



# PAR1113 WORKING GROUP MEETING

October 30, 2014



# OVERVIEW

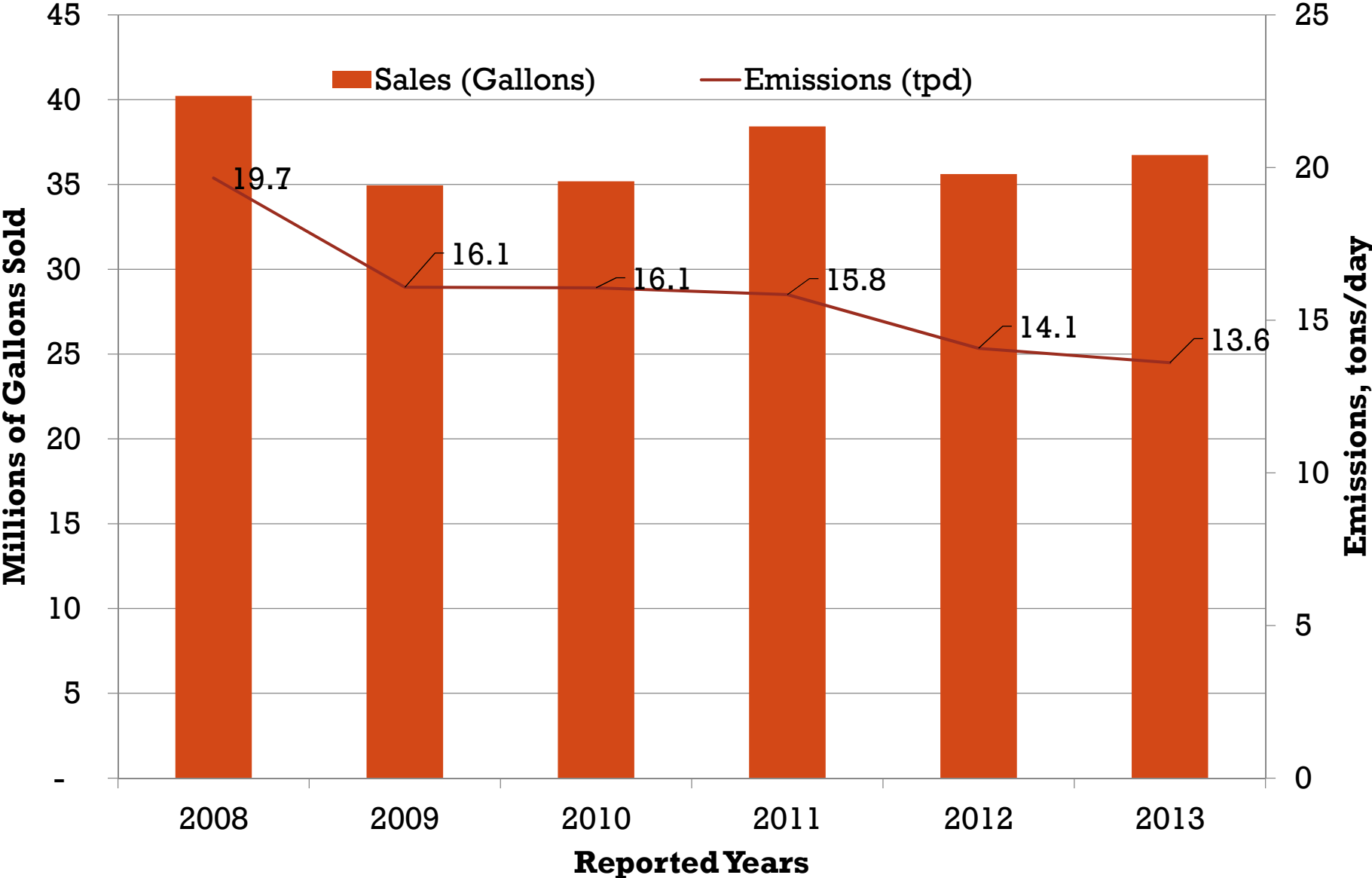
- Sales and Emissions Overview (2008 – 2012)
  - Flats/Non-Flats/PSU
  - Small Container Exemption
- Data Integrity
- Rule Clarification



# **SALES AND EMISSIONS TRENDS**

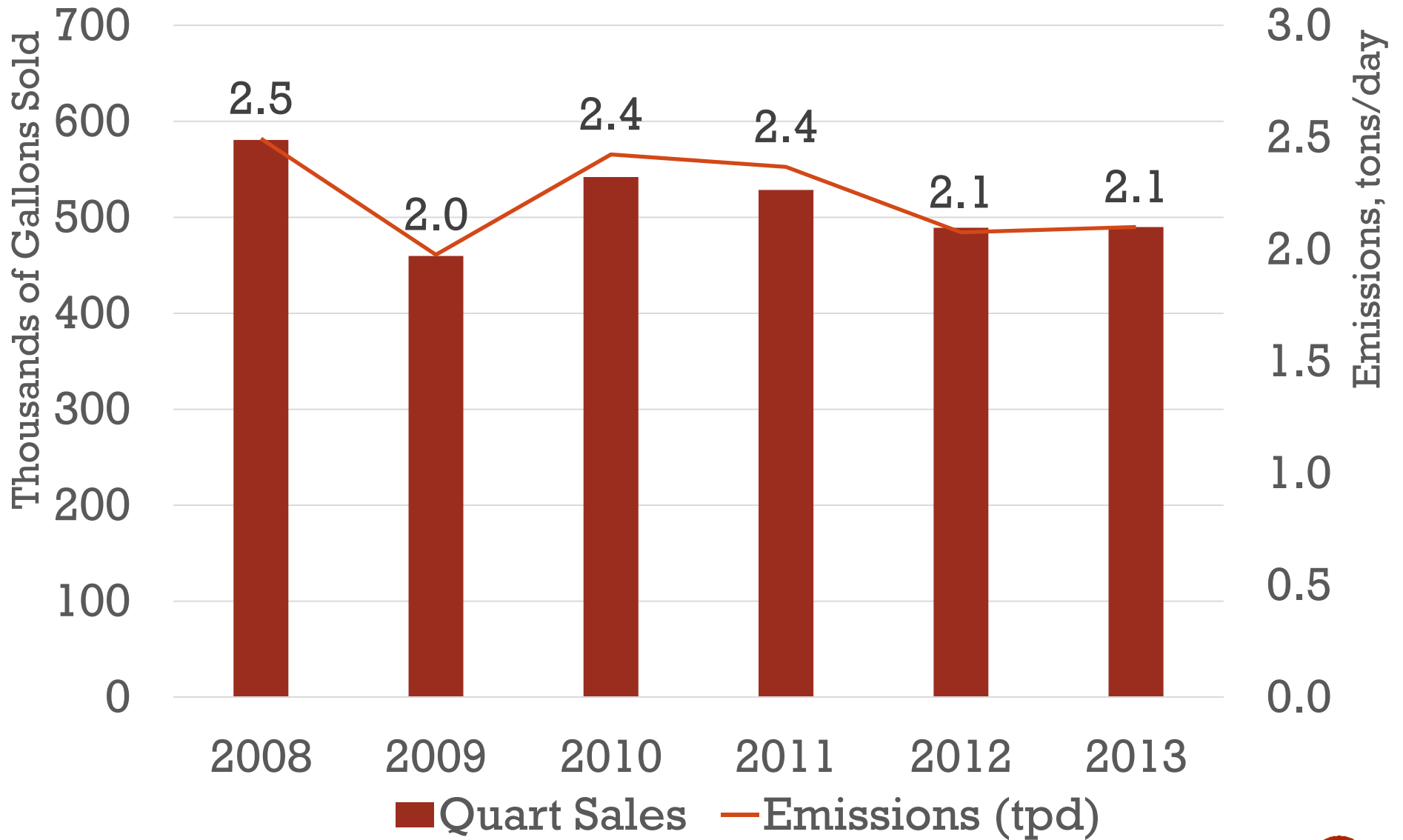
Summary of the Rule 314 data collected from 2008 – 2013

