State of California

AIR RESOURCES BOARD

Final Statement of Reasons for Rulemaking,
Including Summary of Comments and Agency Responses

PUBLIC HEARING TO CONSIDER ADOPTION OF A REGULATION TO REDUCE VOLATILE ORGANIC COMPOUND EMISSIONS FROM AEROSOL COATING PRODUCTS AND AMENDMENTS TO THE ALTERNATIVE CONTROL PLAN FOR CONSUMER PRODUCTS

Scheduled for Consideration: March 23, 1995
Agenda Item No.: 95-3-1

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I. INTRODUCTION

On March 23, 1995, the Air Resources Board (the "Board" or "ARB") conducted a public hearing to consider the adoption of a statewide regulation to reduce volatile organic compound emissions from aerosol coating products (the "aerosol paint regulation"). The aerosol paint regulation specifies volatile organic compound ("VOC") limits for 35 categories of aerosol paints and related coating products. The Board also considered amendments to the alternative control plan (the "ACP") regulation for consumer products. The amendments to the ACP regulation allow manufacturers of aerosol paints to utilize it, thereby providing an additional compliance option.

On February 3, 1995, the notice of proposed action was made available to the public and published in the California Regulatory Notice Register. The notice was also mailed to each of

the individuals described in Government Code, section 11346.4(a)(1) through (a)(4), Title I, California Code of Regulations (CCR). At the hearing, the Board adopted Resolution 95-12, by which the Board adopted the aerosol paint regulation and the amendments to the ACP regulation as originally proposed. The aerosol paint regulation will be contained in Title 17, CCR, sections 94520-94528. The amendments to the ACP regulation will be contained in Title 17, CCR, sections 94540 to 94543, 94547, 94550, 94551, and 94553.

An Initial Statement of Reasons (ISOR) was prepared for the proposed rulemaking. The ISOR was released on February 3, 1995 and is incorporated herein by reference. This Final Statement of Reasons contains a summary of comments received during the formal rulemaking process and the ARB staff's responses to these comments.

As defined in Government Code section 11345.5(a)(6), the Board has determined that this regulatory action will neither create costs or savings to any State agency nor affect federal funding to the State. The Board has also determined that this regulation will not create costs or impose a mandate upon any local agency or school district, whether or not it is reimbursable by the State pursuant to Part 7 (commencing with section 17500), Division 4, Title 2 of the Government Code; or affect other nondiscretionary savings to local agencies. In preparing the regulatory proposal, the ARB staff considered the potential economic impacts on California business enterprises and individuals. A detailed discussion of these impacts is discussed in the ISOR, Volume II, Chapter VIII.

The aerosol paint regulation incorporates by reference the following documents, which are listed in section 94526:

(1) Bay Area Air Quality Management District (BAAQMD) Manual of Procedures, Volume III, Laboratory Procedures, Method 35, "Determination of Volatile Organic Compounds (VOC) in Solvent Based Aerosol Paints," as amended January 19, 1994;

(2) American Society for Testing and Materials (ASTM) Test Method D-5325-92, "Standard Test Method for Determination of Weight Percent Volatile Content of Water-Borne Aerosol Paints," November 15, 1992;

(3) Air Resources Board Method 432, CCR, Title 17, section 94144;

(4) South Coast Air Quality Management District (SCAQMD) Test Method 311, "Laboratory Methods of Analysis for Enforcement Samples," June 1, 1991;

(5) American Society for Testing and Materials Test Method D-523-89, March 31, 1989;

(6) American Society for Testing and Materials Test Method D-1613-91, "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products," May 15, 1991; and

(7) American Society for Testing and Materials Test Method D-5043-90, "Standard Test Methods for Field Identification of Coatings," April 27, 1990.

These documents were incorporated by reference because it would be cumbersome, unduly expensive, and otherwise impractical to print them in the CCR. The documents are complicated and lengthy test methods that would add unnecessary additional volume to a complex regulation. As the interested audience for these documents is small (primarily laboratories who formulate and test aerosol paints), distribution to all recipients of the CCR is not needed. Furthermore, it has been a longstanding and accepted practice for the ARB to incorporate test methods by reference, and the affected public is accustomed to this format. (e.g., see Title 17, CCR, sections 94506 and 94515)

The aforementioned documents were made available in the context of the subject rulemaking in the manner specified in Government Code section 11364.7, and will continue to be made available by the ARB upon request. The ASTM publishes an "Annual Book of ASTM Standards" which consists of a number of bound volumes. The ASTM test methods (incorporated by reference in section 94526(a)-(f)) are contained in these volumes. These documents are available at public and college libraries, and can also be purchased directly from ASTM. They are widely used by industry, government agencies, scientists, engineers, and the

general public. The BAAQMD's test method to determine the VOC content of solvent-based aerosol paints (in section 94526(a)) is available from the BAAQMD. The ARB's test method to determine the content of dichloromethane (methylene chloride) and 1,1,1-trichloroethane (in section 94526(b)) is available from the ARB. Finally, the SCAQMD's test method to determine the metal content in coatings (in section 94526(c)) is available from the SCAQMD.

II. SUMMARY OF COMMENTS AND AGENCY RESPONSES

The Board received written and oral comments in connection with the March 23, 1995 hearing. A list of commenters is set forth below, identifying the date and form of all comments that were timely filed. Following the list is a summary of each objection or recommendation made regarding the proposal, together with an explanation of how the proposed action has been changed to accommodate the objection or recommendation, or the reasons for making no change. Several commenters expressed general support or disagreement with the regulation or certain aspects of it, but did not suggest that the Board take any specific action. While these comments were considered by the Board, most of these comments are not separately addressed in this Final Statement of Reasons because they were not objections or recommendations specifically directed at the proposed action or the procedures followed by the Board in proposing or adopting the proposed action. However, some of these comments have been included in those cases where they add additional information or perspective on the actions taken by the Board.

