a | (75) x300,000 / 100 | 225,00 |
| 1b | (75) x 800,000 / 100 | 600,00 |
| 2a | (50) x 300,000 / 100 | 150,000 |
| 2b | (50) x 800,000 / 100 | 400,000 |
| 3a | (5) x 550000 / 100 | 27,500 |
| 3b | (5) x 550,000 / 100 | 27,500 |

TOTAL 1997 ACP EMISSIONS = 1,430,000

| Responsible Party Identification Number: For ARB Use Only | ACP001 |
|---|---|

## 1997 ACP LIMIT

| Product | Calculation (Per Section 94542(a)) [ACP Standard] x [Enforceable CA Sales] / 100 | ACP Limit |
|---|---|---|
| 1a | (50) x300,000 / 100 | 150,00 |
| 1b | (50) x 800,000 / 100 | 400,00 |
| 2a | (75) x 300,000 / 100 | 225,000 |
| 2b | (75) x 800,000 / 100 | 600,000 |
| 3a | (6) x 550000 / 100 | 33,000 |
| 3b | (6) x 550,000 / 100 | 33,000 |

TOTAL 1997 ACP Limit = 1,441,000

| Responsible Party Identification Number: For ARB Use Only | ACP001 |
|---|---|

## 1998 ACP Emissions

| Product | Calculation (Per Section 94542(a)) $\frac{[\text{VOC Content}] \times [\text{Enforceable CA Sales}]}{100}$ | ACP Emissions |
|---|---|---|
| 1a | $\frac{(50) \times 325{,}000}{100}$ | 162,500 |
| 1b | $\frac{(50) \times 825{,}000}{100}$ | 412,500 |
| 2a | $\frac{(50) \times 325{,}000}{100}$ | 162,500 |
| 2b | $\frac{(50) \times 825{,}000}{100}$ | 412,500 |
| 3a | $\frac{(5) \times 575{,}000}{100}$ | 28,750 |
| 3b | $\frac{(5) \times 575{,}000}{100}$ | 28,750 |
| TOTAL 1998 ACP EMISSIONS = | | 1,207,500 |

| Responsible Party Identification Number: For ARB Use Only | ACP001 |
|---|---|

## 1998 ACP Limit

| Product | Calculation (Per Section 94542(a)) [ACP Standard] x [Enforceable CA Sales] / 100 | ACP Limit |
|---|---|---|
| 1a | (50) x 325,000 / 100 | 162,500 |
| 1b | (50) x 825,000 / 100 | 412,500 |
| 2a | (50) x 325,000 / 100 | 243,750 |
| 2b | (50) x 825,000 / 100 | 618,750 |
| 3a | (6) x 575,000 / 100 | 34,500 |
| 3b | (6) x 575,000 / 100 | 34,500 |

TOTAL 1998 ACP LIMIT = 1,506,500

| Responsible Party Identification Number: For ARB Use Only | ACP001 |
|---|---|

## 1999 ACP Emissions

| Product | Calculation (Per Section 94542(a)) $\frac{\text{[VOC Content] x [Enforceable CA Sales]}}{100}$ | ACP Emissions |
|---|---|---|
| 1a | $\frac{(50) \times 350{,}000}{100}$ | 175,000 |
| 1b | $\frac{(50) \times 850{,}000}{100}$ | 425,000 |
| 2a | $\frac{(50) \times 350{,}000}{100}$ | 175,500 |
| 2b | $\frac{(50) \times 850{,}000}{100}$ | 425,000 |
| 3a | $\frac{(5) \times 600{,}000}{100}$ | 30,000 |
| 3b | $\frac{(5) \times 600{,}000}{100}$ | 30,000 |

TOTAL 1999 ACP EMISSIONS = 1,260,000

| Responsible Party Identification Number: For ARB Use Only | ACP001 |
|---|---|

## 1999 ACP Limit

| Product | Calculation (Per Section 94542(a)) [ACP Standard] x [Enforceable CA Sales] / 100 | ACP Limit |
|---|---|---|
| 1a | (50) x 350,000 / 100 | 175,000 |
| 1b | (50) x 850,000 / 100 | 425,000 |
| 2a | (75) x 350,000 / 100 | 262,500 |
| 2b | (75) x 850,000 / 100 | 637,500 |
| 3a | (6) x 600,000 / 100 | 36,000 |
| 3b | (6) x 600,000 / 100 | 36,000 |

