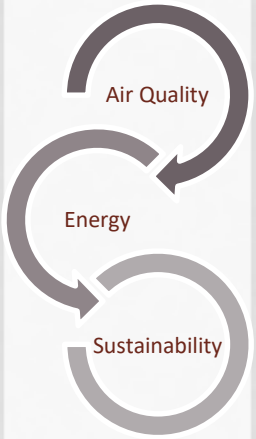
STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF AIR QUALITY

AIR QUALITY, ENERGY, AND SUSTAINABILITY

POTENTIAL REVISIONS TO N.J.A.C. 7:27-23 ARCHITECTURAL COATINGS

SEPTEMBER 6, 2019



ARCHITECTURAL COATINGS

The Department is seeking input on proposal of new rule amendments based on the Ozone Transport Commission (OTC) model rule for Architectural Coatings.

PURPOSE OF RULE

- Consumer Products and Architectural Coatings represent the largest source of volatile organic compound (VOC) emissions in the State's air emission inventory, compared to mobile, industrial and commercial sources.
- VOCs are precursors to ozone formation and secondary fine particulate formation.
- New Jersey is in nonattainment for the National Ozone Ambient Air Quality Standards (NAAQS) for Ozone.

OTC MODEL RULES

- New Jersey is one of 13 northeast states and DC that are part of the Ozone Transport Region (OTR)
- New Jersey works with the Ozone Transport Commission (OTC) and other states to develop model rules and guidelines for states to follow to reduce ozone pollution.
- The OTC has developed two phases of architectural coatings model rules and guidelines, based on California rules.
- These model rules go through a stakeholder process, review and comment at a regional and national level.

UNIFORMITY

- The OTC strives for uniformity with California and uniformity among its states to the extent practical or feasible for each state and the OTC.
- New Jersey recognizes that Stakeholders have consistently expressed the importance of uniformity when it comes to rules that regulate the manufacture of products sold in multiple states.

ARCHITECTURAL COATINGS

- Architectural Coatings include, but are not limited to:
  - paints
  - varnishes
  - stains
  - traffic coatings
  - industrial maintenance coatings.

ARCHITECTURAL COATINGS

- An "architectural coating" is a coating that is applied in the field to a stationary source, and not in a factory setting where VOCs can be controlled by some other control technology.

ARCHITECTURAL COATINGS

- An "Industrial maintenance coating" is a category within the definition of architectural coating and means a high performance coating that is formulated for application to substrates exposed to extreme environmental conditions (bridges, dams, tunnels, etc….)

EXISTING RULES

- The existing New Jersey product rules control the emissions of VOCs from Architectural Coatings by setting manufacturing limits on the VOC content of products sold in the state for use in the state.

- The existing OTC and New Jersey rules are based on California product rules. California has adopted many phases of these rules since the 80's.

- New Jersey has been adopting product rules since 1989.

ARCHITECTURAL COATINGS PROPOSAL

- The proposed rules would revise VOC limits for several existing categories of products and add new categories of products for regulation.
  - There are 54 existing categories in New Jersey's existing architectural coatings rules.
  - New Jersey proposes to add 12 new specialty categories, lower the VOC limits for 12 categories and eliminate 16 specialty categories.
- Anticipated effective date of the VOC limits would be 6 months to 1 year after the effective date of the rule adoption.
  - These new limits are already effective in California.
  - Please provided feedback on timeframe necessary to comply with the rule.

EXISTING ARCHITECTURAL COATINGS CATEGORIES

Flat Coatings
Nonflat Coatings
Nonflat – High Gloss Coatings
Antenna Coatings
Antifouling Coatings
Bituminous Roof Coatings
Bituminous Roof Primers
Bond Breakers
Calcimine Recoaters
Clear Brushing Lacquers
Concrete Curing Compounds
Concrete Surface Retarders
Conversion Varnish
Conversion Varnishes
Dry Fog Coatings
Faux Finishing Coatings
Fire-Resistive Coatings
Fire-Retardant Coatings clear
Fire-Retardant Coatings opaque
Floor Coatings
Flow Coatings
Form-Release Compounds
Graphic Arts Coatings (Sign Paints)
High-Temperature Coatings
Impacted Immersion Coatings
Industrial Maintenance Coatings
Lacquers (including lacquer sanding sealers)