# OVERALL TOTAL SALES 2008 - 2013\*



\* 314 Data + estimated colorant emissions

# Small Container Sales & Emissions\*



\* Does not include colorant

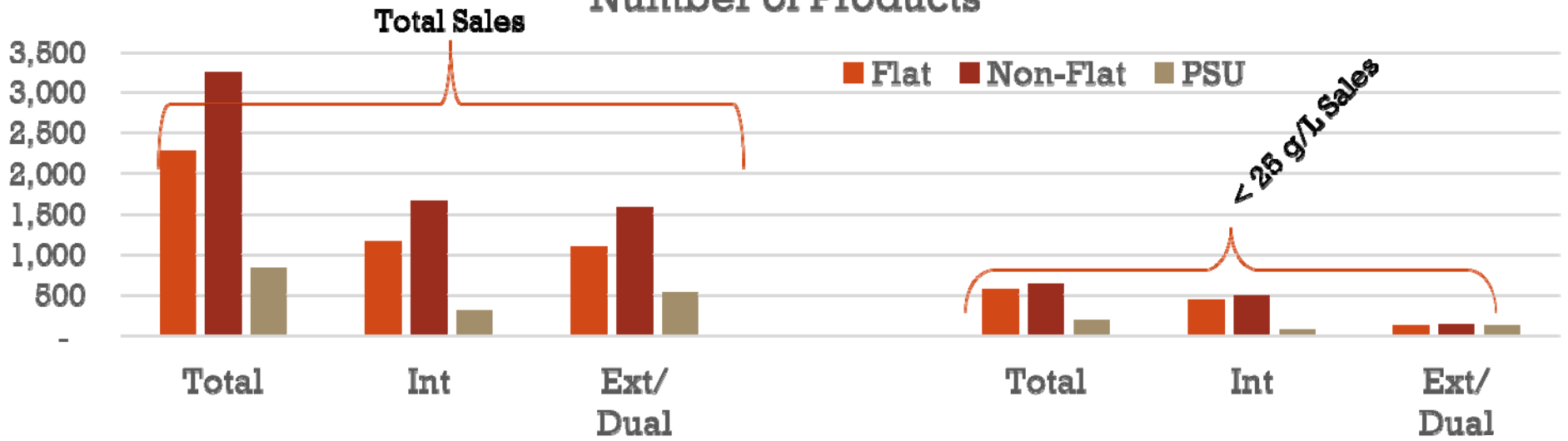
# **FLAT, NON-FLAT, & PSU STATISTICS: 2013 SALES**

# SALES WEIGHTED AVERAGE VOC

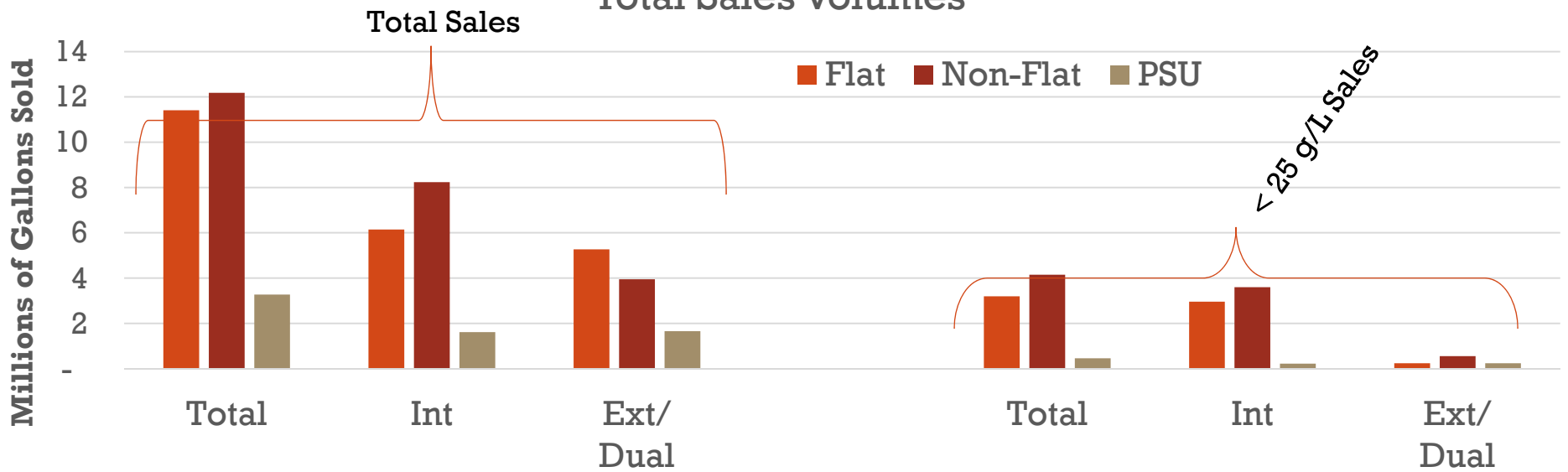
	<b>SWA VOC Int (g/L)</b>	<b>SWA VOC Ext (g/L)</b>	<b>SWA VOC Dual (g/L)</b>	<b>Total Gallons Affected*</b>	<b>Emission Reduction* (25/50g/L)</b>
<b>FLAT</b>	24	44	37	8,215,444	0.61
<b>NON-FLAT</b>	29	42	43	8,036,027	0.88
<b>PSU (25G/L) PSU (50 G/L)</b>	62	103	58	2,814,567/ 1,473,120	0.89/ 0.57