TOTAL 1999 ACP LIMIT = 1,572,000

| Responsible Party Identification Number: For ARB Use Only | ACP001 |
|---|---|

Table G. ACP Operational Plan - Projected ACP Emissions

| Product No. | Current ACP Emissions, lb/yr | 1996 ACP Emissions, lb/yr | 1997 ACP Emissions, lb/yr | 1998 ACP Emissions, lb/yr | 1999 ACP Emissions, lb/yr | Reference Section(s) |
|---|---|---|---|---|---|---|
| 1a<br>1b | 187,500<br>562,500 | 206,250<br>581,250 | 225,000<br>600,000 | 162,500<br>412,500 | 175,000<br>425,000 | 94543(7) |
| 2a<br>2b | 187,500<br>562,500 | 137,500<br>387,500 | 150,000<br>400,000 | 162,500<br>412,500 | 175,000<br>425,000 | 94543(7) |
| 3a<br>3b | 40,000<br>40,000 | 26,250<br>26,250 | 27,500<br>27,500 | 28,750<br>28,750 | 30,000<br>30,000 | 94543(7) |
| Total | 1,580,000 | 1,365,000 | 1,430,000 | 1,207,500 | 1,260,000 | 94543(7) |

Table H. ACP Operational Plan - Projected ACP Limits

| Product No. | Current ACP Limit, lb/yr | 1996 ACP Emissions, lb/yr | 1997 Enf. Sales, lb/yr | 1998 Enf. Sales, lb/yr | 1999 Enf. Sales, lb/yr | Reference Section(s) |
|---|---|---|---|---|---|---|
| 1a<br>1b | 187,500<br>562,500 | 137,500<br>387,500 | 150,000<br>400,000 | 162,500<br>412,500 | 175,000<br>425,000 | 94543(7) |
| 2a<br>2b | 187,500<br>562,500 | 206,250<br>581,250 | 225,000<br>600,000 | 243,750<br>618,750 | 262,500<br>637,500 | 94543(7) |
| 3a<br>3b | 40,000<br>40,000 | 31,500<br>31,500 | 33,000<br>33,000 | 34,500<br>34,500 | 36,000<br>36,000 | 94543(7) |
| Total | 1,580,000 | 1,375,500 | 1,441,000 | 1,506,500 | 1,572,000 | 94543(7) |

Table I. Equivalency Demonstration - Comparison of Projected ACP Emissions to ACP Limits

| ACP Limit - Emissions | Current | 1996 | 1997 | 1998 | 1999 | Ref Section(s) |
|---|---|---|---|---|---|---|
| | 0 | 10,500 (credit) | 11,000 (credit) | 299,000 (credit) | 312,000 (credit) | 94543(7) |

| Responsible Party Identification Number: For ARB Use Only | ACP001 |
|---|---|

Table J. Summary of Reconciliation of Shortfalls Plans

| Projected Shortfalls Up To | To Be Reconciled By |
|---|---|
| 0% of ACP Limit (ACP Emissions = ACP Limit) | Monthly reports to ARB outlining steps to avoid shortfall occurrence |
| 5% of ACP Limit (ACP Emissions = 1.05 x ACP Limit) | |
| 10% of ACP Limit (ACP Emissions = 1.10 x ACP Limit) | |
| 15% of ACP Limit (ACP Emissions = 1.15 x ACP Limit) | |
| 20% of ACP Limit (ACP Emissions = 1.20 x ACP Limit) | |
| 25% of ACP Limit (ACP Emissions = 1.25 x ACP Limit) | |
| 50% of ACP Limit (ACP Emissions = 1.50 x ACP Limit) | |
| 75% of ACP Limit (ACP Emissions = 1.75 x ACP Limit) | |
| 100% or more of ACP Limit (ACP Emissions $\geq$ 2.0 x ACP Limit) | |

Potential Reconciliation Options To Consider:

(1) product recalls
(2) stop shipments to California
(3) higher pricing on noncomplying products/lowered pricing on over complying products
(4) non-mandated add-on controls for stationary facilities statewide

| Responsible Party Identification Number: For ARB Use Only | ACP001 |
|---|---|

Additional Information Provided in Application

(1) Justification for small business claim, if applicable

(2) Required information on firms to provide Enforceable Sales records

(3) Justification/validation of Enforceable Sales Records, Gross California Sales

(4) Legible copies of all ACP products

(5) VOC and LVP content data for the ACP products occurring over the last four years prior to submittal of the application

(6) Explanation of date-codes; Committment to date-code every ACP product by 5 working days after approval of the ACP plan

(7) Full details of planned/projected purchases of Surplus Reduction Credits (seller, date of planned purchase, amount of credits from each seller, etc.)

