



PAR 1113 & 314
Public Workshop

AUGUST 26, 2015

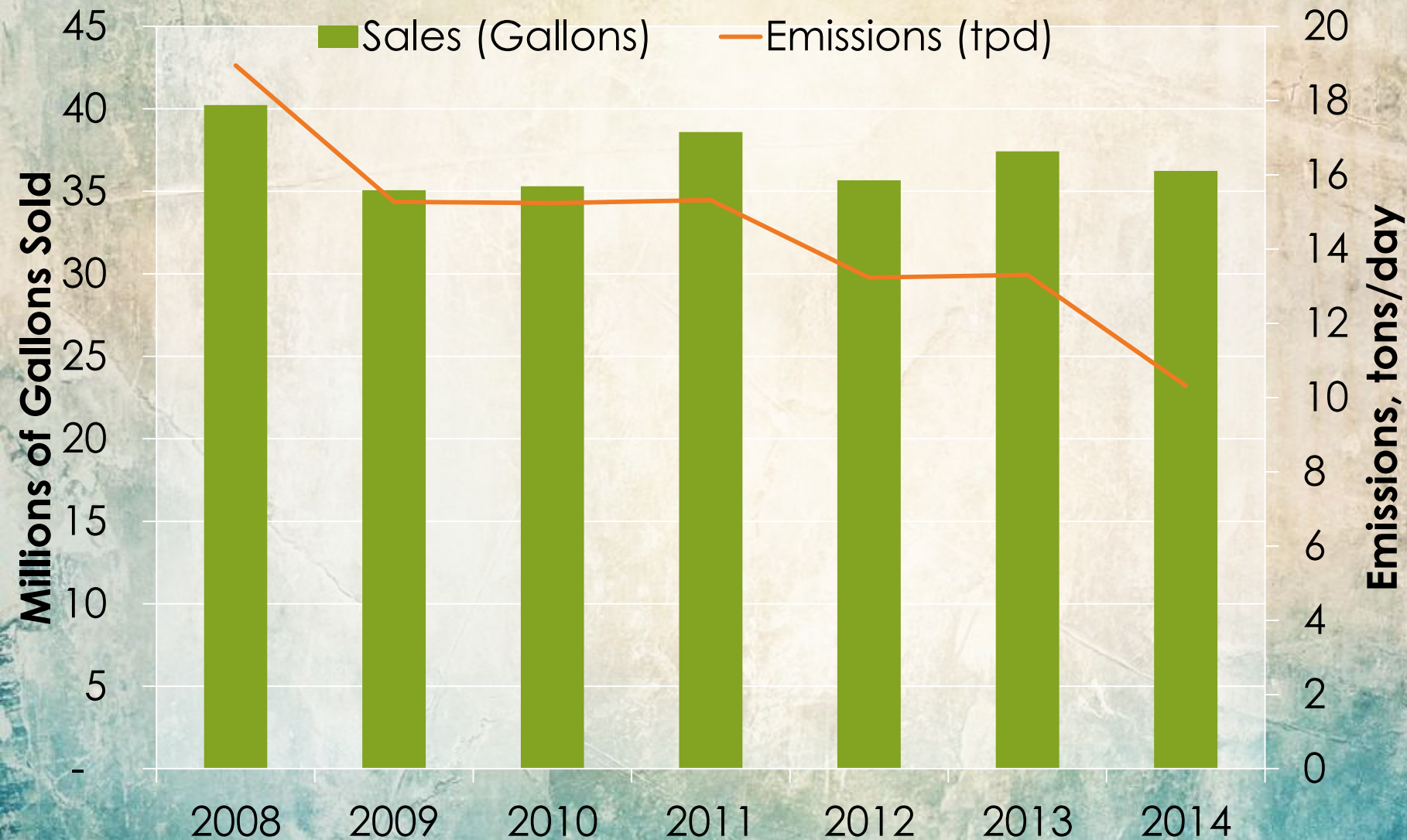


SALES AND EMISSION TRENDS

SUMMARY OF 2008 – 2014 RULE 314 DATA DRAFT
DATA – SUBJECT TO CHANGE

OVERALL TOTAL SALES 2008 - 2014*

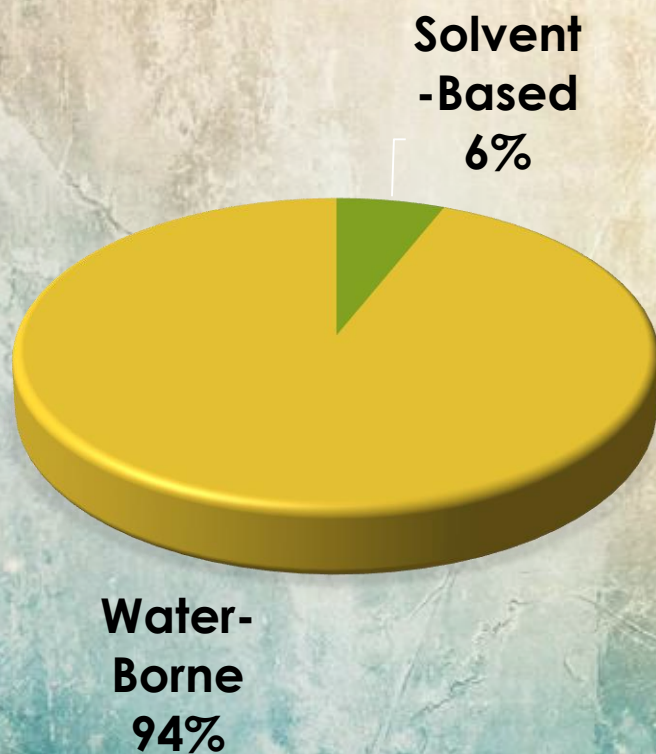
3



