PAR1113 WORKING GROUP MEETING

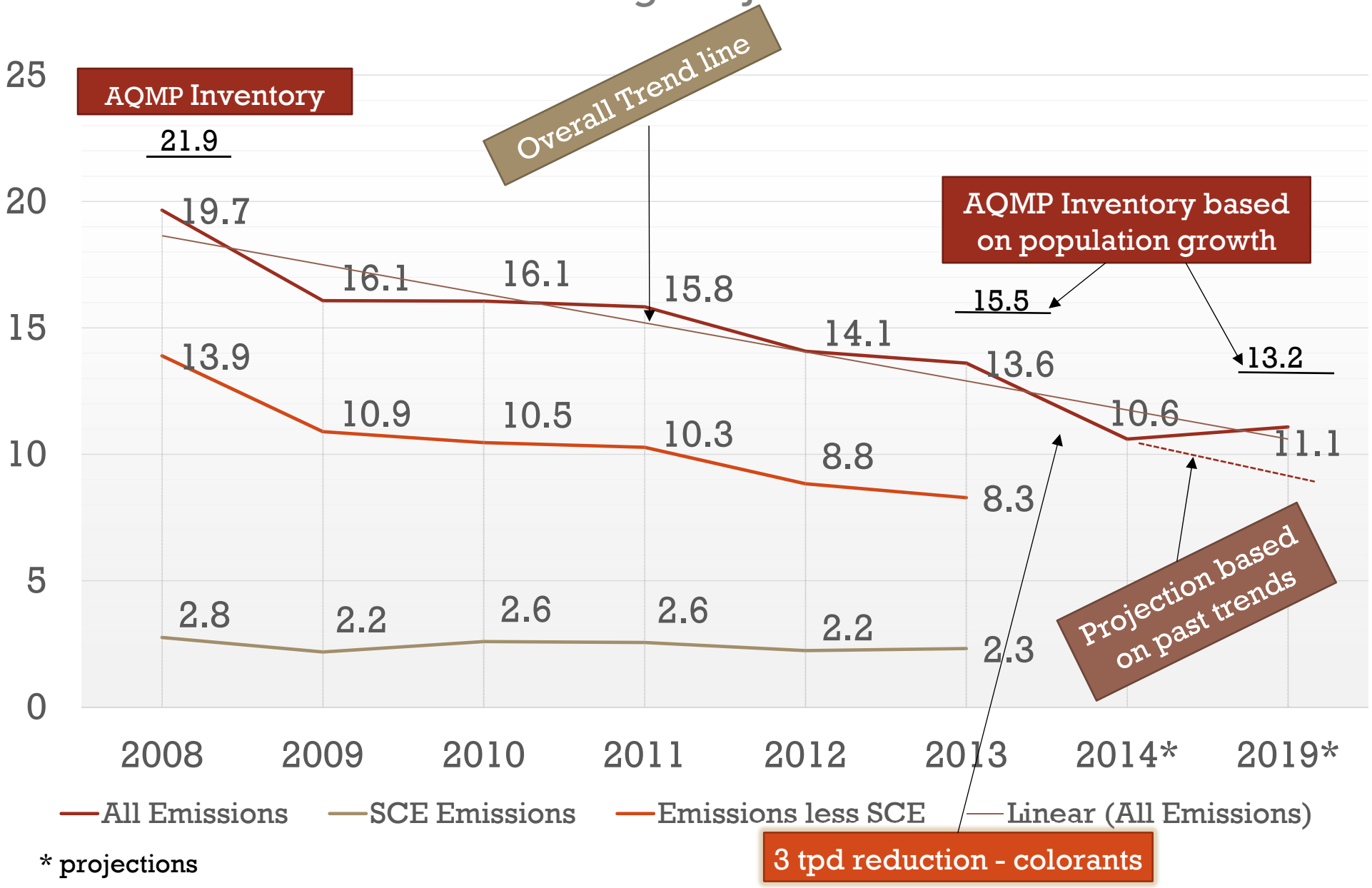
December 3, 2014

OVERVIEW

- 2012 AQMP CTS-01 includes 2-4 tpd VOC reductions
  - 25 g/L VOC limit flats, non-flats, PSU
  - Small Container Exemption
  - Transfer Efficiency
- Credit for Current Inventory

CREDIT FOR CURRENT INVENTORY

Rule 314 Emissions Summary (tons/day) Including Projections



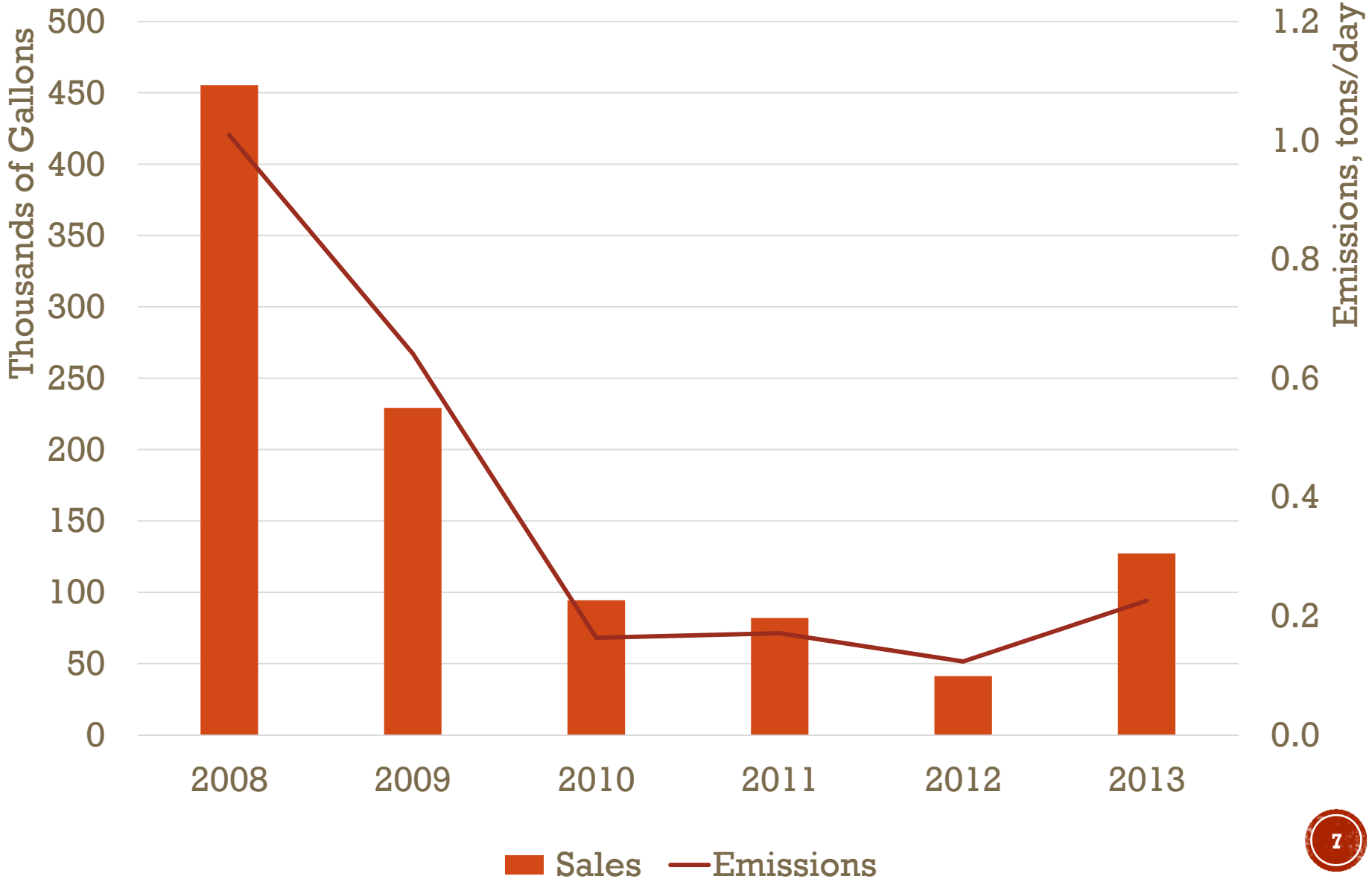
* projections

ISSUES UNDER REVIEW

- U.S. EPA Requirements
  - No Backsliding
- **Data Integrity**
- Path forward

DATA INTEGRITY/COATING CHARACTERIZATION

Self-Reported *Potential* Non-Compliance
> Liter Containers Only



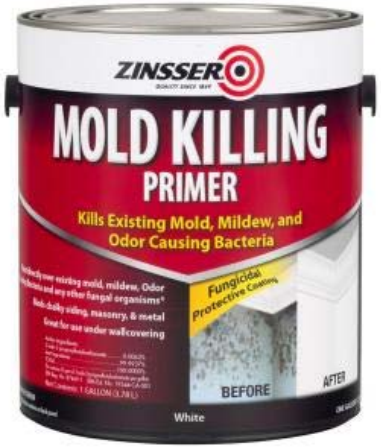
EXAMPLE COATING CATEGORIZATION ISSUE

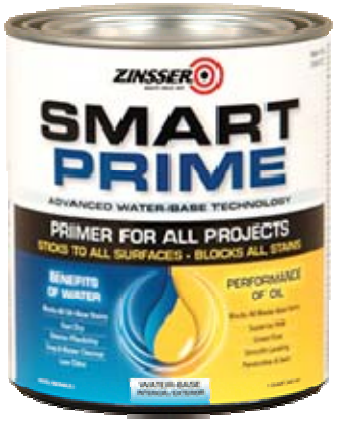
SPECIALTY PRIMERS are coatings formulated for or applied to a substrate to **seal fire, smoke or water damage; or to condition excessively chalky surfaces.** An excessively chalky surface is one that is defined as having chalk rating of four or less as determined by ASTM D-4214 – Photographic Reference Standard No. 1 or the Federation of Societies for Coatings Technology "Pictorial Standards for Coatings Defects".