(8) The VOC content for each ACP product during each applicable reporting period; the specific method by which the VOC content will be determined, as provided in Section 94515; and the repeatbility and reproducibility calculated for the specified method(s)

(9) The date-codes that will be applicable to each different VOC content for each ACP product

(10) The approximate dates by which the ACP products will meet the applicable VOC standards

(11) Certification that all VOC content reductions are real and not the result of changing product names, false rrepresentations of ACP product reformulations, or any other attempts at circumventing the intentions of the regulation

(12) Written committment to provide all required information using ARB-approved records

(13) Specific mandatory reporting periods and dates; specific mandatory enforceable sales records as approved by the ARB

(14) Specific and full details of reconciliation plan

(15) Declaration that all information and operational plans provided are truthful and accurate

| Responsible Party Identification Number: For ARB Use Only | ACP001 |
|---|---|

## Appendix G

California Government Code, section 11342 (Definition of "Small Businesses")

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determines that a regulation does not meet the standards set forth in Section 11349.1, it shall order the adopting agency to show cause why the regulation should not be repealed and shall proceed to seek repeal of the regulation as provided by this section in accordance with the following:

(a) In the event it determines that any of the regulations subject to the review do not meet the standards set forth in Section 11349.1, the office shall within 15 days of the determination order the adopting agency to show cause why the regulation should not be repealed. In issuing the order, the office shall specify in writing the reasons for its determination that the regulation does not meet the standards set forth in Section 11349.1. The reasons for its determination shall be made available to the public. The office shall also publish its order and the reasons therefor in the California Regulatory Notice Register. In the case of a regulation for which no, or inadequate information relating to its necessity can be furnished by the adopting agency, the order shall specify the information which the office requires to make its determination.

(b) No later than 60 days following receipt of an order to show cause why a regulation should not be repealed, the agency shall respond in writing to the office. Upon written application by the agency, the office may extend the time for an additional 30 days.

(c) The office shall review and consider all information submitted by the agency in a timely response to the order to show cause why the regulation should not be repealed, and determine whether the regulation meets the standards set forth in Section 11349.1. The office shall make this determination within 60 days of receipt of an agency's response to the order to show cause. If the office does not make a determination within 60 days of receipt of an agency's response to the order to show cause, the regulation shall be deemed to meet the standards set forth in subdivision (a) of Section 11349.1. In making this determination, the office shall also review any written comments submitted to it by the public within 30 days of the publication of the order to show cause in the California Regulatory Notice Register. During the period of review and consideration, the information available to the office relating to each regulation for which the office has issued an order to show cause shall be made available to the public. The office shall notify the adopting agency within two working days of the receipt of information submitted by the public regarding a regulation for which an order to show cause has been issued. If the office determines that a regulation fails to meet the standards, it shall prepare a statement specifying the reasons for its determination. The statement shall be delivered to the adopting agency, the Legislature, and the Governor and shall be made available to the p ublic and the courts. Thirty days after delivery of the statement required by this subdivision the office shall prepare an order of repeal of the regulation and shall transmit it to the Secretary of State for filing.

(d) The Governor, within 30 days after the office has delivered the statement specifying the reasons for its decision to repeal, as required by subdivision (c), may overrule the decision of the office ordering the repeal of a regulation. The regulation shall then remain in full force and effect. Notice of the Governor's action and the reasons therefor shall be published in the California Regulatory Notice Register.

The Governor shall transmit to the rules committee of each house of the Legislature a statement of reasons for overruling the decision of the office, plus any other information that may be requested by either of the rules committees.

(e) In the event that the office orders the repeal of a regulation, it shall publish the order and the reasons therefor in the California Regulatory Code Supplement.

Added Stats 1987 ch 1375 § 1.5.

**Cross References:**

Compilation, printing, and publication of weekly updates of California Code of Regulations, including priority reviews: Gov C § 11344.

Judicial declaration as to validity of disapproved or repealed regulation: Gov C § 11350.3.

**Collateral References:**

Review of Selected 1987 Legislation. 19 Pacific LJ 455.

