

State of California
AIR RESOURCES BOARD

**CALIFORNIA CONSUMER PRODUCTS REGULATIONS:
ANTIPERSPIRANTS AND DEODORANTS REGULATION, CONSUMER PRODUCTS
REGULATION, AEROSOL COATING PRODUCTS REGULATION, TABLES OF
MAXIMUM INCREMENTAL REACTIVITY VALUES, METHOD 310, AND PROPOSED
REPEAL OF THE HAIRSPRAY CREDIT PROGRAM.**

Resolution 13-36

September 26, 2013

Agenda Item No.: 13-8-3

WHEREAS, sections 39600 and 39601 of the Health and Safety Code authorize the Air Resources Board (ARB or Board) to adopt standards, rules and regulations and to do such acts as may be necessary for the proper execution of the powers and duties granted to and imposed upon the Board by law;

WHEREAS, section 41712 of the Health and Safety Code requires the Board to adopt regulations to achieve the maximum feasible reduction in volatile organic compounds (VOC) emitted by consumer products, if the Board determines that adequate data exist for it to adopt the regulations, and if the regulations are technologically and commercially feasible and necessary;

WHEREAS, pursuant to Health and Safety Code section 41712, the Board adopted on December 27, 1990, the Regulation for Reducing Volatile Organic Compound Emissions from Antiperspirants and Deodorants Regulation, (title 17, California Code of Regulations (CCR), sections 94500-94506.5); adopted on August 14, 1991, the Regulation for Reducing Emissions from Consumer Products Regulation, (title 17, CCR, sections 94507-94517); adopted on March 23, 1995, the Regulation for Reducing the Ozone Formed from Aerosol Coating Product Emissions Regulation, (title 17, CCR, sections 94520-94528); adopted on May 1, 2001, the Tables of Maximum Incremental Reactivity (MIR) Values, (title 17, CCR, sections 94700-94701); and adopted on June 12, 1998, the Hairspray Credit Program, (title 17, CCR, sections 94560-94575);

WHEREAS, on September 25, 1997, the Board adopted Method 310, "Determination of Volatile Organic Compounds (VOC) in Consumer Products and Reactive Organic Compounds in Aerosol Coating Products";

WHEREAS, section 38500 et seq. of the Health and Safety Code establishes the California Global Warming Solutions Act of 2006;

WHEREAS, section 38510 of the Health and Safety Code requires ARB to monitor and regulate sources of greenhouse gases (GHG) that cause global warming in order to reduce emissions of GHG;

WHEREAS, section 38550 of the Health and Safety Code requires ARB to develop regulations and consider market-based compliance mechanisms that will restore California's GHG emissions to the 1990 baseline year by 2020;

WHEREAS, on April 15, 2004, the United States Environmental Protection Agency (U.S. EPA) designated 15 areas of California nonattainment for the federal ambient air quality standard for ozone of 0.08 parts per million (ppm) averaged over eight hours;

WHEREAS, on November 28, 2007, ARB submitted revisions to the California State Implementation Plan (SIP) which included a commitment to achieve by 2023 in the South Coast Air Quality Management District (SCAQMD) 40 tons per day of VOC reductions from long term measures in accordance with section 182(e)(5) of the federal Clean Air Act; U.S. EPA approved these revisions to the California SIP on March 1, 2012;

WHEREAS, U.S. EPA promulgated a lower ambient air quality standard for ozone of 0.075 ppm averaged over eight hours on March 27, 2008, driving the need for additional emission reductions;

WHEREAS, achieving additional VOC reductions from consumer products is necessary to attain air quality standards;

WHEREAS, U.S. EPA exempted trans-1,3,3,3-tetrafluoropropene (HFO-1234ze) from the federal VOC definition on June 7, 2012, and on August 8, 2012, Honeywell Corporation petitioned the Board to exempt HFO-1234ze from the VOC definition in the Consumer Products Regulation;

WHEREAS, the Board has identified methylene chloride, perchloroethylene, and trichloroethylene as toxic air contaminants (TAC), pursuant to article 3 (commencing with section 39660), chapter 3.5, part 2, division 26 of the Health and Safety Code;

Antiperspirants and Deodorants Regulation

WHEREAS, the proposed amendments to the Antiperspirants and Deodorants Regulation, as set forth in Attachment A hereto, includes the following primary element:

Would Exempt HFO-1234ze from the VOC definition.