\* Everything above suggested limit (includes SCE)

## Number of Products



## Total Sales Volumes





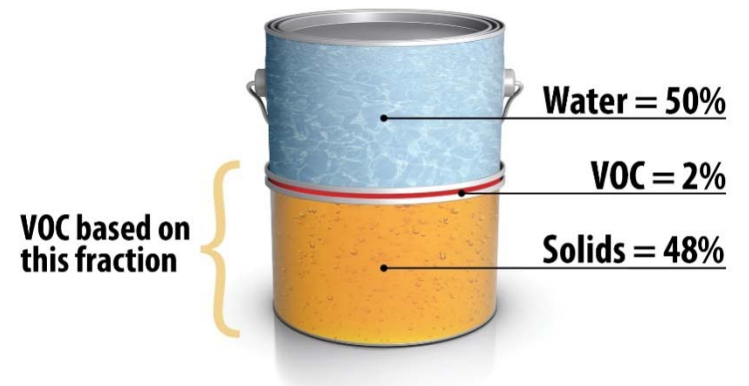
# 2013 SALES AND PRODUCT COUNT

## Number of Products

	All Products			<25 g/L		
	Total	Int	Ext/ Dual	Total	Int	Ext/ Dual
Flat	2,268	1,165	1,103	25%	19%	6%
Non-Flat	3,243	1,661	1,582	20%	15%	4%
PSU	838	306	532	23%	9%	15%

## Sales Volumes (gallons)

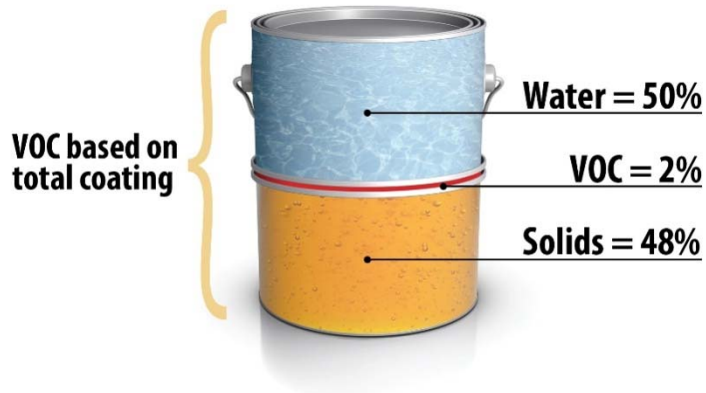
	All Products			<25 g/L		
	Total	Int	Ext/ Dual	Total	Int	Ext/ Dual
Flat	11,411,136	6,145,642	5,265,494	28%	26%	2%
Non-Flat	12,182,540	8,234,218	3,948,322	34%	30%	5%
PSU	3,271,648	1,615,106	1,656,542	14%	7%	7%



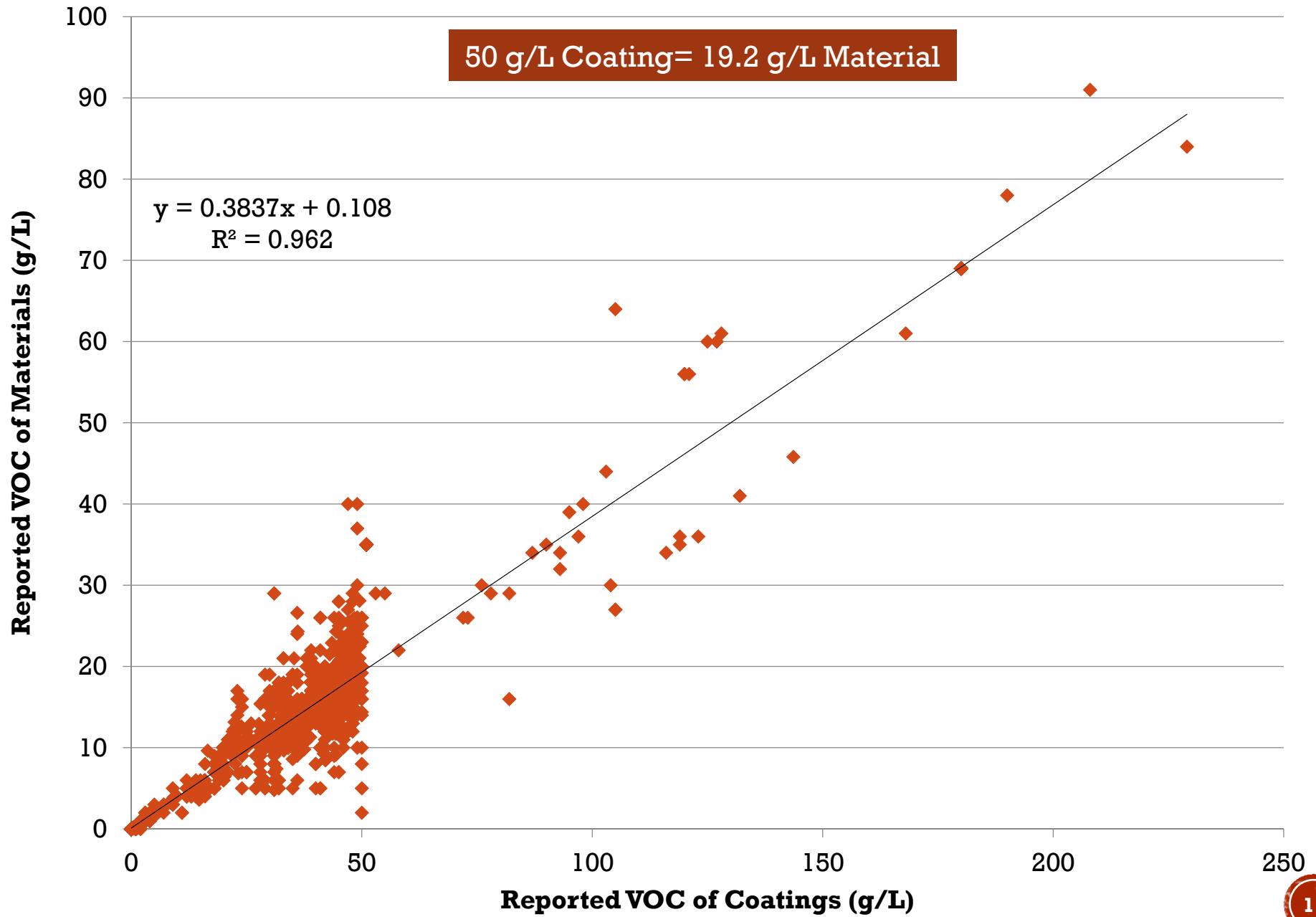
$$VOC_{coating} = \frac{(100\% - 48\% - 50\%)}{\left(\frac{100\%}{1.10 \text{ g/mL}} - \frac{50\%}{0.997 \text{ g/mL}}\right)} \times 1000 = 49 \text{ g/mL}$$