‘SPECIALTY’ PRIMERS

Reported as PSU
VOC of Coating:
4 g/L

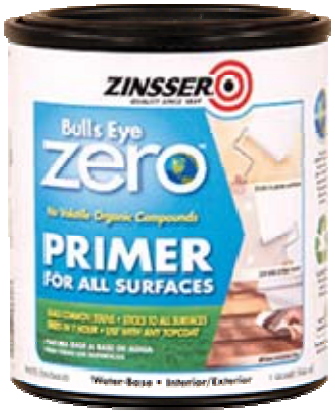
VOC of Coating:
1 g/L





Reported as PSU
VOC of Coating:
0 g/L

Reported as PSU
VOC of Coating:
47 g/L

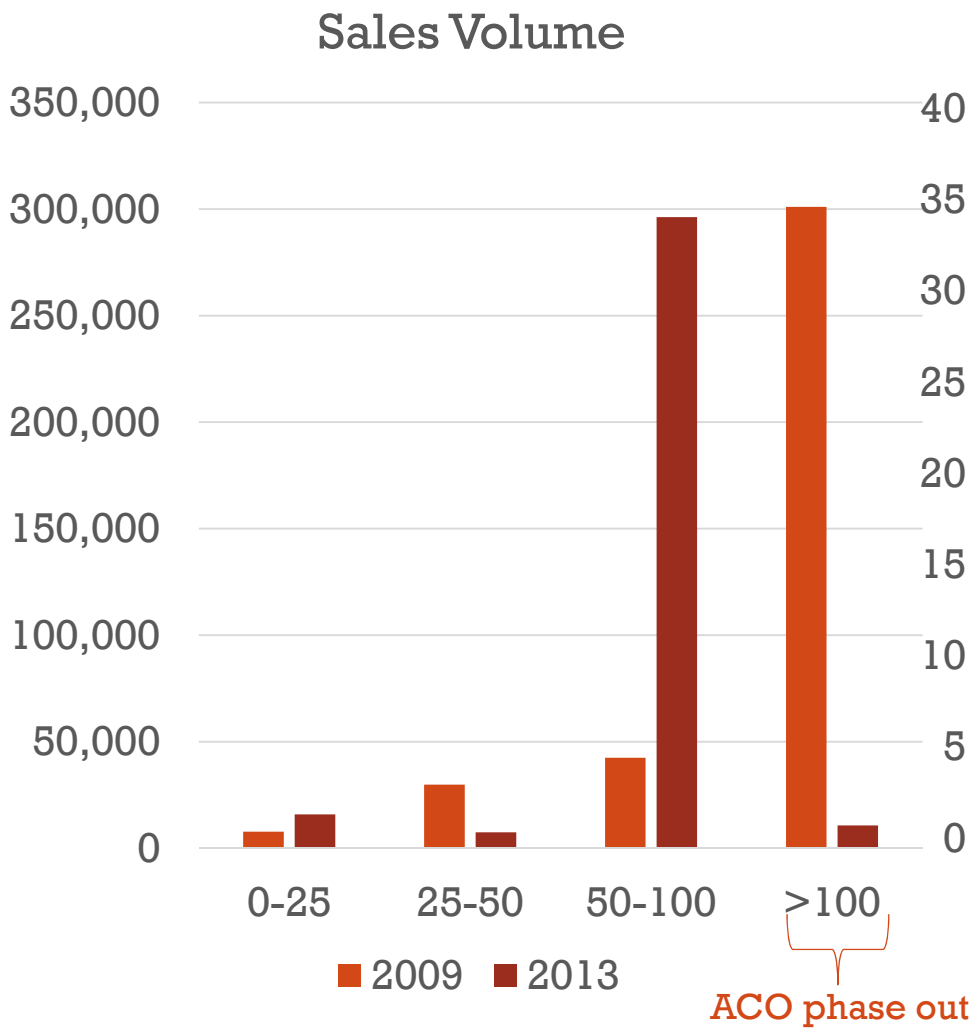


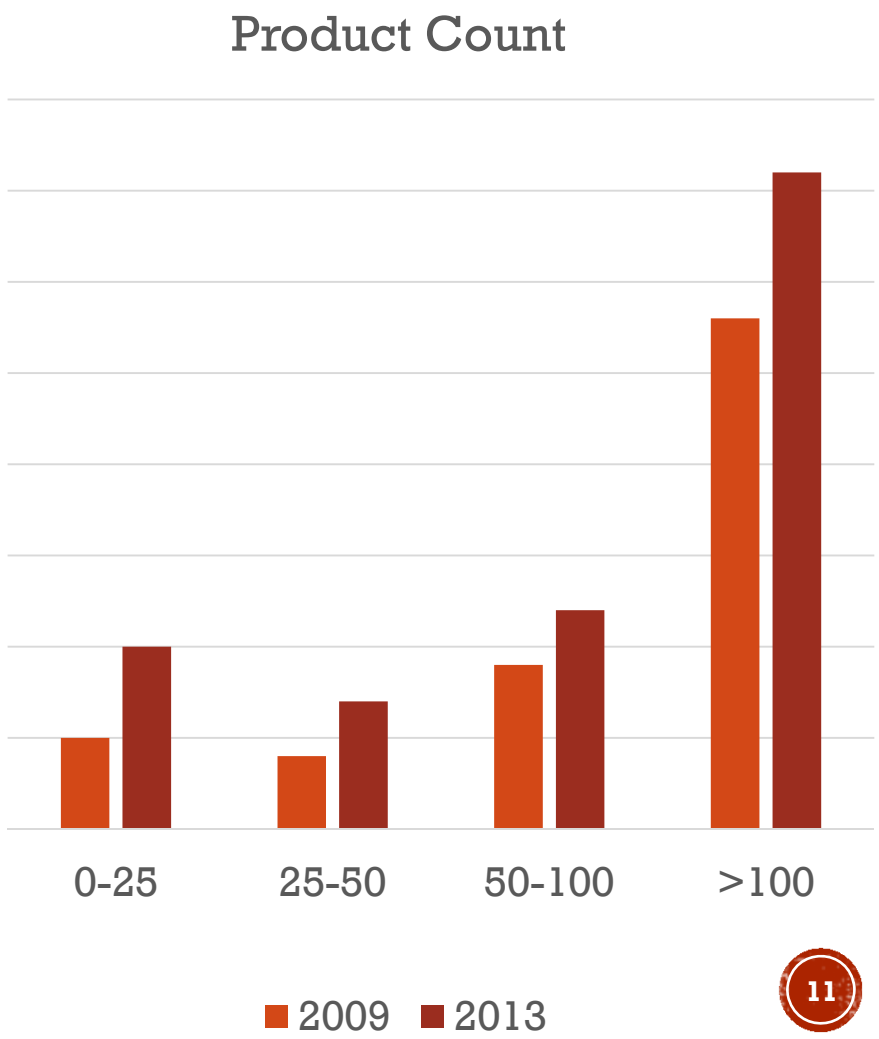
Reported as PSU
VOC of Coating:
0 g/L

COATINGS REPORTED AS SPECIALTY PRIMERS BUT DO NOT MEET RULE 1113 DEFINITION

- Peelable basecoat
- Swedish Putty
- Quick Dry Primers
- Rust Preventative Primers