Consumer Products Regulation

WHEREAS, as allowed by Health and Safety Code section 41712(i)(1), the SCAQMD adopted a rule for "Consumer Paint Thinners & Multi-purpose Solvents" (Rule 1143) on March 6, 2009, that established requirements specific to consumer paint thinners and multi-purpose solvents sold, supplied, offered for sale, or manufactured for use in the SCAQMD;

WHEREAS, after promulgation of Rule 1143 in the SCAQMD, ARB approved for adoption on September 24, 2009, a similar rule for paint thinners and multi-purpose solvent products that applies statewide; the provisions of ARB's rule and Rule 1143 both apply to products sold within the SCAQMD;

WHEREAS, SCAQMD's Rule 1143 established a VOC limit of 300 grams per liter (g/L), effective January 1, 2010, and a 25 g/L limit, effective January 1, 2011;

WHEREAS, as directed by the Board's September 24, 2009, Resolution 09-51, staff conducted a Technical Assessment that is scheduled to become effective on December 31, 2013, on the feasibility of the 3 percent by weight VOC limit for paint thinners and multi-purpose solvents provision in the ARB rule, and the results of this assessment indicate that the limit is feasible and can be implemented as scheduled;

WHEREAS, the proposed amendments to the Consumer Products Regulation, as set forth in Attachment B hereto, include the following primary elements:

New or lower VOC limits for three aerosol adhesive categories and aerosol forms of paint thinner and multi-purpose solvent products;

VOC limits and testing procedures for nonaerosol paint thinner and multi-purpose solvent products sold in the SCAQMD;

Prohibition on use of methylene chloride, perchloroethylene, and trichloroethylene in five consumer product categories and prohibition on use of compounds with a global warming potential (GWP) value at or above 150 in three consumer product categories;

Extension of existing safety labeling provisions for paint thinner and multi-purpose solvent products;

Modification of existing definitions, deletion of expired provisions, addition of new definitions for various product categories, such as hair care products, household cleaning products, lubricants, paint thinner, and multi-purpose solvents;

Extension for three years of the compliance date for the 10 percent by weight VOC limit for the multi-purpose lubricant category; and

Exemption of HFO-1234ze from the VOC definition.

WHEREAS, the proposed amendment to the Consumer Products Regulation that would extend the effective date for the 10 percent by weight VOC limit for the multi-purpose lubricant category from December 31, 2015, until December 31, 2018, would result in delaying a 1.3 tons per day VOC emission reduction, but will be offset by emission reductions obtained from other consumer product categories such that overall VOC emissions will continue to decline;

WHEREAS, the proposed amendments to the Consumer Products Regulation would result in a VOC emissions reduction of about 0.4 tons per day, beginning January 1, 2017;

Aerosol Coating Products Regulation and the Tables of Maximum Incremental Reactivity (MIR)

WHEREAS, the proposed amendments to the Aerosol Coating Products Regulation as set forth in Attachment C and Tables of MIR Values, as set forth in Attachment D hereto, include the following primary elements:

New or lower Reactivity Limits for six General Coating categories and 10 Specialty Coating categories;

Reactivity Limits for another 23 Specialty Coating categories to ensure that the ozone forming potential does not increase;

Modifications, additions, and clarifications to provisions for using MIR values that set forth default MIR values to be used when an ingredient is not listed in the Tables of MIR Values and MIR values for various hydrocarbon solvent fractions, and reorganization of the "Oxygenated Organics" section of the Tables of MIR Values by chemical class; and

Modification and clarification of existing regulatory language, including new and modified definitions, and deletion of expired definitions and provisions.

WHEREAS, the proposed amendments to the Aerosol Coating Products Regulation would result in an equivalent VOC emissions reduction of about 3.7 tons per day, beginning January 1, 2017;

Method 310

WHEREAS, proposed amendments to Method 310 as set forth in Attachment E, include the following primary elements:

Additional testing procedures for aerosol coatings, and addition of new testing procedures for paint thinners and multi-purpose solvents sold in the SCAQMD; and

Modification of testing procedures for "Fabric Softener – Single Use Dryer Product," and deletion of analytical procedures that are no longer used.

