

**State of California
AIR RESOURCES BOARD**

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

**THE ADOPTION OF PROPOSED AMENDMENTS TO THE
CALIFORNIA CONSUMER PRODUCTS REGULATIONS**

**Hearing Date: September 26, 2013
Agenda Item No. 13-8-3**

State of California
AIR RESOURCES BOARD

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

PUBLIC HEARING TO CONSIDER ADOPTION OF PROPOSED AMENDMENTS TO
THE CALIFORNIA ANTIPERSPIRANTS AND DEODORANTS REGULATION;
CONSUMER PRODUCTS REGULATION; AEROSOL COATING PRODUCTS
REGULATION; THE TABLES OF MAXIMUM INCREMENTAL REACTIVITY VALUES;
TEST METHOD 310; AND PROPOSED REPEAL OF THE HAIRSPRAY
CREDIT PROGRAM

Public Hearing Date: September 26, 2013
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I. GENERAL

- A.** The Staff Report: Initial Statement of Reasons for Rulemaking (Staff Report), entitled Public Hearing to Consider Proposed Amendments to the Antiperspirants and Deodorants Regulation; Consumer Products Regulation; Aerosol Coating Products Regulation; the Tables of Maximum Incremental Reactivity Values; Test Method 310; and Proposed Repeal of the Hairspray Credit Program Regulation, released August 7, 2013, is incorporated by reference herein. The Staff Report contains a description of the rationale for the proposed amendments. On August 7, 2013, all references relied upon and identified in the staff report were made available to the public.

In this rulemaking, on September 26, 2013, the California Air Resources Board (ARB or Board) approved for adoption amendments covered by the initially proposed rulemaking. The primary purpose of the amendments is to lower the impacts that volatile organic compound (VOC) emissions from use of consumer products and aerosol coatings have on formation of ground-level ozone. When fully implemented, VOC emissions would be reduced by about four tons per day statewide. Of this amount, about 1.8 tons per day reduction would occur in the South Coast Air Quality Management District (SCAQMD).

The Board approved for adoption new or lower VOC limits for aerosol adhesives and for aerosol "Multi-purpose Solvent" and "Paint Thinner" products. In these same categories the Board approved for adoption prohibitions on use of several

chlorinated toxic air contaminants (TAC) (except for “Mist Spray Adhesive” and “Web Spray Adhesive” categories where use is already prohibited) and precluded use of compounds with high global warming potentials (GWP). The Board also set lower Reactivity Limits for aerosol coating products.

In addition, the Board approved amendments to provide clarity to a number of definitions, provide reformulation flexibility by exempting trans-1,3,3,3-tetrafluoropropene (HFO-1234ze) from the VOC definition, extend a compliance date for a VOC standard to address commercial and technological feasibility, strengthen the enforcement process, and repeal provisions that have expired. Other amendments stem the circumvention of provisions for “Multi-purpose Solvent” and “Paint Thinner” products, particularly for products sold in the SCAQMD. Amendments to Method 310 is to establish procedures to test various products for compliance. Finally, the Board approved the repeal of the Hairspray Credit Program as its usefulness has expired

The sections adopted for amendments are codified in title 17, California Code of Regulations (CCR), sections 94500-94506.5, 94507-94517, 94520-94528, 94560-94575, and 94700-94701.

B. MANDATES AND FISCAL IMPACTS TO LOCAL GOVERNMENTS AND SCHOOL DISTRICTS

The Board has determined that this regulatory action will not result in a mandate to any local agency or school district the costs of which are reimbursable by the state pursuant to Part 7 (commencing with section 17500), Division 4, Title 2 of the Government Code.

C. CONSIDERATION OF ALTERNATIVES

For the reasons set forth in the Staff Report, staff’s comments and responses at the hearing, and in this Final Statement of Reasons, the Board determined that no alternative considered by the agency would be more effective in carrying out the purpose for which the regulatory action was proposed, or would be as effective as and less burdensome to affected private persons, or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provisions of law than the action taken by the Board.

II. MODIFICATIONS MADE TO THE ORIGINAL PROPOSAL

A. MODIFICATIONS APPROVED AT THE BOARD HEARING AND PROVIDED FOR PUBLIC COMMENT IN THE 15-DAY COMMENT PERIOD

Minor modifications to the original proposal were made in response to comments received during the 45-day public comment period, to clarify the regulatory language and to correct drafting errors. These modifications are described below:

1. Modifications to section 94515(j): A clarification was made on the process to determine VOC content for “Multi-purpose Solvent” and “Paint Thinner” products sold, supplied, offered for sale, or manufactured for sale in the SCAQMD. The modifications clarify that only the amount of methyl esters with 17 or more carbon atoms that volatilize during analytical testing will be excluded from the total volatile material prior to calculating VOC content.
2. Modifications to section 3.3.5 of Method 310: A modification was made to clarify that for nonaerosol “Multi-purpose Solvent” and “Paint Thinner” products sold, supplied, offered for sale, or manufactured for sale in the SCAQMD, analysis of exempt and prohibited compounds shall include analysis of methyl esters with 17 or more carbon atoms. Additionally, the reference to “palmitate” was deleted.
3. Modifications to section 4.2.4 of Method 310: A modification was made to clarify that for nonaerosol “Multi-purpose Solvent” and “Paint Thinner” products sold, supplied, offered for sale, or manufactured for sale for use in the SCAQMD, only the amount of methyl esters with 17 or more carbon atoms that volatilize during analytical testing will be excluded from the total volatile material prior to calculating VOC content. Additionally, the reference to “palmitate” was deleted.
4. Modification to section 94508(a)(58): A modification was made to clarify that the “General Purpose Cleaner” category does not include “Furniture Maintenance Products.”
5. Modification to section 94508(a)(88): A modification was made to clarify that products that do not display specific use instructions on the product container or packaging and products that do not display an end-use function or application on the product container or packaging are “Multi-purpose Solvent” products.
6. Modifications to section 94508(a)(122) and 94508(a)(123): The definitions of “Single Purpose Cleaner” and “Single Purpose Degreaser” were modified to clarify that products must be designed and labeled as single purpose products. Additionally, language was added to clarify that products subject to an existing regulated category are not single purpose products.

These modifications to the original proposal were necessary to improve clarity and enforcement of the Consumer Products Regulation.

B. NON-SUBSTANTIAL MODIFICATIONS

Subsequent to the 15-day public comment period mentioned above, staff identified the following additional non-substantive changes to the regulation:

- Section 94508(a) the definition (88) for “Multi-purpose Solvent” and the definition (99) for “Paint Thinner”: Corrected for consistency: “Zinc –Rich Primers” to “Zinc-Rich Primers.”

The above described modification constitutes non-substantial change to the regulatory text because it corrects spelling or grammatical errors, but does not materially alter the requirements or conditions of the proposed rulemaking action.

III. DOCUMENTS INCORPORATED BY REFERENCE

The regulation and the incorporated documents adopted by the Executive Officer incorporate by reference the following documents:

- Method 310, Determination of Volatile Organic Compounds (VOC) in Consumer Products and Reactive Organic Compounds in Aerosol Coating Products (September 29, 2011);
- The following documents are incorporated by reference in the proposed amendments to Method 310, Determination of Volatile Organic Compounds (VOC) in Consumer Products and Reactive Organic Compounds in Aerosol Coating Products (September 29, 2011):

ASTM D1613 - 06 “Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products (April 1, 2011);”

ASTM D523 - 08 “Standard Test Method for Specular Gloss (June 1, 2008);” and

ASTM D5381 - 93(reapproved 2009) “Standard Guide for X-Ray Fluorescence (XRF) Spectroscopy of Pigments and Extenders.”

These documents were incorporated by reference because it would be cumbersome, unduly expensive, and otherwise impractical to publish them in the California Code of Regulations. In addition, some of the documents are copyrighted, and cannot be reprinted or distributed without violating the licensing agreements. The documents are lengthy and highly technical test methods that would add unnecessary additional volume to the regulation. Distribution to all recipients of the California Code of Regulations is not needed because the interested audience for these documents is limited to the technical staff at a portion of reporting facilities, most of whom are already familiar with these methods and documents. Also, the incorporated documents were made available by ARB upon request during the rulemaking action and will continue to

be available in the future. The documents are also available from college and public libraries, or may be purchased directly from the publishers.

IV. SUMMARY OF COMMENTS AND AGENCY RESPONSE

Written comments were received during the 45-day comment period in response to the September 26, 2013, Board Hearing, public hearing notice, and written and oral comments were presented at the Board Hearing. Listed below are the organizations and individuals that provided comments during the 45-day comment period:

45-Day Comments

The table below contains a list of commenters who submitted written comments on the proposed amendments contained in the August 7, 2013, ISOR that were received during the 45-day comment period or who testified at the September 26, 2013, Board Hearing. Written submittals were received between August 19, 2013 and September 26, 2013. Oral testimony was presented at the September 26, 2013, hearing. *NOTE: Written comments and oral testimony were not edited by ARB staff to correct for grammar or punctuation.*

Commenter	Affiliation
Palmer, Brian (August 19, 2013)	(no affiliation provided) (PALM)
Wallerstein, Barry (September 3, 2013)	South Coast Air Quality Management District (SCAQMD-1)
Darling, David (September 9, 2013)	American Coatings Association (ACA-1)
Massie, Danny (September 17, 2013)	Maxima Racing Oils (MAX-1)
Ferrans, Michael (September 17, 2013)	Honeywell (HONEY)
Rivers, Mark (September 17, 2013)	Aeropres Corporation (AEROPRES)
Buckland, George (September 19, 2013)	National Aerosol Association (NAA-1)
Vanderlaan, Roger (September 19, 2013)	Western Aerosol Information Bureau, Inc. (WAIB)
Lopez, Donna (September 20, 2013)	Shield Packaging of California Inc. (SHIELD)
Johnson, Gregory (September 20, 2013)	Sherwin-Williams Diversified Brands (SWDB)
Seidl, Sara (September 23, 2013)	Ecolab, Inc. (ECO)
Blum, John (September 23, 2013)	Ball Corporation (BALL)
Levenson, Nancy (September 23, 2013)	S.C. Johnson & Son, Inc. (SCJ-1)
Cooley, Michael (September 23, 2013)	W.M. Barr and Company, Inc. (WMB)
Frauenheim, William (September 23, 2013)	Diversified CPC International, Incorporated (DCPC)
Williams, Mark (September 23, 2013)	Aervoe Industries, Inc. (AERVOE)
Wolman, Dave (September 23, 2013)	Motul USA, Inc. (MOT)
Krause, Henry (September 23, 2013)	Finish Line Technologies, Inc. (FL)
Gabram, Kurt (September 23, 2013)	Blaster Corporation (BLASTER-1)

Sweger, Robert (September 23, 2013)	Stoner Incorporated (STON-1)
Selisker, Adam (September 23, 2013)	CRC Industries, Inc. (CRC)
Jacobson, Catherine (September 24, 2013)	3M (3M)
Fratz, Douglas; Yost, Joseph; Power, Kristin (September 24, 2013)	Consumer Specialty Products Association (CSPA-1)
Beaver, Larry (September 24, 2013)	Radiator Specialty Company (RSC)
Freeman, Michael (September 24, 2013)	WD-40 Company (WD40-1)
Pleus, Michael (September 24, 2013)	Reckitt Benckiser LLC (RB)
Froelicher, Julie (September 24, 2013)	Procter & Gamble Company (P&G)
Ruege, Daniel (September 24, 2013)	Plasti Dip International (PDI)
Bastian, Bart (September 24, 2013)	Spray Products Corporation (SPRAY)
Piszynski, Edward (September 24, 2013)	Chicago Aerosol (CA)
Toman, Dru (September 25, 2013)	Dow Chemical Company (DOW)
Myers, Thomas (September 25, 2013)	Personal Care Products Council (PCPC)
McAuliffe, Heidi (September 26, 2013)	American Coatings Association (ACA-2)
Tisopulos, Laki (Oral, September 26, 2013)	South Coast Air Quality Management District (SCAQMD-2)
Power, Kristin (Oral, September 26, 2013)	Consumer Specialty Products Association (CSPA-2)
Pearce, Christopher (Oral, September 26, 2013)	S.C. Johnson & Son, Inc. (SCJ-2)
McAuliffe, Heidi K. (Oral, September 26, 2013)	American Coatings Association (ACA-3)
Sweger, Robert (Oral, September 26, 2013)	Stoner Incorporated (STON-2)
Richardson, Elaine (Oral, September 26, 2013)	Calumet Specialty Products (CALU)
Freeman, Mike (Oral, September 26, 2013)	WD-40 (WD40-2)
Gabram, Kurt (Oral, September 26, 2013)	Blaster Corporation (BLASTER-2)
Massie, Danny (Oral, September 26, 2013)	Maxima Racing Oils (MAX-2)
Darling, David (Oral, September 26, 2013)	American Coatings Association (ACA-4)
Raymond, Doug (Oral, September 26, 2013)	W.M. Barr Company; National Aerosol Association; CRC Corporation; and Radiator Specialties Company (RRR)

15-Day Comments

The table below contains the list of commenters who submitted written comments on the modifications during the 15-day comment period. The Notice of Public Availability of Modified Text was made available for Public Comment on April 3, 2014. Written submittals were received on April 17, 2014, and April 18, 2014. *NOTE: Written comments were not edited by ARB staff to correct for grammar or punctuation.*

Commenter	Affiliation
Rogge, Michael (April 17, 2014)	California Manufacturers & Technology Association (CMTA)
Fratz, Douglas; Power, Kristin; Yost, Joseph (April 18, 2014)	Consumer Specialty Products Association (CSPA-3)
Raymond, Doug (April 18, 2014)	National Aerosol Association (NAA-2)

45-Day Comments and Agency Responses

Support for the Proposed Amendments

- 1. Comment:** The South Coast Air Quality Management District (SCAQMD) staff supports California's Air Resources Board's (CARB) proposed amendments to the California Consumer Products Regulation. **(SCAQMD-1)**
- 2. Comment:** NAA supports the amendments, especially the addition of numerous definitions, which provide clarification and consistency to the rule. **(NAA-1)**
- 3. Comment:** WAIB supports the current amendments to the Consumer Products Regulation and the Aerosol Coating Products Regulation. WAIB appreciates the staff's willingness to meet with our members. **(WAIB)**
- 4. Comment:** We support the amendments to the Consumer Products Rule. We appreciate the staff willingness to discuss the technical issues with us. **(SHIELD)**
- 5. Comment:** Ecolab supports the amendments to the Consumer Products regulation. **(ECO)**
- 6. Comment:** Ball Metal Food & Household Products appreciates the opportunity to comment on the Proposed Amendments to the Aerosol Coating Products and the Consumer Products Regulations scheduled for consideration by the California Air Resources Board on September 26, [2013]. Ball supports specific comments submitted by the American Coatings Association and the Consumer Products Association on the Proposed Amendments.

While the proposed regulatory provisions are technically challenging for the industry to meet, we believe that the proposed amendments are a reasonable approach to meeting the required emissions reductions and we commit to expend the necessary time and effort to meet these new regulatory standards. **(BALL)**

7. Comment: We appreciate the staff's willingness to review industry's technical data. We support the current amendments to the Consumer Products Rule. **(DCPC)**

8. Comment: Aervoe Industries, Inc. supports the amendments to the Consumer Products regulation and Aerosol Coating Products regulation with added consideration on all comments mentioned. **(AERVOE)**

9. Comment: Motul supports the amendments to the Consumer Products regulation. **(MOT)**

10. Comment: We appreciate the staff's willingness to review Industry's technical data. We support the current amendments to the Consumer Products Rule. **(FL)**

11. Comment: Blaster Corporation supports the amendments to the Consumer Products regulation. **(BLASTER-1)**

12. Comment: Stoner Incorporated supports the amendments to the Aerosol Coating Products Regulation and the Consumer Products Regulation. **(STON-1)**

13. Comment: CRC supports the Consumer Products amendments. We appreciate the staff's willingness to meet and work with us on these important issues. **(CRC)**

14. Comment: 3M supports the comments being submitted by the American Coatings Association and the Consumer Specialty Products Association. **(3M)**

15. Comment: We appreciate the consideration of our written comments filed during this rulemaking dated October 10, 2012, March 21, 2013, May 17, 2013, July 8, 2013, and July 26, 2013, these documents are incorporated herein by reference.