List of Commenters

Abbreviation	Commenter	Comment form/date
AER	David Williams President Aervoe Pacific Company	Written testimony: March 23, 1995

FLC	Roy Blackburn Vice President, Operations The Flecto Company	Written testimony: March 23, 1995
FLC	Eve Blackburn The Flecto Company	Oral testimony: March 23, 1995
FLC	Ken Trautwein Technical Director The Flecto Company	Oral testimony: March 23, 1995 Written testimony: March 23, 1995
FOR	Jim Hukill Sales and Marketing Manager Forrest Paint Company	Written testimony: March 6, 1995
KIW	Peter Burke Vice President, Regional R&D Kiwi Brands	Written testimony: March 23, 1995
KRY	Roger Vanderlaan Operations Manager Krylon	Oral testimony: March 23, 1995
OPC	Richard Olson Vice President The Ohio Polychemical Company	Written testimony: March 22, 1995
RUD	Laurel Jamison General Manager Rudd Company	Written testimony: March 22, 1995
SUR	Scott Johnson President Sureguard	Written testimony: March 20, 1995
SW	Robert Graham Technical Director The Speciality Division The Sherwin Williams Company	Oral testimony: March 23, 1995

SW	Douglas Raymond Division Director, Regulatory Affairs The Specialty Division The Sherwin Williams Company	Written testimony: March 16, 1995 Oral testimony: March 23, 1995
SPC	Andy Orr President Spray Products Corporation	Written testimony: March 21, 1995
TMW	James Mattesich, Livingston & Mattesich Thompson Minwax Company	Written testimony: March 23, 1995
TRU	Ed Majkrzak Technical Director Tru-Test Manufacturing Company	Oral testimony: March 23, 1995
YEN	Tony Montjoy Environmental Yenkin-Majestic Paint Corporation	Written testimony: March 21, 1995
ZRC	Matthew Steele President ZRC Products Company	Written testimony: March 13, 1995
NPCA	Ed Majkrzak Spray Paint Manufacturers Committee National Paint & Coatings Association	Written testimony: March 23, 1995 Oral testimony: March 23, 1995
NPCA	Heidi McAuliffe Counsel Government Affairs Division National Paint & Coatings Association	Oral testimony: March 23, 1995
NRDC	Janet Hathaway Senior Attorney National Resources Defense Council	Written testimony: March 22, 1995
BAAQMD	Milton Feldstein Air Pollution Control Officer Bay Area Air Quality Management District	Written testimony: March 15, 1995

EPA	David Howekamp Director Air and Toxics Division United States Environmental Protection Agency Region IX	Written testimony: March 17, 1995
USN	Terry Nolan California Environmental Coordination Office United States Navy	Written testimony: February 22, 1995
USN	Randal Friedman California Environmental Coordination Office United States Navy	Oral testimony: March 23, 1995

A. 1996 Volatile Organic Compound Standards

1. Comment: The initial VOC limits scheduled to become effective on January 1, 1996 are, with some exceptions, an appropriate set of standards given the current state of aerosol formulation technology. (NPCA, FLC, SW, RUD, TMW, BAAQMD)

Agency Response: The ARB staff agrees with this comment. The VOC standards which will become effective on January 1, 1996 (the "1996 standards") are, with a few exceptions, identical to those which have been met in the BAAQMD since 1991. The 1996 standards which deviate significantly from the BAAQMD regulation (the 1996 standards for pigmented lacquers and fluorescent paints) are less stringent in the ARB rule. We are unable to comment on the standards which the commenters feel are inappropriate because no specific standards were identified.

2. Comment: Certain specialty products which currently cannot be marketed in northern California because of BAAQMD's Rule 49, would not likely be able to meet the 1996 VOC standards contained in this rule. (NPCA)

Agency Response: The ARB staff disagrees with this comment. However, we cannot comment on the specialty products mentioned by the commenter because they are not identified. As explained in detail in the ISOR, all of the 1996 VOC standards for the aerosol paint categories in the regulation are currently technologically and commercially feasible. We have made every effort to accommodate the variety of specialty products available as evidenced by the 35 categories of products and corresponding VOC standards in the regulation. While a specific product formulation may not be able to exist in exactly the same form as it did before the regulation, aerosol coatings in each product category can be reformulated to comply with the standards in the regulation.

3. Comment: The reformulation of our high temperature coating product to the 80 percent VOC limit for 1996 will compromise product efficacy in terms of gloss and its use as a touch-up. The result will be a significant increase in usage as whole units will require recoating because the touch-up spray paint will no longer match the factory applied coating. Consequently, we request a two year extension of the effective date of the limits for research and development to produce a compliant product with satisfactory efficacy. (FOR)

Agency Response: The ARB staff disagrees with this comment and believes the 80 percent VOC standard for high temperature coatings will allow for efficacious products. In adopting Resolution 95-12 the Board chose not to grant the extension requested by this commenter. As explained in the ISOR (Volume II, Chapter IV-69, Section Q), 11 of the 29 high temperature products, identified in the ARB's aerosol paint survey of products sold in California during 1992 (or about 25 percent of the market), already comply with the 80 percent standard. These products are currently marketed in California by eight manufacturers, even though there are now no regulations that require these products to meet any particular VOC standard (except for products sold in the BAAQMD). As stated in the ISOR, many of these manufacturers commented that the complying products are comparable to higher-VOC products. Additionally, this commenter's high temperature product is used as an exact-match coating for the touch-up of wood stoves and related products. As discussed previously with this commenter, the regulation

allows the commenter's currently formulated product to be sold as an exact match industrial coating with an 88 percent VOC standard provided that the criteria specified in sections 94521(a)(22) to (a)(24) are met.