# VOC METRIC

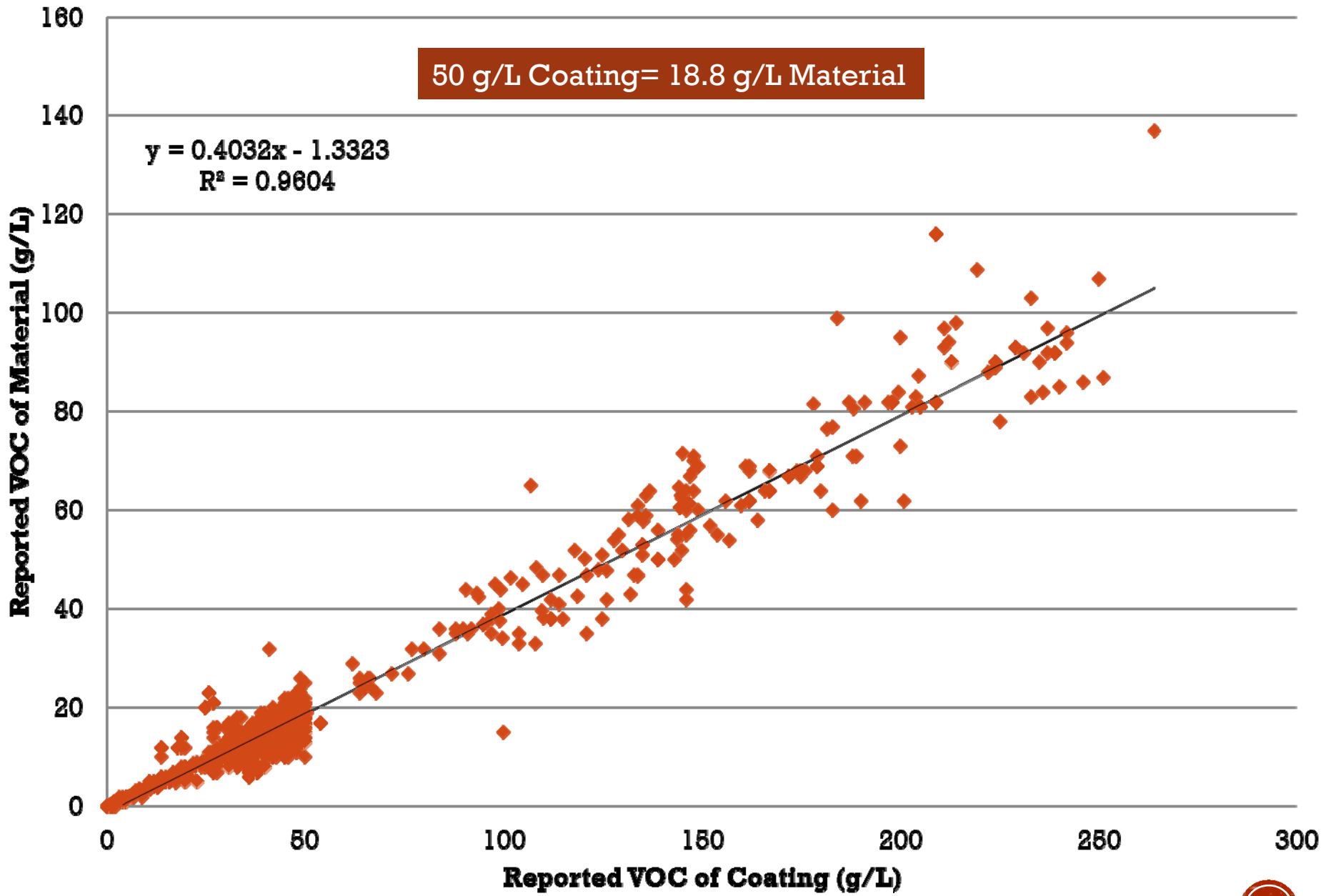
$$VOC_{material} = (100\% - 48\% - 50\%) \times 1.10 \text{ g/mL} \times 10 = 22 \text{ g/L}$$