CSPA's goal has been to assist ARB staff in assuring the 2013 Amendments to the Aerosol Coatings and Consumer Products Regulations are both feasible and necessary. CSPA has coordinated efforts with the American Coatings Association (ACA) in relation to the feasibility of revised product standards, and with numerous other consumer product industry associations as it relates to some of the other proposed regulatory provisions to assure a consistent industry response. **(CSPA-1)**

16. Comment: Radiator Specialty Company supports the amendments to the Consumer Products regulation. **(RSC)**

17. Comment: WD-40 Company would like to thank staff for their willingness to meet with us. WD-40 supports the amendments to the Consumer Products regulation. **(WD40-1)**

18. Comment: Reckitt Benckiser supports specific comments submitted by the American Coatings Association and the Consumer Specialty Products Association on the Proposed Amendments.

Reckitt Benckiser appreciates the opportunity for stakeholder input as the proposed regulation was developed. The Planning and Technical Support Division staff conducted several public workshops and considered the technical input of stakeholders in revising proposed amendments to help ensure the final draft achieved the required emissions reductions and does not compromise the statutory requirements to ensure that proposals must be technically and commercially feasible and does not eliminate any product form.

While the proposed regulatory provisions are technically challenging for the industry to meet, we believe that the proposed amendments are a reasonable approach to meeting the required emissions reductions and we commit to expend the necessary time and effort to meet these new regulatory standards. **(RB)**

19. Comment: Spray Products supports the amendments to the Consumer Products regulation and Aerosol Coating regulation. **(SPRAY)**

20. Comment: Chicago Aerosol appreciates the opportunity for stakeholder input as the proposed regulation was developed. The Planning and Technical Support Division staff conducted several public workshops and considered the technical input of stakeholders in revising the proposed amendments to help ensure the final draft achieved the required emissions reductions and does not compromise the statutory requirements to ensure that proposals must be technically and commercially feasible and does not eliminate any product form.

While the proposed regulatory provisions are technically challenging for the industry to meet, we believe that the proposed amendments are a reasonable approach to meeting the required emissions reductions and we commit to expend the necessary time and effort to meet these new regulatory standards.

We support the specific comments submitted by both the American Coatings Association and the Consumer Specialty Products Association on the Proposed Amendments. **(CA)**

21. Comment: Dow supports the specific comments submitted by the American Coatings Association and the Consumer Specialty Products Association on the Proposed Amendments.

Dow appreciates the opportunity for stakeholder input as the proposed regulation was developed. The Planning and Technical Support Division staff conducted several public workshops and considered the technical input of stakeholders in revising the proposed amendments to help ensure the final draft achieved the required emissions reductions and does not compromise the statutory requirements to ensure that proposals must be technically and commercially feasible and does not eliminate any product form.

While the proposed regulatory provisions are technically challenging for the industry to meet, we believe that the proposed amendments are a reasonable approach to meeting the required emissions reductions and we commit to expend the necessary time and effort to meet these new regulatory standards. **(DOW)**

22. Comment: The [PCP] Council worked with the Consumer Specialty Products Association (CSPA), as well as other trade associations, during the course of this rulemaking, and we are aware of the positions CSPA has taken on the amendments to the Consumer Products Regulation, Aerosol Coatings Regulation, and other regulations. As such, we support the September 24, 2013 comments submitted by CSPA to ARB. **(PCPC)**

23. Comment: ARB has proposed many other amendments to the Consumer Products Regulation and ACA supports those comments offered by the Consumer Specialty Products Association (CSPA). **(ACA-2)**

24. Comment: For 50 years, the Cleveland, Ohio, based Blaster Corporation has manufactured penetrants, lubricants, rust inhibitors, and a full line of specialty formulas for the automotive industry, industrial industry, and hardware. My purpose here today is to support amendments to consumer products regulations. **(BLASTER-2)**

25. Comment: The first three is -- the first one is the National Aerosol Association, association which represents fillers, marketers, and suppliers to the aerosol industry.

Second one is CRC Industries. The third is Radiator Specialty Corporation. And both the last two are manufacturers of household, industrial, and automotive products. The first three organizations fully support the amendments that are put in. **(RRR)**

Agency Response to Comments 1-25: Support noted. At the September 26, 2013, hearing the Board approved staff's proposals with staff's suggested modifications to the Consumer Products Regulation and the Aerosol Coating Products Regulation. When fully effective, the Consumer Products Regulation amendments would reduce VOC emissions by 0.4 tons per day, prevent potential exposure to carcinogens, and minimize potential climate change impacts. Amendments to the Aerosol Coating Products Regulation are primarily designed to lower the ozone forming potential of aerosol coating products. When fully effective, these amendments would result in an equivalent VOC reduction of about 3.7 tons per day statewide, with about 1.6 tons per day of the reductions occurring in the SCAQMD, beginning in 2017.

Proposed Consumer Product Definitional Changes

26. Comment: NAA supports the changes to the definitions in both the Consumer Products regulation and Aerosol Coating regulation. Changes to the definitions for Aerosol Adhesive, Dry lubricants, Multi-purpose Lubricant, Silicone Multi-purpose Lubricant, and Gear, Chain or Wire lubricant provide clarity to the regulation. Likewise the added definitions of No Rinse Shampoo, Thermal Protectants, Single Purpose Cleaner and Single Purpose Degreaser provide clarity and better define the categories. **(NAA-1)**

27. Comment: Sherwin-Williams supports the revised definitions in the consumer products regulation. We urge the ARB to consider the appropriate date for the definitions to become effective. Should a new definition require or result in a product change the effective date must match accordingly. **(SWDB)**

28. Comment: The amendments propose a number of revisions to existing definitions in the Consumer Products Regulation that are of interest to SC Johnson. For example, the definition of “Fabric Protectant” is amended to reflect a change in the title of the “Vinyl/Fabric/Leather/Plastic” Specialty Coating category that has been proposed in amendments to the Aerosol Coating Product Regulation. SC Johnson supports this clarification. Similarly, we can support the proposed amendment to the definition of “Waterproofer,” which clarifies that aerosol waterproofing products are subject to the Aerosol Coating Product Regulation, not the Consumer Products Regulation.

SC Johnson also can support two other definition revisions: For insecticides, we have no objection to the proposed reorganizational change that would bring the various subcategories of Insecticide products under a single, unified definition for added clarity. Similarly, for air fresheners, we do not object to the proposed grouping of current subcategories of air freshener related product definitions under a single “Air Freshener” definition encompassing “Double Phase Aerosol Air Freshener,” “Dual Purpose Air Freshener/Disinfectant,” and “Single Phase Aerosol Air Freshener.” **(SCJ-1)**

29. Comment: First, SC Johnson fully supports the proposed limits and definitions contained in the amendment to the aerosol coating and consumer product regulations. We especially appreciate the inclusion of new and revised definitions that not only improve clarity in the regulation, but also recognize the characteristics of water-based aerosol technologies. **(SCJ-2)**

30. Comment: 3M supports the change in the definition of “undercoating.” The revised definition more accurately reflects how these products are used and clearly delineates which products are regulated by the Consumer Products Rule vs. the Aerosol Coatings Rule.

3M also supports the addition of definitions for “special purpose cleaner” and “special purpose degreaser” and the revised definitions for “fabric protectant,” “general purpose

cleaner,” “general purpose degreaser,” “silicone-based multi-purpose lubricant,” and “waterproof.” These new and revised definitions improve the clarity of the rule. **(3M)**

31. Comment: CSPA supports the revised definitions for General Purpose Cleaner, General Purpose Degreaser, Multi-purpose Lubricant, and Multi-purpose Silicone Lubricant, along with the new definitions for Special Purpose Cleaner and Special Purpose Degreaser, which provide additional clarity for these categories. We continue to recommend that ARB establish an enforcement advisory to record how this distinction between general-purpose/multi-purpose and special-purpose products is being interpreted.

CSPA supports the revised definitions for Fabric Protectant, Footwear or Leather Care Product, Rubber/Vinyl Protectant, Undercoating, and Waterproof. We also support the modifications to the definitions for Paint Thinners and Multi-purpose Solvents, but continue to encourage ARB to ensure that products whose primary purpose is subject to other standards not be further regulated in these categories.

CSPA supports the positions of the Personal Care Products Council (PCPC) regarding the various definitions relating to hair care products.

CSPA also supports the new definitions for Screen Printing Adhesive. **(CSPA-1)**

32. Comment: Maxima support the addition of the Single Use [Purpose] Cleaner and Single Use [Purpose] Degreaser definition. Most of our products are developed for racing. These definitions clearly indicate that products we produce for a single use are not regulated under the General-purpose category. This change will provide clarity for the industry. **(MAX-1)**

33. Comment: WAIB supports the addition of the terms Single Purpose Cleaner and Single Purpose Degreaser. These terms were needed to clarify that products designed as a specific cleaner/degreaser are not general-purpose products. Certain cleaning applications require specific needs, which cannot always be met by a general-purpose product. **(WAIB)**

34. Comment: Shield supports the addition of the definitions for Single Purpose Cleaner and Single Purpose Degreaser. Shield produces General Purpose products and Single Purpose products. The addition of the definitions provides clarity to the regulation. **(SHIELD)**

35. Comment: Ecolab supports the addition of the definitions for Single Purpose Cleaner and Single Purpose Degreaser. Ecolab produces General Purpose products and Single Purpose products. The addition of the definitions provides clarity to the regulation. **(ECO)**

36. Comment: Aervoe supports the addition of the terms Single Purpose Cleaner and Single Purpose Degreaser. These terms were needed to clarify that products designed as a specific cleaner/degreaser are not general-purpose products. Certain cleaning applications require specific needs, which cannot always be met by a general-purpose product. **(AERVOE)**

37. Comment: Motul supports the addition of Single Purpose Cleaner and Single Purpose Degreaser definitions. Motul sells products for the motorsports industry. Most of our products are targeted toward specific uses and are not general-purpose products. This addition of these definitions clarifies the intent of the regulation. **(MOT)**

38. Comment: Finish Line supports the addition of the Single Use [Purpose] Cleaner and Single Use [Purpose] Degreaser definitions. Finish Line produces product specifically and solely for degreasing Bicycle chains and gears. They are designed to clean and degrease the heavy grunge that builds up on these parts (These parts are critical to the bicycle's performance, yet extremely difficult to degrease.) Our bicycle degreasers are not General Purpose products. The addition of these definitions will provide Finish Line the ability to sell much needed high performing bicycle chain and gear degreasing products to cyclists. **(FL)**

39. Comment: Blaster supports the addition of the terms Single Purpose Cleaner and Single Purpose Degreaser. These terms were needed to clarify that products designed as a specific cleaner/degreaser are not general-purpose products. Certain cleaning applications require specific needs, which cannot always be met by a general-purpose product. **(BLASTER-1)**

40. Comment: Stoner Inc. supports the addition of the terms Single Purpose Cleaner and Single Purpose Degreaser. These terms were needed to clarify that products designed as a specific cleaner / degreaser are not general-purpose products. Certain cleaning applications require specific needs, which cannot always be met by a general-purpose product. **(STON-1)**

41. Comment: CRC supports the addition of the Single-Use [Purpose] Cleaner and Single-Use [Purpose] Degreaser definition. CRC produces products that are General Purpose and for Single Use. These definitions were needed to clarify the difference in these products. **(CRC)**

42. Comment: RSC supports the addition of the definitions for Single Purpose Cleaner and Single Purpose Degreaser. RSC produces General Purpose products and Single purpose products. The addition of the definitions provides clarity to the regulation. **(RSC)**

43. Comment: Spray Products does support the new definitions for single use [purpose] cleaner and single use [purpose] degreaser. These definitions provide clarity to the regulation that not all products are or General-purpose use. Spray Products

develops products for both single use purposes and general-purpose use. This addition will clarify issues with our customers. **(SPRAY)**

44. Comment: We are here today to support the amendments for the consumer products regulation. Stoner has a number of issues, but in particular, we support the new definitions for the single purpose cleaners and degreasers. The addition of these terms clarifying the regulations and we feel they were needed. **(STON-2)**

45. Comment: Finally, Blaster supports the single purpose cleaner and degreaser definition, clarification that all cleaners and degreasers are not multi-purpose was needed. **(BLASTER-2)**

46. Comment: We also support the new definitions for single purpose cleaners and degreasers. As stated before, our products are specifically designed for racing and are not general purpose products. CARB and their staff made themselves available to discuss these details in much more detail, and we appreciate the staff's willingness to meet with us to discuss the issues. **(MAX-2)**

47. Comment: WAIB supports the changes to the Multi-purpose lubricant and Dry lubricant definitions. The single use addition to the Multi-purpose lubricant definition is needed to clarify products designed for a single use are not subject to the Multi-purpose lubricant standard. Likewise the Dry lubricant definition change clarifies that Dry lubricants are not subject to other lubricant category VOC limits. **(WAIB)**

48. Comment: Shield supports the changes to the Multi-purpose Lubricant and Dry Lubricant definitions. The single use addition to the Multi-purpose Lubricant definition is needed to clarify products designed for a single use are not subject to the Multi-purpose Lubricant standard. Likewise the Dry Lubricant definition change clarifies that Dry Lubricants are not subject to other lubricant category VOC limits. **(SHIELD)**

49. Comment: Aervoe supports the definition changes to the Dry Lubricant, and Multi-purpose Lubricant. The Dry Lubricant change was needed to ensure that Dry Lubricants were not subject to other lubricant VOC limits. The Multi-purpose Lubricant change was needed to clarify that product for uses as a single use are not regulated by the Multi-purpose Lubricant limit. Both changes clarified the regulation. **(AERVOE)**

50. Comment: Motul supports the changes to the Dry Lubricant definition, which clarifies that Dry Lubricants are not regulated no matter what the use is. This clarification was needed to ensure that the unique characteristics of the dry lubricant are not compromised by different VOC limits. **(MOT)**

51. Comment: Finish Line supports the changes to the Multi-purpose lubricant and Dry lubricant definitions. The single use addition to the Multi-purpose lubricant definition is needed to clarify products designed for a single use which are not subject to the Multi-purpose lubricant standard. Likewise the Dry lubricant definition change clarifies that Dry lubricants are not subject to other lubricant category VOC limits. **(FL)**

52. Comment: Blaster supports the definition change to the Dry Lubricant definition. This change clarifies the regulation. This clarification was needed to ensure that a Dry Lubricant is not regulated in any other category. **(BLASTER-1)**

53. Comment: Stoner Inc. supports the changes to the Multi-purpose Lubricant and Dry Lubricant definitions. The single use addition to the Multi-purpose Lubricant definition is needed to clarify that products designed for a single use are not subject to the Multi-purpose Lubricant standard. Likewise the Dry Lubricant definition change clarifies that Dry Lubricants are not subject to other lubricant category VOC limits. **(STON-1)**

54. Comment: CRC supports the definition changes to the Dry Lubricant, and Multi-purpose Lubricant. The Dry Lubricant change was needed to ensure that Dry Lubricants were not subject to other lubricant VOC limits. The Multi-purpose lubricant change was needed to clarify that products for use as a single use are not regulated by the Multi-purpose Lubricant limit. Both changes clarified the regulation. **(CRC)**

55. Comment: RSC supports the changes to the Multi-purpose Lubricant definition and the Silicone based multipurpose lubricant definition to add single use products. This change adds clarity to the regulation.