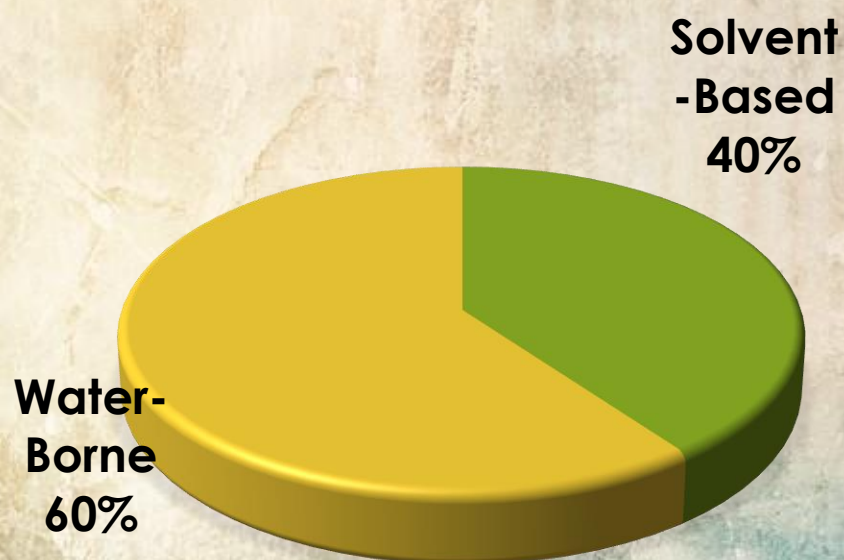
* 314 Draft Data + estimated colorant emissions

Waterborne Versus Solvent-Based - 2014

TOTAL SALES



TOTAL EMISSIONS





SMALL

CONTAINER

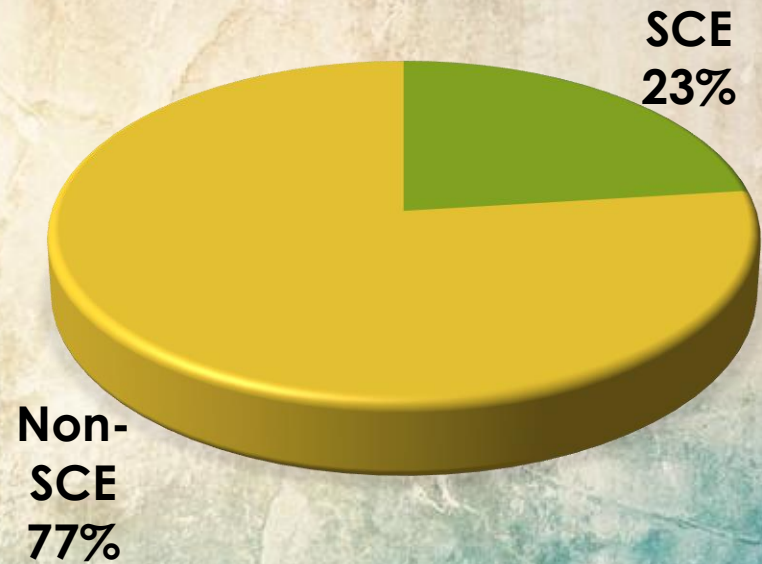
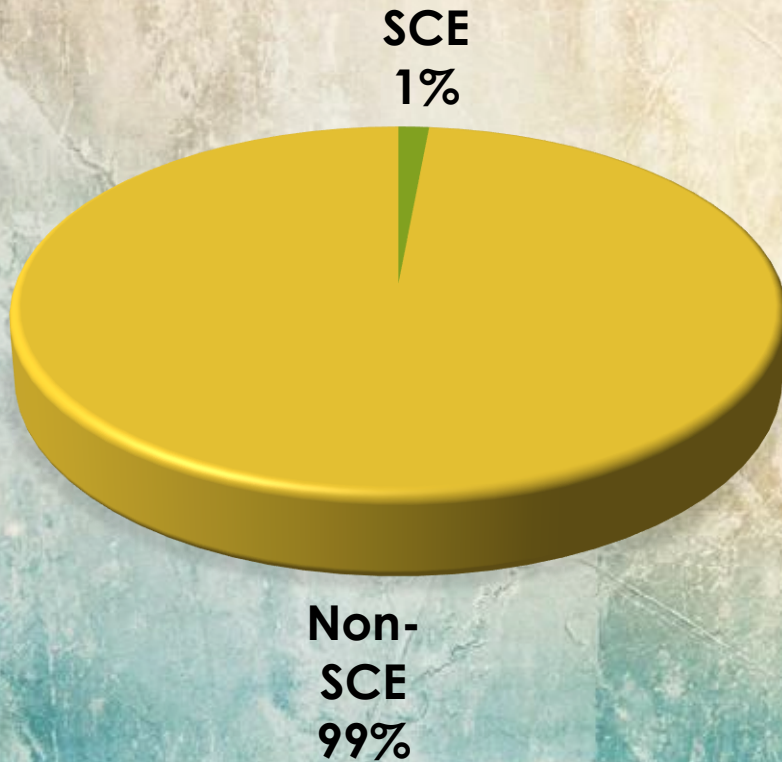
EXEMPTION (SCE)