Low-Solids Coatings
Magnesite Cement Coatings
Mastic Texture Coatings
Metallic Pigmented Coatings
Multi-Color Coatings
Nuclear Coatings
Pre-Treatment Wash Primers
Primers, Sealers, and Undercoaters
Quick-Dry Enamels
Quick-Dry Primers, Sealers and Undercoaters
Recycled Coatings
Roof Coatings
Rust Preventative Coatings
Sanding Sealers (other than lacquer sanding sealers)
Shellacs clear
Shellacs opaque
Specialty Primers, Sealers, and Undercoaters
Stains
Swimming Pool Coatings
Swimming Pool Repair and Maintenance Coatings
Temperature-Indicator Safety Coatings
Thermoplastic Rubber Coatings and Mastics
Traffic Marking Coatings
Varnishes
Waterproofing Concrete/Masonry Sealers
Waterproofing Sealers
Wood Preservatives

PROPOSED NEW AND REVISED ARCHITECTURAL COATINGS CATEGORIES

New
Aluminum Roof
Basement Specialty Coatings
Concrete/Masonry Sealer
Conjugated Oil Varnish
Driveway Sealers
Reactive Penetrating Sealer
Reactive Penetrating Carbonate Stone Sealer
Stone Consolidant
Tub and Tile Refinish
Waterproofing Membranes
Wood Coatings
Zinc-Rich Primer

Lower
Flat Coatings
Nonflat Coatings
Nonflat – High Gloss Coatings
Bituminous Roof Coatings
Dry Fog Coatings
Floor Coatings
Industrial Maintenance Coatings
Mastic Texture Coatings
Primers, Sealers, and Undercoaters
Rust Preventative Coatings
Specialty Primers, Sealers, and Undercoaters
Traffic Marking Coatings

Eliminated/Consolidated to Other Categories
Antenna Coatings
Antifouling Coatings
Clear Brushing Lacquers
Lacquers
Sanding Sealers
Varnishes
Conversion Varnishes
Flow Coatings
Quick-Dry Enamels
Quick-Dry Primers, Sealers and Undercoaters
Swimming Pool Repair and Maintenance Coatings
Temperature-Indicator Safety Coatings
Waterproofing Sealers
Waterproofing Concrete/Masonry Sealers

PROPOSED NEW AND REVISED ARCHITECTURAL COATINGS CATEGORIES

- For example:
  - Flat Coatings are going from 100 grams per liter (g/l) of Volatile Organic Compounds (VOCs) to 50 g/l
  - Non-Flat Coatings are going from 150 g/l of VOCs to 100 g/l
  - Non-Flat High Gloss Coatings are going from 250 g/l of VOCs to 150 g/l
  - Lacquers, Varnishes and Sanding Sealers are now consolidated into a new category, "Wood Coatings", at 275 g/l VOC
  - Driveway Sealers are a new category of regulation at 50 g/l VOC

CONVERSION VARNISHES

- Special exemption created in OTC 2002 Model Rule, not in California rules
- Unclear in OTC 2011 Model Rule
  - Included as a limit of 725 g/l and also as NA, with the intention of being eliminated and consolidated into "Wood coatings" with other clear wood coatings at 275 g/l
- Limit of 725 g/l is proposed to be eliminated for conversion varnishes and replaced with 275 g/l
- Please provide comment on this model rule clarification

REDUCTIONS AND COSTS

Measures	VOC Reductions Estimate (tons per day)	Cost-Effectiveness ($/ton)
Architectural and Industrial Maintenance Coatings: OTC Phase II	8	$2,100/ton average

COSTS

Cost to Consumer:

- CA estimates a "potential" "average" cost increase to be about $1.30/gallon for both of its Suggested Control Measures (SCM).
- In reality, products have already been reformulated for CA, and estimated costs would be lower.
- In addition, manufacturers may absorb the cost rather than pass it on to the consumer.
- Some reformulations result in a cost savings.

MODEL RULE

- These rules would be based on the following OTC model rule:
  - 1) OTC Architectural & Industrial Maintenance (AIM) Coatings Phase II June 2011
- See Handout for a more detailed list of regulated categories
- See OTC Model Rules for more details at: https://otcair.org/document.asp?Fview=modelrules .

QUESTIONS/COMMENTS

Questions?

Please send comments and/or technical support information to:

NJDEP-BAQP@dep.nj.gov

Use the following heading in the Subject Line of the email:

- Architectural Coatings

By October 4, 2019