RSC supports the definition change to the Dry Lubricant definition. Dry lubricants are a unique lubricant that has special requirements. The change clarifies the definitions for all the lubricant uses. **(RSC)**

56. Comment: Spray Products supports changes to Multi-purpose Lubricant & Dry Lubricant. The single use addition to the Multi-purpose lubricant definition is needed to clarify products designed for a single use that are not subject to the Multi-purpose lubricant standard. Likewise the Dry lubricant definition change clarifies that Dry lubricants are not subject to other lubricant category VOC limits. **(SPRAY)**

57. Comment: Blaster also supports the clarification to the dry lube definition. Dry lubricants should not be categorized with other lubricant categories. The change in definition makes the issue very clear. **(BLASTER-2)**

58. Comment: We support the new definitions changes to the multi-purpose lubricant definition, which also adds products designed for a single use are exempt from this definition. We believe the clarification to the dry lubricant definition was needed. Dry lubricants are, indeed, unique. And we believe they cannot be regulated as another lubricant. **(STON-2)**

Agency Response to Comments 26-58: We acknowledge these commenters support for staff's proposed additional and modified definitions approved by the Board at the September 26, 2013, hearing. We anticipate the effective date of the approved amendments to be in late 2014.

59. Comment: However, CSPA is concerned that the revised definitions appear to become effective immediately; definitions requiring product changes should be provided future effective dates. **(CSPA-1)**

Agency Response to Comment 59: Definitional changes that were put in place do not change the products that are regulated. Staff intended for the changes to the definition to serve as further clarification of what products are subject to the regulation. Therefore, we do not anticipate shifting of products between categories or dramatic changes to formulations based upon these definition changes.

60. Comment: ARB should remove the term “or other flying arthropods” from the consumer products regulation for the definition of “flying bug insecticide. Insects are the only known flying arthropods; there are no flying arthropods that are NOT insects. The definition already includes the term “flying insects” and this, therefore, includes ALL flying arthropods. Including the term “or other flying arthropods” implies that there are flying arthropods that are not insects (e.g., crabs, spiders, or centipedes with wings?). However, this is simply not the case, as can be confirmed through consultation with any college level textbook on animal form and function or animal taxonomy. Continuing to include the phrase “or other flying arthropods” is simply incorrect and only leads to confusion over the applicability of this category of products to other arthropods that are not insects and do not fly. **(PALM)**

Agency Response to Comment 60: The definitions pertaining to insecticide products were only reorganized by placing the individual insecticide subcategories under the general “Insecticide” definition. This reorganization clarifies that the various subcategories are “Insecticide” products and makes them easier to find. Staff did not intend to make any substantive modifications to this definition. The “Flying Bug Insecticide” definition has been in place since 1995, while the term “or other flying arthropods” may be redundant, it does not appear to have caused confusion.

Comments on Specific Categories

Aerosol Adhesives

61. Comment: *Aerosol Adhesives:* We believe these new limits will prove feasible. **(SWDB)**

62. Comment: 3M supports the proposed VOC limits for mist and web spray adhesives. Despite the wide variety of uses for these products, and therefore the varied performance requirements, we are confident that we will be able to meet the proposed 30% VOC limit for mist spray adhesives and the proposed 40% limit for web spray adhesives by the effective date of 1/1/2017.

3M supports a balanced approach to assessing risks and benefits of various chemistries for our customers. Such an approach should consider characteristics such as toxicity,

flammability, VOC content, ozone-depleting potential, and potential climate impacts and then allow the best balance of properties to be brought to market. That said, 3M does not object to the Global Warming Potential limit for the aerosol adhesive product categories. **(3M)**

63. Comment: CSPA is not opposing the revised VOC limits for various categories of Aerosol Adhesives, and is supportive of the revised 55% VOC limit for Screen Printing Adhesive subcategory. Although some challenges may be encountered, our members believe that these new limits will prove technologically and commercially feasible. **(CSPA-1)**

64. Comment: While the revised VOC standards for Mist and Web Aerosol Adhesives are very aggressive, ACA is pleased that a new product category, Screen Printing Adhesive, has been delineated. ACA supports the addition of the new adhesive category along with its corresponding VOC Content limit of 55% by weight, and its compliance deadline of January 1, 2017. **(ACA-2)**

Agency Response to Comments 61-64: The Board approved staff's proposal for Aerosol Adhesive products to set new or lower VOC limits for three categories. In response to stakeholders' comments related to the feasibility of these products to meet the proposed lower VOC limits for "Mist Spray Adhesive" and "Web Spray Adhesive," a definition for "Screen Printing Adhesive" was added as a new subcategory of "Special Purpose Adhesive." Provisions to prohibit use of three chlorinated TAC solvents: methylene chloride, perchloroethylene, trichloroethylene, and limit the types of greenhouse gases used in these adhesives were also approved.

65. Comment: NAA believes the Aerosol Adhesive limits are challenging and may not be feasible. Our members will work to meet these limits. Industry may need more time to be able to meet these limits. NAA respectfully request the board to instruct staff to review these limits for Aerosol Adhesives one year prior to the effective date. **(NAA-1)**

66. Comment: Aervoe is very concerned that the Aerosol Adhesive limits being proposed by the staff are not technologically and commercially feasible. Aervoe does not have a current path to meet these limits. We will research available technologies for formulations to meet these limits. Aervoe respectfully requests the staff to review the Aerosol Adhesive limits one year prior to the effective date to ensure that the technology exists to comply with these very stringent limits. **(AERVOE)**

67. Comment: Spray Products is very concerned that the Aerosol Adhesive limits being proposed by the staff are not technologically and commercially feasible. Spray Products does not have a current path to meet these limits. We will research available technologies for formulations to meet these limits. Spray Products respectfully requests the staff to review the Aerosol Adhesive limits one year prior to the effective date to ensure that the technology exists to comply with these very stringent limits. **(SPRAY)**

Agency Response to Comments 65-67: The Board approved staff's proposal for Aerosol Adhesives by setting VOC limits of 30 percent by weight for "Mist Spray Adhesive," 55 percent by weight for "Screen Printing Adhesive," and 40 percent by weight for "Web Spray Adhesive." These limits were developed based on review of data collected from the 2010 Survey Update for Aerosol Coating and Aerosol Adhesive Products (2010 Survey) as well as review of existing technology, and were found to be commercially and technologically feasible. Staff routinely seeks input from stakeholders prior to VOC limits becoming effective as to whether manufacturers are on track to comply with the VOC limits within the timeframe provided. Staff will monitor industry's progress on reformulation efforts to meet the new aerosol adhesives VOC limits.

Gear, Chain, or Wire Lubricant

68. Comment: Maxima supports the change to the Gear, Chain, or Wire Lubricant definition to add the exemption for lubricant used on chain driven vehicle. This exemption is needed to preserve products that are solely used on chain driven vehicles. Products made specifically for chain driven vehicles are unique in their formulation. These products would not have performed if the 25% VOC limit was imposed on them, and could have caused safety issues. **(MAX-1)**

69. Comment: Shield supports the change to the Gear, Chain, or Wire Lubricant definition to add the exemption for lubricant used on chain driven vehicles. This exemption is needed to preserve products that are solely used on chain driven vehicles. Products made specifically for chain driven vehicles are unique in their formulation. These products would not have performed if the 25% VOC limit was imposed on them, and could have caused safety issues. **(SHIELD)**

70. Comment: Motul supports the inclusion of an exemption for chain driven vehicles into the Gear, Chain, or Wire Lubricant definition. This exemption will provide Motul with the opportunity to continue to produce high quality effective products that will solely be used on chain driven vehicles. This change adds clarity to the regulation. **(MOT)**

71. Comment: Finish Line supports the exemption for chain driven vehicles from the Gear, Chain and Wire Lubricant definition. As stated above our products are unique in that they are designed specifically for use on chain driven bicycles. This exemption allows us to provide effective products for use on bicycle chains. Lubricating the chain on a bicycle is vital to the bicycle's performance. Given the extremely exposed environments in which bicycles are often used (off road and on road), unique bicycle-specific technologies are required for their lubrication (Often times, these technologies require VOC carriers). Finish Line naturally tries to encourage the use of bicycles, and without these specialty lubricants, bicycle usage would be lessened. Increasing bicycle usage will assist California in its effort to provide clean air. **(FL)**

72. Comment: Spray Products supports the exemption for chain driven vehicles added to the Gear, Chain and Wire lubricant definition. This exemption was needed for us to be able to continue to develop products that are effective. **(SPRAY)**

73. Comment: Our company develops product for the racing industry. The definition change to gear wire and chain lubricant which exempts chain-over vehicles was a needed change to preserve the products based on fundamentals of safety. **(MAX-2)**

Agency Response to Comments 68-73: The Board approved staff's proposal to amend the definition of "Gear, Chain, or Wire Lubricant" to specify that lubricants labeled solely for use on chains of chain-driven vehicles are not included.

General Purpose Cleaner

74. Comment: In further reviewing the proposed revisions to the definition of "General Purpose Cleaner," we respectfully recommend that ARB make a minor modification at the end of the proposed definition to indicate that General Purpose Cleaners do not include "Furniture Maintenance Products." This exclusion would be in addition to "Single Purpose Cleaners" already referenced in the revised definition.

As currently defined, a "Furniture Maintenance Product" is a "wax, polish, conditioner, or any other product labeled for the purpose of polishing, protecting or enhancing finished wood surfaces other than floors, and other furniture surfaces including but not limited to acrylics, ceramic, *plastics, stone surfaces, metal surfaces*, and fiberglass..." (Emphasis added). The proposed revised definition of "General Purpose Cleaner" says, in part, that a "General Purpose Cleaner" includes "products that clean kitchens, sinks, appliances, counters, walls, cabinets or floors and products that claim to clean a variety of similar surfaces such as *plastics, stone or metal...* (Emphasis added)." Because of the similarity of references to plastic, stone, and metal surfaces in the two definitions, we believe this minor modification will clarify the distinction between the two product categories, their respective VOC limits, and use patterns (*i.e.*, while a Furniture Maintenance Product may also clean, by definition it cannot be a product designed *solely* for the purpose of cleaning).

Thus, the revised definition of "General Purpose Cleaner" at section 94508(a)(58)(B) that we recommend would read as follows, with the suggested addition in **bold face type**:

(B) for products manufactured on or after January 1, 2015: a product that is designed or labeled to clean hard surfaces in homes, garages, patios, commercial, or institutional environments. "General Purpose Cleaner" includes products that clean kitchens, sinks, appliances, counters, walls, cabinets or floors and products that claim to clean a variety of similar surfaces such as plastics, stone or metal. "General Purpose Cleaner" does not include "Single Purpose Cleaner" or "**Furniture Maintenance Product.**" **(SCJ-1)**

Agency Response to Comments 74: Staff agrees with the Commenter and as part of the 15-day notice modified the definition of “General Purpose Cleaner” to specify that the “General Purpose Cleaner” category does not include “Furniture Maintenance Products.”

Hair Care

75. Comment: P&G appreciates the multiple opportunities for stakeholder input that were available as the proposed regulation was developed. The Planning and Technical Support Division staff conducted several public workshops; met individually with P&G Regulatory and Product Development Scientists for a technology discussion of heat/thermal protectant hair care products; and considered the technical input of stakeholders in revising the Proposed Amendments. This engagement of the regulated community and interested stakeholders enabled the development of a final draft that achieves the required emissions reductions, but does not compromise the statutory requirements for a technically and commercially feasible regulation.

P&G commends the Planning and Technical Support Division staff for recognizing the unique chemistry needed for heat/thermal protectant products to function as intended and deliver the desired consumer benefits of hair preparation and protection. It is not appropriate or technologically feasible to regulate heat/thermal protectant products as a Hair Styling Product with the category’s respective VOC limit. We are pleased to see in the final draft that heat/thermal protectant products are specifically excluded from the Hair Styling Product category. We sincerely thank staff for their consideration of the technology information we shared during our visit to Sacramento in January 2013 to support this very outcome for heat/thermal protectant products. **(P&G)**

76. Comment: The [PCP] Council supports the revised definitions to *existing* personal care product categories, as well as the newly developed definitions to address new personal care products now at market.

The Council also supports the elimination of the now defunct Hairspray Credit Program from the regulations, as that program became obsolete on January 1, 2010. **(PCPC)**

Agency Response to Comments 75-76: The Board approved staff’s proposal to modify the “Hair Spray” category name to “Hair Finishing Spray” and reorganize the definition to better clarify that the product is to be used to finish styled hair. The Board also approved modifications to the “Hair Shine” definition that are designed to provide consistency with the changes proposed to the “Hair Finishing Spray” definition. Deletion of the term “Hair Styling Gel” was approved to provide clarity.

The Board approved staff’s proposal to delete the December 30, 2006, effective date of the “Hair Styling Product” definition because it is no longer relevant. Deleting this outdated language would streamline the regulation.

At the request of stakeholders, staff proposed and the Board approved language clarifying that “No Rinse Shampoo” and “Thermal Protectant” products are not currently regulated. Other amendments were approved to define “No Rinse Shampoo” and “Thermal Protectant.”

The Board also approved staff’s proposal to repeal the Hairspray Credit Program (provisions of sections 94560-94575 in Subchapter 8.5, title 17, CCR), in its entirety. The Hairspray Credit Program expired when the ability to utilize credits ended on January 1, 2010. Repealing the Hairspray Credit Program would formally acknowledge expiration of the program, and streamline the suite of Consumer Products Regulations.

Multi-purpose Lubricant (aerosol)

77. Comment: Maxima support the extension of the Multi-purpose Lubricant VOC limit from 12/31/2015 to 12/31/2018. This change was needed to provide industry more time to meet this very stringent limit. **(MAX-1)**

78. Comment: NAA supports the change in the “Multi-purpose Lubricant” future effective date from 12/31/2015 to 12/31/2018. The extra time is needed for the industry to research and develop technologically feasible formulations to meet the stringent 10% future effective limit. Industry has spent significant resources to meet the 25% limit effective on 12/31/2013. **(NAA-1)**

79. Comment: Shield supports the Multi-purpose Lubricant future effective limit delay. The VOC limit is to become effective on 12/31/2015. More time was needed for research. Staff has delayed the VOC limit to 12/31/2018. This additional time is needed to develop technology to meet this stringent limit. **(SHIELD)**

80. Comment: Aervoe supports the extension of the Multi-purpose Lubricant VOC limit from 12/31/2015 to 12/31/2018. This change was needed to provide industry more time to meet this very stringent limit. **(AERVOE)**

81. Comment: Motul supports the Multi-purpose Lubricant future effective limit delay. The VOC limit is to become effective on 12/31/2015. More time was needed for additional research. Staff has delayed the VOC limit to 12/31/2018. This additional time is needed to develop technology to meet this stringent limit. **(MOT)**

82. Comment: Finish Line is in support of the Multi-purpose Lubricant future effective VOC limit extension from 12/31/2015 to 12/31/2018. **(FL)**

83. Comment: Blaster supports the change in the future effective date for Multi-purpose Lubricant from 12/31/2015 to 12/31/2018 for the 10% VOC limit. More time is required to do research and development to meet this stringent limit. Currently Blaster does not have a reformulation pathway to meet this limit. Blaster met with CARB twice a year to provide updates on their R & D [research and development efforts].
(BLASTER-1)

84. Comment: CSPA fully supports extending the effective date for the very challenging future-effective regulatory limit for Multi-purpose Lubricants from 2015 to 2018. There is compelling evidence to substantiate the fact that our members are having significant difficulties finding technology capable of meeting the 10% VOC limit that is scheduled to become effective in 2015. This modification would provide our members the additional time needed to conduct the research and development necessary to discover the new technologies to meet this very aggressive technology-forcing standard, and assure that the products are commercially as well as technologically feasible. **(CSPA-1)**

85. Comment: Spray Products supports the extension of the Multi-purpose Lubricant VOC limit from 12/31/2015 to 12/31/2018. This change was needed to provide Industry more time to meet this very stringent limit. **(SPRAY)**

86. Comment: Stoner Inc. supports the Multi-purpose Lubricant future effective limit delay. The VOC limit is to become effective on 12/31/2015. More time was needed for research. Staff has delayed the VOC limit to 12/31/2018. This additional time is needed to develop technology to meet this stringent limit. **(STON-1)**

87. Comment: WAIB supports the change in the Multi-purpose Lubricant future effective date from 12/31/2015 to 12/31/2018. The extra time is needed for the industry to research and develop technologically feasible formulations to meet the stringent 10% future effective limit. Industry has spent significant resources to meet the 25% limit effective on 12/31/2013. **(WAIB)**

88. Comment: WD-40 supports the change in the future effective date for Multi-purpose Lubricants from 12/31/2015 to 12/31/2018. WD-40 has spent significant time and resources on research to comply with the 10% VOC limit. At this time the WD-40 Company does not have a clear path to feasible technology that will comply with the 10% VOC limit. Our company has been in constant contact with CARB staff. Providing quarterly updates to the staff on our research efforts. The delay in the effective date is needed to provide additional time for research and development issues. **(WD40-1)**

89. Comment: We also support the extension of time for the ten percent VOC limit for the multi-purpose lubricants. **(STON-2)**

90. Comment: We also fully support the change in the future effective date of multi-purpose lubricants from 2015 to 2018. We spent significant time, talent, and treasure the past several years to try to come up with compliance methods for the 10 percent VOC limit. It's been our number one R&D priority since the regulation came into existence.