COATINGS REPORTED AS SPECIALTY PRIMERS
ALL SALES





FLAT, NON-FLAT,& PSU STATISTICS

2013 SALES AND PRODUCT COUNT

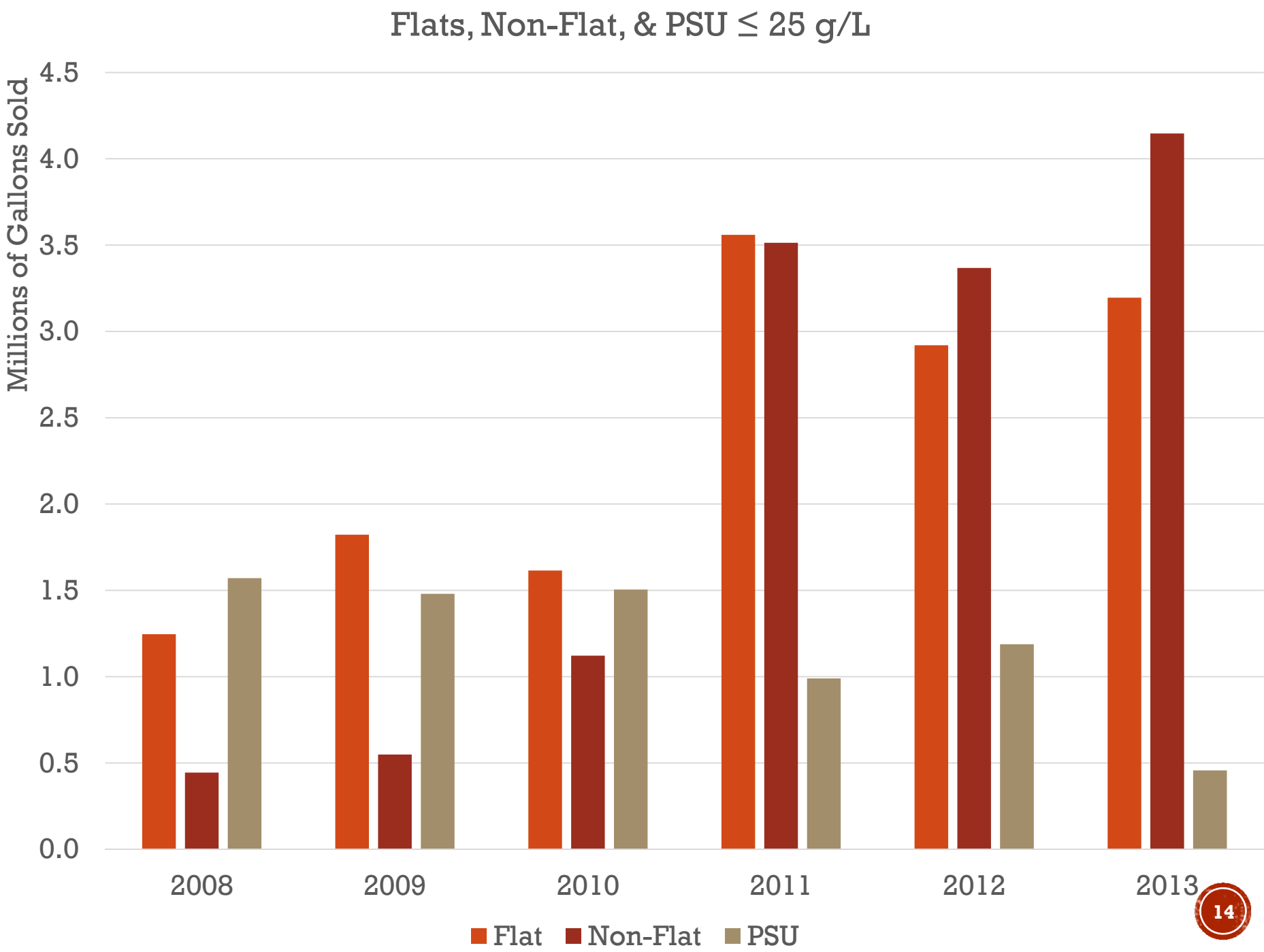
Number of Products

	All Products				≤ 25 g/L			
	Total	Interior	**Exterior**	**Dual**	Total	Interior	**Exterior**	**Dual**
Flat	2,268	1,165	**691**	**412**	573 (25%)	440 (38%)	**74 (11%)**	**59 (14%)**
Non-Flat	3,243	1,661	**796**	**786**	643 (20%)	500 (30%)	**25 (3%)**	**118 (15%)**
PSU*	838	306	**167**	**365**	195 (23%)	72 (24%)	**28 (17%)**	**95 (26%)**

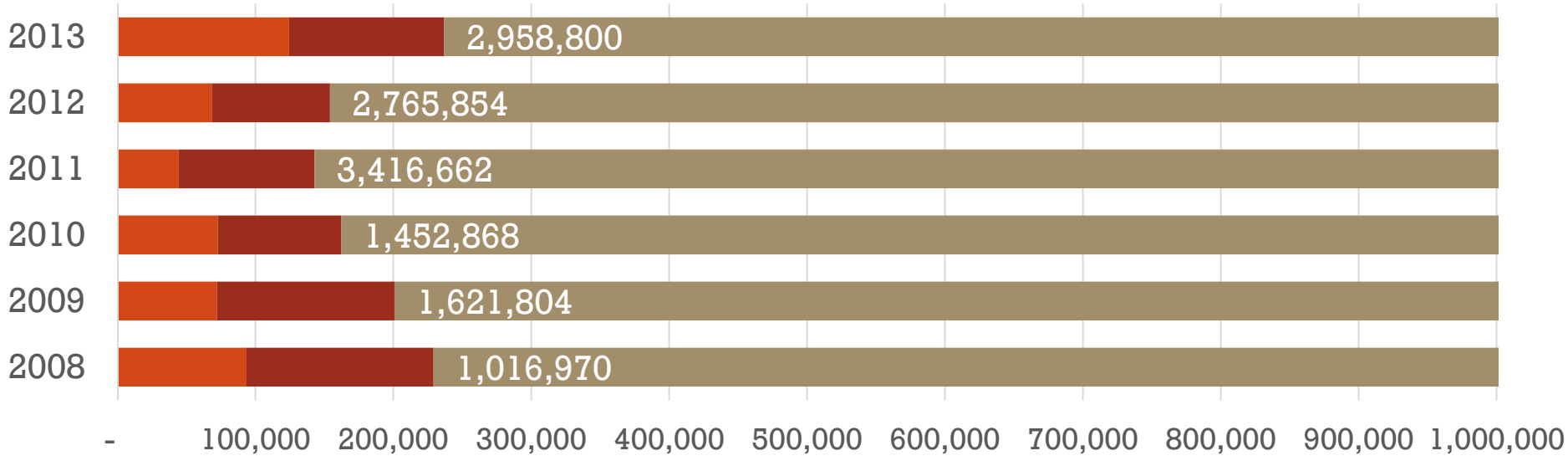
Sales Volumes (gallons)

	All Products				≤ 25 g/L			
	Total	Interior	Exterior	Dual	Total	Interior	Exterior	Dual
Flat	11,411,136	6,145,642	**4,551,943**	**713,552**	3,195,692 (28%)	2,958,800 (48%)	**112,410 (2%)**	**124,483 (17%)**
Non-Flat	12,182,540	8,234,218	**2,063,236**	**1,885,086**	4,146,513 (34%)	3,595,235 (44%)	**152,550 (7%)**	**398,727 (21%)**
PSU*	3,271,648	1,615,106	**222,537**	**1,434,005**	457,081 (14%)	219,227 (14%)	**4,427 (2%)**	**233,427 (16%)**

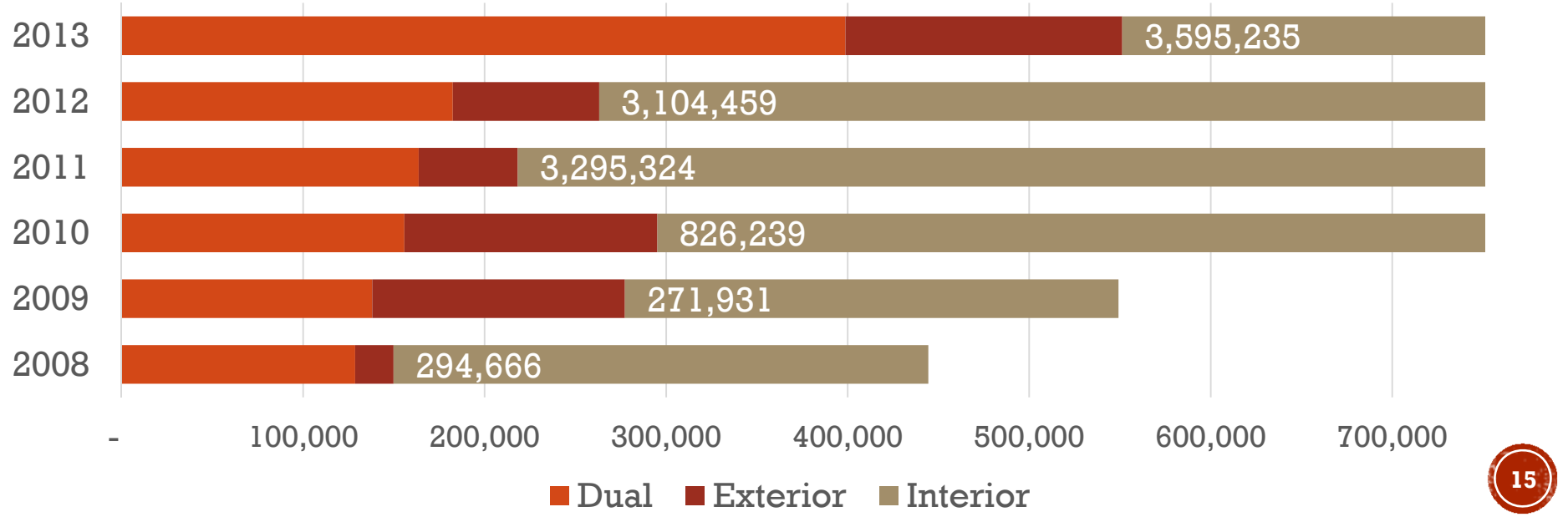
* Includes coatings reported as PSU and QD-PSU (not specialty primers)