4. Comment: The 1996 standards, which are modeled after the BAAQMD's Rule 49, are feasible. It has been shown in the BAAQMD that the aerosol coating industry has been able to successfully formulate products at these levels. In fact, manufacturers have even used the low VOC formulas as advertisements for "environmentally friendly" products. (BAAQMD)

Agency Response: The ARB staff agrees with this commenter that the 1996 standards are feasible. The standards in the State's aerosol paint regulation are identical or similar to the standards in the BAAQMD's Rule 49 (see the response to Comment number 1). Because the aerosol coating industry has developed products to comply with the BAAQMD's rule, these same products should be able to meet the ARB's 1996 standards as well.

B. 1999 Volatile Organic Compound (VOC) Standards

5. Comment: The VOC limits scheduled to become effective in 1999 are not achievable by any technology currently known to the industry. Specifically, products from the following categories are referred to: clear coatings , metallic coatings, nonflat, primers, high temperature coatings, webbing / veil coatings, vinyl / fabric / leather / polycarbonate coatings and photograph coatings. (NPCA, SW, FLC, KRY, RUD, KIW, TMW, ZRC)

Agency Response: The ARB staff agrees that data is not currently available to demonstrate that the 1999 standards are achievable. As explained in Volume II on pages I-2 through I-3 and pages V-7 through V-8 of the ISOR, the 1999 standards are included to meet the specific requirements of Health and Safety Code section 41712(f). Section 41712(f) requires the Board to establish VOC limits designed to achieve a 60 percent reduction in emissions from aerosol paints by December 31, 1999. However, section 41712(f) and section 94522(g) of this

regulation require the technological and commercial feasibility of the 1999 standards to be reviewed at a public hearing at least a year before the effective date of the 1999 standards. If the standards are not found to be feasible, the Board may delay them for up to five years.

However, it is not unrealistic to expect that these future effective standards may be achievable by 1999. There are many technologies that may allow the standards to be reached by 1999. As explained in the ISOR (Volume II, Chapter V), these technologies include new resins that will require less VOC solvents, the use of the non-VOC propellant Hydrofluorocarbon (HFC)-152a, water-borne formulations, and compressed gas propellants. In addition, there are solvents being reviewed by the United States Environmental Protection Agency (U. S. EPA) and the ARB for possible exemption from the definition of "volatile organic compound." If additional solvents are determined to be "non-VOC" (due to negligible or low photochemical reactivity) in a future rulemaking action, the regulation may be amended to allow their use in conjunction with the technologies mentioned above.

6. Comment: If the rule is adopted with the inclusion of the 1999 VOC limits, these standards will be widely misinterpreted as foreseeably attainable and used as a benchmark for other regulatory agencies throughout the country. (RUD)

Agency Response: We do not agree that the 1999 VOC standards will be misinterpreted as being foreseeably attainable, because the regulation also contains a specific provision requiring the technological and commercial feasibility of the 1999 standards to be reviewed, and delayed if necessary (see section 94522(g)). We believe this provision will convey the message that the standards are not necessarily "foreseeably attainable" by 1999. In any event, however, Health and Safety Code section 41712(f) specifically requires the regulation to include these standards.

7. Comment: The ARB's 1999 VOC limits are self-created numbers. "Why shouldn't the creators of this illusion [ARB] be required to prove that it can be done?" (AER)

Agency Response: The general rationale for the 1999 VOC limits is discussed in the response to Comment number 5. With regard to the commenter's statement that the ARB should "prove that it can be done," Health and Safety Code section 41712(f) and section 94522(g) of the regulation require that a public hearing be held to consider the technological and commercial feasibility of the 1999 standards at least a year before they become effective. At the hearing, the ARB staff will be presenting their recommendation as to whether or not the standards are achievable, as the commenter seems to be suggesting. In preparation for the hearing, the ARB staff will be in close contact with the manufacturers and will conduct a survey of the products sold in California during 1997. In addition, we will be reviewing information supplied by manufacturers under section 94524(c)(2) of the regulation, which requires manufacturers to submit progress reports on their research and development efforts to comply with the 1999 standards.

8. Comment: If a large company patents a way to achieve the 1999 standards, and this technology is not available to all, the proposed rule will result in a "legislated monopoly." (FOR)

Agency Response: At the public hearing to consider the technological and commercial feasibility of the 1999 standards, the Board will take into consideration the availability of technology to achieve the 1999 standards. The availability of technology is an important component in determining whether the standards are technologically and commercially feasible, as required by Health and Safety Code section 41712(f).

9. Comment: The 1999 standards should be eliminated for now until technology indicates that the limits are feasible for at least 50 percent of the manufacturers. (FOR)

Agency Response: As described in the responses to Comments number 5 and 7, the Health and Safety Code requires the ARB to include VOC standards in the regulation that are designed to achieve at least a 60 percent reduction in emissions by December 31, 1999. The

1999 standards in the regulation fulfill this legal requirement. During the public hearing to consider the technological and commercial feasibility of the 1999 standards, the ability of the companies to manufacture complying products will be taken into consideration by the Board. In addition the "50% test" suggested by the commenter is not appropriate in evaluating the feasibility of the 1999 standards, since it establishes an arbitrary numerical threshold that may not be appropriate, given the wide variety of circumstances that exist in the marketplace..