**COATINGS SOLD IN ONE-LITER OR SMALLER
CONTAINERS ABOVE THE VOC LIMIT**

SCE Versus Non-SCE - 2014

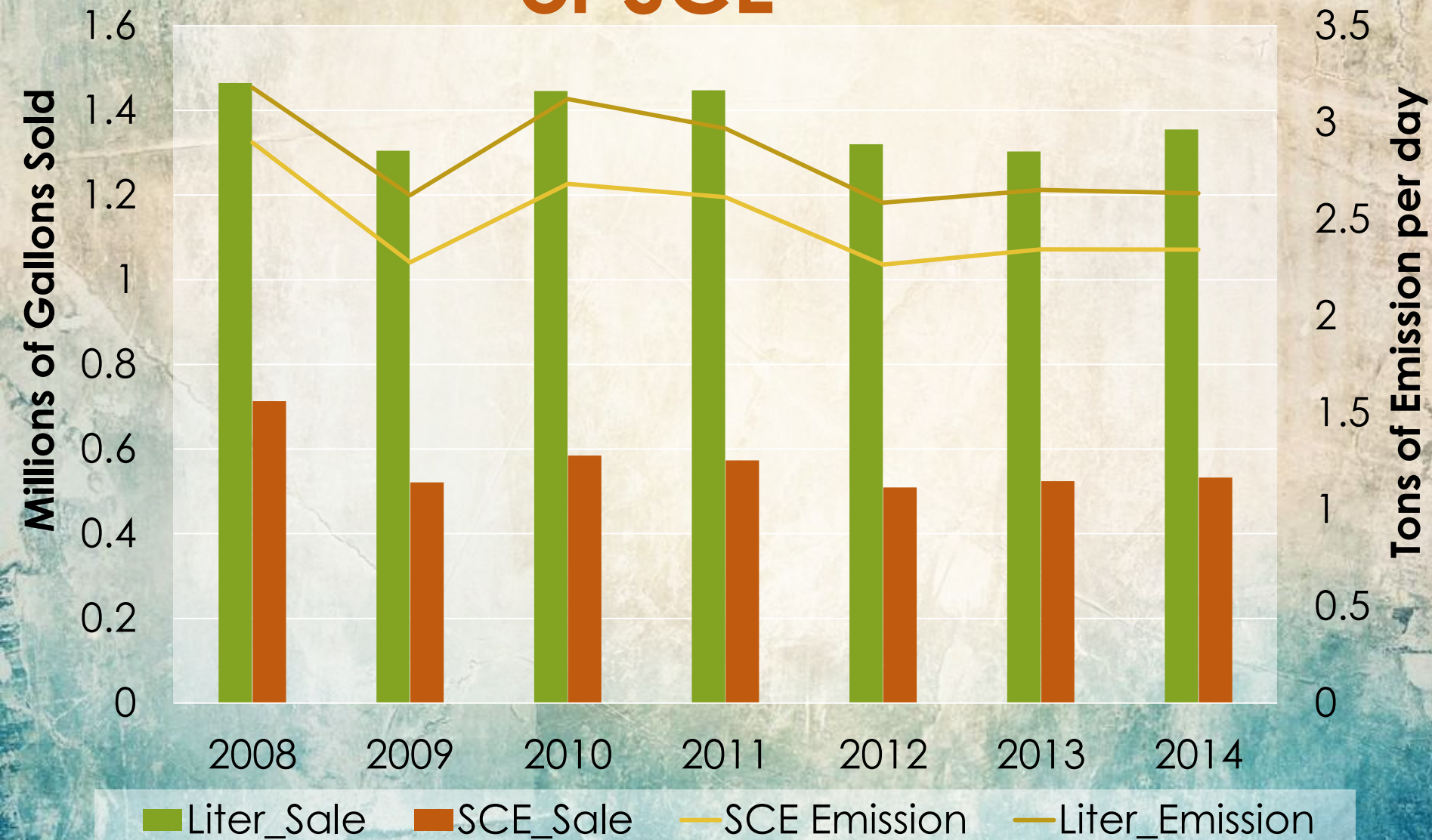
SALES

EMISSIONS



All Coatings Reported in Liter or SCE

7

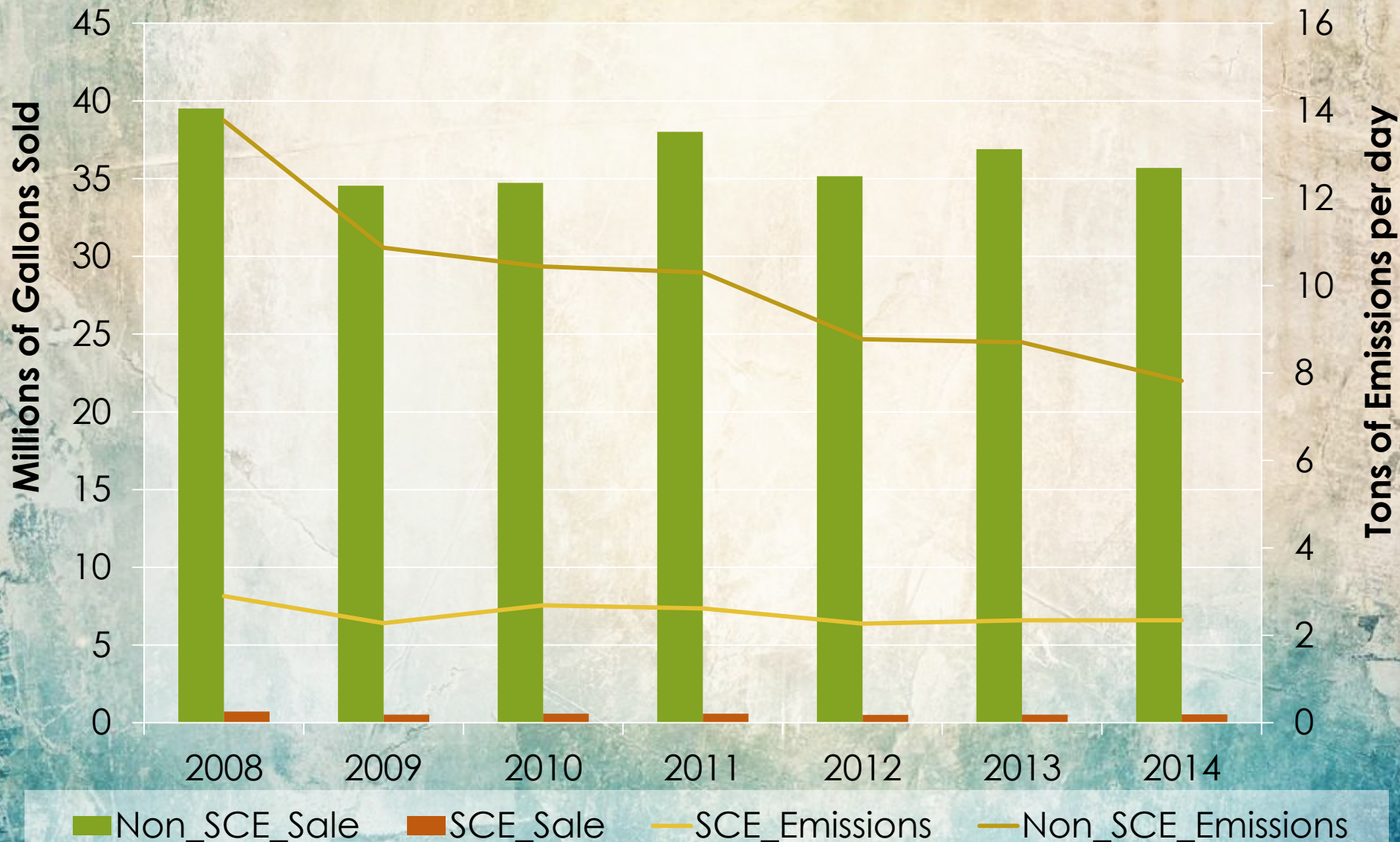


SCE Sales - 2014

Category	Sales (gal)	# of Products	Total Emission	Emission Reductions (tpd)	SWA VOC Coating	SWA VOC Material
RPC	15,1237	203	0.7	0.63	413	413
Non-Flat	83,772	260	0.2	0.15	258	207
Flat	5,983	211	0.01	0.002	178	80
IM	2,687	118	0.01	0.01	323	306