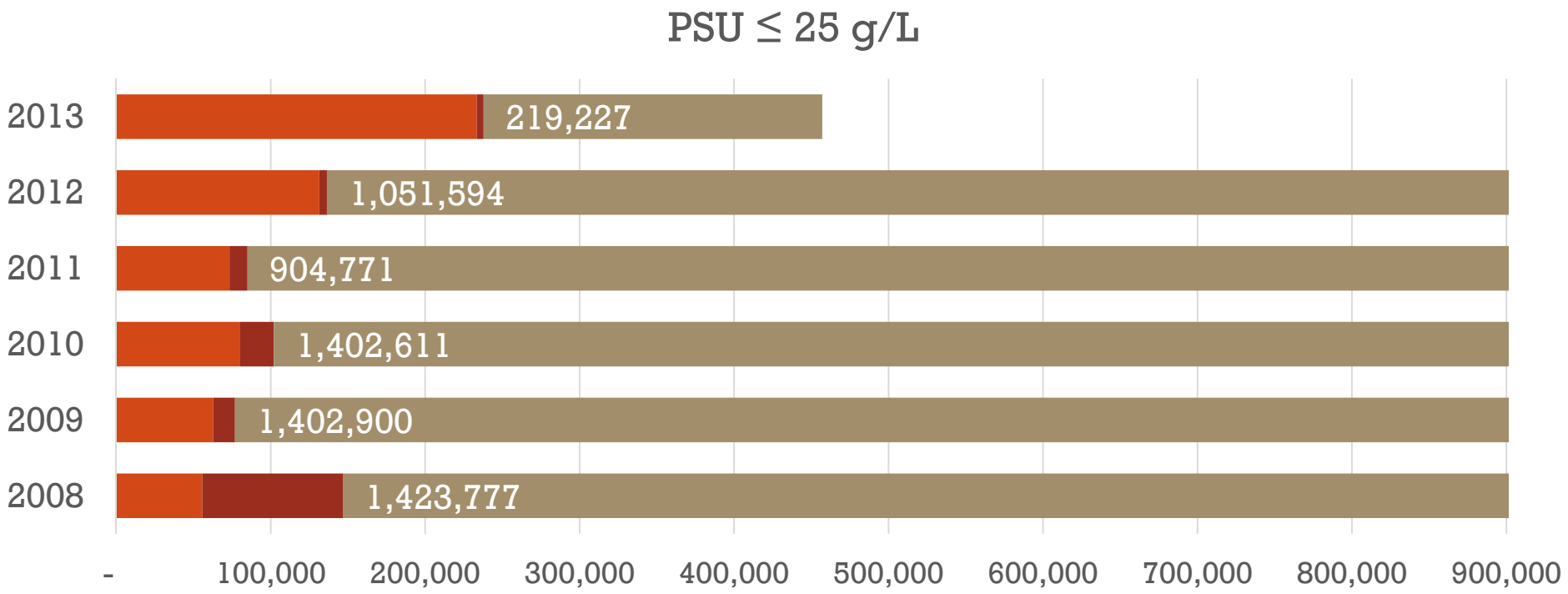

Flats, Non-Flat, & PSU ≤ 25 g/L
Millions of Gallons Sold
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2008
2009
2010
2011
2012
2013
Flat
Non-Flat
PSU

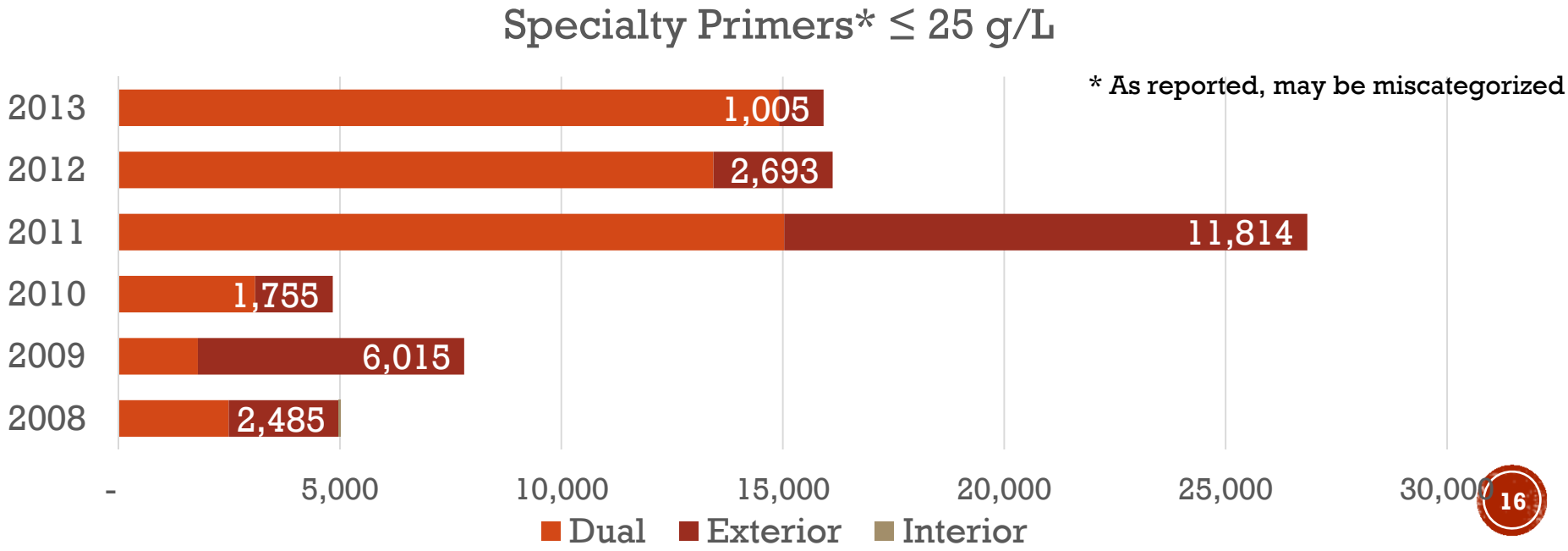
Flat Coatings ≤ 25 g/L

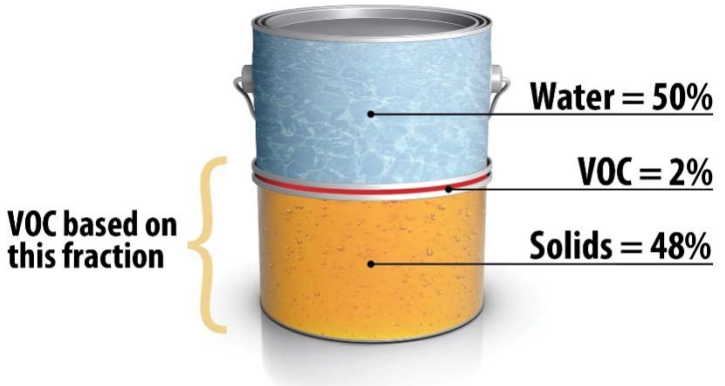


Non-Flat Coatings ≤ 25 g/L




PSU ≤ 25 g/L
2013
2012
2011
2010
2009
2008
219,227
1,051,594
904,771
1,402,611
1,402,900
1,423,777
-
100,000
200,000
300,000
400,000
500,000
600,000
700,000
800,000
900,000

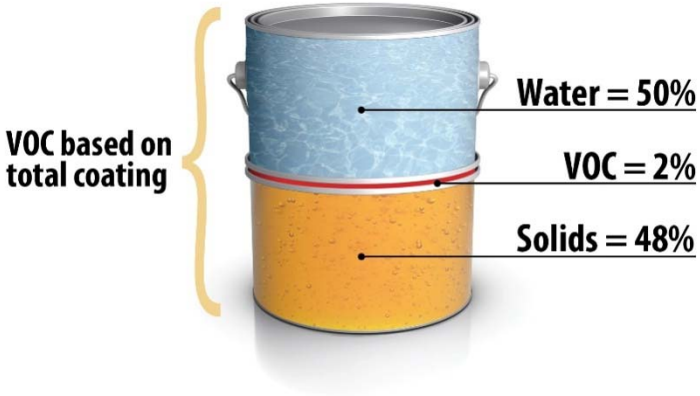

Specialty Primers* ≤ 25 g/L
* As reported, may be miscategorized
2013
2012
2011
2010
2009
2008
1,005
2,693
11,814
1,755
6,015
2,485
-
5,000
10,000
15,000
20,000
25,000
30,000
Dual
Exterior
Interior