C. Definition of Technologically and Commercially Feasible

10. Comment: The term "technologically and commercially feasible" needs to be more thorough and definitive, and must consider marketplace factors such as price, quantities available, product capabilities, availability of colors, and performance characteristics such as viscosity, ease of application, hideability, durability, texture, and scrubbability. (NPCA, KRY)

Agency Response: As stated at the March 23, 1995 hearing (page 89 of the transcript), general definitions of the terms technologically and commercially feasible were developed and have been consistently followed by the Board since the first consumer product regulation was adopted in 1990. These definitions are explained in detail in the Phase II Consumer Products ISOR (Staff Report for the Proposed Amendments to the Statewide Regulation to Reduce Volatile Organic Compound Emissions from Consumer Products, Phase II, October, 1991), and in the ISOR for this rulemaking action (Volume II, pages V-8 to V-13). These definitions were not included in the text of the regulation itself (or in the existing consumer products regulations) because the actual determination about whether a particular standard is feasible is a very fact-specific inquiry made on a case-by-case basis after looking at a wide variety of technical factors. The commenter has listed a number of factors that may be relevant to a specific determination. However, we did not attempt to develop a definition of technological and commercial feasibility based on all these factors because the definition would include numerous detailed criteria that would almost certainly not work well for every standard, in every situation. For example, the criteria that would be important to market a successful art varnish would be very different from

the criteria for a fluorescent coating. We believe that such a detailed, definition could limit the Board's ability to make an appropriate, common-sense decision in an individual case, because the particular situation that arises may simply not fit into the regulatory language. To avoid this potential problem, we believe that the best approach is to not include specific definitions in the regulation.

11. Comment: An evaluation of commercial feasibility contemplates that the 1999 standards be subjected to a standard cost-benefit analysis which considers the costs not only to manufacturers, but also to consumers and society. The analysis should consider that less effective paint may need to be applied in greater volume, increasing cost and emissions. (NPCA)

Agency Response: A cost-benefit analysis of the 1999 standards was not performed during the development of the proposed aerosol paint regulation. The benefits of the regulation were not quantified because the ARB is not legally required to do so, and an accepted methodology does not currently exist to perform this type of analysis. However, the cost of manufacturing products that comply with the 1999 standards is a component of their commercial feasibility, and will be considered during the public hearing on the achievability of the 1999 standards. At the hearing, industry will have the opportunity to discuss all aspects of the cost of complying with the standards, including the factors mentioned by this commenter.

It should be noted that the ARB did perform a cost analysis for the 1996 standards. As discussed in the ISOR (Volume II, Chapter VIII) the analysis examined the costs to manufacturers, consumers, and other related industries, as well as the cost-effectiveness ratio (the cost of the regulation per pound of VOC emissions reduced). The ISOR also examined the possibility that reformulated products would be less effective and would require that larger volumes of paint be applied. The analysis found that reformulated products would not be used in larger volumes or result in increased emissions. The potential environmental impacts of the regulation are discussed in detail in Volume II, Chapter VII of the ISOR.

12. Comment: To evaluate the commercial feasibility of the 1999 VOC standards, ARB should consider whether consumers will pay more for a product that is less effective, less convenient, or less safe. The ARB should also consider whether a separate marketing strategy for California will be needed. Manufacturers may be required to develop a separate marketing strategy for California and limit national advertising to the other 49 states. (NPCA)

Agency Response: These concerns can appropriately be considered at the public hearing to consider the technological and commercial feasibility of the 1999 standards.

D. Public Hearing to Consider the Technological and Commercial Feasibility of the 1999 VOC Standards

13. Comment: The 1998 hearing fails to provide basic procedural protections for the aerosol industry, because of the loose definitions for technological and commercial feasibility. Industry's fear is that the Board will be persuaded that a VOC limit is technologically feasible merely because one person can make it. (NPCA)

Agency Response: The ARB staff disagrees with this comment. As explained in the response to Comment number 10, it is not appropriate to include definitions for "technologically and commercially feasible" in the text of the regulation. In fact, we believe that the general definitions of technological and commercial feasibility described in the ISOR, Volume II, pages V8-V13 will allow the Board to make an appropriate, case-by-case decision about the feasibility of the 1999 standards more readily than would be allowed by detailed definitions that likely would not be appropriate for every aerosol paint category. The general definitions will allow all relevant information to be considered by the Board during the noticed public hearing, including information presented by the commenter and other members of the aerosol paint industry.

14. Comment: The ARB should formally convene a "committee of experts" to act as a review panel for the 1998 hearing and charge them with the responsibility to evaluate the

evidence regarding the technological and commercial feasibility of the 1999 standards and to make a recommendation to the ARB. This suggestion is consistent with the enabling legislation for the proposed rule. (NPCA)

Agency Response: The ARB staff will work closely with industry experts in the evaluation of the feasibility of the 1999 standards. As mentioned during the March 23, 1995 board hearing, we believe that this could be accomplished as part of our Consumer Products Working Group meetings, perhaps via a subgroup dedicated to aerosol paints. However, it would not be appropriate to duplicate or replace the function of the Board. The Health and Safety Code clearly vests the ultimate decision-making responsibility in the Board to determine whether the 1999 standards should be delayed or modified, after considering the evidence presented at the 1998 hearing.

15. Comment: The 1998 hearing, as it stands, provides industry an opportunity by which we are confident a workable solution to the 1999 standards will be found. (SW)

Agency Response: We agree with the commenter that the 1998 public hearing will provide an opportunity for the concerns of industry and other interested parties to be considered and resolved.