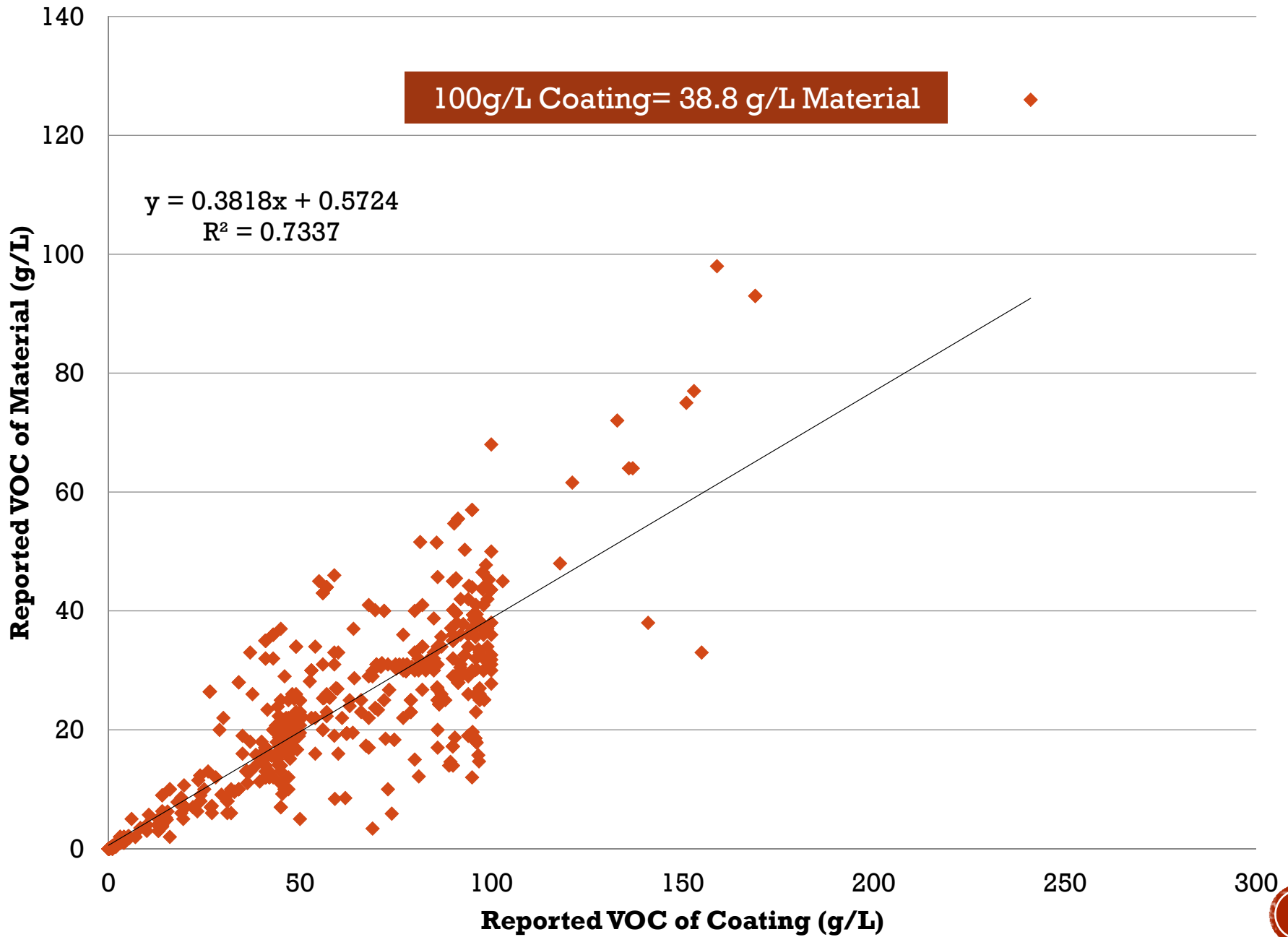
# 2013 Waterborne Flat Coatings Data (Revised)