Hairspray Credit Program

WHEREAS, the proposed amendments as set forth in Attachment F hereto, would repeal the Hairspray Credit Program in its entirety because the program ended on January 1, 2010;

WHEREAS, the Board has considered the impact of the proposed amendments on the economy of the State and the potential for adverse economic impacts on California business enterprises and individuals;

WHEREAS, the Board is committed to evaluating community impacts of proposed regulations, including environmental justice concerns;

WHEREAS, the California Environmental Quality Act (CEQA) requires that a public agency not approve a project as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental impacts of such a project; in the event that specific economic, social, or other conditions make infeasible the alternatives or mitigation measures, the project may be approved if it is determined that any remaining unavoidable significant impacts are acceptable due to overriding considerations;

WHEREAS, Public Resources Code section 21080.5 allows public agencies with regulatory programs to prepare a plan or other written document in lieu of an environmental impact report or negative declaration once the Secretary of the Resources Agency has certified the regulatory program;

WHEREAS, that portion of the ARB's regulatory program that involves the adoption, approval, amendment, or repeal of standards, rules, regulations, or plans has been certified by the Secretary of Resources Agency (CEQA Guidelines, section 15251(d));

WHEREAS, in accordance with ARB's certified regulatory program at title 17, CCR, section 60005 (b), and the policy and substantive requirements of CEQA, as part of the Staff Report, ARB staff has prepared an assessment and succinct analysis of the potential for significant adverse and beneficial environmental impacts associated with the proposed amendments to the consumer products regulations; the environmental analysis found that the amendments will not result in any significant adverse impacts on the environment;

WHEREAS, a public hearing and other administrative proceedings have been held in accordance with the provisions of Chapter 3.5 (commencing with section 11340), part 1, division 3, title 2 of the Government Code;

WHEREAS, the Board staff has consulted with the U.S. EPA regarding consumer products regulations promulgated by other state and local governments as provided in section 183(e) of the federal Clean Air Act;

WHEREAS, the Board finds that:

The proposed amendments to reduce VOC emissions are authorized by California law and satisfy the requirements of Health and Safety Code, section 41712;

Adequate data exists to support the adoption of the proposed amendments and to establish that the amendments are necessary, and are commercially and technologically feasible for each of the regulated consumer product categories;

The proposed amendments will not result in the elimination of a product form for any product category;

The proposed amendments are necessary to attain and maintain ambient air quality standards, and to help fulfill California's SIP commitments to achieve emission reductions;

The proposed VOC Standards and Reactivity Limits will result in an equivalent VOC emission reduction of about 4.0 tons per day, beginning in 2017;

The prohibition on the use of methylene chloride, perchloroethylene, and trichloroethylene, and the use of compounds with a GWP value at or above 150 are necessary to prevent their use in products reformulated to comply with the proposed VOC limits;

VOC limits and testing procedures for paint thinner and multi-purpose solvent products sold in the SCAQMD are consistent with Rule 1143;

The proposed amendments pertaining to paint thinner and multi-purpose solvent products are necessary to fully achieve the expected air quality benefits from SCAQMD's Rule 1143 and ARB's regulation;

Extending the effective date of the multi-purpose lubricant VOC limit will result in delaying a 1.3 tons per day VOC emission reduction, but the delay is necessary to address the technological challenge of reformulating to meet the 10 percent by weight VOC limit, and the temporary delay in emissions reductions will be offset by reductions obtained from other categories, such that overall VOC emissions from consumer products will continue to decline;

It is appropriate to exempt HFO-1234ze from the VOC definition in the Consumer Products and Antiperspirants and Deodorants regulations because of its negligible reactivity with respect to forming ground-level ozone and because no adverse environmental impacts or potential adverse health impacts from its use were identified;

The proposed new and modified definitions are necessary to clarify and implement the Antiperspirants and Deodorants Regulation, the Consumer

Products Regulation, and the Aerosol Coating Products Regulation and deleting expired provisions will streamline the regulations;
The proposed provisions for using MIR values would provide additional reformulation flexibility;

The reorganization of the "Oxygenated Organics" section of the Table of MIR values by chemical class would make compounds easier to find;

The proposed amendments to Method 310 are necessary to improve enforcement of the Consumer Products Regulation and the Aerosol Coating Products Regulation; and

It is appropriate to repeal the Hairspray Credit Program because the ability to use it expired in 2010.