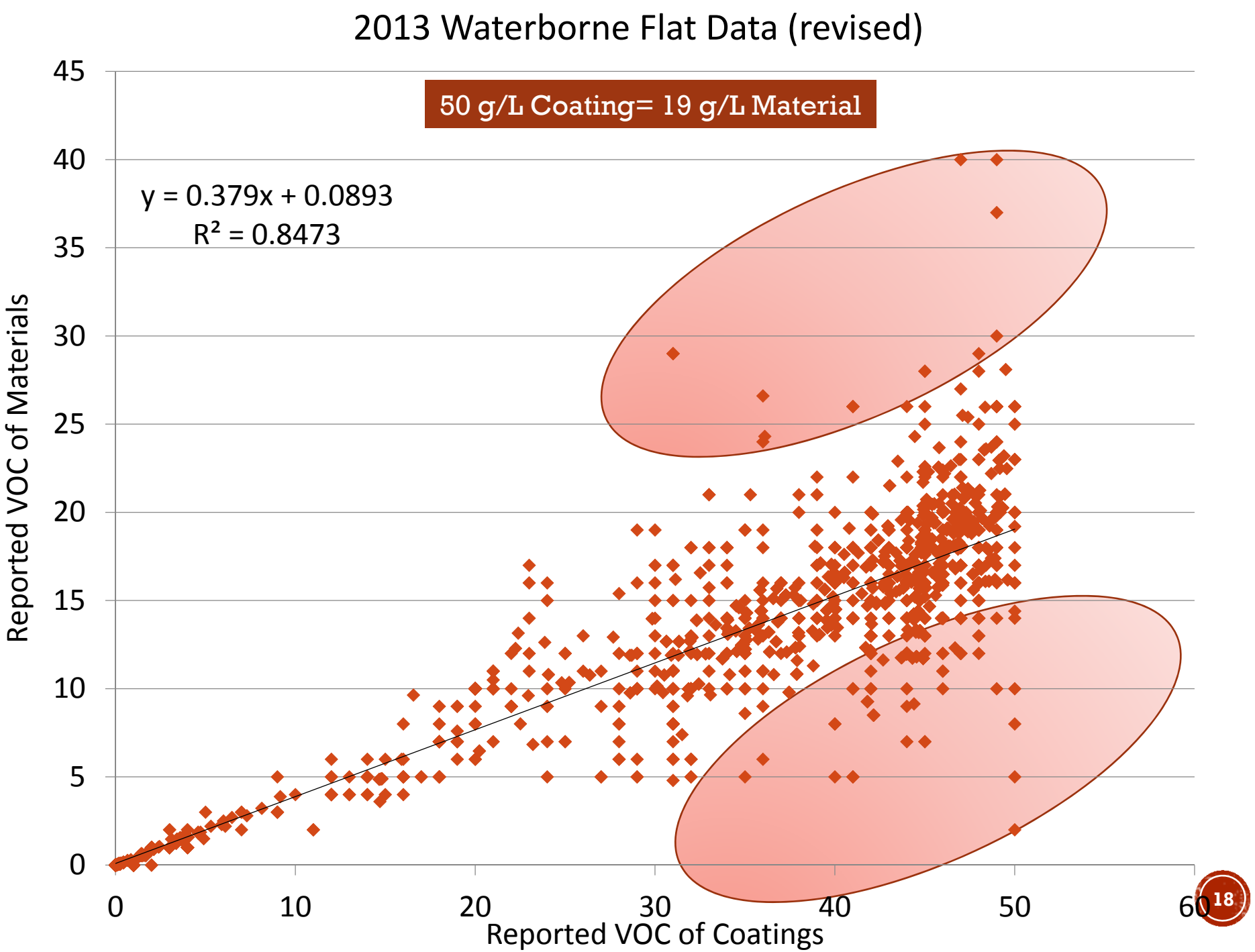


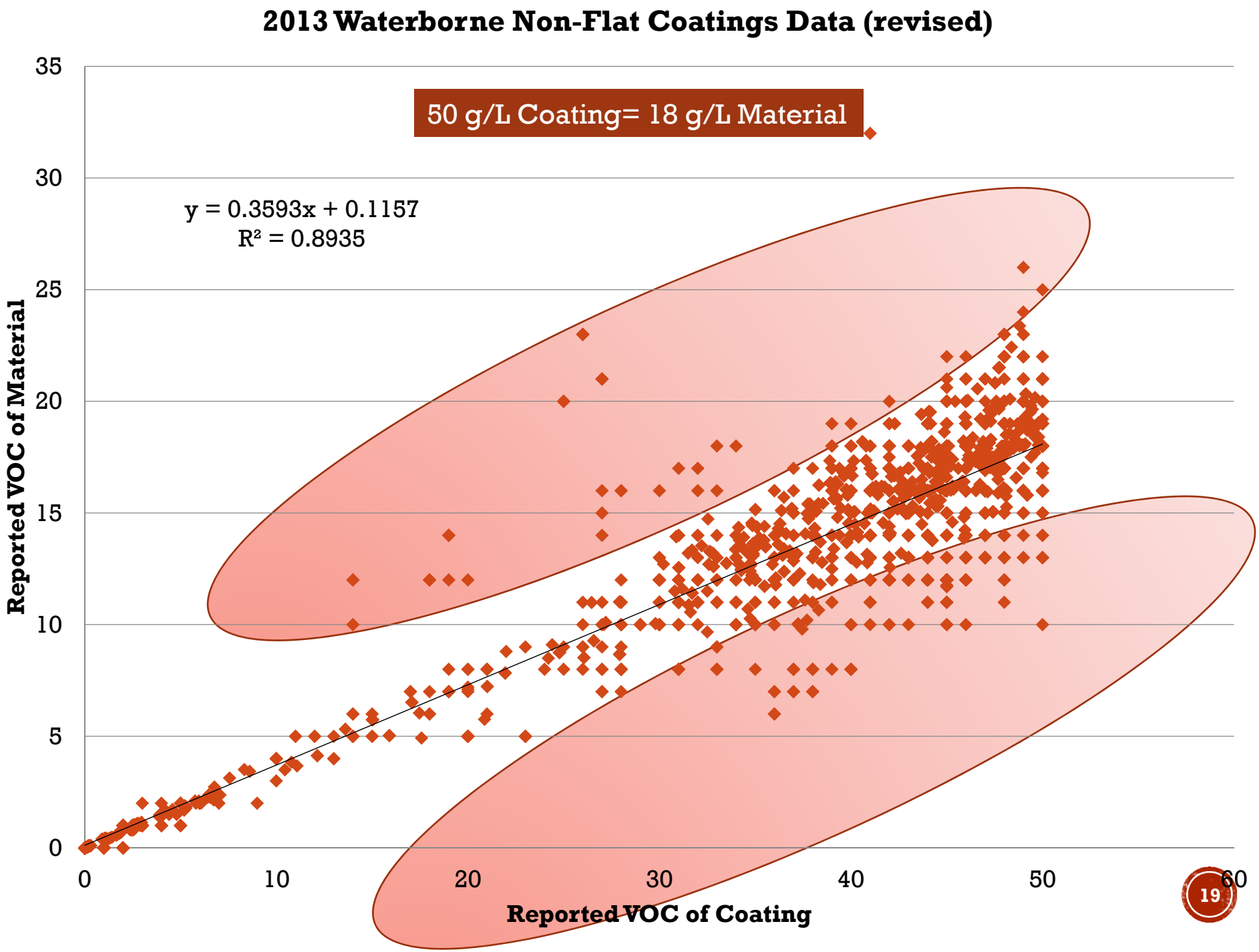
$$VOC_{Coating} = \frac{(100\% - 48\% - 50\%)}{\left(\frac{100\%}{1.10\ g/mL} - \frac{50\%}{0.997\ g/mL}\right)}\ x\ 1000 = 49\ g/mL$$

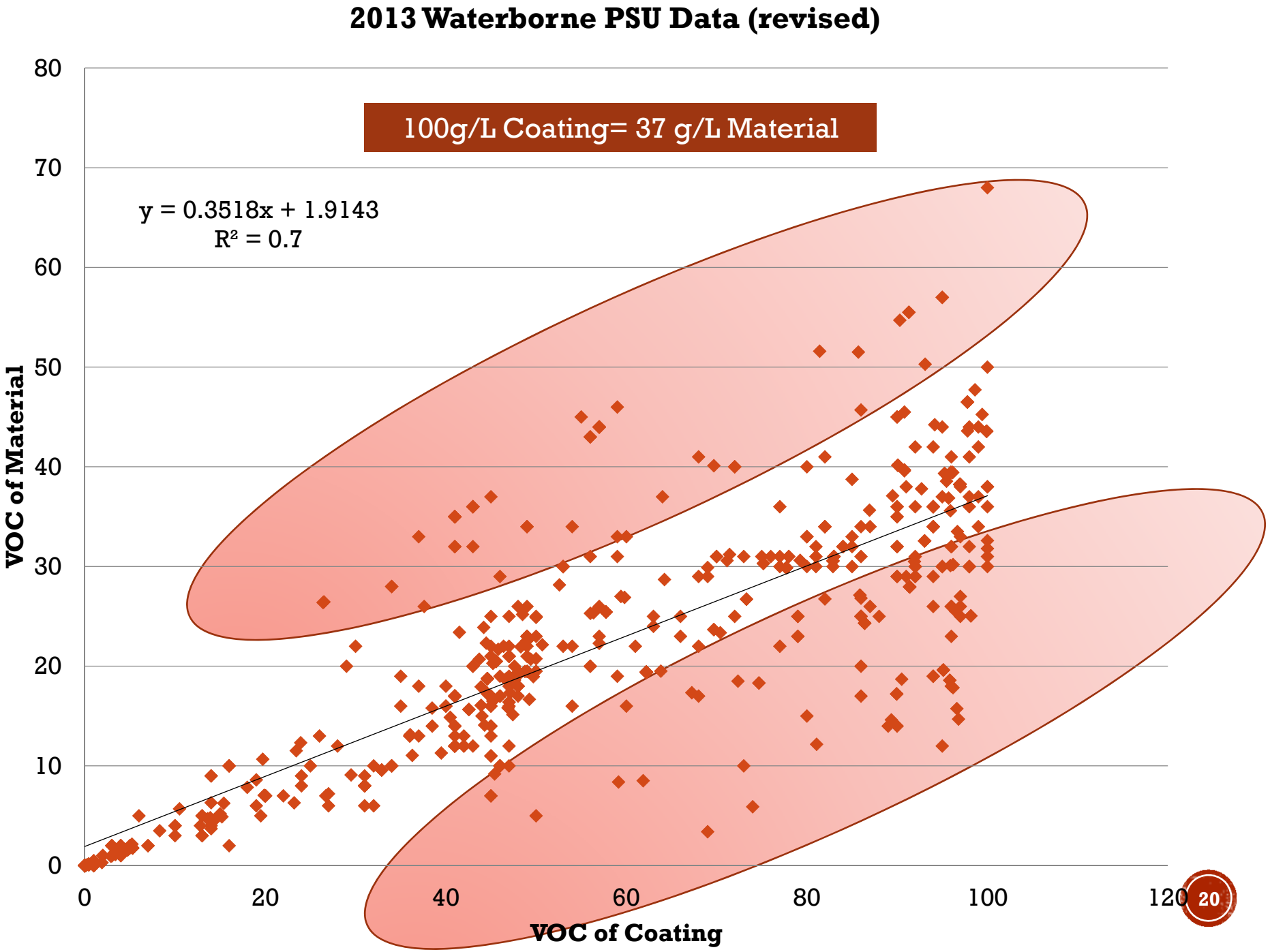
VOC METRIC

$$VOC_{Material} = (100\% - 48\% - 50\%)\ x\ 1.10\ g/mL\ x\ 10 = 22\ g/L$$




2013 Waterborne Flat Data (revised)
50 g/L Coating= 19 g/L Material
y = 0.379x + 0.0893
R² = 0.8473
Reported VOC of Materials
Reported VOC of Coatings
0
5
10
15
20
25
30
35
40
45
0
10
20
30
40
50
60

