

Proposed Amended Rule 1168 Adhesive and Sealant Applications



Public Workshop and CEQA Scoping Meeting
December 18, 2013

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Agenda

- Rule Development Process
- Survey
- Proposed Amended Rule
- CEQA Process
- Estimated Emission Inventory and Reductions
- Socio-economic Impacts
- Tentative Schedule

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Background

- Rule adopted in 1989; last amended in 2005
- Applies to adhesives, adhesive primers, caulks, sealants and sealant primers
 - All uses excluding products regulated by CARB
- Small shops, area sources (e.g. architectural) and consumers – largest users
- Significant advances in technology over the past decade
 - High performance resins
 - Lower VOCs

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Rule Development Process

- Four working group meetings
 - Discussion of rule concepts
 - Several iterations of preliminary rule language
- Voluntary survey / Technology Review
 - Draft survey reviewed by working group
 - Limited survey response
 - Staff technology review
- Public Workshop (today)
 - Review proposed rule language
 - Opportunity for comments and questions
 - Written comments as follow-up
- Future working group / public meetings
- Draft Proposed Rule and Staff Report released 30 days prior to Public Hearing
 - Draft CEQA document
 - Draft Socio-Economic Assessment

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Voluntary Survey

- 17 responses – 18 companies

Source	Volume (MM gal/year)	Emissions (tpd)
CPR*	0.88	0.34
Non-CPR*	0.62	0.41
Total	1.50	0.75

*Consumer Product Regulation

- 2012 AQMP emission inventory: 3.49 tpd
- Survey well below projected estimates
 - Limited response
 - Multiple categories with no volume reported
 - Concerns about using data for categories with less than 5 products or 5,000 gallons reported
- Notices to Comply issued

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Proposed Amended Rule

- Purpose and Applicability
 - Clarify that purpose of the rule is to reduce VOC and toxic air contaminants
 - Applies to manufacture, sales and use of adhesives, adhesive primers, caulks, sealants and sealant primers
- Definitions
 - Deleted definitions that restated dictionary definition or provided no additional insight
 - Revised definitions to be more consistent with OTC
 - Clarify that primers must be film-forming and include promoters, bonding primers, etc.
 - VOC definition revised to allow limited exemption for DMC and TBAC

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Proposed Amended Rule - TBAC/DMC

- Request from industry to classify TBAC/DMC as exempt compounds

For the purpose of this rule, tertiary butyl acetate (TBAC) and dimethyl carbonate (DMC) shall be considered exempt as a VOC only for purposes of VOC emission limitations and VOC content requirements when used in Roofing regulated products. TBAC shall be VOC for purposes of all recordkeeping, emission reporting, photochemical dispersion modeling, and inventory requirements which apply to VOCs.

- Considering limited exemption for exterior, roofing products
 - Associated VOC limit reductions provide environmental benefit
 - Limited to outdoor activity
- Potential risk exposure analysis required under CEQA

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Proposed Amended Rule – VOC Limits

- Survey data used where available
- Product review conducted
 - Marketing literature
 - Online literature
 - Store shelves
- VOC limits become effective January 1, 2016
 - Except Foam Sealants (1/1/2015 and 1/1/2017) and Rubber Vulcanization Adhesives (1/1/2019)
- Most restrictive limit applies
- Any regulated product without a specific category limit is subject to appropriate “Other” limit

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VOC Content Limits - Architectural Adhesives

Category – Architectural Adhesives	Current Limit (g/L)	Proposed Limit (g/L)
Carpet Pad Adhesive	50	20
Ceramic Tile Adhesive	65	20
Cove Base Adhesive	50	20
Dry Wall and Panel Adhesive	50	20
Indoor Flooring Adhesive	50	20
Multipurpose Construction Adhesive	70	20
Other Roof Adhesive	250	100
Outdoor Floor Covering Adhesive	150	20
Rubber Floor Adhesive	60	20
Single Ply Roof Membrane Adhesive	250	100
Structural Glazing Adhesive	100	40
Structural Wood Member Adhesive	140	20
Subfloor Adhesive	50	20
VCT and Asphalt Tile Adhesive	50	20
Wood Flooring Adhesive	100	20

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VOC Content Limits - Miscellaneous Adhesives

Category	Current Limit (g/L)	Proposed Limit (g/L)
Rubber Vulcanization Adhesive*	850	250**
Top and Trim Adhesive	250	540
Waterproof Resorcinol Glue	250	170

*Replaces Sheet-Applied Rubber Lining Operation

** Effective 1/1/2019

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VOC Content Limits - Substrate Specific Adhesives

Category	Current Limit (g/L)	Proposed Limit (g/L)
Plastic Foams	50	20
Reinforced Plastic Composite	250	200

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VOC Content Limits - Sealants