Sales and Emission Trends

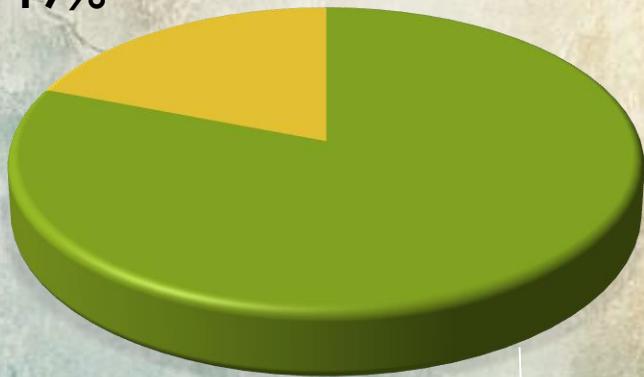
9



Waterborne Versus Solvent-Based - SCE 2014

SALES

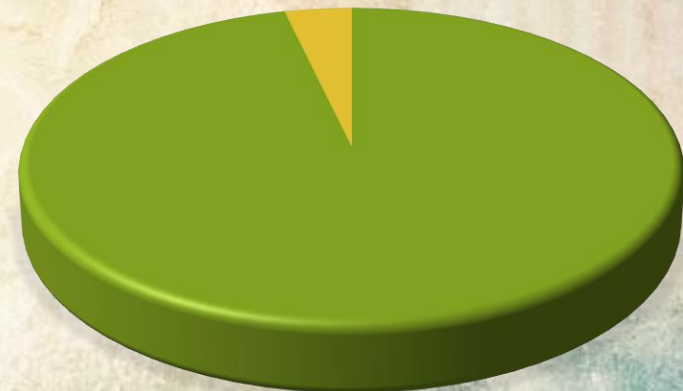
Water-Borne
19%



Solvent-
Based
81%

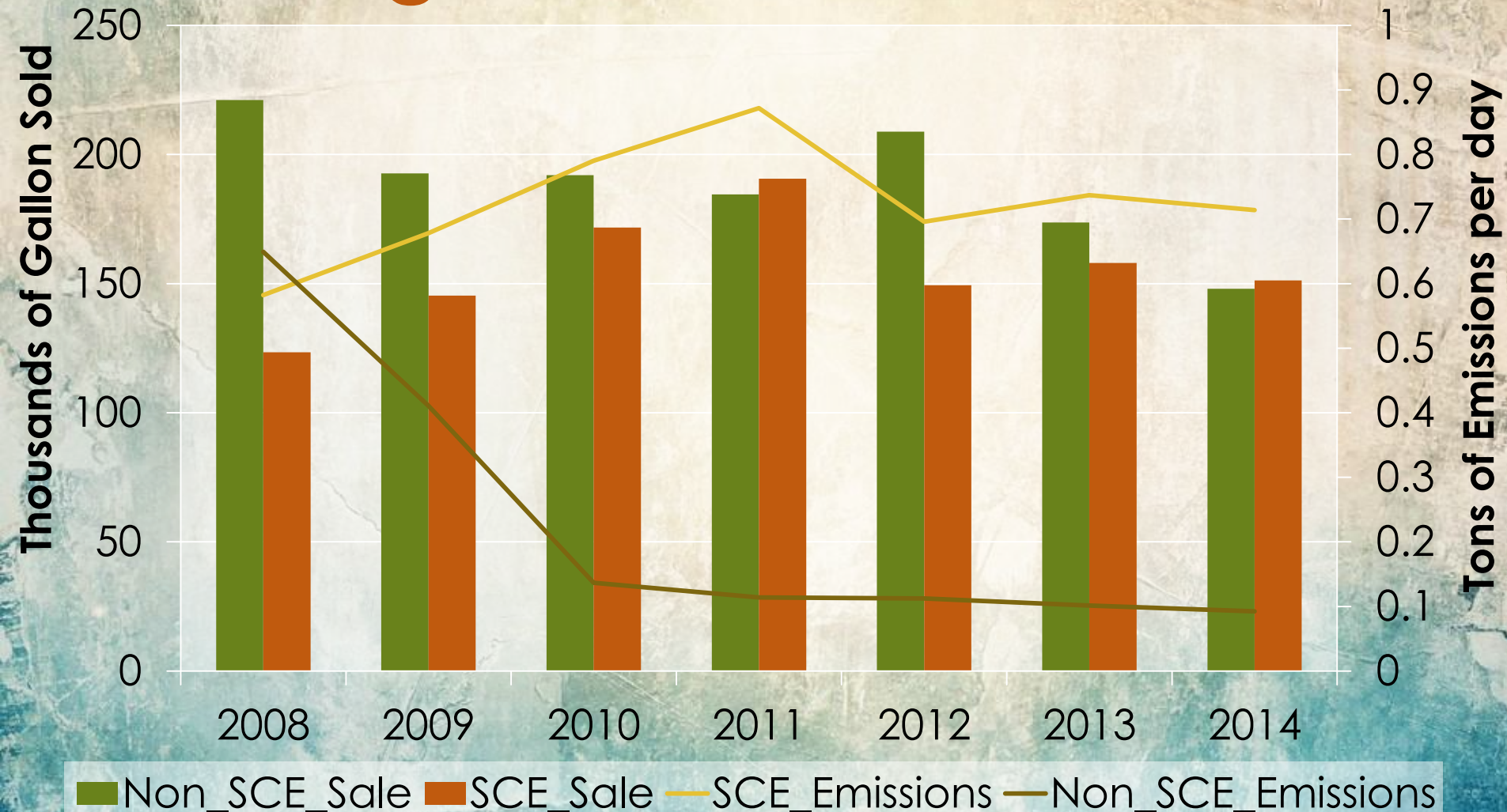
EMISSIONS

Water-
Borne
4%



Solvent-
Based
96%

Rust Preventative Coatings Sales & Emissions



A hand holding a paintbrush with blue paint splashing out, forming a large, dynamic splash shape. The splash is bright blue and has a glossy, liquid-like appearance. The background is plain white.

RULE AMENDMENTS

BACKGROUND

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▶ 2014 AIR QUALITY MANAGEMENT PLAN

Control Measure CM#2012 CTS-01
Further VOC Reductions from
Architectural Coatings

- ▶ 25 g/L for flat, non-flat, & PSU
- ▶ Transfer Efficiency Requirements
- ▶ Restrictions on the Small Container Exemption
- ▶ Committed to 2 – 4 tpd VOC reduction



PAR 1113 OVERVIEW

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- ▶ Limit the small container exemption for select categories
- ▶ Propose new categories with VOC limits, phase out categories that will be regulated under a different rule
- ▶ Propose an exemption for 2-Amino-2-Methyl-1-Propanol
- ▶ Clarify existing definitions and requirements, as necessary
- ▶ Reduce the VOC limit of some architectural coating categories to reflect currently available inventory
- ▶ Include colorants in the labeling requirements
- ▶ Include several new test methods
- ▶ Remove outdated language

PAR 314 OVERVIEW

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- ▶ Include a tiered sales fee
- ▶ Require architectural coating manufacturers to pay outstanding fees of any acquired architectural coating manufacturer



RULE DEVELOPMENT PROCESS

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PROPOSED AMENDED
RULE 1113

DEFINITIONS

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BOND BREAKERS & FORM RELEASE COMPOUNDS