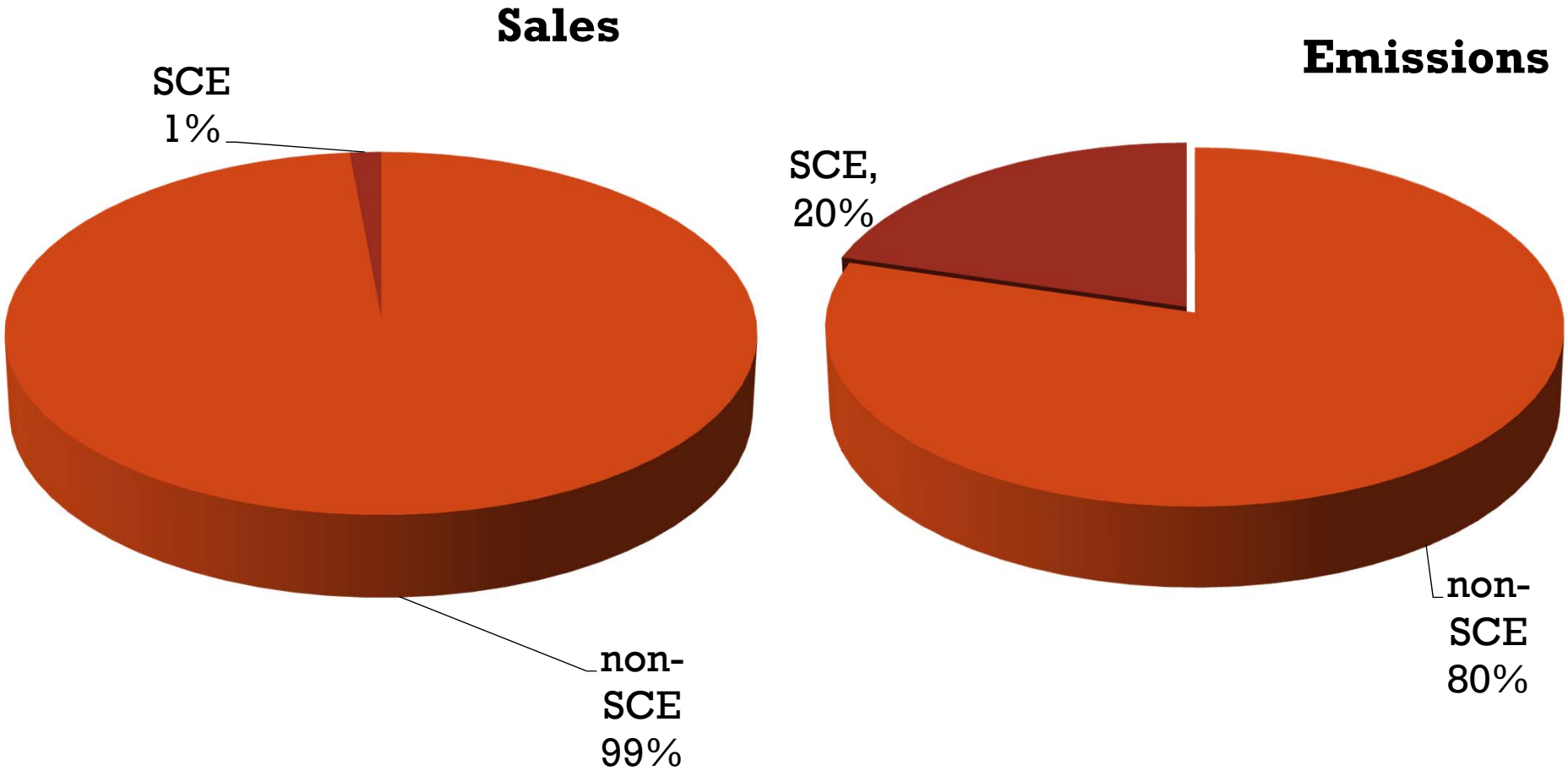

2013 Waterborne Non-Flat Coatings Data (revised)
50 g/L Coating= 18 g/L Material
y = 0.3593x + 0.1157
R² = 0.8935
Reported VOC of Material
Reported VOC of Coating
0
5
10
15
20
25
30
35
0
10
20
30
40
50
60


2013 Waterborne PSU Data (revised)
100g/L Coating= 37 g/L Material
y = 0.3518x + 1.9143
R² = 0.7
VOC of Material
VOC of Coating
0
10
20
30
40
50
60
70
80
0
20
40
60
80
100
120

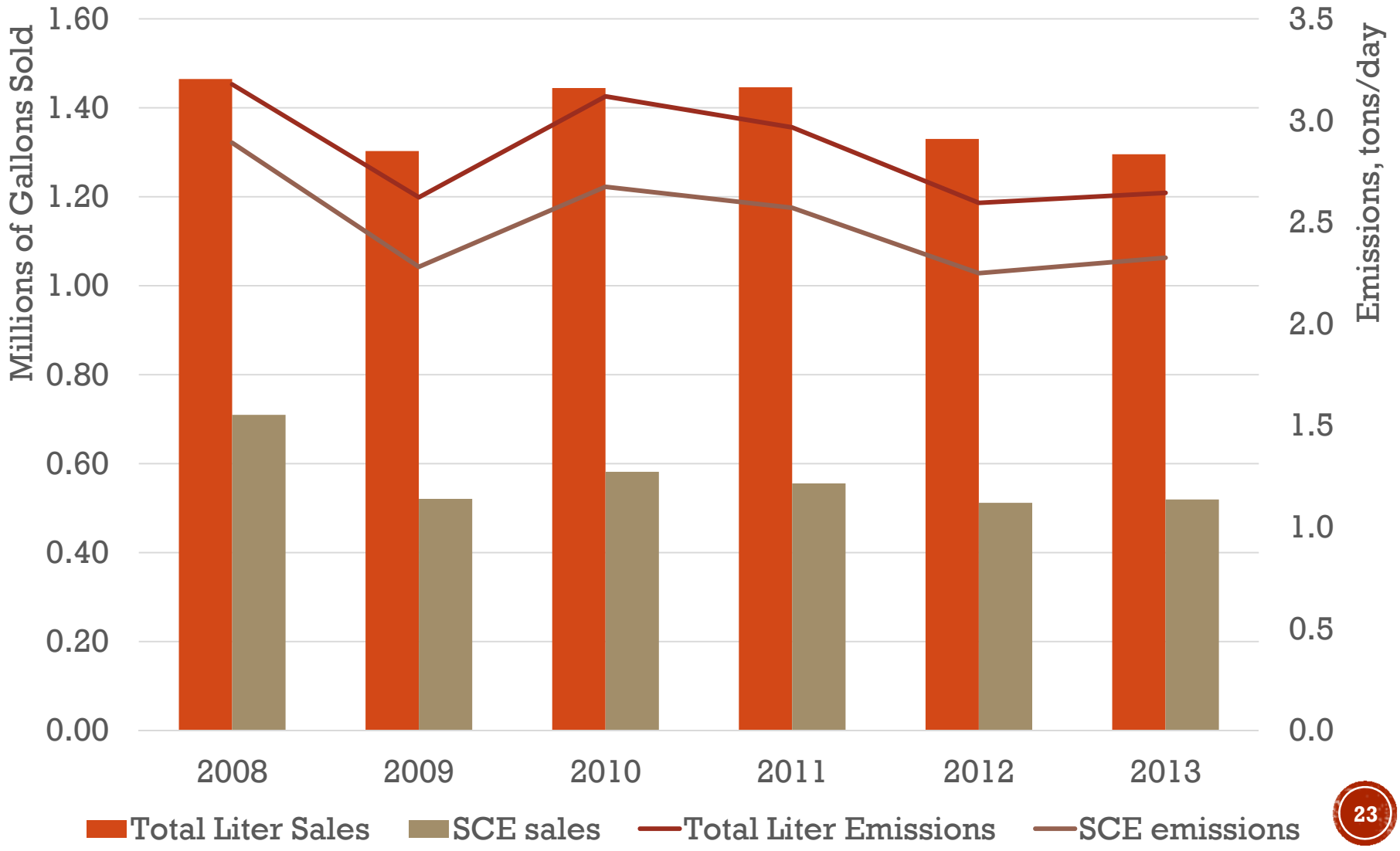
SMALL CONTAINER EXEMPTION (SCE)