In 2008, we scoured the globe looking at thousands of universities and companies to find a formula that already existed that met our performance criteria which is work as well WD-40 and also meet the regulatory compliance. Unfortunately, came back with notta, zero. So we had to go out and invent something.

We've done lots and lots of marketing research over these years. Two key take-aways. One, 93 percent of WD-40 end users expect any new formula to be at least as good or better than the current WD-40 in performance.

And second of all, despite all the regulatory agencies telling us you're WD-40 and you can charge whatever you want and they'll just come buy it, the market research does not support that.

We did a price elasticity study, ten million data points, three years, all the trade classes in the U.S. that does not support that kind of approach. And unfortunately, we have several real life price increase experiences that do not say that's not a true statement.

So we have to be sensitive about pricing. We did come around and generate a new product. It's not petroleum based, but soy based. And the challenges with it -- and it works as well as WD-40 -- it costs 30 percent more and has a two-year shelf life, where WD-40 is indefinite.

We took that soy-based formula and put it into our Blue Works brand that goes towards the industrial end user. We did a test market in the South Coast Air Quality Management District for about 15 to 18 months and sold a whopping \$1,200 worth of product.

Meanwhile, in twelve months, we sold over \$100 million of WD-40 in the United States, to bet a \$100 million brand on that kind of sales result and not that good a business decision. We took that same formula and put it into a new category that we're developing where we thought it had a very, very relevant place. We took that to Walmart, Home Depot, Lowe's, Ace, True Value, and everybody was very interested. And all the offers we have on this category, except for the one soy-based product. No one was interested in it at all. In conclusion, we still have lots of work to do. We need more time. **(WD40-2)**

91. Comment: First of all, Blaster is in full support of the change and effective date for the ten percent VOC limit. Blaster research and development is working diligently, but needs the extension to develop feasible technology that will meet the very stringent ten percent limit. **(BLASTER-2)**

Agency Response to Comments 77-91: In 2012, ARB staff conducted a survey of “Multipurpose Lubricant” manufacturers regarding their progress towards meeting the 25 weight percent VOC limit. Data collected included product sales and composition for the 2011 calendar year. Our findings of the technical assessment were discussed at the workshops during the rulemaking process. Based on the technical assessment, staff proposed to delay the 10% by weight future effective VOC limit for “Multi-purpose Lubricant” products until December 31, 2018.

The Board approved staff’s proposal to delay the 10 percent by weight future effective VOC limit for “Multi-purpose Lubricant” products until December 31, 2018. Based on the results of the 2011 technical assessment and stakeholder comments, the delay is necessary to address the challenges manufacturers are facing in reformulating “Multi-purpose Lubricant” products to meet this technology forcing limit.

Aerosol Multi-purpose Solvent and Paint Thinner

92. Comment: We do not oppose the 10% VOC Limit in 2016. **(SWDB)**

93. Comment: CSPA does not oppose the new 10% VOC limit for these aerosol products that will take effect in 2016. Although some challenges may be encountered, our members believe that these new limits will prove technologically and commercially feasible. **(CSPA-1)**

Agency Response to Comments 92-93: The Board approved staff’s proposal of a 10 percent by weight VOC limit for aerosol “Multi-purpose Solvent” and “Paint Thinner” products, effective January 1, 2016.

Nonaerosol Multi-purpose Solvent and Paint Thinner; Fuels

94. Comment: W.M. Barr requests clarification of “products to be used as fuels.” The Multi-purpose Solvent category means any product used for dispersing, dissolving or removing contaminants or organic matter that does not display an end use function or application on the label.

This language is clear in that all fuels would have an end use function whether the label states “Gasoline and oil mixture” for small engines, or kerosene fuel for heaters or alcohol for camp stoves.

However, in Chapter VIII page 112 of the Initial Statement of Reasons (ISOR) dated August 7, 2013, states "The proposal to include in the "Multi-purpose Solvent" category products that display on the Principal Display Panel a specific chemical name is to clarify that these types of products are considered "Multi-purpose Solvents" even if they do not have other language on the label that states they are used for dispersing, dissolving or removing contaminants or other organic materials."

The above statement confuses the intent of the regulation. Is race fuel, which may list the constituents of the product on the label, to be caught up in the definition of a Multi-purpose Solvent? Likewise, alcohol used in camp stoves states alcohol on the label, or kerosene used for turbo heaters states kerosene on the label. For this regulation to be clear in the marketplace, fuels must have a specific exemption-- such as "Rubbing Alcohol" has in the new definition.

Currently, there is confusion that could cause unexpected, and unintended, enforcement actions against these types of products.

W.M. Barr respectfully requests the board to instruct the staff to clarify the fuels exemption in this rule. **(WMB)**

95. Comment: W.M. Barr and Company, Inc. respectfully requests the Board to instruct the staff to clarify that fuels, even with chemical names on the principal display, are not Multi-purpose Solvents. **(WMB)**

96. Comment: The last one is the WM Barr company. The WM Barr company is the largest supplier of retail solvents in the country. And unfortunately, we cannot support the amendments as put in. We would like clarification to the one issue that was brought up with the fuels. We appreciate the two slides that were put up. We appreciate that we have worked with Kurt, Terry, and Carla on all of these issues that we have the multi-purpose solvent issue down to the one last issue of fuels. We respectfully request that we get an exemption for fuels put into the definition.

They're going out for a 15 day comment period. Again we respectfully request that fuels -- or packaged fuels for stoves, lamps, and heaters be specifically exempt as they have exempted rubbing alcohol. We appreciate the two slides. But in a couple of years when a customer asks us a question, we don't want to have to pull out slides from this proceeding to show them that it's not being regulated.

Throughout the Initial Statement of Reasons, we've been portrayed as circumventing the rule. We did not purposely circumvent the rule. We met the letter of the law of the rule. And we want to do that here. And we want to make sure there is no confusion in any of the labeling that we plan to go ahead with.

So again, we would respectfully request that the staff add that simple exemption. You've put it up on the slide. You've put two slides up. I don't see where the issue is. One last thing is we really appreciate the staff being available. -- But we've come a long way from where we started with this. And we think this should settle all the issues with the South Coast. **(RRR)**

Agency Response to Comments 94-96: Staff does not believe that exemption is needed. Fuels are not currently regulated under the Consumer Products Regulation. Products that are exclusively labeled and have instruction for use as a fuel in portable stoves, heaters, lamps, etc. (and no other claims are made that the

fuel is suitable for use as another regulated consumer product category) are not covered by this regulation.

97. Comment: W.M. Barr respectfully disagrees with the staff portrayal of the Multi-purpose Solvent labeling issue. Staff has stated that the Multi-purpose Solvent labeling issue is was a circumvention of the rule, unanticipated and did not achieve the expected benefits.

On the circumvention of the rule claim, the ISOR states circumvention of the rule in several chapters Executive Summary, Chapter II, Chapter IV, and Chapter VII. If industry was circumventing the rule, that would have been an enforcement issue. The 30% VOC limit for Multi-purpose Solvent has been effective since 12/31/2010 without any enforcement action on this category.

On the unanticipated labeling claims which are mentioned in Chapter IV and Chapter VIII, staff's claim that the labeling was unanticipated is interesting. In Chapter IV staff refers to ISOR for release August 2009. In the ISOR released 2009 staff has stated that how a product is labeled determines rule applicability. W.M. Barr agrees with this statement. In the Initial Statement of Reasons released August 7, 2009 on the rule making that adopted limits for Multi-purpose Solvent and Paint Thinner, the labeling issue was clearly described in Chapter VI page 58. The document stated about Multi-purpose Solvent the following: *The category also does not include any product making and representation that the product may be used as, or is suitable for use as, a consumer product which qualifies under another definition in section 94508 (the "definitions" section of the general consumer products regulation). Such products are not Multi-purpose Solvents and are subject to the "Most Restrictive Limit" provision of section 94512. For example, adhesive removers that can technically meet the definition of Multi-purpose Solvent, are not Multi-purpose Solvents because they are defined in section 94508 as "Adhesive Remover."* This is very similar to the description of the General purpose Degreaser labeling currently being used by the industry.

This description clearly defined the labeling issue. In addition, the document goes on to detail all the changes to the regulation that currently define the Multi-purpose Solvent definition. The document states in Chapter VI on pages 58 - 59 the following: *"Multi-purpose Solvent" was originally defined as an exclusion to the definition of "Spot Remover" in the Consumer Products Regulation Amendments of July 1997 (ARB, 1997). In the November 2006 Consumer Products Regulation Amendments, the definition was modified to clearly exclude multi-function products (products that make multiple regulated claims on the label) and clearly include packaged solvents (organic solvents without specific use claims, such as mineral spirits or methyl ethyl ketone) (ARB, 2006). The above description for Multi-purpose Solvent, included new proposed language to the existing regulatory definition that will clarify products that are included in the category and products that are not included in the category.*

This description clearly and in detail shows that Multi-purpose Solvent product with multiple claims is subject to the Most Restrictive limits. This is exemplified in the label

in the appendix. For years any Multi-purpose Solvent that had a specific claim was regulated and subject to enforcement action. For example: Denatured Alcohol that has glass cleaner claims was considered a Glass Cleaner under the regulations (provided that category had the lowest applicable limit). Thus, staff was well aware of this issue before this regulation was adopted.

In addition, in 2010 before the effective date for the Multi-purpose Solvents, W.M. Barr made three presentations, one to CARB Stationary Source Division (which at the time was in charge of rule writing for the Consumer Products regulation), one to CARB Enforcement Division in charge of Consumer Products, and one to the SCAQMD staff. In the presentation W.M. Barr detailed their intended labeling scenario, along with the products that were to be removed from sale. The labeling scenario specifically included the General Purpose Degreasing labeling on the Mineral Spirits container. During and after those meetings/presentations, no agency personnel stated any concern with the labeling. (Re-insert no enforcement action here?) Since that time there has been a reorganization of personnel on the CARB rule writing side. CARB enforcement has never questioned our labeling or stated "circumvention" concerns. **(WMB)**

98. Comment: On the staff's last claim that the full benefit of the emission regulations have not been met, W.M. Barr again respectfully disagrees. The current Mineral Spirits products meet the VOC limit for the General Purpose Degreaser VOC limit which is 0.5 percent VOC which is 29.5 percent VOC below the current VOC limit for Multi-purpose Solvent. Before the General Purpose Degreaser limit was 0.5%, the limit was 4 %, still 26% VOC lower than the 30% VOC limit for Multi-purpose Solvent. Thus since 12/31/2010, W.M. Barr has been complying with some of the most stringent VOC limits in the CARB Consumer Products regulation. This has resulted in tons of emissions reductions that the staff did not anticipate.

Currently, the Mineral Spirits product is significantly over-complying with even the 12/31/2013 future VOC limit of 3% VOC. Thus, W.M. Barr is puzzled on how the staff can state that emission reductions are not being met. **(WMB)**

Agency Response to Comment 97-98:

Multi-purpose Solvent and Paint Thinners are regulated by the Consumer Products Regulation and by SCAQMD Rule 1143. SCAQMD's efforts to have a definition of Multipurpose Solvent consistent with ARB's Consumer Products Regulation had unanticipated results because unlike ARB's regulation, SCAQMD Rule 1143 does not include a "Most Restrictive Limit" provision. The purpose of the "Most Restrictive Limit" provision is to prevent product manufacturers from circumventing ARB's regulation by re-labeling their products. The result is that language in ARB's Consumer Products Regulation that is designed to prevent circumvention is actually being used to circumvent the requirements of Rule 1143.

Circumvention has been possible primarily because of how "Consumer

Multi-purpose Solvents” is defined in Rule 1143. This allowed some manufacturers to circumvent Rule 1143 by changing the labels on their “Multi-purpose Solvent” products to add claims that the products may also be used as “General Purpose Degreasers,” “General Purpose Cleaners,” “General Purpose Adhesive Removers,” or other product categories that are defined in section 94508 of ARB’s Consumer Products Regulation. ARB never intended for the rule language to be interpreted in this way, because the purpose of the language is to prevent and not facilitate circumvention.

To correct misinterpretation of the language from ARB’s Consumer Products Regulation - language that has been copied by the SCAQMD and placed in Rule 1143 - ARB is clarifying that products sold, supplied, offered for sale, or manufactured for use in the SCAQMD that meet the definition of “Multi-purpose Solvent” or “Paint Thinner,” do not meet the criteria for any other consumer product category identified in ARB’s Consumer Products Regulation, and do not qualify under a definition of any other consumer product category that is defined in section 94508(a) of ARB’s Consumer Products Regulation, regardless of any representation made that the product may be used as, or is suitable for use as another category of consumer product that is defined in section 94508(a).

The effect of this new language is that products meeting the definition of “Multi-purpose Solvent” or “Paint Thinner” would not fall under any other consumer products category defined in section 94508(a) and would be regulated under SCAQMD Rule 1143, regardless of any representations that may be made on the product label, packaging, or elsewhere. This should prevent use of language derived from ARB’s consumer products regulation to circumvent Rule 1143, and should help ensure that the expected emission benefits from Rule 1143 are fully achieved.

99. Comment: 3M understands the unique circumstances behind the ARB’s proposal that the South Coast Air Quality Management District’s (SCAQMD’s) VOC limits for nonaerosol multi-purpose solvents and paint thinners would apply in that jurisdiction, while the ARB’s VOC limits for those product categories would apply elsewhere in the state. 3M does not oppose this solution to this unique situation, but we urge that this not be used as a precedent for other consumer product categories.

However, if it is the ARB’s intent that products sold in the SCAQMD after the effective date and at all times in the future comply with the SCAQMD VOC limits, 3M urges the Board to not replicate the South Coast’s regulatory language in its Consumer Products Rule but instead to refer the reader to SCAQMD’s *Rule 1143: Consumer Paint Thinners and Multi-Purpose Solvents*. Otherwise, the ARB will need to update its Consumer Products Rule whenever Rule 1143 is updated. **(3M)**

Agency Response to Comment 99: Provisions have been added to the Consumer Products Regulation that apply to Multipurpose Solvent and Paint Thinner products sold for use in the SCAQMD to address the circumvention of Rule 1143. Referring to the

Rule 1143, would not address the circumvention issue (see response to Comments 97 and 98).

100. Comment: The American Coatings Association (ACA) Architectural and Industrial Maintenance (AIM) VOC Committee supports the use of ARB Method 310 to determine compliance with the 25 g/L VOC standard for nonaerosol “Multi-purpose Solvent” and “Paint Thinner” products sold, supplied, offered for sale, or manufactured for use in the South Coast Air Quality Management District (SCAQMD). **(ACA-1)**

Agency Response to Comment 100: Comment noted.

