CALIFORNIA
AIR RESOURCES BOARD

Update on the Status of the 2018 Aerosol Coating and Aerosol Adhesive Products Survey

California Air Resources Board
November 4, 2026

Housekeeping Items

Written



Type in the **Q&A** box

OR

Verbally



Use the **raised hand** function (*9 if calling in by phone)



Please state your **name** and **affiliation** before asking a question or making a comment

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Outline



Aerosol Coatings Regulation Background

- Regulatory Timeline
- Reactivity Based Approach
- 2018 Survey

Preliminary Data Summaries

- Sales and Reactivity Trends that Emerged
- Comments Received

Tentative Rulemaking Timeline

- Board Items

Aerosol Coating Products Regulatory Timeline

1995 — Adoption of Aerosol Coating Products Regulation

- Mass Based Limits
- Designed to achieve **60%** volatile organic compound (VOC) reduction

1998 — Amendment of Aerosol Coating Products Regulation

- Revisions to limits to address feasibility

2000 — Introduction of Reactivity Based Limits

- Mass based limits replaced by reactivity limits based on maximum incremental reactivity (MIR) scale

2013 — Last Amendment of Aerosol Coating Products Regulation

Emissions Benefits:

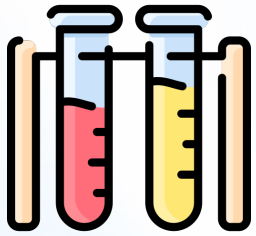
- Equivalent VOC reduction of 3.7 tons per day statewide
- 1.6 tons per day in the South Coast Air Basin



All products meeting the definition of "Aerosol Coating Product" are regulated unless specifically exempted

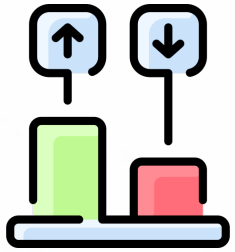
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How CARB Regulates Aerosol Coating Products



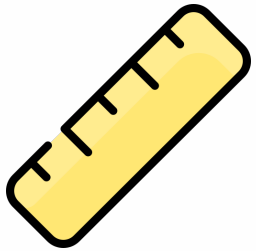
Limits on Types of Reactive Organic Compounds (ROC), Not Amounts

Different ROCs have different ozone-forming potential



Maximum Incremental Reactivity (MIR) Based Approach

Reactivity of VOCs quantified using the MIR scale



Units of Limits

Grams of ozone per gram of product



No Exemptions

Includes low and negligibly reactive compounds



PWMIR

Product Weighted Maximum Incremental Reactivity (PWMIR) represents product level reactivity

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2018 Survey



CARB conducted the **2018 Aerosol Coating and Aerosol Adhesive Products Survey (2018 Survey)** to gather data about aerosol coating and aerosol adhesive products sold or supplied for use in California during calendar year 2018.



Link to Survey:
2018 Aerosol Coating and Aerosol Adhesive Products Survey | California Air Resources Board

NOTE: The 2018 Survey was conducted one year after the implementation of new effective limits (1/1/2017); therefore, some reported products manufactured before January 1, 2017, were in the Sell-through period (*per section 94522(c): "for up to three years after each of the specified effective dates"*) during calendar year 2018

2018 Survey Process



October 18, 2019
Survey letter released



March 1, 2020
Deadline for the survey

Survey Scope

- 41 Total Aerosol Coatings Product Survey Categories
- 39 Regulatory Aerosol Coating Product Categories
- 2 Additional Categories

Additional Categories

- "Custom Fill Aerosols (coating not included)"
  - A new type of product appeared on market only several years earlier
- "Other Aerosol Coating Product"
  - Catch up category

Data Summary

June 9, 2022

- Released preliminary data summaries

Link to Preliminary Data Summaries:

- 2018 Aerosol Coating and Aerosol Adhesive Products Survey Preliminary Data Summary

2018 Survey Preliminary Data Summaries

- List of Responding Companies

Table 1AC - List of Responding Companies

Item #	Company Name	Parent Company
38	Moneysworth and Best	
39	NCH Corporation	NCH Corporation
40	Niteo Products LLC	Niteo Products LLC
41	Nu-Calgon Wholesaler Inc.	

