

Proposed Amendments to the Suggested Control Measure for Architectural Coatings

*Board Meeting
October 26, 2007
Sacramento, CA*



TODAY'S PRESENTATION

- **BACKGROUND**
- **PROPOSED AMENDMENTS TO THE SUGGESTED CONTROL MEASURE**
- **IMPACTS OF PROPOSED AMENDMENTS**
- **SUMMARY & RECOMMENDATION**

BACKGROUND



What are Architectural Coatings?

- **Coatings applied to stationary structures and their appurtenances**
- **Includes paints, stains, industrial maintenance coatings, traffic coatings, etc.**
- **Does not include aerosol paints**



Why Are Architectural Coatings Regulated?

- **Architectural coatings contain VOCs that evaporate when they are applied**
- **95 TPD of VOC Emissions in 2004**
- **8% of VOC emissions from stationary & areawide sources in CA**
- **4% of VOC emissions from all sources in CA**

Architectural Coating Trends

Since 1975 -

- **Water-based coatings have increased to 88% of total sales**
- **VOC emissions per gallon have decreased 63%**
- **VOC emissions per gallon would decrease 73% with proposed SCM**

Suggested Control Measure (SCM)

- **SCMs are model rules**
- **SCM Benefits:**
 - **Minimize district resources for rule development**
 - **Promote statewide uniformity**
- **The Board approved the current SCM in June 2000.**

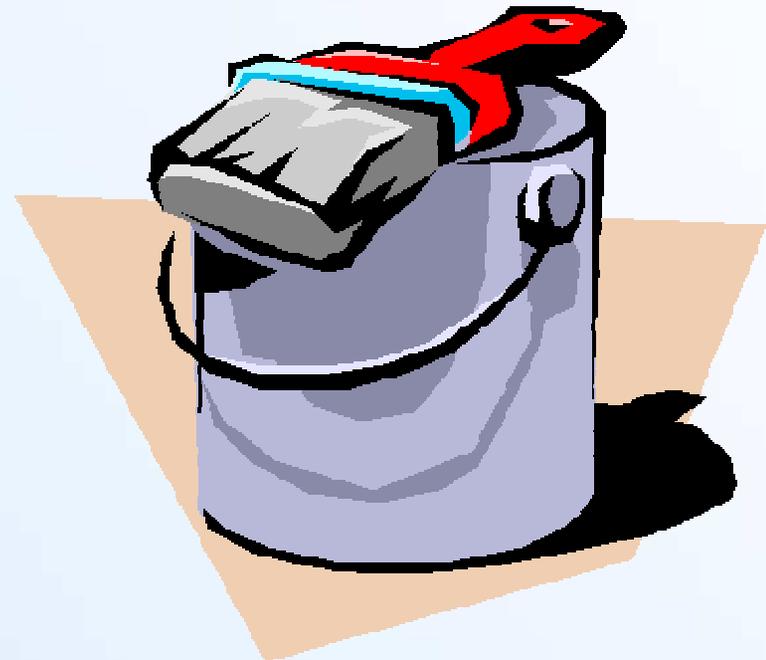
Who Regulates Architectural Coatings?

- **Districts have the primary role in regulating architectural coatings**
- **Rules in effect in CA:**
 - **SCM-based**
 - **SCAQMD**
 - **U.S. EPA**

ARB 2000 Architectural Coating SCM

- **20 districts have adopted**
- **VOC limits effective in 2003 & 2004**
- **Other jurisdictions adopting**
- **U.S. EPA modifying national rule to adopt similar limits**

PROPOSED AMENDMENTS TO THE SUGGESTED CONTROL MEASURE



Why Are We Proposing Amendments?

- **Help districts reduce emissions and meet SIP commitments outside of SCAQMD**
- **Improve category definitions**
- **Assist districts with fewer resources**
- **Promote statewide uniformity**



SCM Development Process

- **Conducted three public workshops**
- **Completed two comprehensive surveys**
- **Performed technology assessments**
- **Hosted meetings and conference calls with districts, U.S. EPA, and industry**

What revisions are proposed?