E. Reporting Requirements

16. Comment: The reporting requirements are unfair to smaller companies because the ARB's promise of the protection of confidentiality is of little value in light of the potential damage to small companies if their trade secrets are compromised, and because the cost of redress in court is too high for small businesses. (FOR)

Agency Response: The ARB understands how damaging the release of "trade secret" information could be to small, as well as large businesses, and takes very seriously its

responsibility to protect confidential information. We have a long history of protecting confidential information, including the information recently provided by industry in the aerosol paint and cost surveys conducted during the development of the aerosol paint regulation. The ARB is also legally required to provide confidentiality protection in accordance with the California Public Records Act and ARB regulations (Title 17, CCR, sections 91000-91022). Because the ARB intends to fully protect all confidential information of both large and small businesses, we do not believe that the reporting requirements are unfair to small businesses.

17. Comment: The reporting requirements are a fraud designed to preserve staff job security. The ARB rather than industry should hold the burden for demonstrating research and development that supports the 1999 standards because the aerosol paint industry is totally dependent on the research and development efforts of raw materials suppliers. (AER)

Agency Response: The ARB staff disagrees with this comment. The commenter appears to be referring to the reporting requirements in section 94524(c)(2) of the regulation, which require that manufacturers supply the ARB with information on their research and development efforts to achieve compliance with the 1999 standards. These reporting requirements are necessary to provide the ARB with the information required to evaluate the technological and commercial feasibility of the 1999 standards in preparation for the 1998 hearing. While we understand that much of the research and development leading to new, lower-VOC products is performed by suppliers such as resin manufacturers, it is still true that aerosol paint manufacturers develop and test products based on these new materials, and ultimately decide if the new formulations are satisfactory. Therefore, we believe it is appropriate for manufacturers to report on their research and development efforts, rather than having ARB speculate as to whether the research and development efforts of suppliers are sufficient to allow the 1999 standards to be achieved by manufacturers.

18. Comment The removal of the "onerous" quarterly reporting requirements in favor of the 1998 report is appropriate. (SW)

Agency Response: We agree that the reporting requirements in the aerosol paint regulation will be less burdensome and are more appropriate than quarterly reporting requirements. It should be further noted that the ARB did not propose quarterly reporting in its aerosol paint regulation. In addition, the reporting requirements in the ARB's regulation do not supersede the reporting requirements that may exist in a district rule adopted pursuant to a federal court order (i.e., the Bay Area Air Quality Management District's aerosol paint rule; see Health and Safety Code section 41712(f)(1)).

F. Amendments to the Alternative Control Plan

19. Comment: The ACP is inherently unfair, because it guarantees and institutionalizes an unlevel playing field which favors big companies over small companies. We predict that large companies with numerous product lines will be at an advantage over small companies and will target the market of a competitor by using surplus credits to produce a cheaper, better performing, higher VOC ACP product which eliminates compliant niche products from the marketplace. (FLC, RUD)

Agency Response: The ARB staff disagrees with the comment. An extensive discussion of the overall benefits the ACP regulation will provide to the regulated industry and consumers is contained in both the ISOR for this rulemaking action and the ISOR for the Alternative Control Plan Regulation for Consumer Products, August, 1994 (the "ACP ISOR," which is part of the record for this aerosol paint rulemaking action). The formulation and marketing flexibility afforded by the ACP will provide large and small consumer product manufacturers, including aerosol paint manufacturers, with an additional compliance option.

In Volume II, Chapter X of the aerosol paint ISOR and Chapter VI of the ACP ISOR, we provided an extensive discussion of the potential adverse economic impacts to small and one-product businesses under the ACP program. We evaluated this potential both for companies who participate and those that do not participate in the ACP program. Using the

best available data on the consumer products market, we determined that, overall, the consumer products industry will benefit from the ACP program. While we believe the scenarios which may result in adverse impacts to small and one-product manufacturers are unlikely, we also recognize that some individual companies may be adversely affected (see the discussion in the aerosol paint ISOR, Volume II, Chapter X-8 to X-13). To encourage small and one-product companies to participate in the ACP and thereby gain from its benefits, we have designed the external trading of surplus reduction credits primarily to benefit these companies. We believe that small and single-product companies will be able to purchase credits from larger companies. Because surplus reduction credits are recalculated at the end of each compliance period, all credits issued in one compliance period become invalid by the end of the next compliance period (new credits, if any, are calculated at that point). Therefore, manufacturers who cannot use all of their surplus credits by the end of the next compliance period have a strong incentive to sell such credits, especially to smaller businesses with whom they may not directly compete. We believe this provision will help minimize any adverse impacts the ACP may have on smaller manufacturers. Adverse impacts will also be minimized by prohibiting aerosol paints from being included in an ACP with other consumer products (see section 94541 of the ACP regulation, and the discussion of this issue in Volume II, Chapter X-12 of the aerosol paint ISOR).

20. Comment: The ARB's accommodation to limit the ACP within the aerosol coatings category is unsatisfactory. Niche manufacturers will still be victimized by the large companies with more product lines which they can generate credits from. (FLC)

Agency Response: The ARB staff disagrees with this comment and incorporates its Response to Comment number 19. Limiting the ACP to aerosol coatings will minimize any advantage gained by large companies with the ability to average aerosol paints with other consumer products. However, our analysis in the ISOR indicates that the ACP will benefit the industry overall and that both large and small companies will be able to benefit from the ACP.

21. Comment: The development of the ACP was unfairly influenced by the lobbying effort of "big business." The ARB staff was contacted hundreds of times by one company pushing this rule through. (FLC)

Agency Response: The ARB staff disagrees with this comment and was not unfairly influenced by "big business." During the regulatory process, we received comments from both small and large businesses on all aspects of the regulation, including the proposed inclusion of aerosol paints in the ACP regulation. The comments received were considered based on their merits, and not on the size of the business or the number of times the interested business contacted the ARB. In fact, the decision to limit the use of the ACP regulation to allow averaging only among aerosol paints, thereby preventing "averaging" between aerosol paints and other consumer products, was made based on the comments received from the commenter and from other small and medium-sized businesses.