101. Comment: CSPA supports ARB’s proposal to clarify that the South Coast AQMD standards for these products apply in that District, while maintaining the existing ARB 30% and 3% standards as apply in all other parts of the State. While we do not believe that incorporation of the 25 g/L VOC standard from the South Coast regulation is necessary to accomplish this goal (and could cause confusion since the standard is enforced by different test methodologies), we understand the importance of clarifying what standards apply in each jurisdiction. However, CSPA urges that ARB not use this action as precedent for any other categories of consumer products.

We also like to note that although the Table of Standards makes it clear that 30% and 3% VOC limits for nonaerosol Multi-purpose Solvents and Paint Thinners apply only in “all other areas of the State” (i.e., outside of the South Coast AQMD), section 94509(p)(4)(B) subsections (2) and (3) provides “additional requirements” for South Coast products that imply that both the 3% and 25 g/L standards will be effective (in 2013 and 2015, respectively). As a general matter, CSPA strongly opposes the simultaneous application of dual VOC standards to a single product category. **(CSPA-1)**

102. Comment: I do wish to call your attention to our written comments, specifically our support for ARB's proposal to clarify the South Coast AQMD standard for non-aerosol and multi-purpose paint thinner apply in that district, while maintaining the existing ARB standards as applying in other parts of the state.

While we do not believe that incorporation of the South Coast regulation is necessary to accomplish this goal and could cause confusion since the standard is enforced by different test methodologies, we understand the importance of clarifying what standards apply in each jurisdiction. However, CSPA urges that ARB not use this action as precedent for any other categories of consumer products. **(CSPA-2)**

103. Comment: We continue to oppose the SCAQMD standard of 25 g/L (and associated test method) as we believe this does not provide any additional benefit over the ARB VOC Percentage Limit and its existence will only cause confusion. **(SWDB)**

Agency Response to Comments 101-103: Currently Multipurpose Solvent and Paint Thinner products are regulated by both Rule 1143 and the Consumer Products Regulation. The provisions added to the Consumer Products Regulation in section

94509(p)(4) are consistent with Rule 1143 and are intended to prevent circumvention of Rule 1143. Thus, this provision does not impose different requirements than what is already required by Rule 1143.

104. Comment: Specifically, SCAQMD staff supports the provisions in Section 94509 clarifying that “Paint Thinners” and “Multi-purpose Solvents” sold in the SCAQMD will meet the VOC limits adopted in SCAQMD Rule 1143, as well as strengthening the exemption criteria to limit sales of Industrial Maintenance Coating Thinning solvents which will limit the use of higher VOC products to uses truly necessary. These revisions will ensure that all of the expected benefits from ARB’s regulation and the SCAQMD’s Rule 1143 are fully realized. **(SCAQMD-1)**

105. Comment: We fully support the proposal. Specifically, the portions of the proposal that relate to -- that clarify that multi-purpose solvents and paint thinners in the South Coast will have to meet the South Coast Rule 1143 limits. These changes, in addition to the tightening of the exemption applicable to the maintenance coating thinners, will go a long way to alleviate some of our challenges that we experienced in the past -- with enforcement challenges that we experienced in the past and also will allow the 17 million southern Californians to experience fully the air quality benefits of Rule 1143 and the consumer products regulations estimated at 10 tons per day in South Coast alone.

We fully support the changes, the clarifications and changes that have been introduced within the 15 day procedure. They are very reasonable. And in fact, they'll provide some added flexibility to the formulators to experiment with alternative solvents such as soy-based products. **(SCAQMD-2)**

Agency Response to Comments 104 and 105: Comments noted.

Amendments to Method 310

106. Comment: CSPA does not concur with the proposed special treatment of “methyl esters with 17 or more carbon atoms” (apparently meant to ensure that soy methyl ester solvents will comply) over other materials of similar volatility. We support exemption of all low volatility alternatives; one technology should not be selected over others.

We also note that the language in this section differs with the proposed changes in Method 310, which calls for the analysis and exemption of “methyl palmitate.” Typical soy methyl ester solvents contain 10-15% methyl palmitate, with the balance being mainly other C-17 to C-19 esters, so there is a significant technical difference between section 94515(j) and Method 310.

In addition, we would note that there is an apparent technical error in the equations in both section 94515(j) and Method 310. In each case, the total amount of methyl esters with 17 or more carbons (or methyl palmitate) is subtracted from the total nonwater

volatile matter. However, available data show that the typical soy methyl ester solvents are determined to contain only about 5% nonwater volatile materials using the initial procedures in Method 310. The equation therefore could result in 100% of the soy methyl ester weight being subtracted from the 5 percent that is included in the volatile portion. A negative VOC content could result. **(CSPA-1)**

107. Comment: Here today to support the use of the ARB method 310. It's a different compliance with the 25 gram per liter VOC standard for multi-purpose solvent and paint thinner products sold in South Coast. We also support the CSPA technical comments on method 310. And we really appreciate the staff's help on this issue. **(ACA-4)**

Agency Response to Comments 106 and 107: Staff generally agrees with the Commenters. Additional modifications to provide clarification on the process to determine VOC content for "Multi-purpose Solvent" and "Paint Thinner" products sold in the SCAQMD and to correct drafting errors in Test Method 310 were proposed at the hearing and approved by the Board. These modifications were made available for public comment as part of the Notice of Public Availability of Modified Text (15-day notice) published April 3, 2014.

108. Comment: Elsewhere in Method 310, ARB is proposing to eliminate the isoteniscope method for vapor pressure determination currently in section 3.6.3. While we do not object to the deletion, since it is no longer used by ARB, we urge ARB to continue to consider as valid vapor pressure data developed by the isoteniscope methodology. Much of the vapor pressure data that currently exists was developed by that method, and there is no reason to retest using other methodology. **(CSPA-1)**

Agency Response to Comment 108: The Board approved staff's proposal to delete both section 3.6.3 and Appendix B to Method 310, pertaining to determining LVP-VOC status using the isoteniscope, as this method is no longer used. While this procedure is no longer used by ARB staff, ASTM D 2879 "Standard Test Method for Vapor-Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope" is still one of the ASTM International methods incorporated by reference in Method 310 and continues to be valid. Therefore, existing vapor pressure data obtained by this method are also valid.

Manufacturer-Use Products versus Consumer Products

109. Comment: Compliance with the Consumer Products Regulation often requires manufacturers to determine whether a product is a Consumer Product subject to the regulation or a manufacturing-use-only product that is not subject to the regulation, and may therefore be subject to district or other regulations. This distinction is most clearly described in the definitions of Lubricants and General Purpose Degreasers. We therefore recommend that the language from those definitions become part of the general definition through its use in defining "Institutional Product." We therefore recommend the following revision:

"Institutional Product" or "Industrial and Institutional (I&I) Product" means a

consumer product that is designed for use in the maintenance or operation of an establishment that: (A) manufactures, transports, or sells goods or commodities, or provides services for profit; or (B) is engaged in the nonprofit promotion of a particular public, educational, or charitable cause. "Establishments" include, but are not limited to, government agencies, factories, schools, hospitals, sanitariums, prisons, restaurants, hotels, stores, automobile service and parts centers, health clubs, theaters, or transportation companies. "Institutional Product" includes products sold in retail outlets or wholesale locations to nonmanufacturing consumers. "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.~~ (1) exclusively sold directly or through distributors to establishments that manufacture or construct goods or commodities, and (2) labeled exclusively for "use in manufacturing process only."

This change would allow products to be clearly labeled and sold as: (1) consumer products subject to ARB regulations, or (2) nonconsumer manufacturer-use products. If ARB is unwilling to apply this clarification across all categories of Consumer Products, we recommend that the language currently used for defining General Purpose Degreaser and Lubricant be incorporated into other category definitions where there is similar interface between Consumer Products for household, institutional and commercial users, and industrial products sold to and used by manufacturers.

In addition, we recommend that ARB Enforcement Division create an Enforcement Advisory to document specific interpretations of this provision so that both manufacturers and regulators have a clearer mutual understanding of the bright line between Consumer Products and industrial products (*i.e.*, products used only in the manufacturing process.) **(CSPA-1)**

Agency Response to Comment 109: This comment is directed at sections of the regulation not being modified as part of the proposed rulemaking. However, ARB staff responds as follows. At the request of industry representatives, ARB developed the November 2002, Advisory Number 307, entitled "Industrial & Institutional Products Definition Clarification" to more clearly describe the so-called "industrial" products that are not regulated under the California Consumer Products Regulation. In addition, because Lubricants and General Purpose Degreaser products had the greatest potential interface, language was added to the definitions to clarify the distinction between products regulated as Consumer Products and Industrial Products. We do not believe that other category definitions require such exclusionary language.

Minimum Recommended Dilutions

110. Comment: We continue to believe that allowing dilutable products to label different dilutions to meet different category VOC limits is both reasonable and appropriate – why require a concentrated product with multiple uses to be manufactured

and labeled separately? The problem is that the regulation is not clear regarding how to handle the Minimum Recommended Dilution provision and Most Restrictive Limit provision when both apply. We recommend the following two revisions to clarify the issue:

Section 94509(b)

(b) *Products that are diluted prior to use*

(1) Except for “Automotive Windshield Washer Fluid (Dilutable),” for consumer products for which the label, packaging, or accompanying literature specifically states that the product should be diluted with water or non-VOC solvent 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. If differing use dilutions are provided for uses subject to differing product category limits, the “minimum recommended dilution” applies separately to each product category limit.

Section 94512(a)

(a) *Most Restrictive Limit*

(2) Notwithstanding the definition of “product category” in Section 94508, if anywhere on the container or packaging of any consumer product manufactured on or after January 1, 2007, *or any FIFRA-registered insecticide manufactured on or after January 1, 2008*, or on any sticker or label affixed thereto, 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 limit is specified in Section 94509(a), then the lowest VOC limit shall apply. This requirement does not apply to general purpose cleaners and insecticide foggers. Dilutable products may provide different recommended dilutions to meet each of the various limits that apply to each specific product category.

If the above is not acceptable, we are willing to work with ARB staff to develop more appropriate regulatory language to accomplish this goal. **(CSPA-1)**

Agency Response to Comment 110: This comment is directed at sections not being modified as part of the proposed amendments. However, ARB staff responds as follows: We acknowledge the comment and will continue to work with the Commenter and other interested stakeholders to develop advisories to facilitate the implementation of the regulation.

Chlorinated Solvents Prohibition

111. Comment: CSPA does not oppose the inclusion of new restrictions on specified chlorinated solvents in Aerosol Screen Printing Adhesive, Aerosol Multi-purpose Solvent, Aerosol Paint Thinner, and the newly defined categories of Special Purpose Cleaner and Special Purpose Degreaser. **(CSPA-1)**

Agency Response to Comment 111: The Board approved staff's proposal to prohibit use of methylene chloride, perchloroethylene, and trichloroethylene in aerosol "Multi-purpose Solvent" and aerosol "Paint Thinner" products, effective January 1, 2016. For "Screen Printing Adhesive," "Single Purpose Cleaner," and "Single Purpose Degreaser," the Board approved an effective date of January 1, 2017.

Global Warming Potential Restrictions

112. Comment: CSPA does not oppose the new restrictions on Global Warming Potential (GWP) for Aerosol Screen Printing Adhesive (effective in 2017), Aerosol Paint Thinner and Aerosol Multi-purpose Solvent (both effective in 2016). **(CSPA-1)**

Agency Response to Comment 112: The Board approved staff's proposal to prohibit use of global warming compounds with higher GWP values greater than or equal to 150 in aerosol "Multi-purpose Solvent" and aerosol "Paint Thinner" products, effective January 1, 2016. For "Mist Spray Adhesive," "Screen Print Adhesive," and "Web Spray Adhesive," the effective date is January 1, 2017.

Further Evaluation of Low Vapor Pressure VOCs

113. Comment: Aeropres supports the CARB staff's scientific approach to the Low Vapor Pressure (LVP) definition issue. The industry has invested significant dollars in research and development to utilize LVP compounds to improve the Air Quality in the State of California. **(AEROPRES)**

114. Comment: NAA supports the CARB staff's scientific approach to the Low Vapor Pressure (LVP) definition issue. The industry has invested significant dollars in research and development to utilize LVP compounds to improve the Air Quality in the State of California. **(NAA-1)**

115. Comment: Aervoe supports the CARB staff's scientific approach to the Low Vapor Pressure (LVP) definition issue. The industry has invested significant dollars in research and development to utilize LVP compounds to improve the Air Quality in the State of California. **(AERVOE)**

116. Comment: Ecolab supports the scientific pathway being taken by staff in dealing with the Low Vapor Pressure (LVP) provision. LVP compounds are extremely important in maintaining compliance with current and future VOC limits. The LVP provision is needed to provide technical feasibility to the current VOC limits. **(ECO)**

117. Comment: Blaster supports the scientific studies on the Low Vapor Pressure compounds. Blaster has spent a significant amount of resources on reformulating products using LVP's to the benefit of the Air Quality in California. **(BLASTER-1)**

118. Comment: CRC supports the scientific pathway being taken by the staff in dealing with the Low Vapor Pressure (LVP) provision. LVP compounds are extremely important in CRC maintaining compliance with current and future VOC limits. The LVP provision is needed to provide technical feasibility to the current VOC limits.

CRC has used the LVP provision as a way to meet the very difficult VOC levels. LVP's remain the way forward for compliance. **(CRC)**

119. Comment: Diversified supports the scientific pathway being taken by the staff in dealing with the Low Vapor Pressure (LVP) provision. LVP compounds are extremely important in maintaining compliance with current and future VOC limits. The LVP provision is needed to provide technical feasibility to the current VOC limits. **(DCPC)**

120. Comment: Finish Line supports the staff stance on the Low Vapor Pressure (LVP) compounds being subject to a scientific study. The LVP provision is needed for our formulations to meet current VOC limits. **(FL)**

121. Comment: Maxima also supports the scientific studies that CARB will be performing on the Low Vapor Pressure compounds. The LVP provision is extremely important. Further reformulation options will use LVP compounds. **(MAX-1)**

122. Comment: Motul also supports the staff's decision to pursue scientific studies on the Low Vapor Pressure (LVP) compounds. The LVP provision is vital to our formulations. We look forward to working with staff on this issue. **(MOT)**

123. Comment: Reckitt Benckiser supports the ARB's decision not to remove the Low Vapor Pressure (LVP) VOCs exemption in Consumer Products Regulation at this time. Reckitt Benckiser and other consumer products manufacturers have taken direction from ARB to replace VOCs with LVPs and other non-VOCs for over 20 years. ARB announced their intention to conduct scientific studies on the LVP contribution to the formation of ozone in the atmosphere over the next couple of years. Reckitt Benckiser looks forward to participating in any future discussions ARB has with stakeholders on the design and results of these studies. **(RB)**

124. Comment: RSC supports the staff decision to pursue scientific studies for the Low Vapor Pressure (LVP) compounds. RSC has utilized the LVP provision in reformulating many of its products. This provision is necessary to be able to continue to produce our products. **(RSC)**

125. Comment: [SC] AQMD staff look forward to working closely with CARB staff on the research projects pertaining to low vapor pressure solvents, as well as a mutually

agreeable path to attain State and Federal air quality standards and further protecting the health of all Californians. **(SCAQMD-1)**

126. Comment: SC Johnson fully supports ARB's intent to conduct additional research into the environmental fate of LVP-VOCs and commends the Board's recent decision to approve funding for two research proposals submitted by the University of California system related to evaluating the air quality impacts of LVP-VOCs. We also welcome the opportunity to partner with ARB staff to develop the necessary technical information that will allow the Agency to accurately assess the environmental fate and effects of LVP-VOCs and ultimately determine whether the current exemption in the Consumer Products Regulation should continue in its current form or if it should be modified in any way. Our scientists and formulators have significant experience and expertise in this area, as the vast majority of SC Johnson products are optimally formulated using LVP-VOCs, and we stand ready to work with ARB to improve understanding of the relationship between LVP-VOCs and ozone formation, and ensure that any regulatory decisions affecting the current LVP-VOC exemption is grounded in the best available science. To that end, we are looking forward to participating in the stakeholder Technical Advisory Group created by ARB as part of the overall LVP-VOC research effort. **(SCJ-1)**