- **Lower VOC limits for 19 categories**
- **Improve categorization**
- **Modify definitions**
- **Modify reporting requirements**



Categories With Lower Proposed VOC Limits

- Flat
- Nonflat
- Nonflat High Gloss
- Aluminum Roof
- Bituminous Roof
- Concrete/Masonry Sealer
- Driveway Sealer
- Dry Fog
- Floor
- Mastic Texture
- Primer, Sealer, Undercoater
- Reactive Penetrating Sealer
- Roof
- Rust Preventative
- Specialty PSU
- Traffic Marking
- Waterproofing Membrane
- Wood Coating
- Zinc Rich Primer

Proposed Effective Dates for Lower Limits

	Effective Date of VOC limits
Most Categories	January 1, 2010
Rust Preventative & Specialty PSU	January 1, 2012

Actual effective dates depend on district adoption

Categories Proposed for Elimination

Old Category

Replacement Category

Antenna	IM, Rust Prev
Antifouling	Marine Coating
Fire Retardant	Flat, Nonflat, etc.
Flow	IM
Quick Dry Enamel	Nonflat High Gloss
Quick Dry PSU	PSU, SPSU
Swimming Pool Repair/Maint	Swimming Pool
Temperature Indicator Safety	IM, High Temp

Categories Proposed for Elimination (contd.)

<i>Old Category</i>	<i>New Category</i>
Clear Brushing Lacquer	Wood Coating
Lacquer	Wood Coating
Sanding Sealer	Wood Coating
Varnish	Wood Coating
Waterproofing Sealer	Concrete/Masonry Sealer, Wood Coating
Waterproofing Concrete/ Masonry Sealer	Concrete/Masonry Sealer, Reactive Penetrating Sealer, Stone Consolidant

Proposed New Categories

- **Aluminum Roof**
- **Basement Specialty**
- **Concrete/Masonry Sealer**
- **Driveway Sealer**
- **Reactive Penetrating Sealer**
- **Stone Consolidant**
- **Tub and Tile Refinish**
- **Waterproofing Membrane**
- **Wood Coatings**
- **Zinc-Rich Primer**

Modified Definitions

- **Bituminous Roof Primer**
- **Concrete Curing Compd.**
- **Faux Finishing**
- **Fire Resistive**
- **Graphic Arts**
- **Industrial Maintenance**
- **Low Solids**
- **Metallic Pigmented**
- **Multi-Color**
- **Recycled**
- **Shellac**
- **Stain**
- **Swimming Pool**



Technical Basis for Proposal

- **Survey data**
- **Complying marketshare**
- **Test data**
- **Technical articles**
- **Product literature**
- **Manufacturer information**



Other Factors We Considered

- **District SIP commitments**
- **Enforceability**
- **District resources**
- **Climate conditions**
- **Need for flexibility options**
- **Feasibility of reactivity-based limits**

Changes to Original Proposal

- **We are proposing to delete Table 2 “Most Restrictive Limit Exceptions for Specialty Coatings”**
- **We are proposing minor revisions to Section 1.1. “Applicability” and Section 5.1 “VOC Content Limits”**
- **We are proposing minor revisions to Section 6.1 “Container Labeling Requirements”**

IMPACTS OF THE PROPOSED AMENDMENTS



What are the expected impacts?

- **15 TPD of VOC emission reductions statewide (excluding the SCAQMD)**
- **28% reduction of VOC emissions**
- **No adverse environmental impact**
- **Cost Effectiveness: \$1.12 per pound VOC reduced**

District SIP Commitments

	SIP Commitment (tpd)	SCM Reductions (tpd)
San Joaquin APCD	2.0	2.7
5 Districts in Sacramento Nonattainment Area	1.0	1.7

Future Plans

ARB staff will:

- **Conduct technology assessments for categories with lower limits**
- **Investigate potential for lower limits**
- **Evaluate the feasibility of reactivity-based limits**
- **Monitor research**
- **Conduct another comprehensive survey**

SUMMARY & RECOMMENDATION



Summary

- **Achieves 15 tons per day VOC emission reductions outside SCAQMD**
- **Exceeds the goals for district SIP commitments**
- **Meets needs of large and small districts**
- **Meets cost effectiveness & technological feasibility criteria**

Recommendation

- **Approve the proposed amendments to the Suggested Control Measure with suggested changes**
- **Forward to the districts and assist in adoption**