WHEREAS, the Board further finds that:

On the basis of the whole record, including the environmental analysis set forth in the Initial Statement of Reasons (ISOR) and comments received, there is no substantial evidence that the amendments will result in significant adverse impacts on the environment;

The proposed amendments are consistent with ARB's environmental justice policies and do not disproportionately impact people of any race, culture, or income;

The economic impacts of the proposed amendments have been analyzed as required by California law, and the conclusions and supporting documentation for this analysis are set forth in the ISOR;

The cost-effectiveness of the proposed amendments has been considered;

The proposed amendments reduce human health, safety, or environmental risks;

The benefits to human health, public safety, public welfare, or the environment justify the costs of the proposed amendments; and

No reasonable alternative considered or that has otherwise been identified and brought to the attention of ARB would be more effective in carrying out the purpose for which the amendments are proposed, or be as effective and less burdensome to affected private persons and businesses than the proposed amendments.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves for adoption the proposed amendments to sections 94501, 94506, 94508, 94509, 94512,

94513, 94515, 94520, 94521, 94522, 94523, 94524, 94525, 94526, 94528, and 94700, title 17, CCR and the proposed amendments to ARB Method 310, as set forth in Attachments A, B, C, D, E and Staff's Suggested Modifications described in Attachment G.

BE IT FURTHER RESOLVED that the Board adopts the proposed repeal of the Hairspray Credit Program, sections 94560, 94561, 94562, 94563, 94564, 94565, 94566, 94567, 94568, 94569, 94570, 94571, 94572, 94573, 94574, and 94575, title 17, CCR., as set forth in Attachment F.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to determine if additional conforming modifications to the regulations are appropriate. If no additional modifications are appropriate, the Executive Officer shall take final action to adopt the regulations, as set forth in Attachments A, B, C, D, E, F and Staff's Suggested Modifications described in Attachment G. If the Executive Officer determines that additional conforming modifications are appropriate, the Executive Officer shall adopt the modified regulations after making the modified regulatory language and any additional supporting documents and information available to the public for a period of 15 days, provided that the Executive Officer shall consider such written comments as may be submitted during this period, shall make such further modifications as may be appropriate in light of the comments received, and shall present the regulations to the Board for further consideration if he determines that this is warranted.

BE IT FURTHER RESOLVED that to the extent that the Executive Officer receives comments raising significant environmental issues, the Executive Officer shall, if appropriate, conduct any further environmental analysis as required for a regulatory program certified under Public Resource Code section 21080.5 and if it is determined that any 15-day modifications to the regulation may have a significant impact on the environment, the Executive Officer shall incorporate all feasible mitigation or alternatives that could eliminate or substantially lessen any significant adverse environmental impacts identified; the Executive Officer shall also, prepare written responses to comments raising significant environmental issues and shall present to the Board for its consideration and approval the proposed Final Regulation Order, the environmental analysis prepared for the proposed regulatory action pursuant to ARB's regulatory program, and written responses to any comments received during the evaluation process that raised significant environmental issues.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to take the following actions: (1) monitor the progress of manufacturers in meeting the VOC and Reactivity Limits, and (2) identify any significant problems in achieving the limits and propose any future regulatory modifications that may be appropriate.

BE IT FURTHER RESOLVED that following approval of the amendments by the Office of Administrative Law, the Board directs the Executive Officer to submit the amendments to the U.S. EPA for inclusion in the SIP.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to include in the SIP revision any additional documentation identified as necessary for approval under the federal Clean Air Act and U.S. EPA regulations, and to work with the U.S. EPA to ensure that the amendments are approved as a SIP revision.

I hereby certify that the above is a true and correct copy of Resolution 13-36, as adopted by the Air Resources Board.


Tracy Jensen, Clerk of the Board

RECEIVED By
Office of the Secretary

AUG 05 2014

Natural Resources Agency California

Resolution 13-36

September 26, 2013

Identification of Attachments to the Board Resolution

- Attachment A:** Proposed Modifications to the Regulation for Reducing Volatile Organic Compound Emissions from Antiperspirants and Deodorants, title 17, CCR, sections 94501, and 94506, as set forth in Appendix A of the Initial Statement of Reasons, released August 7, 2013.
- Attachment B:** Proposed Modifications to the Regulation for Reducing Emissions from Consumer Products, title 17, CCR, sections 94508, 94509, 94512, 94513, and 94515, as set forth in Appendix B of the Initial Statement of Reasons, released August 7, 2013.
- Attachment C:** Proposed Modifications to the Regulation for Reducing the Ozone Formed from Aerosol Coating Product Emissions, title 17, CCR, sections 94520, 94521, 94522, 94523, 94524, 94525, 94526, and 94528, as set forth in Appendix C of the Initial Statement of Reasons, released August 7, 2013.
- Attachment D:** Proposed Modifications to the Tables of Maximum Incremental Reactivity (MIR) Values, title 17, CCR, section 94700, as set forth in Appendix E of the Initial Statement of Reasons, released August 7, 2013.
- Attachment E:** Proposed Modifications to Method 310: Determination of Volatile Organic Compounds (VOC) in Consumer Products and Reactive Organic Compounds in Aerosol Coating Products (September 29, 2011) sections 1, 2, 3, 4, 5, Appendix A, and repeal of Appendix B, as set forth in Appendix F of the Initial Statement of Reasons, released August 7, 2013.
- Attachment F:** Proposed Repeal of the Hairspray Credit Program, title 17, CCR, sections 94560, 94561, 94562, 94563, 94564, 94565, 94566, 94567, 94568, 94569, 94570, 94571, 94572, 94573, 94574, and 94575, as set forth in Appendix D of the Initial Statement of Reasons, released August 7, 2013.
- Attachment G:** Staff's Suggested Modifications to the Original Proposal (Distributed at the September 26, 2013, Board hearing)