- ▶ Include the following statement at the end of the definitions:

Bond breakers/Form release compounds will be exempt from Rules 1113 and 314 upon adoption of Rule 1161 – Release Agents or any other Regulation IX rule limiting the VOC content of bond breakers/form release compounds.

BUILDING ENVELOPE

is the ensemble of exterior and demising partitions of a building that enclose conditioned space.

BUILDING ENVELOPE COATINGS

are fluid applied coatings applied to the building envelope to provide a continuous barrier to air or vapor leakage through the building envelope that separates conditioned from unconditioned spaces. Building Envelope Coatings are applied to diverse materials including but not limited to concrete masonry units (CMU), oriented stranded board (OSB), gypsum board, wood substrates, and adjacent structural components and include:

BUILDING ENVELOPE COATINGS

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(cont.)

- A. Air Barriers formulated to have an air permeance not exceeding 0.004 cubic feet per minute per square foot under a pressure differential of 1.57 pounds per square foot (0.004 cfm/ft²), [0.02 liters per square meter per second under a pressure differential of 75 Pa (0.02 L/(s m²) @ 75 Pa)]. (0.02 L/m² at 75 pa), when tested in accordance with ASTM E2178; and/or
- B. Water Resistive Barriers formulated to resist liquid water that has penetrated a cladding system from further intruding into the exterior wall assembly and is classified as follows:
 - i. Passes water resistance testing according to ASTM E331, &
 - ii. Water vapor permeance is classified in accordance with ASTM E96/E96M-10.

COLOR INDICATING SAFETY COATINGS

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are industrial maintenance coatings for safety management of process streams to prevent or minimize the consequences of the release of toxic, reactive, flammable or explosive substances, and include chemical and thermal color indicating coatings.

