

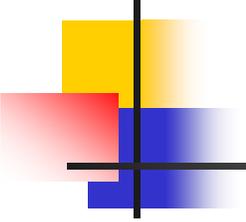
Proposed Amended Rule 1168 Adhesive and Sealant Applications

April 17, 2014

Working Group Meeting

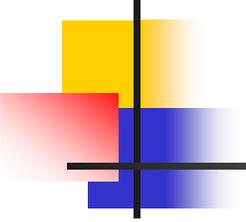


South Coast Air Quality Management District



Agenda

- Changes in Proposed Rule Language
 - Definitions
 - VOC Limits
 - Technology Assessment
 - Test Methods
- Emission Inventory and Reductions
- TBAC/DMC Status
- CEQA Status
- Rule Development Schedule



Definitions

- Removing minimum content from cyanoacrylates
- Including calculation method for aerosol products
 - Using material VOC content
 - Not including weight percent in VOC Limit table (Table 1)
- Including definition for Potable Water Architectural Sealant
- Revising Reactive Diluent/Product definition
 - Facilitate use with proposed test method for reactive materials
- Removing TBAC exemption from VOC definition

VOC Limits

SELECTED ADHESIVE CATEGORIES	CURRENT LIMIT	EFFECTIVE 1/1/2016	EFFECTIVE 1/1/2018
Carpet Pad	50 g/L	20 g/L	
Ceramic Tile	65 g/L	20 g/L	
Cove Base	50 g/L	20 g/L	
Dry Wall and Panel	50 g/L	20 g/L	
Indoor Flooring	50 g/L	20 g/L	
Multi-Purpose Construction	70 g/L	40 g/L	20 g/L
Outdoor Floor Covering	150 g/L	20 g/L	
Plastic Foams	50 g/L	20 g/L	
Reinforced Plastic Composite	250 g/L	200 g/L	
Rubber Floor	60 g/L	20 g/L	
Structural Glazing	100 g/L	40 g/L	
Structural Wood Member	140 g/L	50 g/L	
Subfloor	50 g/L	20 g/L	
VCT and Asphalt Tile	50 g/L	20 g/L	
Wood Flooring	100 g/L	50 g/L	20 g/L

- Numerous products compliant with proposed limits already in marketplace
- Additional time provided for final Multi-Purpose Construction and Wood Flooring limits

VOC Limits (Cont.)

SELECTED SEALANT CATEGORIES	CURRENT LIMITS	EFFECTIVE 1/1/2015	EFFECTIVE 1/1/2016	EFFECTIVE 1/1/2018
Clear, Paintable and Immediately Water-Resistant	250 g/L	380 g/L		50 g/L ¹
Foam	250 g/L	200 g/L		20 g/L ¹
Potable Water	250 g/L	100 g/L		
Roadway	250 g/L		50 g/L	
Other Architectural	250 g/L		50 g/L	

1. Technology Assessment for Clear, Paintable and Immediately Water-Resistant Sealants and Foam Sealants prior to final limit implementation, including potential sub-categorization

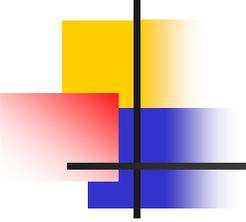
VOC Limits (Cont.)

SELECTED ROOFING CATEGORIES	CURRENT LIMIT	EFFECTIVE 1/1/2018
Single Ply Roof Membrane Adhesive	250 g/L	100 g/L ¹
Other Roof Adhesive	250 g/L	100 g/L ²
Single Ply Roof Membrane Sealant	450 g/L	100 g/L ³
Other Roof Sealant	300 g/L	100 g/L



1. Includes assessment of wall and parapet (vertical) adhesives
2. Includes assessment of ply adhesives
3. Includes assessment of waterproofing mastic

- All roofing categories to subject to Technology Assessment before final limits
- Other Roof Sealants include Clear, Paintable and Immediately Water-Resistant Roof Sealants
- Exempting DMC for roofing products



Technology Assessment

- Regular meetings at key intervals to evaluate progress
 - Research
 - Testing/certification
 - Commercialization
- Establish criteria to determine viability of products
 - Performance
 - Cost
 - Meteorological and Environmental impacts
- Joint report to SCAQMD Stationary Source Committee in 2017
 - Maintain limits as proposed
 - Rule amendment to consider one or more of the following:
 - Extend compliance deadlines
 - Alternative limits
 - Rescind limits

Test Methods

- Proposing CARB Method 310 for aerosols
 - Excluding LVP-VOC exemption
- Continuing to include SCAQMD Method 313
- Specifying products to be testing by Subpart PPPP Appendix A
 - Polyurethanes
 - Two component
 - Others?
- Working on revision to SCAQMD Method 316B
- Working on methodology for Foam Sealants



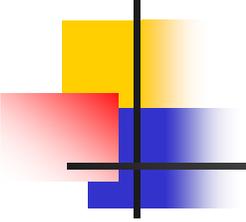
Emission Inventory and Reductions

Emission Inventory

Source	2008 ¹	2012 ¹	2012 (Survey)	2012 Projected ²
Area (t/d)	3.41	3.37	2.95	6.70
Point (t/d)	0.13	0.12	0.12	0.12
All	3.54	3.49	3.07	6.82
1. 2012 AQMP; 2. Includes Foam Sealants & under-reported products				

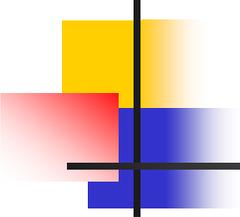
Emission Reductions

Category	Emission Reductions (tpd)
Waterborne architectural adhesives	0.4 to 0.8
Clear, Paintable, Immediately Water-Resistant Architectural Sealants	< 0.1
Foam Sealants	0.5 to 0.9
Other Roof Adhesives	0.5 to 0.9
Other Roof Sealants	1.0 to 2.0
Single Ply Roof Membrane Adhesives	< 0.1
Single Ply Roof Membrane Sealants	< 0.1
Overall	2.4 to 4.6

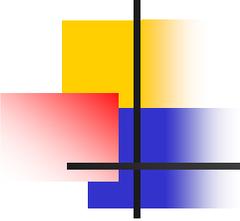


TBAC/DMC Exemption

- TBAC Status - OEHHA
 - Received reply from inquiry
 - Scientific Review Panel (SRP) process in 2014
 - Still considered a potential human carcinogen
 - TBAC exemption removed from current proposal
 - Will reconsider if SRP alters findings
- DMC Status
 - Continuing to propose VOC exemption for roofing use
 - Using OSHA PEL for worker risk; OEHHA REL for consumer risk



CEQA Status



Schedule

- Working Group Meetings Ongoing
- Stationary Source April 18, 2014
- Set Hearing June 6, 2014
- Public Hearing July 11, 2014