22. Comment: In effect, the ACP requires only small companies to comply with the VOC standards whereas large companies may comply by means of "smoke and mirrors." Emissions of air pollutants may increase. (FLC)

Agency Response: We do not agree with the commenter. The ACP regulation contains numerous safeguards to ensure that participating companies actually achieve emission reductions that are equivalent to the emission reductions that would be achieved through meeting the VOC standards. Within the ACP application and plan, the responsible party must provide detailed information relating to the products to be sold; the enforceable 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 by meeting each VOC standard for each product in the ACP; and the contingency plan to be used for reconciling any shortfall, should such shortfalls occur. No ACP will be approved by the Executive Officer of the ARB unless all of the above information is provided, and demonstrates that the ACP will achieve the same overall emission

reductions as would be achieved by having all individual products in the ACP meet the prescribed VOC standards.

23. Comment: The ACP discourages new technology by allowing big companies to "juggle the books" instead. The ACP will disadvantage small businesses that have put significant effort into research and development. (FLC)

Agency Response: The ARB staff disagrees with this comment and incorporates its Response to Comment number 22. Participants in the ACP will have to achieve equivalent emission reductions by generating excess emissions credits from some product types to offset products above the VOC standards. Therefore, this should encourage development of new technology rather than discourage it. Because of the emissions averaging mechanism, the ACP will provide participating companies with more flexibility to choose the products that they wish to reformulate. Participants in the ACP will be able to focus their research and development efforts on the products which are the most cost-effective for them to reformulate. The ACP includes trading provisions designed mainly for use by small businesses to encourage their participation in the ACP program and thereby benefit from its high level of flexibility.

24. Comment: The ACP is of little or no value to small companies with few (or only one) product lines, because they will have nothing with which to average their products. (FLC, RUD, ZRC)

Agency Response: The ARB staff disagrees with this comment and incorporates its Responses to Comment numbers 19 and 22. To allow small and one-product companies to participate in the ACP, and thereby gain from its benefits, we have designed the external trading of surplus reduction credits primarily to benefit these companies. We believe this provision will help minimize any adverse impacts the ACP may have on smaller manufacturers.

25. Comment: The ACP favors larger Midwestern companies at the expense of California companies. (FLC)

Agency Response: The ARB staff disagrees with this comment and incorporates its Responses to Comment numbers 19 and 24. The ACP is intended to benefit both large and small companies regardless of where they might be located. .

26. Comment: If the 1996 VOC limits are already feasible, what is the need for the ACP? (FLC)

Agency Response: We agree that the 1996 VOC limits are feasible. However, as explained in detail in the ACP ISOR, and in the aerosol paint regulation ISOR, (Volume II, Chapter X) we believe the ACP regulation will reduce manufacturers' overall cost of controlling VOC emissions from aerosol paints, thereby reducing overall societal costs to consumers. Under the ACP program, overall emission reductions from aerosol paints will be equivalent to those that would be achieved by meeting each prescribed standard in the aerosol paint regulation. The goal of the ACP is to provide flexibility in complying with the specified VOC limits at the lowest cost to manufacturers and consumers.

27. Comment: The ACP is too complex; the administrative requirements would prohibit small companies with limited resources from entering an application even if averaging is advantageous. (RUD, FLC)

Agency Response: The ACP is a voluntary program and is offered only as an alternative to meeting all of the prescribed VOC standards. The administrative requirements in the ACP regulation are necessary to ensure that the emission reductions achieved are equivalent to the emissions reductions achieved under the existing regulation. However, we do not agree that these requirements would necessarily make it more difficult for small companies to participate in the ACP. The application for an ACP and the recordkeeping requirements could be

less complicated for small companies that may have fewer product lines and less complicated distribution systems. Additionally, a small business can participate in an ACP program by purchasing excess emission credits from another company. The surplus credits would be verified and issued by the Executive Officer. This allows a small company to benefit by reducing the number of products to be reformulated and reducing the costs of preparing an ACP application and subsequent recordkeeping.

28. Comment: The ACP will set a precedent for this type of program to spread to the rest of the nation. (FLC)

Agency Response: This comment is not directed at the amendments to the ACP, which deal only with emission averaging for aerosol coating products sold within California. The ARB staff is not able to predict whether or not the ACP regulation will set a precedent for similar regulations in other states.

29. Comment: In practice, the system of surplus credits envisioned by the ACP is "fundamentally ridiculous." (ZRC)

Agency Response: The ARB staff disagrees with this comment and incorporates its Responses to Comment numbers 19, 22, and 24. Because surplus reduction credits are recalculated at the end of each compliance period, all credits issued in one compliance period become invalid by the end of the next compliance period. Therefore, manufacturers who cannot use all of their surplus credits by the end of the next compliance period have a strong incentive to sell such credits.

30. Comment: The ACP is innovative; it provides flexibility and incentive for small companies as well as large ones. Small companies can overcomply to get emission credits or they can buy emission credits. (SW)

Agency Response: The ARB staff agrees with this comment.