REACTIVE PENETRATING SEALERS

- E. ~~Not reduce the water vapor transmission rate by more than 2 percent after application on a concrete or masonry substrate.~~ Provide a breathable waterproof barrier for concrete or masonry surfaces that does not prevent or substantially retard water vapor transmission. This performance must be verified on standardized test specimens, in accordance with ASTM E96/E96M or ASTM D6490.

GLAZES

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~~which~~ are coatings formulated and recommended (or mixed with another coating) ~~designed~~ for:

- i. ~~W~~Wet-in-wet techniques, where a wet coating is applied over another wet coating ~~used~~ to create artistic effects, including simulated marble or wood grain, or
- ii. Wet-in-dry techniques, where a wet coating is applied over a pre-painted or a specially prepared substrate or base coat and is either applied or is treated during the drying period with various tools, such as a brush, rag, comb, or sponge to create artistic effects such as ~~but not limited to~~ dirt, old age, smoke damage, simulated marble and wood grain finishes, decorative patterns, or color blending.

NONFLAT COATINGS

are coatings that ~~are not defined under any other definition in this rule and that~~ register a gloss of 5 or greater on a 60 degree meter and a gloss of 15 or greater on an 85 degree meter according to ASTM Test Method D 523 as specified in paragraph (e)(5).

DEFAULT COATINGS

are specialty coatings (those other than flat or non-flat coatings) that are not defined in section (b) as any other coating category.

TILE AND STONE SEALERS

are clear or pigmented sealers that are used for sealing tile, stone or grout to provide resistance against water, alkalis, acids, ultraviolet light or staining and which meet one of the following subcategories:

- A. Penetrating sealers are polymer solutions that cross-link in the substrate and must meet the following criteria:
 - i. A fine particle structure to penetrate dense tile such as porcelain with absorption as low as 0.10% per ASTM C 373, ASTM C 97, or ASTM C 642,
 - ii. Retain or increase static coefficient of friction per ASTM C 1028, ANSI A137.1,
 - iii. Not create a topical surface film on the tile or stone, &
 - iv. **Allow vapor transmission per ASTM E9690.**
- B. Film forming sealers which leave a protective film on the surface.

TUB AND TILE REFINISHING COATINGS

are clear or opaque coatings that are used exclusively for refinishing the surface of a bathtub, shower, or sink which must meet all of the following criteria:

- A. Have a scratch hardness of 3H or harder and a gouge hardness of 4H or harder as determined on bonderite 1000 in accordance with ASTM D3363-05,
- B. Have a weight loss of 20 milligrams or less after 1000 cycles as determined with CS-17 wheels on bonderite 1000 in accordance with ASTM D4060-07,
- C. Must withstand 1000 hours or more of exposure with few or no #8 blisters as determined on unscribed bonderite in accordance with ASTM D4585-99, and ASTM D714-02e1, and
- D. Must have an adhesion rating of 4B or better after 24 hours of recovery as determined on unscribed bonderite in accordance with ASTM D4585-99 and ASTM D3359-02.

VOLATILE ORGANIC COMPOUND

is as defined in Rule 102 – Definition of Terms. For the purpose of this rule, tertiary butyl acetate (tBAC) shall be considered exempt as a VOC only for purposes of VOC emissions limitations or VOC content requirements ...when used in industrial maintenance coatings, including zinc-rich industrial maintenance coatings and non-sacrificial anti-graffiti coatings. For the purpose of this rule, 2-Amino-2-Methyl-1-Propanol (AMP) shall be considered exempt as a VOC.

2-Amino-2-Methyl-1-Propanol (CAS 124-68-5)



- ▶ Exempted by the U.S. EPA June 25, 2014
- ▶ Allowed by FDA as indirect food additive in adhesives for food packaging
- ▶ Used in cosmetics and personal care products
- ▶ Used in paint and coatings up to 0.5% as pH control and a dispersant
- ▶ OEHHA assessment expected shortly

WOOD COATINGS

are film forming coatings used for application to wood substrates only, which are applied to substrates including floors, decks and porches. The Wood Coating category includes all lacquer topcoats, varnish topcoats and sanding sealers, regardless of whether they are clear, semi-transparent or opaque.

TOPCOAT

is any final coating applied to the interior or exterior of a stationary structure or their appurtenances.

LAQUERS

are clear or pigmented ~~wood coatings~~ topcoats, including clear lacquer sanding sealers, formulated with nitrocellulose or synthetic resins to dry by evaporation without chemical reaction.

VARNISHES

are clear or pigmented ~~wood coatings~~ topcoats formulated with various resins to dry by chemical.

WOOD CONDITIONERS

are coatings that are used to prepare bare wood for staining to provide uniform penetration of stain.