# 2013 Waterborne Non-Flat Coatings Data (Revised)



# 2013 Waterborne Primer, Sealer, Undercoater Data (Revised)

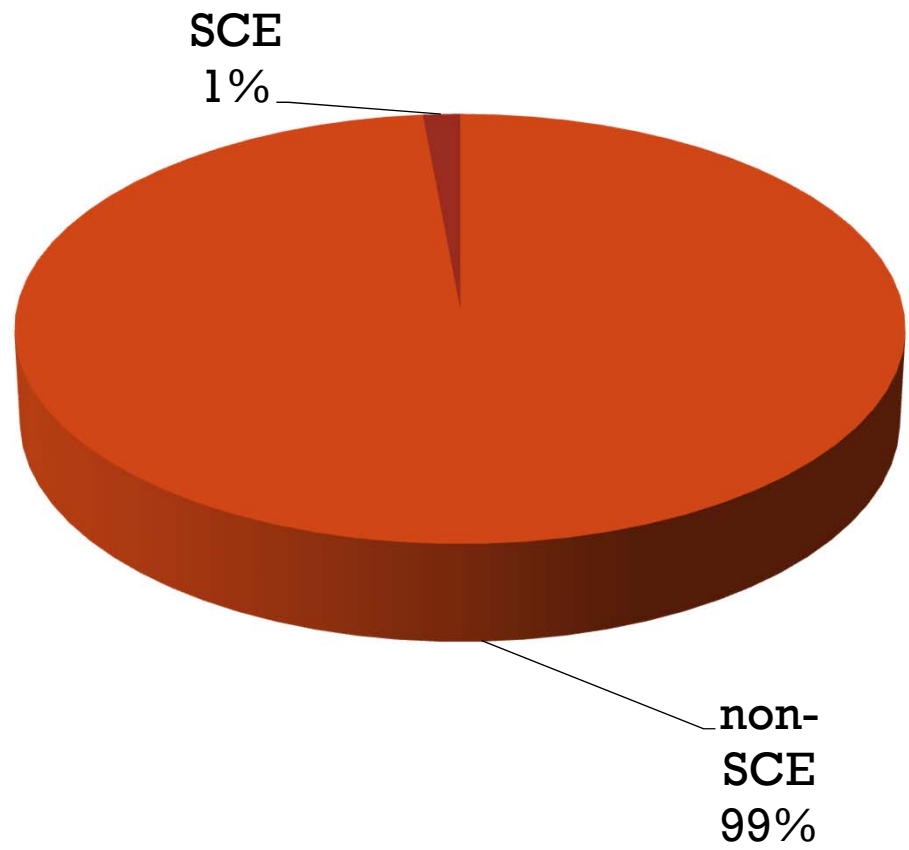


# **SMALL CONTAINER EXEMPTION (SCE)**

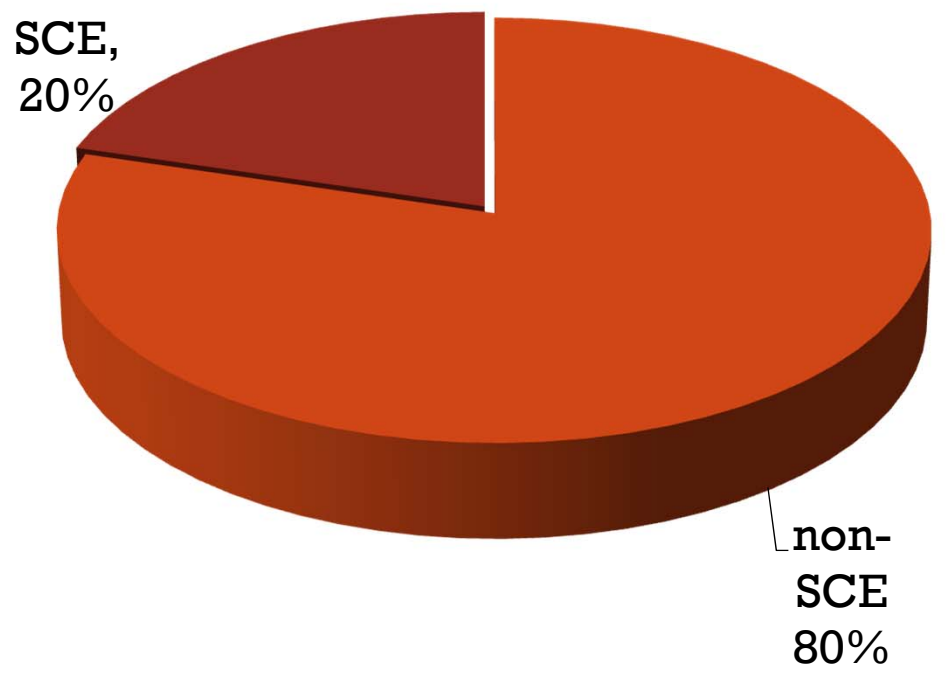
Coating sold in one-liter or smaller containers above the VOC limit

# SCE VERSUS NON-SCE

## Sales



## Emissions



# SCE SALES - 2013

Category	SCE Sales (gal)	SCE Emissions (tpd)	SCE SWA VOC (g/L)	Non-SCE Sales (gal)	Non-SCE SWA VOC (g/L)
RPC	157,714	0.74	407	174,008	81
Non-Flat	105,976	0.25	251	12,076,564	31
Stains, Interior*	97,842	0.59	520	102,936	108
PSU	69,228	0.36	439	3,202,420	43
WPCMS *	30,111	0.23	276	1,106,938	54

\* Includes numerous low solids coatings



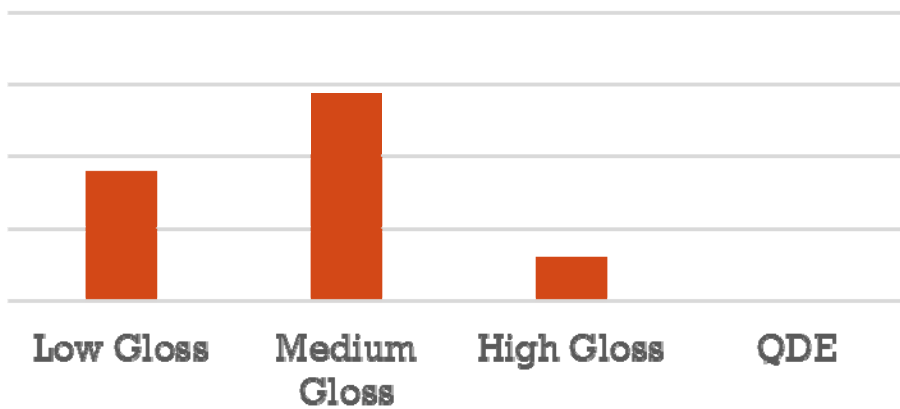


# SCE SALES - 2013

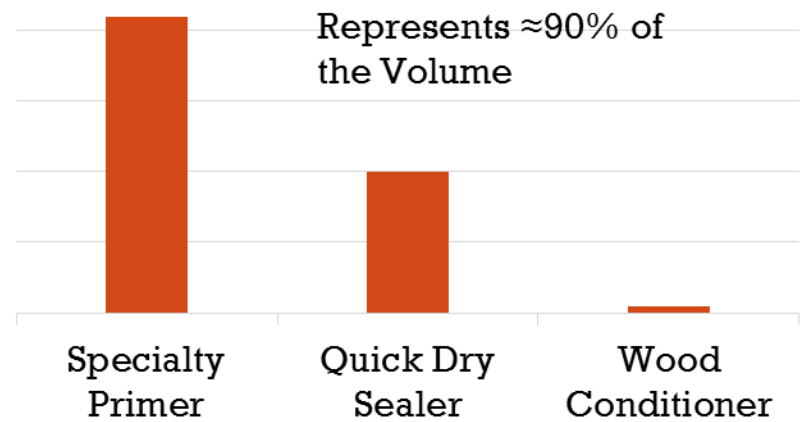


Category	Sales Volume (gal)		Emissions (tpd)	
	Dual & Exterior	Interior	Dual & Exterior	Interior
<b>Non-Flat</b>	37,828	68,148	0.08	0.17
<b>PSU</b>	60,626	8,602	0.30	0.06
<b>RPC</b>	155,084	2,629	0.72	0.01

