

Public Workshop for Proposed Amendments to the Aerosol Coatings and the Consumer Products Regulations

September 12, 2012



California Environmental Protection Agency

Air Resources Board

Workshop Agenda

- Proposed amendments to the Aerosol Coatings Regulation
- Proposals under consideration for amending the Consumer Products Regulation
- Update on Method 310 analytical procedures
- Ongoing work
- Schedule

Aerosol Coatings Regulation 2013 Proposed Amendments

3

Aerosol Coatings

Overview

- ❑ Background
- ❑ Proposal development
- ❑ Proposal summary
 - MIR Value proposal
 - Proposed limits
 - Lower PWMIR limits for selected categories
 - PWMIR 'Caps' for small emissions categories
 - Categories requiring further evaluation
 - Test Methods Section

4

Background

- ❑ California Clean Air Act requires ARB to regulate consumer products
- ❑ Health and Safety Code, Section 41712(i) provides that ARB has sole authority to regulate aerosol paints to ensure statewide uniformity
 - Applies to formulation and use
 - Achieve maximum feasible reduction

5

Background (Cont.)

- ❑ Aerosol Coating Products Regulation first adopted in 1995
 - Designed to achieve 60% volatile organic compound (VOC) reduction
 - Mass-based Limits
- ❑ Amended in 1998
 - Revisions to limits to address feasibility
- ❑ Last amended in 2000
 - Mass-based limits replaced by Reactivity-based limits

6

Background (Cont.)

- ❑ “Aerosol Coating Product” is defined as: “a pressurized coating product containing pigments or resins that dispenses product ingredients by means of a propellant,”
- ❑ All products meeting this definition are regulated unless specifically exempted
 - 6 General Coating categories
 - 30 Specialty Coating categories

7

Background (Cont.)

- ❑ Reactivity-based limits
 - Based on Maximum Incremental Reactivity (MIR) Scale
 - Units of limits are grams ozone per gram product
 - Product Weighted Maximum Incremental Reactivity (PWMIR)
 - No Exemptions
 - Includes low and negligibly reactive compounds
- ❑ Prohibition on use of Toxic Air Contaminants
 - Trichloroethylene
 - Methylene Chloride
 - Perchloroethylene

8

Proposal Development

- ❑ Technological Basis
 - 2006 Consumer & Commercial Products Survey including Aerosol Coating Products
 - 2010 Aerosol Coating Products Survey Update
 - Adjusted for market coverage
- ❑ Data Summary Releases
 - September 2011 – general data summaries
 - February 2012 – sales and emissions summaries

9

Proposal Development (Cont.)

- ❑ Surveyed for 58 categories
- ❑ Results:
 - Total sales ~ 40 tons per day (tpd)
 - Total reactive organic compound (ROC) emissions ~ 29 tpd
 - Total VOC emissions ~ 20 tpd
 - General Coating categories ~15 tpd
 - Nonflat Paint Products category ~7.5 tpd
 - Specialty Coating categories ~ 5 tpd

10

Proposal Summary

- ❑ MIR value proposal
 - Fix timeframe for use
- ❑ Propose lower limits for largest emission categories
 - 8 categories account for ~ 90% of total VOC emissions
- ❑ Propose limits that 'Cap' PWMIR for 25 other small categories
- ❑ Amend Test Method section

11

MIR Value Proposal

- ❑ 2001 values are used to calculate PWMIR
 - Regulation specifies these values shall not be changed until June 1, 2007 (section 94522)
- ❑ Proposing to shift to use of 2010 MIR values
 - Generally lower by about 15%
- ❑ Proposing values would be fixed until 2020

12

Proposed Limits

Aerosol Coating Category Name	Proposed PWMIR Limit (g O ₃ / g Product)	Total VOC Emissions (tons/day)	Equivalent VOC Reduction (tons/day)
Clear Coatings	0.80	1.42	0.43
Flat Paint Products	0.80	1.99	0.46
Ground Traffic/Marking and Fluorescent Coatings	0.80	2.66	0.42
Metallic Coatings	1.20	1.24	0.22
Nonflat Paint Products	0.80	7.43	2.47
Primers	0.60	1.76	0.49
Auto Body Primers	0.95	0.54	0.10
Exact Match Finishes (Combined)	0.90	0.57	0.14
Total Equivalent VOC Emission Reductions:			4.73

Proposed Effective Date of 1/1/2016

13

Proposed Limits (Cont.)