Coating sold in one-liter or smaller containers above the VOC limit

SCE VERSUS NON-SCE

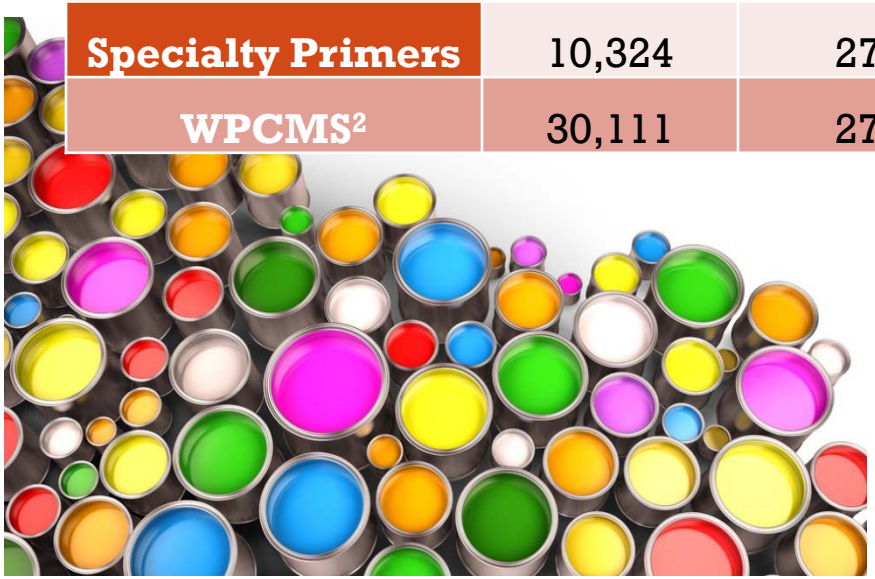


ALL COATINGS REPORTED IN LITER OR SCE



SCE SALES - 2013

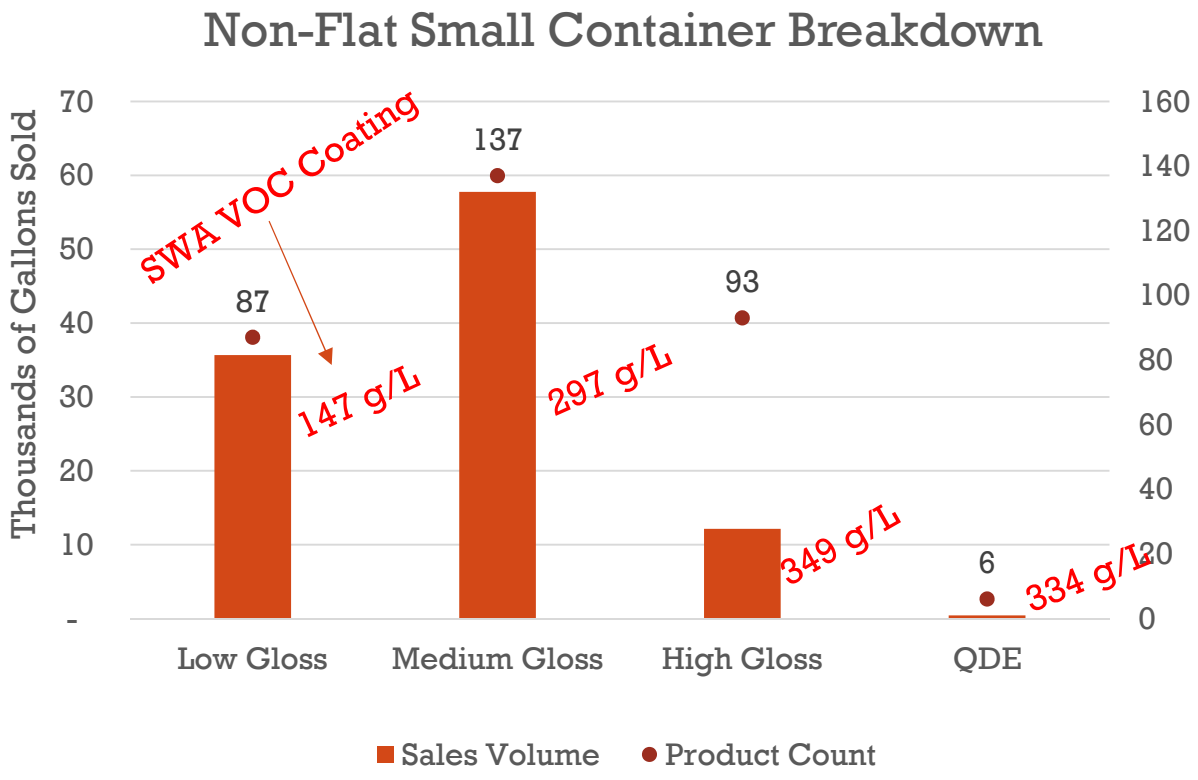
Category	Sales (gal)	# of products	Emissions (tpd)	SWA VOC of Coating (g/L)	SWA VOC of Material (g/L)[1]
RPC	157,714	279	0.74	408	-
Non-Flat	105,976	323	0.25	252	-
Stains, Interior[2]	97,842	568	0.59	524	665
PSU	69,228	71	0.36	453	708
Specialty Primers	10,324	27	0.04	319	-
WPCMS[2]	30,111	27	0.23	526	703



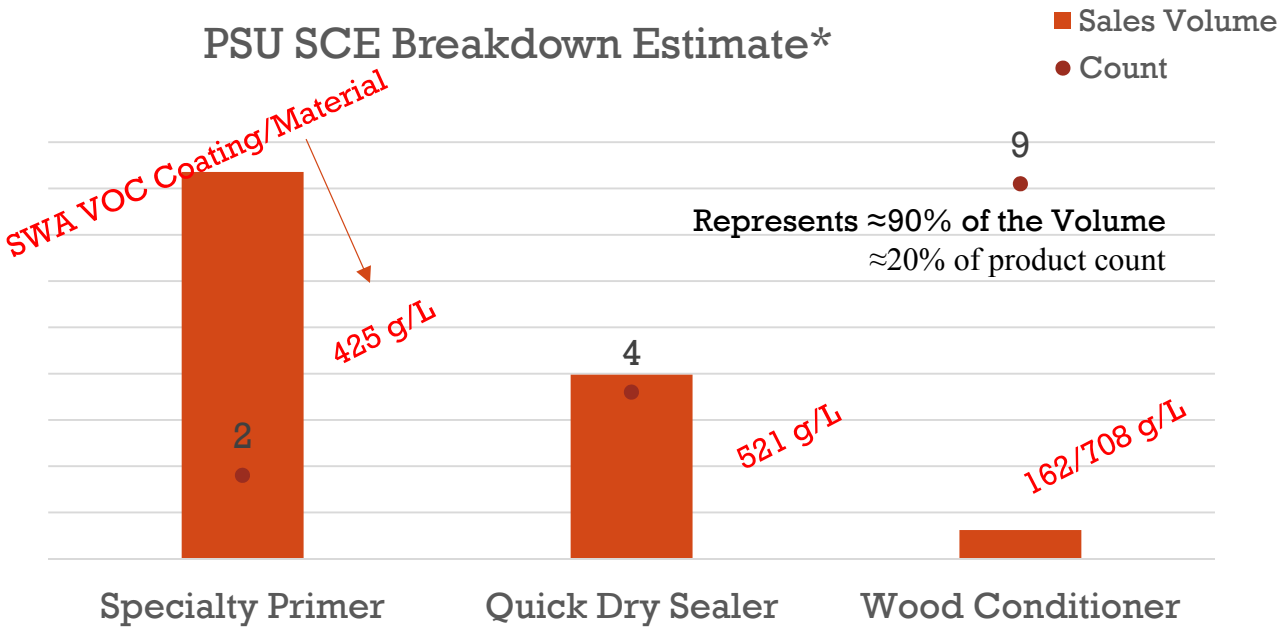
1. Only low solids coatings
2. Includes numerous low solids coatings sold over 120 g/L VOC of material limit

SCE SALES - 2013

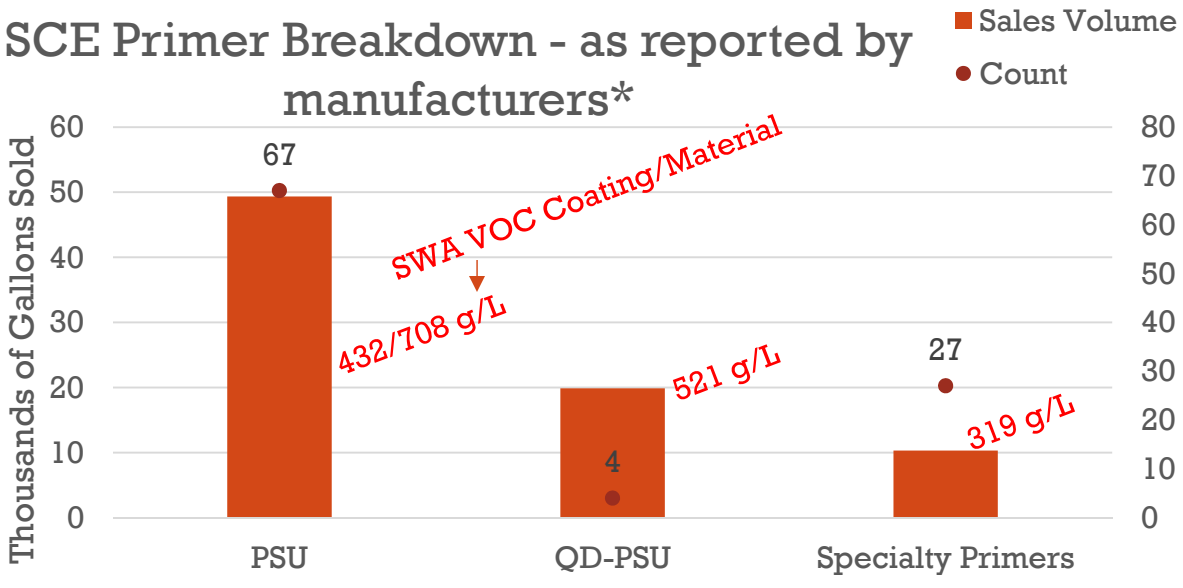
Category	Sales Volume (gal)		Emissions (tpd)	
	Dual & Exterior	Interior	Dual & Exterior	Interior
Non-Flat	37,828	68,148	0.08	0.17
PSU	60,626	8,602	0.30	0.06
RPC	155,084	2,629	0.72	0.01