ATTACHMENT G TO RESOLUTION 13-36

NOTICE OF PUBLIC HEARING TO CONSIDER PROPOSED AMENDMENTS TO THE REGULATION FOR REDUCING EMISSIONS FROM CONSUMER PRODUCTS

Staff's Suggested Modifications to the Original Proposal

TO BE PRESENTED AT THE SEPTEMBER 26, 2013 HEARING OF THE AIR RESOURCES BOARD

Note: Amendments proposed with the 45-day notice are shown in single underline to indicate additions and ~~single-strikeout~~ to indicate deletions from the existing text, while new amendments proposed with these staff suggested modifications are shown in double underline to indicate additions and ~~double-strikeout~~ to indicate deletions from existing text. The symbol "*****" means that intervening text not proposed for modification is not shown.

Amend sections 94508, 94509, 94512, 94513 and 94515, title 17, California Code of Regulations, to read as follows:

Subchapter 8.5 Consumer Products

Article 2. Consumer Products

§ 94515. Test Methods.

(i) Effective January 1, 2015, testing to determine compliance with 25 g/L or 0.21 lb/gal 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) shall be determined using ARB Method 310, with final VOC content determined as set forth in section 4.2.4. As specified in section 3.6 of Method 310, and as reproduced in section 94515(a)(2), determination of LVP-VOC status does not apply because there is no LVP-VOC exemption for these products. Section 4.2.4 is reproduced below:

4.2.4 Effective January 1, 2015, 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), grams of VOC per liter of material (g/L) shall be calculated using the following equation:

$$\text{g/L VOC} = \frac{\text{WM} \times (\text{TV} - \text{H} - \text{EL})}{\text{VM}}$$

Where:

WM = weight of the material in grams.

VM = volume of the material in liters.

TV = weight fraction of total volatile material.

H = weight fraction of water.

EL = weight fraction of exempt compounds including the weight fraction of methyl esters with 17 or more carbon atoms in the total volatile material.

NOTE: Authority cited: Sections 39600, 39601, 39607, 41511 and 41712, Health and Safety Code.
Reference: Sections 39002, 39600, 39607, 40000, 41511 and 41712, Health and Safety Code.

Proposed Amendments to Method 310, Determination of Volatile Organic Compounds (VOC) in Consumer Products and Reactive Organic Compounds (ROC) in Aerosol Coating Products

(Including Appendixes A and B)

3 CONSUMER PRODUCTS TESTING PROCEDURE

3.3.5 Analysis of exempt and prohibited compounds, if present (US EPA Reference Method 18, US EPA Method 8240B, US EPA Method 8260B, ASTM D 859-00, NIOSH Method 1400). Effective January 1, 2015, for nonaerosol "Multi-purpose Solvent" and "Paint Thinner" products sold, supplied, offered for sale, or manufactured for sale in the South Coast Air Quality Management District, analysis of exempt and prohibited compounds shall include analysis for methyl esters ~~palmitate~~ with 17 or more carbon atoms, if present.

4 CALCULATION OF VOC CONTENT

4.2.4 Effective January 1, 2015, for nonaerosol "Multi-purpose Solvent" and "Paint Thinner" products sold, supplied, offered for sale, or manufactured for sale for use in the SCAQMD, grams of VOC per liter of material (g/L) shall be calculated using the following equation:

$$\text{g/L VOC} = \frac{\text{WM} \times (\text{TV} - \text{H} - \text{EL})}{\text{VM}}$$

Where:

WM = weight of the material in grams.

VM = volume of the material in liters.

TV = weight fraction of total volatile material.

H = weight fraction of water.

EL = weight fraction of exempt compounds including the weight fraction of methyl ~~palmitate~~ esters with 17 or more carbon atoms in the total volatile material.