**Non-Flat Small Container Breakdown**

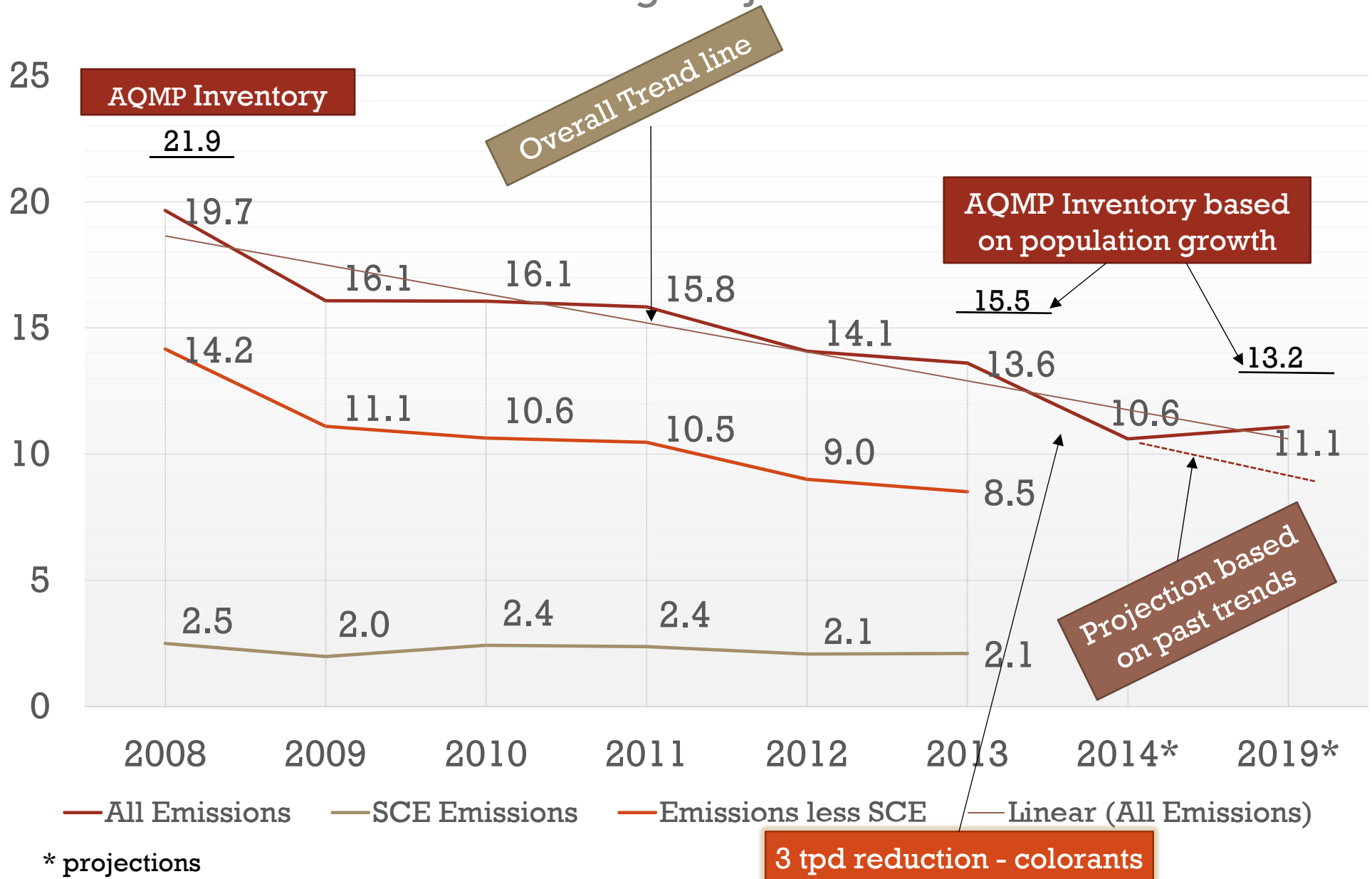


**PSU Small Container Breakdown Estimate**



# FUTURE EMISSIONS PROJECTIONS

# Rule 314 Emissions Summary (tons/day) Including Projections



**INITIAL CONCEPTS GOING  
FORWARD: ENSURING EMISSIONS TRENDS  
CONTINUE**

# RULE 314 DATA INTEGRITY

- Emissions inventory
  - Planning
  - SIP submittal
  - Modeling
- Audits
  - Increase # and frequency
- Rule amendments
  - Target categories for reductions
  - Sales Weighted Average VOC
  - Cost Impacts (sales volume)



# 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 DIY end user
- Work with spray gun manufacturers to make improvements to the gun (integrate the laser system)
- Explore a potential SCAQMD incentive program (e.g. provide free gun tips, laser guidance system and/or discounted guns to enhance transfer efficiency)

# INCREASE RULE 314 FEES

Cleaning the air that we breathe...

Welcome HEATHER FARR!

Wednesday, October 22, 2014

## Review Applications

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Submit the Rule 314

- Architectural Coatings  
Annual Quantity and  
Emissions Report.

- Revenue Neutral Approach
- Increase Emissions Fee to Incentivize the Sale of Lower-VOC Coatings
- Tiered Emission Fee Structure
  - Target higher-VOC products

# SCE RESTRICTIONS

- Revise exemptions for high volume categories & categories not using exemption
  - Further review of WPCMS/Interior Stains
- Set VOC ceiling limit
- Three year SCE allowance when a VOC limit is reduced
- Allow SCE for default category to address new/niche products
- Touch-up for factory applied coatings: allow shipment of 2 oz. containers to accompany pre-painted widgets (e.g. doors/windows)
- Potential Emission Reduction:  $\approx 2$  tons/day



# VOC REDUCTIONS

- Reduce VOC limits on high volume categories (25 g/L)
  - Flat
  - Non-Flat
  - PSU
- Potential Emission Reduction:  
≈ 2 tons/day