SCE SALES - 2013



* Includes coatings reported as PSU and QD-PSU, breakdown based on product name. Does not include products categorized as specialty primers. Revised to include low solids coating sold under the SCE



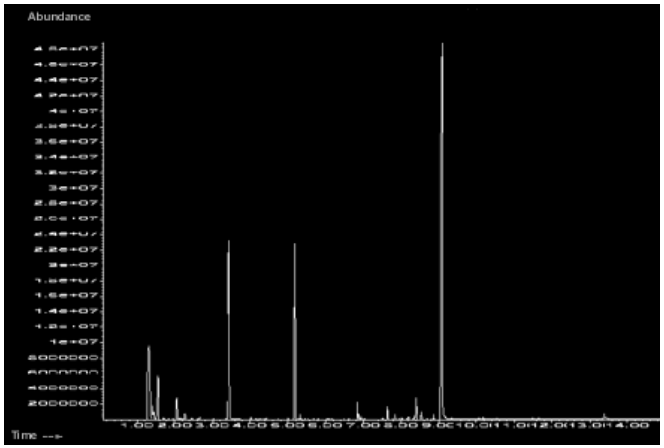
* Includes low solids coating sold under the SCE

OTHER CONCEPTS

TRANSFER EFFICIENCY

- Collaborate with manufacturer/ contractors to improve transfer efficiency
  - Establish a training program for contractors
  - Work with retailers who offer rental equipment
    - Phase out older, less efficient guns/tips
    - Offer the laser system to assist DYI end user
- Spray Gun Manufacturers – Air Assist versus Airless Guns
  - Assess product usage
  - Consider labor (including surface prep)and cost of paint
  - On site review and assessment
- Explore a potential SCAQMD incentive program (e.g. provide free gun tips, laser guidance system and/or discounted guns to enhance transfer efficiency)

VOC TEST METHODOLOGY



- Include SCAQMD Laboratory Method 313
- Change VOC metric to VOC of material
  - Ongoing discussions with U.S. EPA/CARB
- Need industry support to further analyze exclusion principle
- Considering Cal Poly approach:
  - Neat Compounds evaluation (analyte + MP in pan)
  - Spike a near-Zero VOC coating

DEFINITIONS

GLAZE

Staff's Initial Suggestion:

GLAZES, which are coatings or additives designed for ~~wet-in-wet~~ wet edge techniques used to create artistic effects, including but not limited to dirt, old age, smoke damage, simulated marble and wood grain finishes, decorative patterns, and color blending~~, and wet edge techniques~~.

Industry's Suggestion:

GLAZES, ~~which~~ are transparent or translucent pigmented coatings or additives to coatings, ~~designed for wet-in-wet techniques used~~ recommended for use on previously painted surfaces to create artistic effects, including, but not limited to: dirt, old age, smoke damage, simulated marble or wood grain finishes, decorative patterns, color blending, texture, or wet-edge blending techniques.

GLAZE

CARBs definition:
A glaze or textured coating used to create artistic effects, including, but not limited to: dirt, suede, old age, smoke damage, and simulated marble and wood grain;

BUILDING ENVELOPE COATINGS are fluid-applied air and water resistive coatings designed to prevent the unwanted movement of air and water through the conditioned and unconditioned environment of a building.

MOLD RELEASE COMPOUNDS are coatings designed for or applied to concrete to prevent freshly poured concrete from bonding to molds, mats or other tools used to create patterns on the surface.

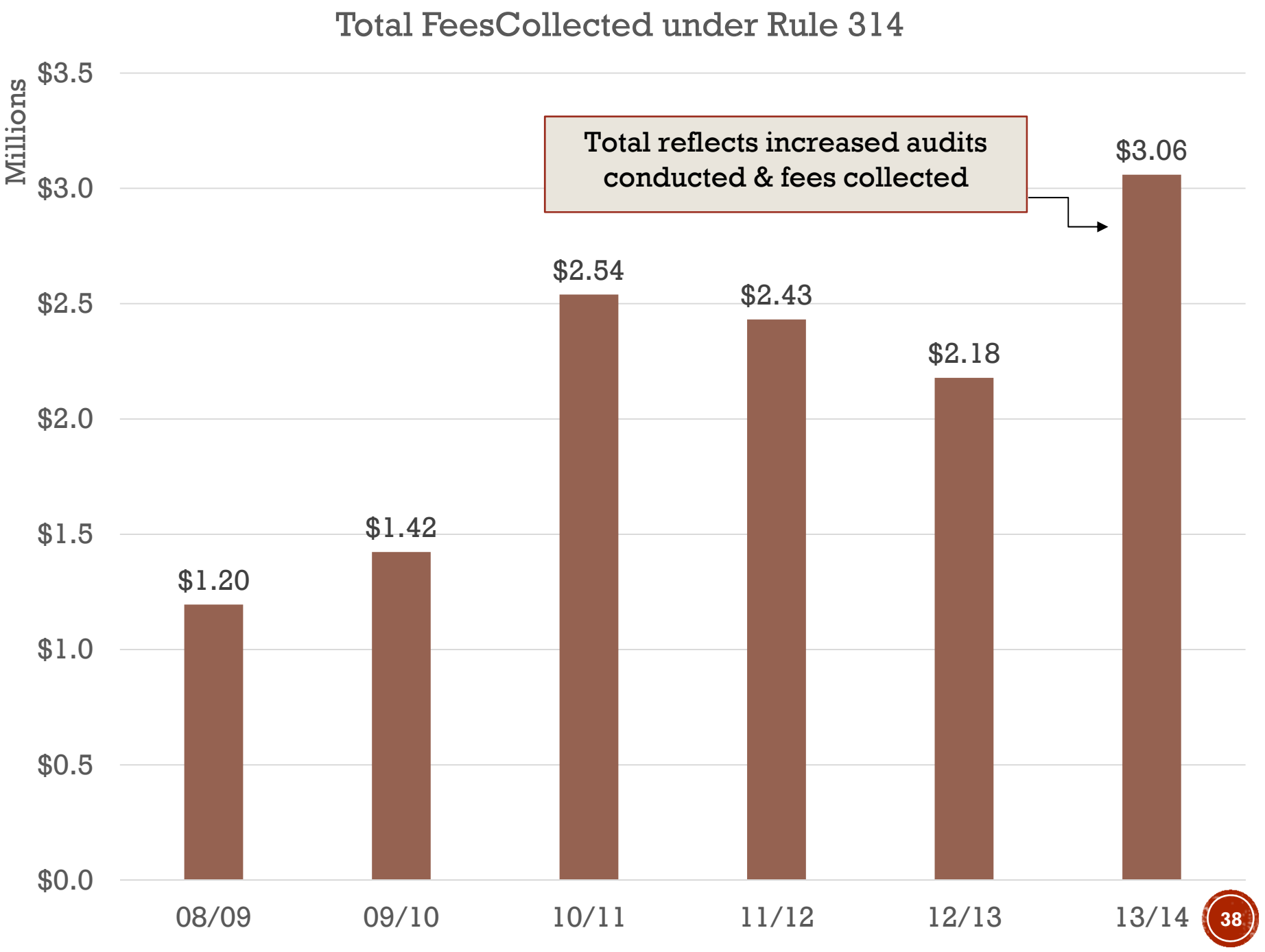
~~CLEAR~~ WOOD FINISHES are ~~clear and semi-transparent~~ coatings, including lacquers and varnishes, applied to wood substrates, including floors, desks and porches, to provide a ~~transparent or translucent~~ solid film.

REACTIVE PENETRATING SEALERS are clear or pigmented coatings labeled and formulated for application to above-grade concrete and masonry substrates to provide protection from water and waterborne contaminants, including, but not limited to, alkalis, acids, and salts.

Reactive Penetrating Sealers must meet the following criteria:

E. ~~Not reduce the water vapor transmission rate by more than **2 percent** after application on a concrete or masonry substrate. This performance must be verified on standardized test specimens, in accordance with ASTM E96/E96M.~~ 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."

FEES COLLECTED


Total FeesCollected under Rule 314
Millions
$3.5
$3.0
$2.5
$2.0
$1.5
$1.0
$0.5
$0.0
Total reflects increased audits conducted & fees collected
$1.20
$1.42
$2.54
$2.43
$2.18
$3.06
08/09
09/10
10/11
11/12
12/13
13/14

NEXT STEPS

- Schedule Next Meeting – late January/early February
  - Manufacturer Input on Amended Definitions
  - Draft Rule Language
  - Establish Direction and Timeline of the Amendment


↑ Parking