31. Comment: Eventually the scope of the ACP should be substantially widened so that the bubble may include all consumer products as well as other sources of emissions. (SW)

Agency Response: We may consider widening the scope of the ACP regulation at a future date to include other consumer product categories or even other sources of VOC emissions. However, we believe it is prudent at this stage to determine the effectiveness of the ACP regulation before increasing its scope and complexity. In addition, as mentioned in comments 20 and 21, we believe it is appropriate to limit the use of the ACP regulation by aerosol paint manufacturers to only aerosol paint categories at this time, in order to address the concerns of smaller aerosol paint manufacturers. In addition, we do not feel it would be appropriate at this time to include unregulated categories of consumer products in the regulation. This is because no VOC standards have been established for these product categories, and without such VOC standards, there would be no baseline from which to measure reductions in VOC emissions. This is a basic requirement in an emissions averaging program such as the ACP. Further discussion of these issues can be found on page V-2 of the ACP ISOR.

32. Comment: If the ACP is adopted we are prepared to take any and all steps to contest it, including legal action, working with environmental groups and challenging the rule in the marketplace. If an ACP product threatens us we are prepared to match whatever VOC is in that product--and from there challenge the legality of the rule. (FLC)

Agency Response: The commenter has advanced no specific legal theory as to why the ACP violates any provision of California or federal law, and we are aware of no legal infirmity with the ACP. We are confident that the ACP will be upheld by the courts if the commenter chooses to file a lawsuit.

The commenter also states that they are "prepared to match whatever VOC is in" an ACP product. While this statement is somewhat unclear, the commenter appears to be saying that they might intentionally choose to manufacture and sell an aerosol coating product that contains more VOC than allowed by the regulatory standards. Such an action would constitute a violation of the regulations and subject the violator to potential civil and criminal penalties under Health and Safety Code section 42400 et seq.

G. Methylene Chloride Provision

33. Comment: The use of methylene chloride in aerosol coatings should not be addressed in a rule specifically designed to limit VOCs. (NPCA)

Agency Response: The ARB staff disagrees with this comment. We believe it is appropriate to place some restrictions on the use of methylene chloride. As explained in detail in the ISOR (Volume II, Chapter IX, Section A), methylene chloride is considered a probable human carcinogen. During the development of the aerosol paint regulation, we became aware of the possibility that methylene chloride use would increase dramatically to comply with the VOC limits in the regulation, because aerosol paints can be reformulated easily using methylene chloride as a solvent in the formulation. Under the California Environmental Quality Act (CEQA), when feasible, we are required to mitigate such potential adverse environmental impacts that may occur as a result of our regulations.

34. Comment: Although methylene chloride is not considered a human carcinogen, other regulations already discourage and restrict the use of methylene chloride. In order to provide flexibility, the ARB ought to leave the final decision with industry on whether or not it is worthwhile to use methylene chloride as a means of compliance with VOC limits. (NPCA)

Agency Response: The ARB staff disagrees with this comment and incorporates its Response to Comment number 33. As stated in the ISOR (Volume II, Chapter IX, section A)

exposure to methylene chloride is associated with potential cancer effects, liver toxicity, and central nervous system depression. In 1988, methylene chloride was added to California's Proposition 65 list of "Chemicals Known to the State to Cause Cancer", in 1989 it was identified as a toxic air contaminant under California's air toxics law (AB 1807), and in 1990, U. S. EPA identified it as a hazardous air pollutant. As such, methylene chloride is considered a probable human carcinogen and poses a potential adverse environmental impact if its use is unrestricted.

We assume the reference by the commenter to regulations which "discourage and restrict the use of methylene chloride" refers to the hazard labeling required by the Federal Health and Safety Act. We do not believe that these labeling regulations are adequate to prevent a potential increase in the use of methylene chloride. Many products in the ARB's aerosol paint survey were identified as using methylene chloride despite these labeling requirements. In addition, to comply with the VOC standards, the use of methylene chloride could increase because it will be much cheaper to reformulate products using methylene chloride than to reformulate to more expensive higher solids or water-borne formulations.

35. Comment: In lieu of the current language controlling methylene chloride, the regulation should contain a provision instructing manufacturers to track the usage of this solvent and to report the amount and specific use of it on an annual basis. (NPCA)

Agency Response: The ARB staff disagrees with this comment and incorporates its Responses to Comment numbers 33 and 34. Such a provision is not appropriate because simply requiring manufacturers to report the usage of methylene chloride would do virtually nothing to actually discourage its increased use. We believe that the current language is necessary in order to prevent increased use of methylene chloride in aerosol paints.

H. Miscellaneous Comments

36. Comment: The public process of workshops and public hearings is a "sham;" it restricts dialogue, sidesteps issues such as reactivity and fails to address at all the fundamental questions such as why the regulation is necessary. (AER)

Agency Response: The ARB staff disagrees with this comment. The proposed regulation was developed over a two year period, during which the ARB staff worked closely with the affected aerosol paint industry, trade associations, and other concerned parties. The process included six workshops, numerous meetings, and dozens of telephone conversations. The formal proposal of the regulation followed the specific process set forth in the Administrative Procedure Act. The regulatory process was open to all comments and concerns, as evidenced by the numerous comments the ARB received during the 45-day comment period and during the public hearing that expressed appreciation for the open process, and the willingness of the ARB staff to consider the commenter's concerns. Because Health and Safety Code section 41712(f) specifically requires the ARB to adopt a regulation to reduce VOC emissions from aerosol paints, the issue of the necessity for the regulation was not a major focus of the regulatory process. However, the necessity for the regulation is thoroughly discussed in the ISOR (see Volume II, Chapter II).

The ARB staff did consider incorporating reactivity considerations (the ozone forming potential of individual VOC compounds) into the aerosol paint regulation. However, we did not feel it was appropriate to incorporate reactivity considerations into the regulation at this time because the science of measuring the reactivity of VOC species is still developing and not all VOC species used in aerosol paints have established reactivity values. However, the ARB is continuing to investigate the possibility of incorporating reactivity considerations into current and future consumer products regulations as information becomes available.