## ARTICLE 2

### Rules and Regulations

**Collateral References:**

Witkin Summary (9th ed) Constitutional Law § 560, 561.

### § 11342. Definitions

In this chapter, unless otherwise specifically indicated, ***the following definitions apply***:

(a) "State agency" and "agency" does not include an agency in the judicial or legislative departments of the state government.

(b) "Regulation" means every rule, regulation, order, or standard of general application or the amendment, supplement, or revision of any * * * rule, regulation, order, or standard adopted by any state agency to implement, interpret, or make specific the law enforced or administered by it, or to govern its procedure, except one *that* relates only to the internal management of the state agency. "Regulation" does not mean or include legal rulings of counsel issued by the Franchise Tax Board or State Board of Equalization, or any form prescribed by a state agency or any instructions relating to the use of the form, but this provision is not a limitation upon any requirement that a regulation be adopted pursuant to this part when one is needed to implement the law under which the form is issued.

(c) "Order of repeal" means any resolution, order or other official act of a state agency *that* expressly repeals a regulation in whole or in part.

(d) "Office" means the Office of Administrative Law.

(e) "Small business" means:

(1) A business activity, unless excluded in paragraph (2), that is all of the following:

(A) Independently owned and operated.

(B) Not dominant in its field of operation.

(C) Not exceeding the following annual gross receipts in the categories of:

(i) Agriculture, one million dollars ($1,000,000).

(ii) General construction, nine million five hundred thousand dollars ($9,500,000).

(iii) Special trade construction, five million dollars ($5,000,000).

(iv) Retail trade, two million dollars ($2,000,000).

(v) Wholesale trade, nine million five hundred thousand dollars ($9,500,000).

(vi) Services, two million dollars ($2,000,000).

(vii) Transportation and warehousing, one million five hundred thousand dollars ($1,500,000).

(D) A manufacturing enterprise not exceeding 250 employees.

(E) A health care facility not exceeding 150 beds or one million five hundred thousand dollars ($1,500,000) in annual gross receipts.

(F) Generating and transmitting electric power not exceeding 4.5 million kilowatt hours annually.

(2) The following professional and business activities shall not be considered a small business for purposes of this act:

(A) Financial institutions including banks, trusts, savings and loan associations, thrift institutions, consumer and industrial finance companies, credit unions, mortgage and investment bankers, and stock and bond brokers.

(B) Insurance companies, both stock and mutual.

(C) Mineral, oil, and gas brokers; subdividers and developers.

(D) Landscape architects, architects, and building designers.

(E) Entities organized as nonprofit institutions.

(F) Entertainment activities and productions including motion pictures, stage performances, television and radio stations, and production companies.

(G) All utilities, water companies, and power transmission companies, except electrical power generating transmission companies providing less than 4.5 million kilowatt hours annually.

(H) All petroleum and natural gas producers, refiners and pipelines.

*(f) "Plain English" means language that can be interpreted by a person who has no more than an eighth grade level of proficiency in English.*

Amended Stats 1982 ch 1083 § 2; Stats 1983 ch 1080 § 1; Stats 1984 ch 1444 § 2, effective September 26, 1984. Amended Stats 1993 ch 870 § 2 (SB 726).

**Amendments:**

1982 Amendment: Added subd (e).

1983 Amendment: Added "legal rulings of counsel issued by the Franchise Tax Board or State Board of Equalization, or" in the second sentence of subd (b).

1984 Amendment: Substituted "4.5 million kilowatt hours annually" for "4,500,000 kilowatts" in subd (e)(1)(F), and for "4.5 kilowatts" in subd (e)(2)(G).

**Cross References:**

Construction of section to exclude Bureau of State Audits: Gov C § 8546.

**Collateral References:**

B-W Cal Civ Prac, Procedure § 17:13.

Vermont Yankee in California's courts. 13 Pacific LJ 315.

**NOTES OF DECISIONS**

**2. Particular Applications**

A policy memorandum issued by the executive director of the State Personnel Board was a regulation within the meaning of Gov. Code, § 11342, subd. (b), rather than a rule relating only to internal management of a state agency, where it was intended as an outline of the procedures and standards for out-of-class experience as qualifying in an examination for a civil service position and to serve as a general limitation on the use of out-of-class experience to meet minimum requirements for advancement to a higher civil service position. The policy was invalid and entitled to no weight, where it was not promulgated by the board in substantial compliance with the requirements of the Administrative Procedure Act for the promulgation of administrative regulations (Gov. Code, §§ 11371 et seq., 11420 et seq.). Ligon v State Personnel Bd. (1981, 1st Dist) 123 Cal App 3d 583, 176 Cal Rptr 717.