127. Comment: Shield also supports the staff's decision to pursue scientific studies on the Low Vapor Pressure (LVP) compounds. The LVP provision is vital to our formulations. We look forward to working with the staff on this issue. **(SHIELD)**

128. Comment: Spray Products also supports the staffs' decision to pursue scientific studies on the Low Vapor Pressure (LVP) compounds. The LVP provision is vital to our formulations. We look forward to working with the staff on this issue. **(SPRAY)**

129. Comment: Stoner Inc. supports the scientific pathway being taken by the staff in dealing with the Low Vapor Pressure (LVP) provision. LVP compounds are extremely important in maintaining compliance with current and future VOC limits. The LVP provision is needed to provide technical feasibility to the current VOC limits. **(STON-1)**

130. Comment: WAIB supports the scientific pathway being taken by the staff in dealing with the Low Vapor Pressure (LVP) provision. LVP compounds are extremely important in WAIB member companies maintaining compliance with current and future VOC limits. The LVP provision is needed to provide technical feasibility to the current VOC limits. **(WAIB)**

131. Comment: WD-40 supports the staff approach to the Low Vapor Pressure (LVP) issue. The scientific studies for these compounds are justified. Our company has spent significant resources using these compounds in our reformulation efforts. Without the LVP provision, the VOC limit for the lubricant products is not technically feasible. **(WD40-1)**

132. Comment: And lastly, we are looking forward to continue our working relationship as it relates to the LVP issue, the low vapor pressure issues, and the research that will be conducted on this particular area and hope that will result in a much more refined tool that we can both use in our future control strategy development. **(SCAQMD-2)**

133. Comment: We are particularly appreciative of the efforts to address our concerns with provisions in early draft impacting the low vapor pressure volatile organic compounds. And as I stated at your June ARB meeting, we do support the research plans that includes two LVP research projects. **(CSPA-2)**

134. Comment: Second, we're pleased that ARB remains committed to conducting additional research of the air quality impacts of low pressure VOC compounds you've heard about already this morning, rather than taking any regulatory action relative to LVPs in this particular rulemaking. The vast majority of our products have been optimally formulated using LVP compounds. We stand ready to work with ARB to ensure that any regulatory decisions affecting the current exemption will be grounded in the best available science. To that end, we look forward to being an active participant that ARB has formed on this issue. **(SCJ-2)**

135. Comment: We are a producer of LVP solvents, as you've heard about for the regulation. For many years, ARB has urged manufacturers to use LVP solvents in their formulations for consumer products. I want to thank you for listening to our customers, many of whom are here today and continuing to allow the use of the LVP solvent exemption to promote products with lower volatile emissions. Calumet supports this proposed regulation, and we support the scientific research studies currently being conducted regarding this issue. **(CALU)**

136. Comment: The WD-40 company fully supports the staff's approach to low vapor pressure, or LVP, issue. The scientific studies are justified. Without LVPs, we would not be able to be compliant with any of the VOC regulations for WD, WD-40, Spot Shot, and a number of our brands. We feel LVPs have been very successful the last 20, 25 years in generating clean air and good business results. So we just say let the science speak. **(WD40-2)**

137. Comment: And we [National Aerosol Association, CRC Industries, Radiator Specialty Corporation] support the LVP issue as the scientific studies will proceed. **(RRR)**

Agency Response to Comments 113-137: These Commenters express support for the scientific pathway undertaken by the Board to evaluate use of low vapor pressure VOCs or LVP-VOCs in consumer products. Currently, LVP-VOCs are not counted when determining compliance with VOC standards. LVP-VOCs are large compounds that evaporate at a slower rate and are less likely to participate in ozone chemistry. However, initial research recently conducted by SCAQMD staff suggests that some of these LVP-VOCs may be more volatile than previously thought and, therefore, could be available to participate in atmospheric photochemical reactions. In light of these findings, we are undertaking a research program to evaluate the air

quality impacts of these compounds. The research results will help inform whether the LVP-VOC exemption should be modified.

VOC Exemption for HFO-1234ze

138. Comment: 3M supports the addition of HFO-1234ze to the list of compounds considered not to be VOCs. **(3M)**

139. Comment: Aeropres supports the inclusion of the HFO-1234ze compound into the definition for VOC, as an exempt VOC compound for both the Antiperspirants and Deodorants Regulation and the Consumer Products Regulation. The US EPA has exempted this compound as a VOC. CARB staff has reviewed this compound and determined that the HFO-1234ze compound has negligible impacts on ground-level ozone as well as a low GWP, no ozone depleting potential and has been determined to have no adverse health impacts. This compound is nonflammable as well. By CARB exempting this compound, it provides another tool for the industry to use for reformulation. **(AEROPRES)**

140. Comment: CSPA also strongly supports the addition of the exemption for HFO-1234ze within the definition of Volatile Organic Compound (VOC) to provide consistency with Federal regulations. **(CSPA-1)**

141. Comment: Diversified supports the inclusion of the HFO-1234ze compound into the VOC definition as a VOC exempt compound. This compound is nonflammable, non-ozone depleting, negligible reactive, has a low GWP and does not have any adverse health impacts. If exempted this will be another tool for reformulation. **(DCPC)**

142. Comment: Honeywell supports the inclusion of the HFO-1234ze compound into the definition for VOC, as an exempt VOC compound for both the Antiperspirants and Deodorants Regulation and the Consumer Products Regulation. The US EPA has exempted this compound as a VOC. CARB staff has reviewed this compound and determined that the HFO-1234ze compound has negligible impacts on ground-level ozone as well as a low GWP, no ozone depleting potential and has been determined to have no adverse health impacts. This compound is nonflammable as well. By CARB exempting this compound, it provides another tool for the industry to use for reformulation. **(HONEY)**

143. Comment: NAA supports the inclusion of the HFO-1234ze compound into the VOC definition as a VOC exempt compound. This compound is nonflammable, non-ozone depleting, negligible reactive, has a low GWP and does not have any adverse health impacts. If exempted this will be another tool for reformulation. **(NAA-1)**

144. Comment: WAIB supports the inclusion of the HFO-1234ze compound into the VOC definition as a VOC exempt compound. This compound is nonflammable,

non-ozone depleting, negligible reactive, has a low GWP and does not have any adverse health impacts. If exempted this will be another tool for the industry to use. **(WAIB)**

Agency Response to Comments 138-144: Comments noted. The Board approved staff's proposal to exempt the hydrofluoroolefin HFO-1234ze (trans-1,3,3,3-tetrafluoropropene) from the VOC definition in the Consumer Products and Antiperspirants and Deodorants regulations. This propellant has negligible ozone formation potential, a low GWP, and is nonflammable. Based on results of a multi-media evaluation, staff concluded that the exemption would not likely pose any adverse health or environmental impacts.

General Comments

145. Comment: 3M has a long history of continuous environmental improvements to minimize the impact of our manufacturing processes and products on the global environment. In 2011 3M launched a set of global, corporate five-year goals, one of which is to reduce volatile air emissions from manufacturing facilities (indexed to net sales) by 15% from 2010 to 2015. This reduction commitment is in addition to a 95% volatile organic compound (VOC) reduction (in total pounds emitted from manufacturing) since 1990. 3M is also dedicated to reducing the VOC content of its products and expends considerable research and development resources doing so. **(3M)**

Agency Response to Comment 145: Comment noted.

146. Comment: For the companies involved in this rule development, it was very challenging and an arduous process. After 20 plus years of VOC regulation, finding additional reductions is now very difficult. The science now indicates future VOC reductions will have miniscule, if any, air quality benefits. The economic costs of further VOC reductions in the consumer product industry will be untenable. We urge the ARB to create a task force to partner with industry to find alternative solutions to traditional command/control regulation or further VOC reductions. There are numerous opportunities in new technology with the potential to make significant improvements in air quality that represent a much better use of capital than reformulating consumer products again. Expanded use of natural gas vehicles is one example with great potential. **(SWDB)**

Agency Response to Comment 146: Comment noted. Staff appreciates the willingness of affected stakeholders to work with us to develop this rulemaking. Staff acknowledges that in some instances the VOC reductions from future proposed VOC limits may be small. However, given the serious air quality problems in California it is incumbent upon staff to look for all feasible, cost-effective reductions. The staff's proposal does this. The portion of the comment related to pursuing alternative regulatory approaches in the future are not directed at the proposed amendments. However, for completeness staff responds as follows. Staff agrees

that further VOC reductions *via* the setting of additional or lower VOC limits are becoming challenging. This was acknowledged in the 2007 State Implementation Plan (SIP) in which a commitment was made to explore innovative reduction approaches in the longer term. Staff appreciates the willingness of affected stakeholders to work with us on developing such an approach.

147. Comment: Our industry is highly innovative and frequently brings new or improved products to market. This fact presents a challenge to state agencies, such as ARB, tasked with developing and implementing regulations to address consumer products. Classifying new products into appropriate categories is a critical function of ARB, and ultimately controls how the product is regulated. For this reason, the [PCP] Council worked closely with ARB staff to revise existing definitions-and develop new definitions-for products in our industry categories. Our ultimate goal was to assist ARB staff in promulgating regulations that were both technically feasible and appropriate in scope. **(PCPC)**

Agency Response to Comment 147: Comment noted.

Aerosol Coating Products Regulation

General Comments on Aerosol Coating Products

148. Comment: Plasti Dip International supports the amendments to the Aerosol Coating Products. **(PDI)**

149. Comment: Spray Products supports the additional definitions and changes to the definitions in the Aerosol Coating regulation. **(SPRAY)**

150. Comment: Stoner Inc. supports the additional definitions and changes to the definitions in the Aerosol Coating regulation. **(STON-1)**

151. Comment: Plasti Dip International supports the additional definitions and changes in the Aerosol Coating Regulation. **(PDI)**

152. Comment: WAIB supports the additional definitions and changes to the definitions in the Aerosol Coating regulation. **(WAIB)**

153. Comment: 3M strongly supports the addition of a definition for “resin.” This definition will improve the clarity of the applicability section of this regulation. **(3M)**

154. Comment: 3M supports using the reference to the Consumer Products Rule’s definitions when stating the exemptions for rubber/vinyl protectants, fabric protectants, and undercoatings. 3M also supports the removal of the definition of “automotive underbody coating” in §94521. These changes improve clarity and consistency between the rules. **(3M)**

155. Comment: In addition definition changes and additions in the Aerosol Coating regulations for new categories and coating solids, provide a clarification, consistency and provides a better understanding of the regulation. **(NAA-1)**

156. Comment: We support the revised definitions. Again, we urge the ARB to consider the appropriate date for the definitions to become effective. Should a new definition require or result in a product change the effective date must match accordingly. **(SWDB)**

157. Comment: And finally, we support the additional definition changes to the aerosol coating regulation. We appreciate the staff's willingness to work with us on these technical issues and clarifications to the rules. **(STON-2)**

Agency Response to Comments 148-157: We acknowledge the Commenter's general support of the amendments approved by the Board at the September 26, 2013, hearing.

158. Comment: New categories: The proposed amendments contain several new categories of aerosol coatings, including Mold Releases, Two Component Coatings, Flexible Coatings, and Uniform Finish Blenders. ACA supports the inclusion of these new categories. These categories are important additions to the aerosol coatings regulation and the definitions were crafted with significant collaboration between industry and ARB staff. ARB staff diligently worked with the industry and demonstrated a willingness to incorporate standards for new and innovative technologies in this rule. ACA supports this effort.

Changes in existing definitions for Flat, Non Flat, Metallic, Rust Converter, VFLP: The proposed amendments also contain changes to many existing category definitions, including the Flat, Non Flat, Metallic, Rust Converter, Spatter/Multicolor/Stucco Coating, Vinyl/Fabric/Leather/Plastic Coating. These proposed changes were the result of greater understanding of the products and their applications. In the case of the Flat, Non Flat and Metallic Coatings, text was added to recognize the "dual functions" of these coatings. Changes to the Rust Converter definition are more reflective of the market and a more accurate definition for Spatter/Multicolor/Stucco is proposed. This is true for the VFLP definition as well.

New Definitions that Make the Rule Work: In addition, the proposed amendments contain new definitions such as Antimicrobial Compound, Coating, Extender, Fragrance, General coating, Label, Pigment, Plasticizer, Principal Display Panel or Panels, Resin, and Specialty Coating. These definitions make the regulation unambiguous and clear. These definitions are important in interpreting the application of the regulation to specific situations and hopefully, leave very little room for questions. ACA supports these new definitions. **(ACA-2)**

159. Comment: CSPA fully supports the added provision in Section 94521(a)(2) that excludes products regulated under the Consumer Products and Antiperspirant/Deodorant Regulations are not Aerosol Coating Products subject to this

regulation. This new provision provides the clarity needed to assure no product will be subject to requirements of two regulatory provisions. CSPA supports the clarified definition for “Reactivity Limit,” which now refers to the “Product-Weighted MIR.” The use of “Reactivity Limit” elsewhere in the regulation is now consistent with the revised definition for this term. CSPA also supports the clarification that self-priming paints do not have to comply with both the Primer and Flat or Nonflat standards, and the clarifications to the definition for “Mold Release Coating” and “Vinyl/Fabric/Leather/Plastic Coating.” **(CSPA-1)**

160. Comment: ARB has proposed a number of new or amended definitions in Sec. 94521 that will be essential to compliance by manufacturers whose products are covered under the Aerosol Coating Product Regulation and to the fair and efficient enforcement of the new limits by ARB staff. Proposed amendments to existing definitions that are of particular interest to SC Johnson are those related to “Clear Coating,” “Flat Coating,” “Product-Weighted MIR,” “Reactivity Limit,” and “Vinyl/Fabric/Leather/Plastic Coating.” SC Johnson supports these proposed changes and believes they will bring about helpful clarification to these existing definitions.

New definitions of interest to SC Johnson are those related to “Fragrance,” “Pigment,” and “Resin.” The definition of “Fragrance” appears to be very consistent with the “Fragrance” definition contained in the Consumer Product Regulation. The inclusion of new definitions for “Extender,” “Pigment,” and “Resin” will add clarity to the regulation and where it applies. SC Johnson appreciates and supports the inclusion of these new definitions in the Aerosol Coating Regulation.

SC Johnson notes with appreciation the inclusion of a new definition for “Antimicrobial Compound” as any ingredient added to an Aerosol Coating Product exclusively to prevent microbial growth or product spoilage. The inclusion of this definition is important for two reasons – (i) it recognizes that as water-based aerosol coating technology advances, the use of additives designed to inhibit microbial growth will increase; and (ii) the definition will provide additional clarity by proposing that compounds meeting the definition are not counted toward formulation’s product-weighted MIR content. **(SCJ-1)**

Agency Response to Comments 158-160: The amendments to the Aerosol Coating Products Regulation approved by the Board include new Reactivity Limits which are primarily designed to lower the ozone forming potential of aerosol coating emissions. Other amendments include modification and clarification of existing regulatory language, new or modified definitions, deletion of expired mass-based provisions, and alignment with specific provisions in the Consumer Products Regulation to provide consistency. Reactivity Limits are based on the numerical MIR scale. Other proposed amendments would clarify assignment of MIR values and add provisions to clarify the testing and compliance process.

