

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



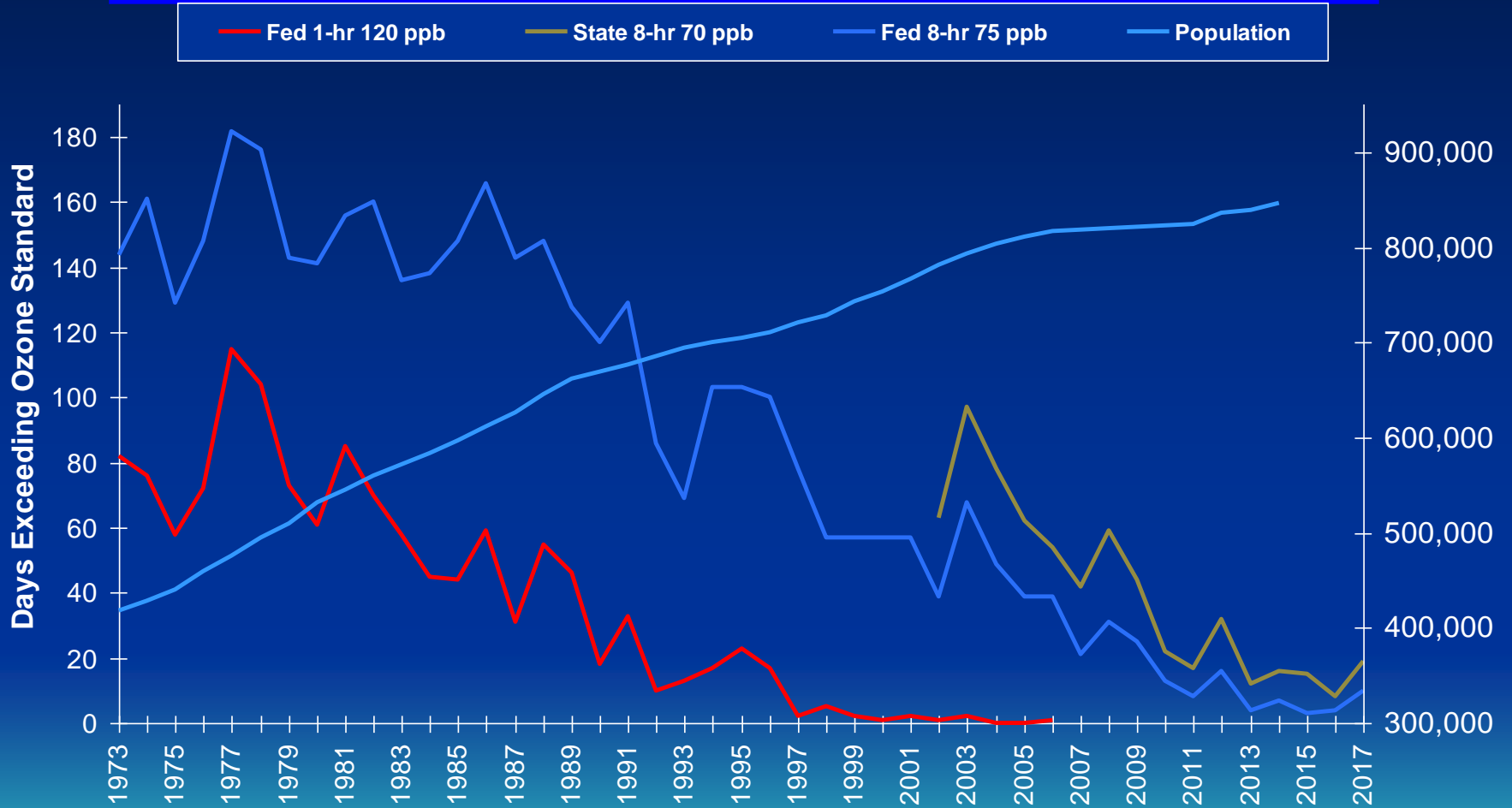
Ventura County
Air Pollution
Control District

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



Days Over Ambient Ozone Standards – Ventura County



Legislative Authority

- HSC Section 40914
 - All feasible measures.
- **This proposal identified as feasible measure based:**
 - Implementation in SCAQMD Rule 1113 (VOC limits effective in 2007 with averaging provision phased out 2015).
 - 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.**
- **Adopted in 1979, and revised 1985, 1989, 2000, and 2007**
- **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; AI 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 .



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 > 100g/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 $349\mu\text{g}/\text{m}^3 < 990\mu\text{g}/\text{m}^3$ 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)**



Comments (Tnemec Company)

- **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.**