**§ 11342.01. "Performance standard"; "Prescriptive standard"**

In addition to the provisions of Section 11342, as used in this chapter, unless otherwise specifically indicated:

(a) "Performance standard" means a regulation that describes an objective with the criteria stated for achieving the objective.

(b) "Prescriptive standard" means a regulation that specifies the sole means of compliance with a performance standard by specific actions, measurements, or other quantifiable means.

Added Stats 1983 ch 874 § 3.

**Collateral References:**

Witkin Summary (9th ed) Constitutional Law § 560.

# Appendix H

October 1993 ACP Business Survey

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STATE OF CALIFORNIA

PETE WILSON, Governor

**AIR RESOURCES BOARD**
2020 L STREET
P.O. BOX 2815
SACRAMENTO, CA 95812

October 5, 1993

Manufacturers/Marketers of Consumer Products
Manufacturers/Marketers of Antiperspirants/Deodorants
Manufacturers/Marketers of Aerosol Paint Products

Dear Sir or Madam:

Survey of Consumer Product Manufacturers/Marketers

We are conducting a short survey and we need your help. As you may know, the Air Resources Board (ARB) staff is developing a market-based regulation called the Alternative Control Plan (ACP). We are developing this regulation to provide manufacturers and marketers with additional flexibility in complying with the consumer product regulations, both present and future, including the aerosol paint regulation currently under development. This survey should allow us to gather information that will help us gauge some of the potential effects the ACP regulation may have on the markeplace and on individual companies.

We ask that you take a few minutes to complete the enclosed survey. Please complete the survey and return it by October 20, 1993 to:

California Air Resources Board
P.O. Box 2815
Sacramento, CA 95812-2815
Attn: Floyd Vergara

Please note that we intend to publish only the aggregated survey results. All information indicated by you to be confidential material will be handled in accordance to the procedures specified in Title 17, California Code of Regulations, sections 91000-91022 (copy enclosed).

If you have any questions regarding the survey, please contact Floyd Vergara, Air Resources Engineering Associate, Solvents Control Section, at (916) 327-1503 or Peggy Taricco, Manager, Solvents Control Section, at (916) 322-8283. We thank you in advance for your time and effort in providing the requested information.

Sincerely,

Dean C. Simeroth, Chief
Criteria Pollutants Branch
Stationary Source Division

Enclosure

## Article 3. Inspection of Public Records

### § 91020. Disclosure Policy.

HISTORY

1. Repealer filed 10–5–82; effective thirtieth day thereafter (Register 82, No. 41).

### § 91021. Disclosure Procedure.

NOTE: Authority cited: Section 39601, Health and Safety Code. Reference: Sections 6253–6257, Government Code.

HISTORY

1. Amendment of subsections (c) and (d)(3) filed 9–28–73; effective thirtieth day thereafter (Register 73, No. 39).
2. Amendment and new NOTE filed 3–18–77; effective thirtieth day thereafter (Register 77, No. 12).
3. Repealer filed 10–5–82; effective thirtieth day thereafter (Register 82, No. 41).

### § 91022. Disclosure of Confidential Data.

(a) This section shall apply to all data in the custody of the state board

(1) designated "trade secret" prior to the adoption of this subchapter,

(2) considered by the state board or identified by the person who submitted the data as confidential pursuant to this subchapter, or

(3) received from a federal, state or local agency, including an air pollution control district, with a confidential designation, subject to the following exceptions:

(A) Except for the time limits specifically provided in subsection (b), only subsections (c) and (d) of this section shall apply to information submitted pursuant to Health and Safety Code Section 39660(e).

(B) Appropriate portions of an application for approval, accreditation, or certification of a motor vehicle emission control device or system shall be kept confidential until such time as the approval, accreditation, or certification is granted, at which time the application (except for trade secret data) shall become a public record, except that estimates of sales volume of new model vehicles contained in an application shall be kept confidential for the model year, and then shall become public records. If an application is denied, it shall continue to be confidential but shall be subject to the provisions of this section.