- ❑ Proposing to set limits that 'Cap' PWMIR for 25 small Specialty Coating categories
 - Limits set as low as possible while still allowing all products reported to comply
 - No reformulating required
 - Preserves air quality benefits
 - Proposed effective date of 1/1/2015

14

Proposed 'Cap' Limits

Art Fixatives or Sealants	Photograph Coatings
Automotive Bumper and Trim Products	Pleasure Craft Finish Primers, Surfacers, or Undercoaters
Aviation or Marine Primers	Pleasure Craft Topcoats
Aviation Propeller Coatings	Polyolefin Adhesion Promoters
Corrosion Resistant Brass, Bronze, or Copper Coatings	Shellac Sealers
Glass Coatings	Slip-Resistant Coatings
Floral Sprays	Spatter/Multicolor Coatings
High Temperature Coatings	Vinyl/Fabric/Leather/Polycarbonate Coatings
Hobby/Model/Craft Coatings:	Webbing/Veil Coatings
Enamel	Weld-Through Primers
Lacquer	Wood Stains
Clear or Metallic	Wood Touch-Up, Repair or Restoration Coatings
Marine Spar Varnishes	
Mold Release Coatings	

Categories Requiring Further Evaluation

- Electrical/Electronic/Conformal Coatings
- Undercoating/Rubberized Coatings
 - Potential solution is to clarify definition of Undercoating
 - Rubberized Coatings would comply with appropriate General Coating category limit
- Aerosol Edge Blenders
- Other small categories to fold into General Coating categories

Test Method Section

- ❑ Challenges
 - Laboratory analysis for some product components is challenging
 - To aid analytical process the regulation requires formulation data to be submitted within 10 days
 - Stakeholders indicate not enough time
 - Enforcement receiving incomplete or incorrect information

17

Amendments to Test Method Under Consideration

- ❑ Require annual filing of contact information for responsible party
- ❑ Provide longer time frame to provide required formulation data upon receiving written notice
- ❑ Clarify what constitutes formulation data
- ❑ Clarify that filing incorrect formulation data or providing no data is a violation
- ❑ Other amendments to address revised analytical approach

18

Proposals Under Consideration for Amending the Consumer Products Regulation and Ongoing Work

19

Consumer Products Regulation Agenda

- Aerosol Adhesives
- Multi-purpose Solvent & Paint Thinner
- Other potential amendments
- Update to ARB Method 310
- Ongoing work
- Schedule

20

Proposed Amendments Pertaining to Aerosol Adhesive Products

21

Consumer Products: Aerosol Adhesives

Background

- Previously regulated in 1992 and 2000
 - 2000 rulemaking revised the 25% VOC standard to address feasibility
 - Prohibition on use of Toxic Air Contaminants
 - Trichloroethylene
 - Methylene Chloride
 - Perchloroethylene
- Considered proposing reactivity-based standards during 2006 rulemaking

22

Background (Cont.)

Current Standards

Aerosol Adhesive Category Name	VOC standard (%)
Mist Spray Adhesive	65
Web Spray Adhesive	55
Mounting, Automotive Engine Compartment, and Flexible Vinyl Adhesive	70
Polystyrene Foam and Automobile Headliner Adhesive	65
Polyolefin and Laminate Repair/Edgebanding Adhesive	60

23

Background (Cont.)

- ❑ Surveyed in 2003
- ❑ Resurveyed in 2010
 - Data summaries
 - Products reported: over 150
 - Sales of ~ 2 tons per day
 - VOC emissions of ~1 tpd
 - ▶ Mist and Web Spray adhesives with most emissions
- ❑ Stakeholders recently commented that mass-based regulatory approach preferred

24

Proposed Standards

Aerosol Adhesive Category Name	Proposed VOC standard (%)	VOC Reductions (tons/day)
Mist Spray Adhesive	30	0.29
Web Spray Adhesive	30	0.14

- No changes to standards for Special Purpose Spray adhesives
- Propose a global warming potential (GWP) limit of 150 for all aerosol adhesive categories
- Proposed effective date of 1/1/2016

25

Potential Amendments Pertaining to Multi-purpose Solvent and Paint Thinner Products

26

Background

- ❑ State law allows air districts to adopt standards for consumer products
 - Only if ARB has not adopted standards for same product category
 - If ARB adopts limits for category, air district rule remains in effect
 - Unless ARB's rule more stringent
- ❑ Regulations for Multi-purpose Solvent and Paint Thinner products
 - South Coast Air Quality Management District (SCAQMD) Rule 1143 in 2009
 - ARB regulation in 2010

27

Background (Cont.)

- ❑ Concerns:
 - Rule Differences
 - Depending upon how product labeled determines rule applicability
 - ARB defines VOC differently
 - Aerosol Paint Thinner products entering market
 - SCAQMD has indicated they are not achieving expected emission reduction benefits

28

Label Demonstrates Concerns

<p>Instructions:</p> <hr/> <p>Warning:</p> <hr/>	<p>A-Z SUPPLIES BRAND™</p>  <p>Odorless Mineral Spirits</p>	<p>100% From Nature:</p> <hr/> <p>Cleanup:</p> <hr/>	<p>Category: General Purpose Degreaser</p>  <p>A-Z Supplies Brand™ Odorless Mineral Spirits, Great for thinning, cleaning, stripping, window cleaning, Degreasing, dissolving gunk, etc.</p> 
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Possible Solutions

- ❑ Consider modifying definitions for Multi-purpose Solvent and Paint Thinner
 - Clarify that products making claims they are suitable for use as another category remain Multi-purpose Solvent or Paint Thinner, regardless of other claims
 - Include all product forms if Technical Assessment indicates limit for aerosol product form feasible

Possible Solutions (Cont.)