161. Comment: We are concerned, however, that confusion, as well as the risk of potential noncompliance, may result from the proposed wording of the term “Ingredient,” which is defined simply at section 94521(a)(40) as a component of an Aerosol Coating Product. SC Johnson recommends that ARB adopt a definition of “Ingredient” as being an intentionally added material in an Aerosol Coating Product. This clarification would help distinguish an “ingredient” from similar terms like “component” or “constituent” – terms that can include numerous unintentional impurities that we believe should not be treated separately when calculating PWMIRs. **(SCJ-1)**

162. Comment: CSPA remains somewhat concerned that the use of the terms “Ingredient” (defined), component and constituent (both undefined) seem to be used interchangeably. As the term is used by our industry, an ingredient is an intentionally added material that can have multiple components/constituents. (Indeed, all ingredients, no matter how pure, contain multiple components, and virtually all have multiple components over 0.1%). This has been appropriately addressed in the development of the industry voluntary ingredient communication program, and in the ongoing development of the *CSPA Consumer Product Ingredient Dictionary*. **(CSPA-1)**

Agency Response to Comments 161 and 162: We disagree with the Commenter’s position, as the definition for “Ingredient” has been in the regulation since the Board adopted the definition at the June 22, 2000, hearing. At the hearing, the Board adopted Resolution 00-22, in which the Board approved the proposed amendments to the Aerosol Coating Products Regulation, the proposed Tables of MIR Values, and the proposed amendments to ARB Method 310.

Revised Limits for General Coatings and Specialty Coatings Categories

163. Comment: Since the current standards were adopted in 2000, the aerosol coatings industry has worked very hard to formulate products that are compliant with the regulations and that maintain very high performance standards.

These proposed new reactivity standards for Aerosol Coatings are extremely challenging for the aerosol coatings industry. The PWMIR for the Clear, Primer, Flat and Non Flat categories represent reductions in the PWMIR from 30% to 45%. These new standards will require significant reformulations for the General categories along with those currently existing categories in the Specialty Coatings A list, which include Auto Body Primer, Exact Match Finish, and Ground Traffic/Marking Coatings. There are several new categories being introduced into the Aerosol Coatings Regulation and these categories appear in the Specialty Coating A list as well. ACA notes that the PWMIR for these new categories Electrical/Electronic/Conformal Coatings; Flexible Coatings; Mold Release Coatings; Two Component Coatings and Uniform Finish Coatings - will also be very challenging for the industry’s formulators.

ACA’s primary concern throughout the rulemaking was the preservation of the industry’s reputation for producing products that provide outstanding performance. Aerosol

coatings are a niche paint product and very often, are the “solution” for a difficult problem. Consumers choose aerosol coatings, rather than bulk paint products, in order to obtain a professional finish that is impossible to achieve with a brush or because bulk liquid paint cannot be applied as comprehensively. This rulemaking threatened to seriously alter the industry’s ability to product efficacious products.

During the rulemaking, ARB’s diligence and effort in collecting formulation data and sharing this information with the industry was keenly important to our understanding of the basis for these proposed standards. This information exchange served as the foundation for all conversations and negotiations between the industry and the agency. ACA met on numerous occasions with ARB staff, both in person and by teleconference, in order to discuss continuing technological issues. These meetings were extremely helpful and in many instances, helped to bridge the gap between the agency’s proposal and the industry’s position. Despite the difficult challenge ahead, ACA supports these proposed new standards for aerosol coatings. **(ACA-2)**

164. Comment: As noted in previous comments submitted to ARB staff by 3M and trade associations, the proposed product-weighted maximum incremental reactivity (PW-MIR) limits for the general coatings categories and the “group A” specialty coatings categories are quite aggressive, with many categories having a low current complying market share and a low percentage of complying products. 3M has been concerned that many of the proposed limits may not be technologically and commercially feasible for the variety of products that are in these categories. However, 3M has evaluated the technological and commercial feasibility of the proposed limits for product categories that we sell (especially auto body primers). Our assessment is that they will be technology-forcing, but we are hopeful that they will be feasible. **(3M)**

165. Comment: Compliance Deadline: The proposed rule provides that the newly proposed PWMIRs for General Categories and Specialty Category A become effective on January 1, 2017, while the Specialty Category B products must meet the new revised standards by January 1, 2015. ACA supports this compliance schedule and believes that this schedule allows the industry to manage the required workload in order to achieve compliance by the appropriate deadlines. This is a key element in the proposed rule. The General Categories include the largest categories by volume -- these include Clears, Flat, Non Flat and Primers, making up more than 90 percent of the products reported in the survey. According to the ARB 2010 Survey, the Non Flat category is the largest at 1053 products reported. There are 225 products reported in the Flat category; 251 products reported in the Clear category and 226 reported in the Primer category. As you can see, reformulating over 1700 formulas will take some aggressive and careful management by manufacturers. It would not be possible to complete this task without the bifurcated compliance deadline in the proposed amendments. **(ACA-2)**

166. Comment: CSPA supports the positions taken by ACA regarding the revised VOC limits and effective dates for various categories of General Coatings. We also support ACA's position on the new limits for Specialty Coatings categories that are set to avoid reformulations while translating the PWMIR Reactivity Limits to use the updated 2010 MIRs. CSPA specifically supports the limits proposed for Mold Release and Vinyl/Fabric/Leather/Plastic Coatings. **(CSPA-1)**

167. Comment: The Aerosol Coating limits for the General Coating categories are challenging and Industry will need significant resources to comply with these limits. **(NAA-1)**

168. Comment: Plasti Dip International supports the additional specialty categories and supports the Specialty Coating limits and the fact that CARB capped these limits to prevent future increases. **(PDI)**

169. Comment: Spray Products supports the staffs' position to cap the Specialty Coatings categories VOC limits. This will allow manufactures to manufacture products and prevents any VOC increases. **(SPRAY)**

170. Comment: Stoner Inc. supports the Specialty Coating limits and the fact that CARB capped these limits to prevent future increases. **(STON-1)**

171. Comment: WAIB supports the Specialty Coating limits and the fact that CARB capped these limits to prevent future increases. **(WAIB)**

172. Comment: Aervoe supports the Specialty Coating limits and the fact that CARB capped these limits to prevent future increases. **(AERVOE)**

173. Comment: NAA supports the Specialty Coating limits and the fact that CARB capped these limits to prevent future increases. **(NAA-1)**

174. Comment: The proposed amendments specify new or lower reactivity limits for six "General Coatings" categories, including a proposed reactivity limit (g O3/g product) of 0.85 for Clear Coating and 0.80 for Flat Coating with an effective date of Jan. 1, 2017. ARB also proposes to cap the reactivity limit for 23 "Specialty Coatings" categories, including a reactivity limit of 1.45 for vinyl/fabric/leather/plastic coating products, with an earlier effective date of Jan. 1, 2015.

SC Johnson markets a water-based colorant spray and sealant product for decorating carpets and rugs under the Vecco™ brand that comes under the Clear and Flat Coating categories, and aerosol coating products for shoe and leather care under the KIWI® brand that fall under the Specialty Coatings category of vinyl/fabric/leather/plastic.

We are pleased to see that ARB's August 2013 proposed reactivity limits for these categories are consistent with the June 27 staff draft proposal and that the Agency has not proposed to lower the limits any further. SC Johnson supports these proposed

limits and respective effective dates, especially given that no product reformulation is required to meet the proposed Specialty Coating category MIR limits, in particular. **(SCJ-1)**

175. Comment: We support the revised limits. However, it is important to note, the limits for general categories are technology forcing and demonstration of commercial feasibility may not be certain until new compliant formulas have been created and marketed. **(SWDB)**

176. Comment: The General Coating limits will be extremely challenging to meet. We need as much time as possible to meet these limits. **(STON-1)**

177. Comment: The General Coating limits will be extremely challenging to meet. We need as much time as possible to meet these limits. **(WAIB)**

178. Comment: The General Coating limits will be extremely challenging to meet. We need as much time as possible to meet these limits. **(SPRAY)**

179. Comment: The American Coatings Association supports the proposed amendments to the aerosol coating regulation. ACA represents paint coatings, adhesives, and sealant manufacturers and are raw material suppliers to these industries. We recognize that the standards, the product weighted MIR standards and the aerosol coatings regulations, are very aggressive. In some cases, these reductions are 30 to 40 percent for some of the general categories. The survey and the rulemaking process that we're engaged in by the staff and the stakeholders was very comprehensive, thorough, and transparent. We had a lot of very, very frank discussions about the survey results and the state of aerosol coatings technologies. We can support these limits.

We support the bifurcated compliance deadline. This allows our manufacturers to manage their resources, the human resources required to reformulate the thousands of formulas in those general categories. There are new categories, amended categories, and there are some clarifying amendments in this regulation that we worked very hard with Air Resources Board staff to hammer out language that was reasonable and much more reflective of how these product are formulated, marketed, and used in the field. And many of these changes were brought to the Air Resources Board by the industry. We certainly appreciate their patience in discussing these changes with us and adopting some of these changes. **(ACA-3)**

Agency Response to Comments 163-179: Although some Commenters express concern that the proposed limits for the General Coating Categories and Specialty Coating Categories are technology forcing, Commenters are supportive of the Reactivity Limits approved by the Board at the September 26, 2013, hearing. The Board approved new or lower Reactivity Limits for 16 categories, representing over 90 percent of the aerosol coating emissions. The approved Reactivity Limits would result in an equivalent VOC reduction of about 3.7 tons per day statewide, with about

1.6 tons per day of the reductions occurring in the South Coast district, beginning in 2017. Staff determined that the new or lower limits are technically and commercially feasible, while providing the maximum feasible emissions reduction. Staff has provided three years for manufacturers to reformulate their products to meet the lower reactivity limits that will become effective on January 1, 2017.

Alternative Control Plans (ACPs)

180. Comment: CSPA continues to recommend that this provision be removed in its entirety, and believe that the ACP Regulation can be revised to handle Aerosol Coatings subject to reactivity limits just as it handles Consumer Products subject to mass-based percent VOC limits. **(CSPA-1)**

181. Comment: Minor proposed amendments at new subsection 94522(c) specify that Aerosol Coating Products cannot use ARB's Alternative Control Plan (ACP). As you may know, in 1995 SC Johnson became the first consumer product company to enter into an Alternative Control Plan with ARB and since that time we have gained significant experience working with ARB staff to maintain and update our ACP. Although resource-intensive for our company and ARB staff alike, we believe the ACP has evolved into a successful, innovative tool for achieving compliance with applicable VOC limits, and that ARB should consider expanding the current ACP program as a regulatory compliance option, especially as the agency continues to lower VOC and MIR limits for a variety of consumer products. We believe the ACP program can be revised to handle aerosol coatings subject to reactivity limits, just as it handles consumer products subject to mass-based percent VOC limits, and recommend that this provision be removed from the regulation in its entirety. Together with the Consumer Specialty Products Association (CSPA), of which SC Johnson is a member, we would be pleased to work with ARB staff to enhance and broaden the current ACP in a manner that provides additional flexible and verifiable compliance options without overburdening ARB staff resources. **(SCJ-1)**

182. Comment: We continue to advocate for the inclusion of an Alternative Control Plan to this regulation. **(SWDB)**

183. Comment: Third, we encourage the ARB to consider ways to expand the current alternative control plan program, which we believe has over the years produced quantifiable environmental benefits. Together, with CSPA, we would be very pleased to work with the staff to enhance and broaden the current ACP in a manner that provides additional flexible and verifiable compliance options, including opening the ACP to aerosol coating products without overburdening ARB staff resources. **(SCJ-2)**

Agency Response to Comments 180-183: We disagree with the Commenter's position that the Alternative Control Plan should be expanded to include the Aerosol Coating Products Regulation. The Aerosol Coating Products Regulation already includes inherent flexibility through the use of MIR values to meet the Reactivity

Limits. However, staff will continue to work with stakeholders to explore ways to expand the use of the ACP.

Effective Date of 2010 Table of MIR Values

184. Comment: ACA supports ARB's efforts to activate the 2010 Table of MIR Values as soon as is practicable after this hearing. The most recent MIR Values, added to the Table on October 2, 2010, represent the most scientifically accurate measurement of reactivity. It is appropriate that these values become the norm for compliance with the new standards and that manufacturers be granted the ability to use these values as soon as possible. Doing so allows manufacturers to provide more accurate information to consumers regarding these products and permits a more efficient reformulation process for those products that require reformulation. ACA supports immediate access to the 2010 Table of MIR Values. **(ACA-2)**

185. Comment: In our previous comments we raised concern regarding barriers to early compliance to the new limits if the flexibility was not given to use them prior to the rule's filing date with the Secretary of State. This may not be a common problem, but occasionally there may be new product formulations that comply with the new limit and new MIRs, but not the old limit and old MIRs. We urge ARB to apply appropriate enforcement discretion to allow early compliance, and not take enforcement actions against products that comply with the new limits and new MIRs. **(CSPA-1)**

186. Comment: Plasti Dip International requests the board to instruct enforcement to allow the use of the 2010 table of MIR values to be utilized upon board approval. **(PDI)**

187. Comment: The new table of MIR values represents state of the art science. We urge the ARB to adopt those values as soon as possible for compliance with current and future limits. We also urge the ARB to exercise discretion should the use of the new MIR values cause a perceived compliance issue on paper due to the use of the new MIR values with the existing limits. **(SWDB)**

188. Comment: Spray Products requests that the 2010 table of MIR values be available for use as soon as possible. The board could instruct enforcement to use the 2010 table of MIR values as soon as the board adopts the new limits. **(SPRAY)**

189. Comment: Stoner requests that the 2010 table of MIR values be available for use as soon as possible. The board could instruct enforcement to use the 2010 table of MIR values as soon as the board adopts the new limits. **(STON-1)**

190. Comment: WAIB requests that the 2010 table of MIR values be available for use as soon as possible. The board could instruct enforcement to use the 2010 table of MIR values as soon as the board adopts the new limits. **(WAIB)**

191. Comment: We are very, very supportive of use of the 2010 table of MIR values. We believe this is of vital importance to the aerosol coatings industry and our formulators. It is very, very important that the most scientifically accurate MIR values are available to the industry to use as quickly as possible.

My second long sentence the effective date for the rulemaking needs to be as quickly as possible. The changes this regulation are really reflective of how these products are marketed. And aerosol coatings manufacturers need to begin immediately to comply with this regulation in order to come into compliance on the date specific. **(ACA-3)**

Agency Response to Comments 184-191: As provided in section 94522(i)(3)(A), the Aerosol Coating Products Regulation contains a provision that allows use of the MIR values dated October 2, 2010, upon final approval of the rulemaking by the Office of Administrative Law and filing with the Secretary of State. We anticipate that these amendments will become legally effective late 2014.

Assigning of MIR values for Calculating Product-Weighted MIR (PWMIR)

192. Comment: 3M supports the proposed changes to how MIR values are assigned to a product's components, including the use of an isomer's MIR value and the use of default MIR values. **(3M)**

193. Comment: Calculation of MIR Values: In this rulemaking, ARB has proposed several changes to the method in which the PWMIR is calculated. A historical problem for the industry occurs when a formula uses a compound that does not appear on the Table of MIR Values. Under the current rule, this compound is not available for use in products in California and automatically renders such a product non-compliant. In this rulemaking, ARB has proposed that the MIR Value for a related isomer can be used or alternatively, a default MIR value for such a compound is proposed. In addition, the proposed text also clearly indicates those compounds or classes of compounds that are assigned a "0" MIR Value. These newly proposed amendments will serve to clarify how the PWMIR of a formula is calculated. The aerosol industry greatly appreciates this effort to proactively respond to these recurring questions. ACA supports these proposals. **(ACA-2)**

194. Comment: SC Johnson appreciates that ARB has proposed two very important and useful additions to Sec. 94522, Reactivity Limits and Requirements for Aerosol Coating Products. The first occurs in proposed subsection (j) Assignment of Maximum Incremental Reactivity (MIR) Values and provides a much-needed default MIR value equal to that of 1,2,3-trimethylbenzene (Table Entry #440; MIR = 11.97) for compounds not specifically listed in ARB's table of MIR values for individual compounds (sec. 94700, Title 17, California Code of Regulations). The second addition, also in subsection (j), establishes a default MIR value of 0.0 for fragrance or an antimicrobial compound present in an aerosol coating product in an amount up to 0.25 percent by weight and a default value equivalent to the MIR value for terpinolene (Table Entry #382; MIR = 6.36) for fragrance in excess of 0.25 percent by weight.