(C) If disclosure of data obtained after August 9, 1984 from a state or local agency subject to the provisions of the Public Records Act is sought, the state board shall request that the agency which provided the data determine whether it is confidential. The state board shall request that it be notified of the agency's determination within ten days. The state board shall not release the data if the agency determines that it is confidential and so notifies the state board; provided, however, that the data may be released with the consent of the person who submitted it to the agency from which it was obtained by the state board.

(b) Upon receipt of a request from a member of the public that the state board disclose data claimed to be confidential or if the state board itself seeks to disclose such data, the state board shall inform the individual designated pursuant to Section 91011 by telephone and by mail that disclosure of the data is sought. The person claiming confidentiality shall file with the state board documentation in support of the claim of confidentiality. The documentation must be received within five (5) days from the date of the telephone contact or of receipt of the mailed notice, whichever first occurs. In the case of information submitted pursuant to Health and Safety Code Section 39660(e), the documentation must be received within 30 days of the date notice was mailed pursuant to that section. The deadlines for filing the documentation may be extended by the state board upon a showing of good cause made within the deadline specified for receipt of the documentation.

(c) The documentation submitted in support of the claim of confidentiality shall include the following information:

(1) the statutory provision(s) under which the claim of confidentiality is asserted;

(2) a specific description of the data claimed to be entitled to confidential treatment;

(3) the period of time for which confidential treatment is requested;

(4) the extent to which the data has been disclosed to others and whether its confidentiality has been maintained or its release restricted;

(5) confidentiality determinations, if any, made by other public agencies as to all or part of the data and a copy of any such determinations, if available; and

(6) whether it is asserted that the data is used to fabricate, produce, or compound an article of trade or to provide a service and that the disclosure of the data would result in harmful effects on the person's competitive position, and, if so, the nature and extent of such anticipated harmful effects.

(d) Documentation, as specified in subsection (c), in support of a claim of confidentiality may be submitted to the state board prior to the time disclosure is sought.

(e) The state board shall, within ten (10) days of the date it sought to disclose the data or received the request for disclosure, or within 20 days of that date if the state board determines that there are unusual circumstances as defined in Government Code Section 6256.1, review the request, if any, and supporting documentation, if received within the time limits specified in subsection (b) above, including any extension granted, and determine whether the data is entitled to confidential treatment pursuant to Government Code Section 6254, 6255 or 6254.7 or other applicable provisions of law and shall either:

(1) decline to disclose the data and, if a request was received, provide to the person making the request and to the person claiming the data is confidential a justification for the determination pursuant to Government Code Section 6255; or

(2) provide written notice to the person claiming the data is confidential and, if a request was received, to the person requesting the data that it has determined that the data is subject to disclosure, that it proposes to disclose the data, and that the data shall be released 21 days after receipt of the notice by the person claiming confidentiality, unless the state board is restrained from so doing by a court of competent jurisdiction. The state board shall release the data in accordance with the terms of the notice unless so restrained.

(f) Should judicial review be sought of a determination issued in accordance with subsection (e), either the person requesting data or the person claiming confidentiality, as appropriate, may be made a party to the litigation to justify the determination.

NOTE: Authority cited: Section 39601, Health and Safety Code. Reference: Sections 6253, 6254, 6254.7, 6255, 6256, 6256.1, 6258 and 6259, Government Code.

HISTORY

1. Amendment of subsections (a) and (b) filed 9–28–73; effective thirtieth day thereafter (Register 73, No. 39).
2. Amendment and new NOTE filed 3–18–77; effective thirtieth day thereafter (Register 77, No. 12).
3. Amendment filed 10–5–82; effective thirtieth day thereafter (Register 82, No. 41).
4. Editorial correction of subsection (a) filed 5–7–84; effective thirtieth day thereafter (Register 84, No. 19).
5. Amendment filed 7–10–84; effective thirtieth day thereafter (Register 84, No. 28).

# CALIFORNIA AIR RESOURCES BOARD ALTERNATIVE CONTROL PLAN SURVEY

Company Name:_____ Contact:_____ Date:_____

Address:_____ Phone:_____

Standard Industrial Classification (SIC) codes applicable to your business?:

SIC:

**Confidential Information** in this Survey?: Yes ( ) No ( )

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Using your best estimates, please check or fill in the applicable bubble(s).

1) Is your company Independently Owned and Operated? O Yes O No

If No, please state the name/address of owner company?

_____

2) What is your company's total number of current employees (including part-time and temporary employees)?