37. Comment: There are no documented benefits from previous consumer products regulations which justify this rule. Since consumer products contribute only 3 percent of total VOC emissions this [aerosol paint] rule or any other rule affecting consumer products is not justified and will not provide any cost effective benefits. (AER)

Agency Response: The ARB staff disagrees with this comment. Emission reductions of VOCs are required as part of the California State Implementation Plan (SIP) to meet the National Ambient Air Quality Standards for ozone. As discussed in the ISOR (Volume II, Chapter II), to meet the SIP goals, emission reductions are required from nontraditional sources such as consumer products, including aerosol paints. In the SIP the State committed to specific emission reductions from aerosol paints. Without these reductions, it will be difficult for the State to reach the ozone attainment goal.

Furthermore, an economic impact analysis conducted by ARB staff demonstrates that this regulation is cost-effective compared to other air quality regulations. This analysis is contained in Volume II, Chapter VIII of the ISOR, with the cost effectiveness of the regulation discussed on page VIII-6.

38. Comment: The ARB lacks clear, meaningful goals for this regulation. The hidden goal is to eliminate all VOCs from consumer products. The agency's activity in general is driven by desire to perpetuate itself and preserve job security rather than a course which includes specific achievement and public measurement. The 1998 reporting requirements are an attempt by staff to provide "continual employment." The ARB consumer products program is an inefficient use of staff hours. (AER)

Agency Response: The ARB staff disagrees with this comment. The ARB's goal throughout the regulatory process has been to achieve the maximum feasible reduction in the VOC emissions from aerosol paints, as the Legislature has specifically required the agency to do in Health and Safety Code section 41712. As explained in detail in the ISOR (Volume II, Chapter

II), emission reductions from consumer products, including aerosol paint, are necessary to achieve compliance with health-based State and federal ambient air quality standards for ozone and PM-10 (particulate matter with an aerodynamic diameter less then 10 micrometers). The 1998 reporting requirements are designed to provide ARB staff with the necessary information to determine whether the 1999 future effective VOC standards are technologically and commercially feasible, as required by Health and Safety Code section 41712(f). The information provided for the 1998 hearing will be a major factor in determining if manufacturers need additional time to meet the 1999 standards. The ARB staff's time expended on consumer products is necessary to carry out the mandate of the Legislature.

39. Comment: The categories included in the rule should have been more carefully constructed. For example, zinc rich primers belong as metallic pigmented coatings, not primers, or perhaps in a category all by themselves. (ZRC)

Agency Response: The categories in the regulation were developed by further refining the existing definitions in the BAAQMD's aerosol paint regulation, based on comments received during the regulatory process. These categories were very carefully defined. Zinc-rich primers were appropriately classified under the "primer" category because they are a type of primer and it is technologically feasible for them to comply with the 60 percent VOC limit for 1996.

40. Comment: The lacquer provision is appropriate; without it, lacquers would be effectively banned in California. (SW, SPC, YEN, OPC)

Agency Response: As explained in detail in the ISOR (Volume II, Chapter IX, Section B), we agree that section 94522(h), which provides a temporary higher VOC standard for lacquers, is appropriate.

41. Comment: If aerosol lacquer paints are unavailable, bulk lacquers will be diluted and used in spray guns resulting in greater emissions than aerosol lacquers (SW)

Agency Response: As explained in detail in the ISOR (Volume II, Chapter VII, section D), we do not believe that consumers will switch to air brushes or spray guns if lacquers or other "traditional" high-VOC aerosol coatings become unavailable. This is because of the high cost and inconvenience of purchasing the necessary spray coating equipment, and because alternative complying products will be available. However, even if some consumers did switch to air brushes or spray guns, the resulting emissions may actually be lower than the emissions resulting from aerosol paints, depending on the individual situation.

42. Comment: Shipboard use of aerosol coatings by the United States Navy is not a commercial activity and should therefore be exempted under the proposed regulation. In addition, the shipment into California of aerosol coatings for use on Navy ships should be exempted. (USN)

Agency Response: We agree that shipboard use of aerosol coatings by the United States Navy is not a commercial activity, and that such use is not restricted by the proposed regulation. Under section 94523(d) of the regulation, the prohibition on the application of noncomplying aerosol paints is limited to commercial applications. Therefore, it would not be a violation of the regulation if a Navy ship has a noncomplying product on-board and the product is used while the ship is docked in California. However, the regulation makes it illegal to sell, supply, offer for sale or manufacture for use in California noncomplying aerosol paint, whether or not the paint is intended for commercial use. Therefore, if noncomplying aerosol paints were being supplied to Navy bases in California, and the supplier of the paint did not take reasonable, prudent precautions to ensure the product was not distributed into California (as specified in section 94523(c)), the supplier would be in violation of the regulation. Section 94523(c) is essentially identical to section 94510(b) in the consumer products regulation. This provision is necessary because, in line with the policy expressed in section 118 of the Clean Air Act (42 U. S. C. section 7418), it would compromise air quality goals to provide a blanket regulatory exemption for the Navy or any other agency of the federal government.

43. Comment: In order for the ACP to qualify as a SIP revision, two administrative details need to be included as an administrative procedures document with the formal submittal to the U. S. EPA. First, a discussion of what comprises a satisfactory statistical determination of "Enforceable California Sales" should be presented. Second, a discussion of how the ACP program will be audited by ARB is required. The EPA does not believe that these issues warrant a revision to the text of the regulation. (EPA)

Agency Response: The Board is committed to working closely with the U. S. EPA staff to ensure that all necessary documentation is submitted to support the approvability of the ACP as a SIP revision.