- ❑ Consider modifying the Most Restrictive Limit provision:
 - Specify that Multi-purpose Solvent and Paint Thinner products that make claims that they are suitable for use for another category must do **both** of the following:
 - Must meet the lowest VOC limit
 - Must meet the lowest limit following requirements for Multi-purpose Solvent and Paint Thinner products

31

Possible Solutions (Cont.)

- ❑ Consider specifying that VOC content is defined as total volatile content as determined using U.S. EPA Method 24, less exempts and non-VOCs
 - Aligns with SCAQMD analytical approach
 - Net effect is that many LVP-VOCs “count” towards complying with limit

32

Possible Solutions (Cont.)

- ❑ Evaluate better defining exemption criteria for Industrial Maintenance Coating Thinner, Zinc Rich Primer Thinner, and High Temperature Coating Thinner
 - Must be a Responsible Party for an Industrial Maintenance Coating, Zinc Rich Primer, or High Temperature Coating to qualify for the exemption

33

Other Potential Amendments

34

Possible Definitional Changes

- ❑ Rubber/Vinyl Protectant
 - Add “plastic” back into definition text
- ❑ Undercoating
 - Specify the product is to be used solely on the undercarriage of motor vehicles
- ❑ Hair care products definitions

35

Hair Care Product Definitions

- ❑ Hair Spray
 - Modify category name to “Hair Finishing Spray” to clarify that only spray products that are designed to finish styled hair are “Hair Finishing Sprays”
 - Corresponding change in the Table of Standards
- ❑ Hair Styling Product clarifications
 - Thermal protection claims
 - Dry and no-rinse shampoos

36

Hairspray Credit Program

- ❑ Proposing to rescind Regulation because no longer applicable (sections 94560-94575)
- ❑ Rationale:
 - Regulation to provide incentive for early or over-compliance with 55% VOC Hairspray standard
 - January 1, 2005: Ability to generate credits expired
 - No applications received for Hairspray Emission Reduction Credits (HERC)
 - January 1, 2010: Ability to use HERCs expired

37

Updates To ARB Test Method 310

Ongoing Work

39

Consumer Products: Ongoing Work

Multi-purpose Lubricant & Penetrant Technical Assessment

- Assess feasibility of 2013 VOC limit of 25%
- 55 responses received
- Most companies indicate on track to comply
- Assessment for feasibility of 2015 VOC limit of 10% for Multi-purpose Lubricant to be conducted in 2014

40

Multi-purpose Solvent & Paint Thinner Technical Assessment

- ❑ Assess feasibility of 2013 VOC limit of 3%
- ❑ Reporting forms sent out on July 11, 2012
- ❑ Responses due back by September 17, 2012
- ❑ Survey packets posted at:
<http://www.arb.ca.gov/consprod/regact/mpspt/mpspt.html>
- ❑ Aerosol products – should they be regulated?

41

VOC Exemption Petition

- ❑ Trans-1,3,3,3-tetrafluoropropene (HFO-1234ze)
 - Nonflammable low global-warming potential (GWP) low reactive propellant
 - U.S. EPA exempted on June 7, 2012
 - Petition for VOC exemption for consumer products regulations submitted August 8, 2012
 - Honeywell Specialty Materials
 - Multi-media evaluation
 - Working with Office of Environmental Health Hazard Assessment (OEHHA) to assess potential adverse health impacts

42

Consumer Products Fee Program (AB 10x)

- ❑ Fiscal Year 2012-2013 fees
 - Based on 2010 emissions
 - Total emissions calculated using combined 2001, 2003, 2006 CP Survey submittals, and 2010 aerosol coatings update, or more recent information from companies
- ❑ Fiscal Year 2012-2013 schedule
 - Preliminary fee determination: October 2012
 - Final fee determination: December 2012

43

State Implementation Plan (SIP)

- ❑ U.S. EPA set 8-hour Ozone Standard of 0.075 ppm in 2008
- ❑ Expect to submit new SIP for the 8-hour Ozone Standard in 2015

44

Automotive Windshield Washer Fluid Proposal

- ❑ Expands Type “A” areas to additional mountainous areas of the State
 - Allows premixed product with up to 25% VOC to be sold in these areas
 - Allows dilutable product labels to advise consumers to follow dilution instructions for Type “A” areas if traveling where freezing temperatures are expected
- ❑ Staff Report released: August 29, 2012
- ❑ Board Hearing: October 18, 2012

45

Schedule

- ❑ Comments on proposal due by October 10, 2012
 - Send Comments to:
 - Irina Malkina imalkina@arb.ca.gov
- ❑ Potential Workshop in late fall
- ❑ Board Meeting June 2013
 - 45-Day Notice Mid May

46

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47

WEBSITES



- Air Resources Board website: <http://www.arb.ca.gov>
- Consumer Products website: <http://www.arb.ca.gov/consprod/consprod.htm>
- Consumer Products Regulations website: <http://www.arb.ca.gov/consprod/regs/regs.htm>
- Consumer Products List Server website: <http://www.arb.ca.gov/listserv/listserv.php>
- 2013 Consumer Products Regulation Amendments website: <http://www.arb.ca.gov/consprod/regact/2013ra/2013ra.htm>

48