- Total Sales and Emissions by Category

Table 2AC - Total Sales and Emissions by Category*

Category Code	Description	Total # of Companies	Total # of Products	Sales* (TPD)	Total VOC (TPD)	Total ROC (TPD)	Ozone Forming Potential (TPD)
	General Coatings						
80101	Clear Coating	28	337	1.31	0.74	1.11	1.02
80102	Flat Coating	22	557	5.34	1.69	2.42	2.43
80103	Fluorescent Coating	9	89	0.17	0.10	0.12	0.15
80104	Metallic Coating	26	442	1.38	0.77	1.10	1.34
80105	Nonflat Coating	23	2533	9.92	5.25	7.93	9.00
80106	Primer	24	316	2.44	1.12	1.61	1.37

- Reactivity Summary by Category

Table 3AC - Reactivity Summary by Category

Category Code	Description	Total # of Companies	Total # of Products	SWA-PWMIR (gO3/g product)	SWA-MIR_ROC (gO3/g ROC)	SWA-MIR_VOC (gO3/g VOC)
	General Coatings					
80101	Clear Coating	28	337	0.78	0.91	1.19
80102	Flat Coating	22	557	0.46	1.00	1.28
80103	Fluorescent Coating	9	89	0.87	1.31	1.46
80104	Metallic Coating	26	442	0.97	1.22	1.57
80105	Nonflat Coating	23	2533	0.91	1.13	1.53
80106	Primer	24	316	0.56	0.85	1.04

- List of ROCs Reported

Table 4AC - List of Reactive Organic Compounds Reported

Chemical Name Description	CAS Number
Acetone	67641
Propane	74986
n-Butane	106978

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Data Summary Comments



Comments

- Comments on the preliminary data summary were accepted until June 20, 2022
- Received comments from:
  - Household & Commercial Products Association (HCPA)
  - National Aerosol Association (NAA)
- Key Comments:
  - SWA-PWMIR lower than expected
  - Additional review requested for selected categories



Notes:

- No webinar held
- Post release data analyses: additional QA/QC, and additional categories review to address stakeholder's comments

Aerosol Coatings Comment Letters (July 2022)



Comments received from the Household & Commercial Products Association (HCPA) and the National Aerosol Association (NAA)



PRIMARY CONCERN

SWA-PWMIR much lower than expected



REQUESTED ACTION

Additional review of selected categories

Aerosol Coating Product Categories Requested for Additional Review

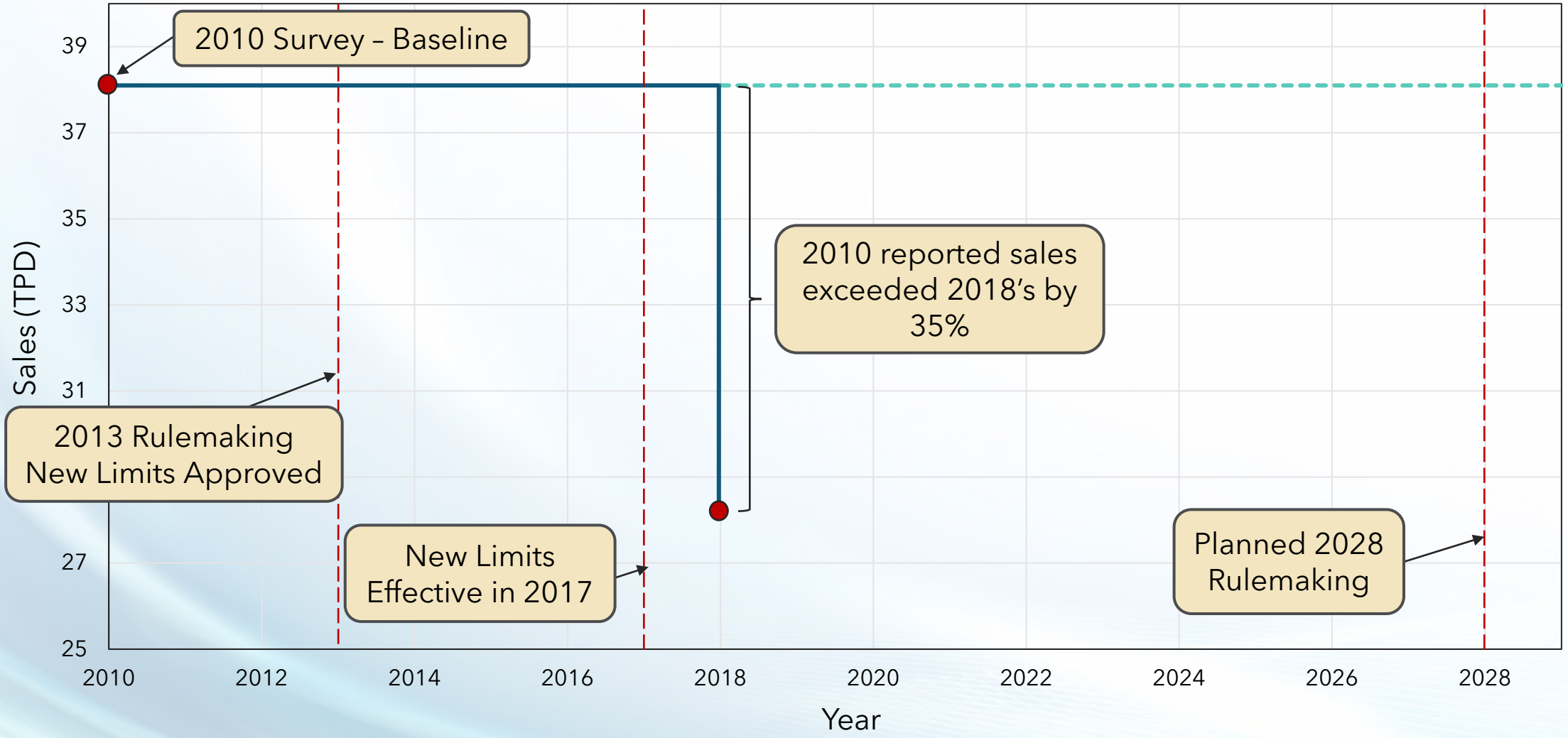
- 80102 - Flat Coating
- 80103 - Fluorescent Coating
- 80104 - Metallic Coating
- 80106 - Primer
- 80202 - Electrical/Electronic/Conformal Coating
- 80206 - Flexible Coating
- 80207 - Ground Traffic/Marking Coating
- 80208 - Mold Release Coating
- 80314 - Polyolefin Adhesion Promoter
- 80319 - Vinyl/Fabric/Leather/Plastic Coating