Category	Current Limit (g/L)	Proposed Limit (g/L)
All Other Architectural	250	50
Foam Sealant	None	200*/20**
Other Roof	300	50
Roadway	250	50
Single-Ply Roof Membrane	450	100

*Effective 1/1/2015
 ** Effective 1/1/2017

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VOC Content Limits - Sealant Primer

Category	Current Limit (g/L)	Proposed Limit (g/L)
Architectural Porous	775	250

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VOC Content Limits - Under Consideration

- **Architectural foam-to-foam adhesives**
Insufficient evidence to provide exception
- **Pressure sensitive adhesive primers**
Under review
- **Reservoir cover repair adhesives**
Will remain under 55 gal/yr exemption
- **Specialty shoe manufacturing**
Insufficient evidence to provide exception

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Proposed Amended Rule

- **Container labeling**
 - VOC Content and manufacture date
 - Does not apply to consumer products or products sold in containers ≤ 2 oz (excluding packaging)
- **Product storage**
 - Containers of products with excess VOC content may not be stored on premises
 - Does not apply to products sold and shipped for use outside SCAQMD or facilities with control equipment

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Proposed Amended Rule - Reporting

- **Annual report of regulated products sold into SCAQMD**
- **Product name, VOC content and volume sold**
 - VOC content shall be reported as calculated or tested
 - Only products with VOC contents of 20 g/L or less may be reported as “less than or equal to”
 - VOC content determination data must be provided upon request

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Proposed Amended Rule – Prohibition of Sales and Use

- Prohibits use of Group II exempt solvents except volatile methyl siloxanes (VMS)
- Sell through and use through included
 - Effective dates should accommodate typical shelf life
- Prohibition of sales does not apply to:
 - Products subject to Consumer Products Regulation
 - Manufacturers or suppliers who inform distributors in writing that affected product(s) are not to be sold in SCAQMD

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Proposed Amended Rule - Exemptions

- 55 gallon per year exemption
 - Two major use groups identified
 - Top & Trim
 - Rubber vulcanization adhesive/primer
 - Incorporate higher VOC limits to address technology limitations & narrow exemption
- Eliminate complete exemption for consumer products used in manufacturing operations
- Limit exemption for aerosol products to 16 oz/day
- Provide exemptions for low-VOC content products as incentives

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CEQA Scoping Session

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Estimated Emission Inventory and Reductions

- Based on 2012 AQMP estimates, survey data and marketing reports (Foam Sealants)
- Estimates to be updated following collection of additional sales data and stakeholder comments

Emission Source	Current Emissions (tons per day)	Emission Reductions (tons per day)
AER	0.1	None
Area Sources	3.4	0.7
Subtotal	3.5	0.7
Foam Sealants	4.7	3.7
Total	8.2	4.4

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Socio-Economic and Cost-Effectiveness

- Socio-Economic report to be released prior to Public Hearing
- Cost-Effectiveness and Incremental Cost-Effectiveness to be presented at later public meeting

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Tentative Schedule

- | | |
|---|--------------|
| ▪ Comments Due | Jan 16, 2014 |
| ▪ Working Group meetings | As Necessary |
| ▪ Public Consultation Meeting | TBD |
| ▪ Report to Stationary Source Committee | TBD |
| ▪ Public Hearing | Jun 6, 2014 |

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Environmental Analysis for PAR 1168

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Public Workshop/CEQA Scoping Session
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CEQA Applicability



- Purpose of CEQA
 - Analyze and disclose potential effects from a project
 - Identify mitigation and alternatives if warranted
- Activities undertaken by a Public Agency [CEQA Guidelines §15002(b)]
- The whole of an action that has reasonably foreseeable direct or indirect physical changes to the environment [CEQA Guidelines §15378]
- If not exempt, complete an initial study (IS)
 - Preliminary review of 17 environmental topic areas
 - Determine potential significance impacts
 - Circulate along with Notice of Preparation (NOP)

NOP/IS



- Two environmental topics determined to have potentially significant impacts:
 - Air Quality
 - Hazards and Hazardous Materials
- 33-day public review and comment period from December 13, 2013 to January 14, 2014

Toxic Impact Analysis^{v1}



- Rule 1401 toxic factors for conventional solvents
- OEHHA and ARB factors for tBAC and DMC
- Off-site health risk according to Rule 1401 methodology
- On-site (“occupational exposure”) toxic impact analysis
 - Will rely on compliance with the OSHA PELs for non-cancer impacts
 - Will rely on a toxicity and mass weighted comparison (mass x cancer potency factor) for cancer impacts.

EA Development Process



- Preparing Environmental Assessment (EA)
 - Determining significance of impacts
 - Developing project alternatives
 - Will respond to comment letters received on NOP/IS in the EA
 - Will circulate EA for 45-day public review and comment period

Schedule



- Release Draft EA late March/early April 2014
- Respond to comment letters received on Draft EA
- Prepare the Final EA
- Tentative June 2014 Public Hearing