These provisions will allow more flexibility in formulating products by allowing a wider range of raw materials to be used and allowing manufacturers to develop and commercialize water-based systems, which ultimately will provide environmental benefits through reduced VOC emissions. SCJ fully supports these proposed additions. **(SCJ-1)**

195. Comment: The proposed changes to how product weighted MIR is calculated are very important also. Use of a default value, use of the MIR value for isomers and clarifying which compounds receive a zero value is very important to the industry and will help provide a level playing field for all manufacturers in this industry.

Again, we certainly appreciate the rulemaking process that was executed by this ARB staff. It was very transparent. It was as transparent as the confidentiality regs allow in California. It was executed very professionally. We had many, many stakeholder meetings where we discussed many of the technical issues confronted by our formulators, and we do appreciate the ARB staff's patience. **(ACA-3)**

Agency Response to Comments 192-195: Previously, compounds that are not listed in the Table of MIR Values (section 94700, title 17, CCR) could not be used. To provide additional compliance flexibility, the Board approved various "default" MIR values that could be used when no MIR value exists. These MIR values are conservative, meaning it is likely that the compound's "true" reactivity would be lower than the default value specified. However, they provide additional flexibility to the regulated community.

New subpart (D) allows an isomer of a compound listed in the Table of MIR Values for Compounds (section 94700, title 17, CCR) to be used if a MIR value for the compound is not listed. If more than one isomer is listed, the highest listed MIR value would be used to represent the compound's reactivity.

Revised subpart (E) specifies that if a compound or its isomer(s) is not listed, the MIR value for 1,2,3-trimethyl benzene shall be used to determine its weighted MIR. This compound is the highest reactive compound reported in the 2010 Survey. Therefore, specifying the use of the MIR value for the compound when no MIR value exists is conservative, meaning that the compound's "true" reactivity would be lower than the default value specified. Similarly, if an aliphatic hydrocarbon solvent is not listed in the Table of MIR Values for Hydrocarbon Solvents (section 94701, title 17, CCR) the MIR value for 1,2,3-trimethyl benzene shall be used to calculate the PWMIR.

In the Table of MIR Values for Compounds only a limited number of fragrance ingredients are listed. To provide flexibility such that any fragrance ingredients could be used, staff specify in subpart (F) that the MIR value for terpinolene be used. This compound is among the most reactive fragrance ingredients listed.

In revised subpart (3)(A), staff proposed the timeline for transitioning to use of the MIR values dated October 2, 2010. These MIR values represent the state of the science so it is appropriate that their use begin expeditiously. Therefore, the new 2010 MIR values shall be used to calculate PWMIR as soon as the amendments are filed with the Secretary of State. In addition, subpart (3)(B) is modified to clarify that if a new compound is added to the Tables of MIR Values, the MIR value of this new compounds shall be used, rather than the default value, because it would more accurately represent the compound's reactivity.

Compliance Verification

196. Comment: 3M understands the need for ARB Enforcement to be able to verify that aerosol coating products sold in California meet the state's reactivity limits. However, we remain concerned about the proposed use of Table 94526(b)(4)(A). In particular, we are concerned that a situation may arise in which we have formulated a product to meet its PW-MIR limit, using the ingredient MIR values found in §94701, but testing and the use of Table 94526(b)(4)(A) indicate that the product does not meet its limit. 3M is hopeful that ARB Enforcement will fully consider the formulation information presented by companies and use this table judiciously. **(3M)**

Agency Response to Comment 196: We acknowledge the comment. As is always the case, formulation data is taken into consideration when determining a product's compliance status.

Table 94526(b)(4)(A) Hydrocarbon Solvent Fraction

197. Comment: CSPA understands the need for this analytical approach for assessing compliance of products formulated with hydrocarbon mixtures that are provided MIR values in one of the 24 Bins defined in section 94700 Table of MIR Values. We urge ARB to make reasonable allowance for any good faith compliance using the Bin values that (for unforeseen technical reasons) do not fully agree with the MIR values in the new table. **(CSPA-1)**

Agency Response to Comment 197: The Board approved staff's proposal to put in place new analytical procedures to analyze for hydrocarbon solvents and a new process for determining their reactivity to align with these procedures. To determine the weighted MIR for each hydrocarbon solvent fraction, MIR values are assigned to hydrocarbons grouped by carbon number. These values listed in title 17, CCR, section 94526(b)(4)(A) are based on the following analysis. Chemical compositions of mixtures assigned to the 24 CARB hydrocarbon solvent Bins were used to determine solvent MIR values by using the MIR value for each hydrocarbon solvent fraction based on carbon number distribution as specified in Table 94526(b)(4)(A). Reactivities for 24 hydrocarbon solvent Bins determined by this method were then compared with the MIR values (October 2, 2010) as specified in title 17, CCR, section 94701; Table of MIR Values for Hydrocarbon Solvents. ARB staff shared their analysis results with stakeholders to demonstrate that the reactivity estimates

for 24 Bins calculated based on MIR values by carbon number are in a good agreement with and often are lower than reactivity assignments for hydrocarbon Bins as specified in section 94701. Based on this assessment, ARB staff does not anticipate any significant discrepancy between the reactivity of hydrocarbon solvents determined by new analytical procedures and the reactivity of hydrocarbon solvents derived using the Bin MIR values as specified in section 94701.

Economic Impacts Analysis

198. Comment: CSPA believes that the estimated overall cost to comply with the proposed regulation --\$26.5 million over the next five years – significantly underestimates the cost of this regulation, and overestimates its cost effectiveness. While our members have agreed to accept these many new standards and revisions, reformulations can be especially difficult for aerosol products, especially coatings and adhesives. The costs of many new provisions do not seem to have been assessed, including the new chlorinated solvent restrictions and new MIR limits created by removing the exemptions for Electrical Coatings, Mold Release Coatings, and Rust Converter Coatings. Even in cases where product reformulations are not required, the regulation triggers requirements to reassess every product using the updated MIR values, and potential label changes to assure compliance with the revised definitions. **(CSPA-1)**

199. Comment: ARB has estimated that the cost to comply with the proposed limits is about \$5,300,000 per year, including both recurring and nonrecurring costs. ACA believes that this estimate is very low. In reviewing ARBs cost assumptions, ACA believes that the agency neglected to include adequate costs for myriad of testing that is required to commercialize a new formula. While ARB has included costs for Stability Testing, Efficacy Testing, and Safety Testing (See Table J-3, in the staff report¹), these costs appear to be minimal and may not account for multiple tests performed on each variation of a new formula. Our review indicates that these costs appear to be extremely conservative. ACA is also concerned about the relatively low economic factor that ARB has assigned to personnel costs in reformulating aerosol coatings to comply with the new limits. **(ACA-2)**

Agency Response to Comment 198 and 199: Since 1999, a set of per product reformulation costs in 1991 dollars had been established for each phase of bringing a reformulated product into the market. The costs are adjusted to 2012 dollars using a well-established method of rationing chemical engineering plant cost indices.

For aerosol coatings staff used a single scenario approach based on the low cost scenario. Since the product form in the low cost analysis did not change, these products would not require any major retooling of manufacturing equipment, and

¹ Initial Statement of Reasons for Rulemaking (staff report), entitled Public Hearing to Consider Proposed Amendments to the Antiperspirants and Deodorants Regulation; Consumer Products Regulation; Aerosol Coating Products Regulation; the Tables of Maximum Incremental Reactivity Values; Test Method 310; and Proposed Repeal of the Hairspray Credit Program, released August 7, 2013

technical data changes would be minor. Staff believes this is appropriate because the reformulation that would be required by the proposed amendments would not involve new technologies. As shown in Table J-3, in the staff report¹, the column “Estimated Cost,” all of the costs except those for registration were used. “Labeling Modifications” were included in the analysis.

California State Implementation Plan

200. Comment: 3M encourages the ARB to account for and claim additional, existing, SIP-creditable emission reductions. The available survey data demonstrate that many current aerosol coating formulas are below the MIR limits. The ARB should “take credit” for the difference between what the emissions actually are now and what the ARB calculated they would be when first setting the limits in the aerosol coatings rule. Accounting for these “limit-to-limit” reductions would both benefit the ARB and recognize the progress the aerosol coatings industry has made in terms of reducing ozone formation. **(3M)**

201. Comment: As ACA has pointed out on several occasions, the 2010 ARB Survey results indicate that aerosol coatings are formulated below current reactivity standards. By our calculations, this has resulted in an additional 2.23 tons per day of emission reductions that are not included in the total emissions reductions for this rulemaking. While we understand the complexities involved in attempting to recognize these emission reductions and apply them to California’s current State Implementation Plan requirements, we continue to seek some appropriate resolution which accounts for these “lost” emission reductions – reductions which have resulted in better air quality that California citizens are already enjoying. **(ACA-2)**

202. Comment: My first long sentence is aerosol coating manufacturers historically manufactured their products below the current standards. What this means is that there are emission reductions that occurred over the course of time that are not accounted for in this rulemaking. These emission reductions are 2.23 tons per day. There should be some way for the Air Resources Board to take credit for that in the State Implementation Plan. We encourage that conversation to continue. **(ACA-3)**

Agency Response to Comments 200-202: While ARB acknowledges that manufacturers may formulate products so as to provide themselves a compliance margin, it should be noted that the so called “lost emissions” are accounted for and taken into consideration when inventories are updated through the survey process. The emissions inventory reflects actual VOC emissions from the products reported in the survey.

15-Day Comments and Agency Responses

Support for the Proposed Modifications

203. Comment: CSPA is in general support of all of the modifications proposed in this 15-Day Notice. **(CSPA-3)**

Agency Response to Comment 203: Support noted.

Consumer Product Definitional Clarifications

204. Comment: The clarification to the definition of General Purpose Cleaner in Section 94508(a)(58)(B) that “Furniture Maintenance Product” is not included is strongly supported by CSPA. We also support the clarification in Section 94508(a)(88)(B) of the definition of “Multi-Purpose Solvent” products.

CSPA also supports the clarification in Sections 94508(a)(122) and 94508(a)(123) to exclude from “Single-Purpose Cleaners” and “Single Purpose Degreasers” products already meeting the definition for another regulated category, and to require single-use status based on labeling. This makes it clear that the many types of single-purpose cleaners and degreasers already subject to existing VOC limits do not now also fall into these new categories. **(CSPA-3)**

205. Comment: The NAA comments are directed at the definition section of the amendments. NAA agrees that the changes to the definitions clarify the intent of the regulation. The clarifications to the Single Purpose Cleaner definition and the Single Purpose Degreaser definition assist in clarifying that products in categories that are already regulated are not subject to this definition.

NAA agrees with this position and NAA supports the inclusion of these definitions into the rule. The entire definition clarifies that there are numerous cleaners and degreasers used on objects that are not intended as general use products and thus should not be regulated under those categories. **(NAA-2)**

Agency Response to Comments 204 and 205: We acknowledge these commenters support for staff’s proposed additional and modified definitions approved by the Board at the September 26, 2013, hearing.

Test Method 310 Clarifications and Modifications

206. Comment: CSPA Supports the Modifications to Section 94515(j) of the Consumer Products Regulation and Method 310 Sections 3.3.5 and 4.2.4, which are aimed at making the Regulation and Method 310 consistent and more technically accurate in the assessment of VOCs in Multi-Purpose Solvents and Paint Thinners.

Agency Response to Comment 206: Support noted.

207. Comment: CSPA continues to believe, however, as we commented last year, that all materials with the same or lower vapor pressures as these methyl esters should be treated the same in terms of defining VOC content. We continue to hope that this issue will be addressed in future rulemakings. We also continue to urge that, even though ARB's Monitoring and Laboratory Division no longer uses the isoteniscope method for vapor pressure determinations, ARB continues to recognize existing data developed by this method that demonstrates the LVP-VOC status of consumer product ingredients. **(CSPA-3)**

208. Comment: Although we [California Manufacturers & Technology Association (CMTA)] understand that the deletion of 3.6.3 is not the subject of the current comment period, we wanted to take this opportunity to further explain CMTA's concerns with this deletion as described below.

CMTA understands that the deletion was a result of the methods no longer being used by CARB to verify chemicals compliance with the LVC-VOC [LVP-VOC] exemption. Given this, we strongly recommend that CARB explicitly state that they will recognize as valid vapor pressure data developed by these methods in cases where conflicts arise between results of 3.6.1 and 3.6.2. As explained below, failing to do so will unnecessarily cause manufacturers to either retest to the boiling point test or in some cases, to eliminate their ability to fall within the LVC-VOC [LVP-VOC] exemption. To ensure a level playing field, CARB must allow manufacturers to rely on these other methods to verify the LVC-VOC [LVP-VOC] status.

Striking Section 3.6.3 unnecessarily eliminates the ability for the Executive Officer to test for LVP-VOC applicability for non-hydrocarbon based chemicals. This creates uncertainty for companies who rely on more rigorous vapor pressure measurements rather than boiling point data to justify the LVP-VOC status of chemicals.

Reliance on boiling point measurements and a testing threshold of 216°C as described in Section 3.6.2 will in some cases lead to incorrect conclusions that non-hydrocarbon based chemicals should not be given LVP-VOC exemption. This is a problem because many non-hydrocarbon based chemicals have lower boiling points than hydrocarbon based chemicals while still having a low vapor-pressure that qualifies them as LVP-VOCs (vapor pressure of less than 0.1 at 20°C, mm Hg).

Clearly, the differences in the testing methods outlined in 3.6.1 and 3.6.2 can result in discrepancies. Section 3.7.3 states that if discrepancies cannot be resolved between the results of Method 310 and the supplied formulation data then the results of Method 310 shall take precedence over the supplied formulation data. For hydrocarbon-based chemicals, the testing methodology in Sections 3.6.1 and 3.6.2 of Method 310 will normally agree and will substantiate an LVP-VOC exemption. For non-hydrocarbon-based chemicals, the testing methodology of Sections 3.6.1 and 3.6.2 may not agree because of the selection of the arbitrary boiling point criteria of 216°C,

potentially eliminating the opportunity for many non-hydrocarbon based chemicals to be properly classified as LVP-VOCs.

Utilizing testing methods that determine vapor pressure is a more accurate testing methodology than using one based off of boiling points. By retaining Section 3.6.3 in Method 310, discrepancies between testing methodologies can be accounted for, resulting in a more thorough and accurate analysis for all chemicals, not just those that are hydrocarbon based.

CMTA strongly encourages CARB to continue to offer this alternative method for verifying conformance with the LVC-VOC criteria and explicitly state in Method 310 that CARB will recognize as valid vapor pressure data developed by the ASTM methods in cases where conflicts arise between results of 3.6.1 and 3.6.2. **(CMTA)**

Agency Response to Comments 207 and 208: While these comments are outside of the scope of 15-day notice, ARB staff would like to provide a clarification. The Board approved staff's proposal to delete Section 3.6.3 and Appendix B to Method 310 that described a modified procedure for determination of vapor pressure and decomposition temperature of liquids using an isoteniscope, because this method is no longer used by ARB staff. ASTM D 2879 "Standard Test Method for Vapor-Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope" is still one of the ASTM International methods incorporated by reference in Method 310. ARB staff did not eliminate this ASTM method from the list of approved methods incorporated by reference in Method 310. As such, ARB staff will continue to recognize data obtained by use of this method.

V. PEER REVIEW

Health and Safety Code Section 57004 sets forth requirements for peer review of identified portions of rulemakings proposed by entities within the California Environmental Protection Agency, including ARB. Specifically, the scientific basis or scientific portion of a proposed rule may be subject to this peer review process.

Here, ARB determined that the rulemaking at issue does not contain a scientific basis or scientific portion subject to peer review, and thus no peer review as set forth in Section 57004 was or needed to be performed.