

VOC Reactivity Technology Forum and Roundtable Discussion

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Architectural Coatings

- Regulated for 30 years
- Significant VOC mass emission reductions
- 80% of market – waterborne
- 50% of emissions from solvent-based coatings
- Manufacturers complying with most stringent South Coast Limits
- Further need for emission reductions
 - Additional VOC Mass reduction
 - Reactivity-based approach

VOC Mass Approach

Approach	Strength/Weakness
Raw material technological advancements	<ul style="list-style-type: none">■ Proven approach■ Costly Reformulation for Small Volume■ Long Development & Testing
Exempt Solvents	<ul style="list-style-type: none">■ Retention of existing resins■ Limited Utility
Multi-Component 100% Solids Systems	<ul style="list-style-type: none">■ No Emissions■ Stringent Surface Preparation■ Challenging Application

Reactivity Based Approach

Approach	Strength	Weakness
MIR Approach for Solvent Replacement	<ul style="list-style-type: none">■ Greater Ozone Reduction Possible?■ Focus on highest-emitting VOCs■ Possible greater and more cost-effective reformulation options	<ul style="list-style-type: none">■ Batch to batch variation could result in ozone impacts■ Manufacturers will need to provide detailed formulation data■ Low VOC mass limits have resulted in lower reactivity coatings■ Consideration for HAPs and Secondary Organic Aerosol■ Would include exempt solvents■ Detailed Compliance Testing