Outcomes



- Staff conducted additional review of selected coating product categories
- Post release data analyses did not result in any notable changes
- January 4, 2023, meeting with industry to discuss the 2018 Survey Data and Comments

Aerosol Coatings Sales Trend



Aerosol Coatings sales and emission growth are assumed to be flat (i.e., independent of Statewide population growth) per the methodology established based on stakeholder input.

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Market Adjustment Factor

2018 Market Adjustment Factor

2010 Survey Sales
38.1 TPD

2018 Survey Sales
28.2 TPD

2010 Market Adjustment Factor
0.9

2018 Market Adjustment Factor

$$\frac{28.2\ \text{TPD}}{38.1\ \text{TPD}} = 0.74$$

$$\text{2018 Market Adjusted Sales} = \frac{\text{2018 Survey Sales}}{\text{2018 Market Adjustment Factor}}$$

$$= \frac{28.2\ \text{TPD}}{0.74} = 38.1\ \text{TPD}$$

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Aerosol Coatings Reactivity Trend

Overall Decrease in Reactivity

2010 SWA-MIR VOC
2.18 gO3/gVOC

2018 SWA-MIR VOC
1.43 gO3/gVOC

SWA-PWMIR Decreased

Category Code	Category Name	2010 SWA-PWMIR	2017 Reactivity Limits	2018 SWA-PWMIR	% Decrease in SWA-PWMIR
80101	Clear Coating	1.03	0.85	0.74	28%
80102	Flat Coating	0.85	0.80	0.45	47%
80103	Fluorescent Coating	1.40	1.30	1.01	28%
80104	Metallic Coating	1.36	1.25	0.96	29%
80105	Nonflat Coating	1.20	0.95	0.89	26%
80106	Primer	0.93	0.7	0.56	40%

Aerosol Adhesives

2010 Survey and 2018 Survey Data Comparison for Aerosol Adhesives

	2010 Survey Sales (TPD)*	2010 Survey Total VOC (TPD)*	2018 Survey Sales (TPD)*	2018 Survey Total VOC (TPD)*
Aerosol Adhesive Categories Totals	**1.59**	**0.86**	**0.64**	**0.24**

*2018 Survey data is not market adjusted.

2013 Rulemaking for Aerosol Adhesives

- Based on 2010 Survey data
- Lower VOC standards for Mist Spray Adhesives and Web Spray Adhesives categories
- VOC standard for new Screen Printing Adhesive category

2017 Emissions Reductions = 0.297 TPD
(market adjusted and grown, 2013 ISOR)

Tentative Rulemaking Timeline

Aerosol Coatings and Consumer Products Data Summary Webinar

November 2026

March 2027

Consumer Products Regulatory Strategies Workshop

April 2027

Aerosol Coatings Regulatory Strategies Workshop

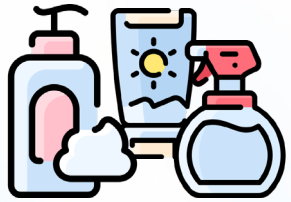
November 2028



Board Hearing

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2028 Board Items



Consumer Product Reductions

Aiming for 20 TPD of reductions from new standards in CP and AC



Aerosol Coatings Reductions

Contribute to 20 TPD of reductions from new limits



PCBTF Prohibitions

Using the California Environmental Quality Act (CEQA)



Personal Fragrance Products

Evaluation of Standards



Consumer Product Definition Changes

Amendments to Consumer Product Category Definitions



Other Items

Adding new ROCs to the Table of MIR Values
Minor modifications to the Regulatory language

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Questions for Industry

SEEKING INPUT



Sales Trends

Are Aerosol Coatings sales remaining flat over time?



Market Adjustment

Feedback on methodology used

2010 Survey Sales
38.1 TPD

2018 Survey Sales
28.2 TPD



Contact Us

Submit Comments by December 4

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