REQUIREMENTS

- ▶ Removing averaging language
- ▶ Removing reference to the default category (c)(A) & (B)

TABLE OF STANDARDS

- ▶ Adding a column for the category code
- ▶ Removing ceiling limit, 7/1/08, & 1/1/12 columns
- ▶ Adding 1/1/16 & 1/1/19 columns
- ▶ Adding a column for the small container exemption allowance

TABLE OF STANDARDS

(cont)

- ▶ Effective 01/01/16
 - Graphic Arts – increase VOC limit to 200 g/L
 - Recycled Coatings – decrease VOC limit to 150 g/L
- ▶ Effective 01/01/19
 - Building Envelope - decrease limit to 50 g/L

ADMINISTRATIVE REQUIREMENTS

- ▶ Include colorants in labeling requirements
 - Date code
 - VOC

TEST METHODS

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- ▶ VOC Gas Chromatography Methods
 - SCAQMD Method 313 [Determination of Volatile Organic Compounds VOC by Gas Chromatography-Mass Spectrometry] in the SCAQMD's "Laboratory Methods of Analysis for Enforcement Samples" manual
 - ASTM Test Method 6886 (Standard Test Method for Determination of the Weight Percent Individual Volatile Organic Compounds in Waterborne Air-Dry Coatings by Gas Chromatography).
- ▶ Performance test methods to support new definitions

EXEMPTIONS

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SMALL CONTAINER EXEMPTION

The provisions of the Table of Standards 1 and paragraph (c)(1) of this rule shall not apply to architectural coatings in containers having capacities of one liter (1.057 quart) or less, but shall apply to the following:

- A. Wood Coatings, including Lacquers, Varnishes, and Sanding Sealers

SMALL CONTAINER EXEMPTION (cont.)

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- B. Effective January 1, 2016, Concrete-Curing Compounds For Roadways and Bridges; Color Indicating Safety Paint; Magnesite Cement Coatings; Multi-Color Coatings; Non-Sacrificial Anti-Graffiti Coatings; Pre-Treatment Wash Primers; Roof Primers, Bituminous; Sacrificial Anti-Graffiti Coatings; Clear and Pigmented Shellacs; Stone Consolidants; Repair and Other Swimming Pool Coatings; and Tub and Tile Coatings.

SMALL CONTAINER EXEMPTION

(cont.)

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- C. Effective January 1, 2019, Flats, Non-Flats, and Rust Preventative Coatings that are sold:
 - i. In containers having capacities greater than 8 fluid ounce, or
 - ii. Sold in any quantity for purposes other than touch-up.
- D. Effective January 1, 2019, Industrial Maintenance Coatings and Zinc-Rich IM Primers that are sold:
 - i. In containers having capacities greater than 1 liter,
 - ii. Sold in any quantity for purposes other than touch-up, or
 - iii. Sold at a retail outlet.



PROPOSED AMENDED
PAR 314

DEFINITIONS

BIG BOX RETAILER

is a physically large-chain retail outlet that is classified by the U.S. Department of Labor under Standard Industrial Classification code 5211: Lumber and Other Building Materials Dealers North American Industry Classification System code 444110: Home Centers, and listed by the Executive Officer as such prior to end of each calendar year.

PRODUCT

is an architectural coating which is identified by means of a unique product code and product name or product line (if applicable), as written on the container label and that is subject to one of the coating category VOC limits specified in Rule 1113 paragraphs (c)(1) or (c)(2) Table of Standards.

FEE RATE

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Annual Quantity Fee: of \$0.04₁ per gallon of paint
until the effective date listed below:

VOC of Material (g/L)	Fee ¹	Effective Date
0.00 – 10.00	\$0.01 ₁	01/01/17
10.01 – 25.00	\$0.04 ₁	01/01/17
25.01 – 50.00	\$0.05 ₁	01/01/19
50.01 – 100.00	\$0.06 ₁	01/01/19
>100.01	\$0.07 ₁	01/01/19

Notwithstanding the above fees, any coating sold over the applicable VOC limit, including non-compliant coatings² and coatings sold under the small container exemption, are subject to the following sales fee:

> Applicable VOC Limit	\$0.41 ₀	01/01/19
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REQUIREMENTS

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Change or Acquisition of an Architectural Coatings Manufacturer

- ▶ Creating New Section (k)
- ▶ Clarifying that manufacturer must notify the District upon acquisition of another manufacturer
- ▶ Stating that new manufacturer is responsible for any outstanding fees

Next Steps

- ▶ VOC Working Group Meeting to follow Public Workshop
- ▶ Additional consultation meeting(s) as needed
- ▶ Stationary Source Committee – 09/18/15
- ▶ Set Hearing – 10/02/15
- ▶ Public Hearing – 11/06/15



QUESTIONS

AREASOURCES@AQMD.GOV