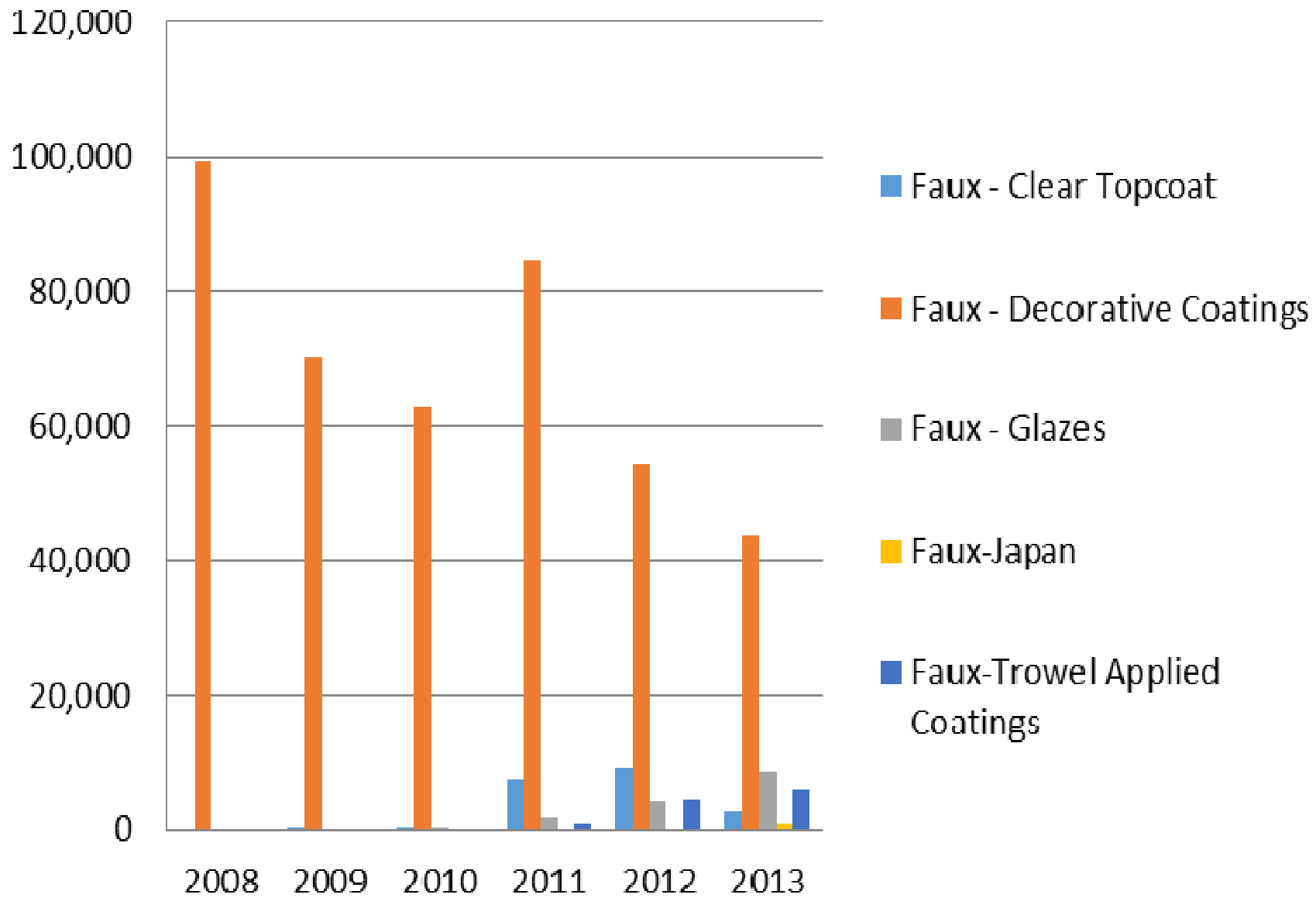
# OTHER POTENTIAL RULE AMENDMENTS

# PAR 1113 – CATEGORY CLARIFICATIONS

- Building Envelope/Foam Insulants
- Architectural Mold Release / Stamping Agents
  - Expand Definition of Form Release
- “Clear” Wood Finish → Wood Finish
  - Address *white* lacquers
- Reactive Penetrating Sealer
  - Reconsider 2% water vapor transmission rate requirement
- Faux Glazes
  - Revise Definition
  - Evaluate VOC Limits
  - Include Artistic Glaze and Architectural Glaze



# Faux Coating Sales



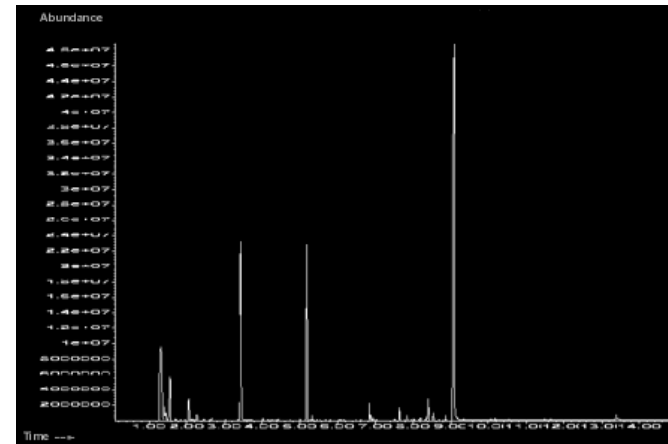
# PAR 1113 – FAUX GLAZE

- Remove wet-in-wet from definition
- Reduce VOC limit to 250
- Include ‘textured’ to harmonize with the SCM
  - Allow SCE to accommodate artistic glazes

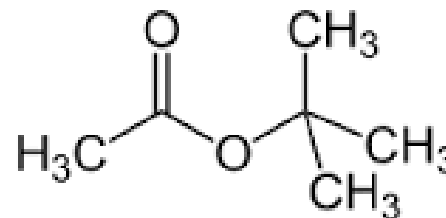
<b>Faux Category</b>	<b>SWA VOC Coating</b>	<b>Emissions (lb/day)</b>	<b>Total Sales (gallons)</b>
<b>Clear Topcoat</b>	119	2.5	2,601
<b>Decorative</b>	144	78.9	43,837
<b>Glaze</b>	290	27.2	8,749
<b>Japan</b>	381	6.7	768
<b>Trowel</b>	86	6.5	6,142

# VOC TEST METHODOLOGY

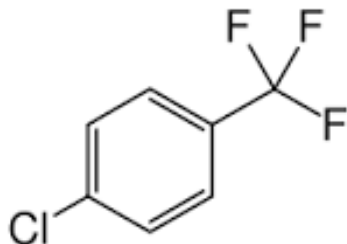
- Include SCAQMD Laboratory Method 313
  - Change VOC metric to VOC of material
    - Ongoing discussions with U.S. EPA/CARB
- Need industry support to further analyze exclusion principle



# EXEMPT COMPOUNDS



- OEHHA's final tBAc finding
  - tBAc approved for IM coatings only
  - Conduct survey of IM coating manufacturers
  - Potential tBAc phase out/VOC limit increase
- Potential toxicity determination for pCBtF
  - Conduct survey of solvent-based coating manufacturers
  - Potential pCBtF phase out/VOC limit increase for certain categories



# NEXT STEPS

- **Schedule Next Meeting - early December**
  - **Manufacturer Input on Amended Definitions**
  - **Draft Rule Language**
  - **Establish Direction and Timeline of the Amendment**