O Less than 10 O Between 10 and 100 O Between 100 and 250

O Between 250 and 500 O More than 500

3) What are your company's typical gross annual receipts (gross annual sales) from **all** business activities, including consumer products not subject to the ARB consumer product regulations?

O Less than $500,000 O Between $500,00 and $1 million

O Between $1 million and $2.5 million O More than $2.5 million

4) How are your consumer products distributed?

O Regionally only O Nationally only O Both Nationally and Regionally

O Other Method (Please describe _____)

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**CALIFORNIA AIR RESOURCES BOARD ALTERNATIVE CONTROL PLAN SURVEY (cont.)**

5) What percentage of your gross receipts is represented by the sales of each of the following categories which are subject to the ARB consumer product regulations? (gross receipts = total annual gross receipts determined for Question 3)

If you're not sure which products this survey applies to, please refer to the list of ARB-regulated product categories at the end of the survey.

| | Category Sales As A Percentage of Total Gross Annual Receipts | | | |
|---|---|---|---|---|
| Product Category | Less than 25% | Between 25% - 50% | Between 51% - 75% | Between 76% - 100% |
| Automotive | ( ) | ( ) | ( ) | ( ) |
| Household Products | ( ) | ( ) | ( ) | ( ) |
| Personal Care Products | ( ) | ( ) | ( ) | ( ) |
| Pesticides | ( ) | ( ) | ( ) | ( ) |
| Aerosol Paints/Coatings | ( ) | ( ) | ( ) | ( ) |
| Miscellaneous | ( ) | ( ) | ( ) | ( ) |

**CALIFORNIA AIR RESOURCES BOARD ALTERNATIVE CONTROL PLAN SURVEY (cont.)**

Any Comments:

_____

_____

_____

_____

_____

LIST OF PRODUCT CATEGORIES SUBJECT TO CONSUMER PRODUCT REGULATION

**Automotive Products**

Automotive Windshield Washer Fluid
Engine Degreasers
Carb/Choke Cleaners
Automotive Brake Cleaners

**Household Products**

Air Fresheners
Bath/Tile Cleaners
Floor Polishes/Waxes
Furniture Maintenance
General Purpose Cleaners
Glass Cleaners
Laundry Prewash
Oven Cleaners
Dusting Aids
Fabric Protectants
Household Adhesives
Laundry Starch Products

**Pesticides**

Aerosol Insect Repellents
Crawling Bug
Flea and Tick
Flying Bug
Foggers
Lawn and Garden

**Personal Care Products**

Hairsprays
Hair Mousses
Hair Styling Gels
Personal Fragrances
Antiperspirants/Deodorants
Shaving Cream
Nail Polish Remover

**Aerosol Paint Products**

(pending)
Aerosol Paints
Aerosol Coatings

**Miscellaneous**

Aerosol Cooking Sprays
Charcoal Lighter Material

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Statistical Representativeness Analysis of 1993 ACP Survey Data

The representativeness of the 1993 ACP survey results can be determined through basic statistical analysis using the following calculation (corrected for a finite population):

$$n = \frac{N \times p \times q \times Z^2}{p \times q \times Z^2 + (N - 1) \times E^2}$$

or

$$E = \sqrt{\frac{p \times q \times Z^2 \times (\frac{N}{n} - 1)}{(N - 1)}}$$

where,

| | | |
|---|---|---|
| n | = | survey sample size |
| N | = | population size |
| p | = | observed proportion |
| q | = | 1 - p |
| Z | = | z-score (1.96 for 95% confidence level) |
| E | = | standard error |

For the 1993 ACP survey:

| | | |
|---|---|---|
| n | = | 217 facilities responded |
| N | = | 810 facilities in universe |
| p | = | 0.5 (assume worst-case) |
| q | = | 0.5 |
| Z | = | 1.96 |
| E | = | ? |

Substituting these values into the equation and solving for E, we calculate E to be $\pm$ 0.057 or $\pm$ 6%. Thus, we are 95% confident that the true population proportions (e.g., X = the percentage of small businesses or the percentage of products made by small businesses) will fall within the percentages observed in the survey results with an error of $\pm$ 6% (i.e., the width of the 95% confidence interval is X $\pm$ 6%). In other words, there is only a 1 in 20 chance that the true percentages applicable to the consumer products industry will fall outside of X $\pm$ 6%.

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