Public Workshop
Proposed Amendments to 74.2
Architectural Coatings
September 28, 2017

Ventura County
Air Pollution
Control District
Presentation Overview

• Air Quality (Ozone), California Clean Air Act
• Legislative Authority & Rule Background
• Proposed Coating VOC Limits
• Other Proposed Amendments
• Rust Preventative Coatings
• Emission reductions and costs
• 2-amino-2-methyl-1-propanol (AMP) as exempt VOC?
• Summary
Legislative Authority

• HSC Section 40914
  – All feasible measures.

• This proposal identified as feasible measure based:
  – Complying coatings already being sold in Ventura County.

• Control Measure R-333-2017
  – 2016 Air Quality Management Plan
Rule Background

• Reduces VOC emissions from the solvents in architectural coatings.
• Reasons for this proposal
  – Advances in coating technology
  – Need for VOC emission reductions to reach ozone standard
  – Based on work done by South Coast AQMD Rule 1113
  – SCAQMD removed averaging of VOC limits = stand-alone limits
  – New test methods developed by SCAQMD - Gas Chromatography
• Working with ARB and other Air Districts
Proposed VOC Limits

- **SCAQMD Limits except for Recycled Coating Category**
- **Includes New Coating Categories:**
  - Building Envelope, Concrete Curing for Bridges/Roads, Concrete Masonry Sealers, Concrete Surface Retarders, Sacrificial Anti-Graffiti Coatings and Tile/Stone Sealers
- **Most significant changes to VOC limits:**
  - Nonflats at 50 g/l; Floor Coatings at 50 g/l; Industrial Maint at 100 g/l; Metallic Pigment at 150 g/l; Al Roofing at 100 g/l; Rust Preventative at 100 g/l; Exterior Stains at 100 g/l; Waterproofing Sealers at 100 g/l
- **New VOC limits for colorants at 50 g/l**
  - Except for Solvent Based Industrial Maintenance (600 g/l)
- **No change to small container (1 liter) exemption**
  - This exemption will not apply to colorants.

Ventura County Air Pollution Control District
Other Proposed Rule Amendments

• Add new VOC Content test methods
  – SCAQMD Method 313 and ASTM 6886 – gas chromatography
  – Current round-robin testing
  – Coating manufacturers may continue to use formulation data.
• Clarify the term “offer for sale” to specifically prohibit the shipping into the county of noncomplying coatings.
• Coating categorization and Most Restrictive VOC limit now matches SCAQMD Rule 1113.
• Includes 3 year Sell-Through Period for coatings manufactured prior to the effective date to allow for inventory depletion (does not apply to current VOC limits categories).
Rust Preventative Coatings

- Significant Reformulations during the previous decade to waterborne and exempt solvent coatings. In the South Coast AQMD,
  - In year 2000, only 4% of products & 1% of the sales volume < 100 g/l
  - In year 2014, 20% of the products and 47% of the sales volume < 100 g/l
  - In year 2014, over 50% of the sales volume > 100 g/l sold in small containers.
  - Basis for the 2016 revision to SCAQMD Rule 1113 to phase out Small Container Exemption – not being proposed in Ventura County at this time.
- Since Ventura County part of So Cal Coating Distribution Network, we are already seeing these 100 g/l compliant coatings in gallon containers.
ROC Emission Reductions and Cost-Effectiveness

- ROC emission reductions estimated at 0.4 tons per day or about 150 tons per year.
- Cost-effectiveness ranges from $1 to $5 per pound of ROC reduced (waterborne to exempt solvent reformulations).
- No coating manufacturers in the county.
- Coatings already reformulated to meet SCAQMD Rule 1113.
- Complying coatings already available.
- Retention of small container exemption provides some regulatory relief for DIYers, for small jobs, and unique applications.
2-Amino-2-methy-1-propanol (AMP)

- Excluded compound from EPA VOC definition in 2014:
  - 40 CFR 51.100(s)
- EPA evaluated likelihood of risk to human health.
- Several air districts automatically accept EPA definition:
  - Antelope Valley, El Dorado, Mojave, Monterey, SLO, and Yolo.
- AMP is a strong base and forms salts with acids.
- UL Environmental Chamber Study – Latex Paint
  - Assume 0.56% AMP by weight in the paint formula
  - Only 2.7% by weight of AMP emitted into chamber.
  - Peak Concentration of $349\mu g/m^3 < 990\mu g/m^3$ Interim Acute REL
- FDA allows use in cosmetics subject to conditions.
- Amend Rule 2, Definitions: Exempt Organic Compounds
- TBAC is currently listed as an Exempt Organic Compound.
Summary

• Significant ROC reductions at 150 tons/year
• Required All Feasible Measure by state law for non-attainment areas
• Required by 2016 Air Quality Management Plan
• Based on successful implementation in South Coast AQMD based on current VOC Limits
• Sunset of averaging provision in SCAQMD Rule 1113 made VOC limits as stand-alone limits.
• Considering AMP as Exempt VOC (Rule 2)
Rule is premature; should wait for ARB SCM.
- Ventura County has been adopting SCAQMD rules for long time.
- As Neighboring District, already seeing AQMD coatings in stores.
- Largest Emission Reduction since 2010 (3 times last rule adoption)
- Working with ARB and other California Air Districts

Requested emission reductions by coating category.
- 100 g/l IM limit not feasible without TBAC Exemption.
- High Solids IM Coatings difficult and expensive to apply.
- Retain existing exemption from most restrictive limit provisions.