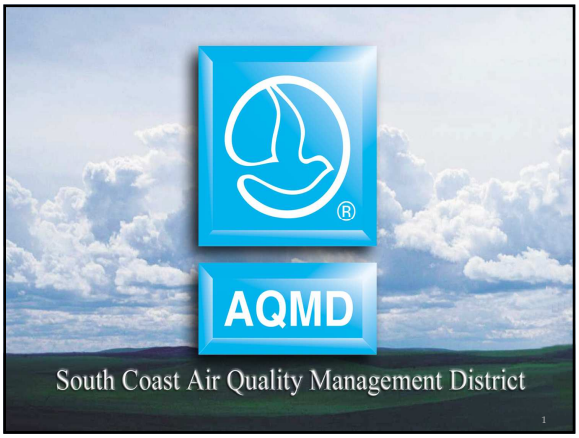

RULE 1113 –ARCHITECTURAL COATINGS

VOC Test Methodology Working Group Meeting

November 18, 2010
3:00 – 4:00 PM

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VOC TEST METHODOLOGY

- EPA Method 24/AQMD Method 304 loses precision as VOC of coating approaches zero.
- ASTM adopted GC method based on work performed at Cal Poly SLO sponsored by CARB.
- The AQMD laboratory and industry has switched to a direct gas chromatographic (GC) measurement.
- Endpoint marker – surrogate definition of a VOC.

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VOC TEST METHODOLOGY

- Not proposing to include GC Method at this time
- Revise and seek EPA approval of AQMD Method 313, including an endpoint marker
- Continue to meet with VOC Test Methodology Working Group

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VOC TEST METHODOLOGY

Comment

- Concerns with the implication on the definition of the VOC by switching to GC method.

Response

- This is a critical aspect of the VOC Test Methodology and staff looks forward to an open dialogue on the issue of the VOC definition.
- Based on internal data, GC results tend to be lower than Method 24

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AQMD Laboratory Data: Method 24 versus GC Method

Coating Type	Method 24 g/L Material	GC g/L Material
Clear Concrete Sealer	80	71
Concrete Curing Compound	27	16
Flat Coating	8	2
Flat Coating	2	1
Flat Varnish	94	90
Interior Latex Flat	18	1
Interior Latex Flat	20	2
Interior Latex Flat	4	3
Interior Semi Gloss	33	26
Non-Flat Coating	80	66
Primer, Sealer, & Undercoater	63	45
Varnish	124	86
Waterproofing Concrete Sealer	38	12

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AQMD Laboratory Data: Compounds the Elute after Methyl Palmitate

- Butyl Phthalate
- Benzyl Phthalate

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VOC TEST METHODOLOGY

Comment

- VOC endpoint should not be determined by boiling point of marker compound. Thermogravimetric Analysis (TGA) is the most sound approach.

Response

- Staff is open to discussions and additional studies on the end point and interested in any data that can be presented.
- Currently conducting evaporation studies.

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VOC TEST METHODOLOGY

- Test Method for Diverse Coatings Regulated by Rule 1113:
  - Multi-component Coatings
    - Waterborne
    - Solvent based
  - Non-film Forming (oily) Coatings
  - Solvent Based Coatings
  - Low VOC Waterborne Coatings
    - Water Analysis by Karl Fischer or Subtraction

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QUESTIONS AND COMMENTS

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Contacts

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