



**Department of the Environment**

---

**Control Techniques Guidelines and  
Standards for Fiberglass Boat  
Manufacturing Operations COMAR  
26.11.19.26-1**

**Air Quality Control Advisory Council  
September 8, 2014**





# Topics Covered

---

- Background
- Basis of Control Techniques Guidelines (CTG) for Fiberglass Boat Manufacturing
- CTG Applicability
- Standards
- Air Quality and Economic Impact





# Background

---

- Control Techniques Guidelines (CTG)
  - Miscellaneous metal and plastic parts coating
- CTG standards for Fiberglass Boat Manufacturing requires new COMAR regulation
- CTG standard and COMAR amendment had been developed in coordination with Permits and Compliance Programs affected sources and EPA





# Basis of CTG for Fiberglass Boat Manufacturing

---

- In 1990, EPA completed a study of fiberglass boat manufacturing operations
- The National Emission Standards for Hazardous Air Pollutants for Boat Manufacturing, 40 CFR part 63, subpart VVVV (2001 NESHAP) were promulgated in 2001
- The CTG was developed based on the 1990 VOC assessment, the 2001 NESHAP, and existing California district and other State VOC emission reduction approaches





# COMAR 26.11.19.26-1 Fiberglass Boat Manufacturing - Applicability

- This regulation applies to any fiberglass boat manufacturing facility where the total actual VOC emissions, before add-on controls, from all fiberglass boat manufacturing is 15 pounds or more per day as determined on a monthly average.





# COMAR 26.11.19.26-1 Fiberglass Boat Manufacturing - Applicability

---

- Fiberglass boat manufacturing facility means a facility that manufactures hulls or decks of fiberglass boats, assembles fiberglass boats from premanufactured hulls and decks, or builds molds to make hulls or decks of fiberglass boats
- VOC emissions from the manufacturing process, polyester resins, tooling resins and gel coats, ancillary parts production, touch-up, clean-up, and repair are to be included in determining applicability
- The manufacturing of one boat would be sufficient to trigger applicability





# COMAR 26.11.19.26-1 Fiberglass Boat Manufacturing

---

- COMAR 26.11.19.26-1 sets VOC standards to reduce the emissions from materials used in the fiberglass boat manufacturing operation
- The process emissions come from styrene and methyl methacrylate (MMA) at fiberglass boat manufacturing facilities
- The resins and gel coats are the main contributors of VOC emissions from fiberglass boat manufacturing facilities





# COMAR 26.11.19.26-1 Fiberglass Boat Manufacturing Standards

---

- Standards
  - Production resin operation
  - Pigmented and Clear gel coat
  - Tooling resin and gel coat
- Alternative option of emission rates for monomers and non monomers
- Certain specific exemptions
- The work practice requirements establish standards and record keeping requirements for the usage of all VOC containing materials.







# Air Quality and Economic Impact

---

- VOC emissions on a national level are expected to be reduced by 40 percent
  - MD only has one known source that may, on occasion, assemble fiberglass boats from premanufactured hulls and decks
  - May already be using resins and gel coats that meet the VOC standards contained in CTG
  - MD VOC emission benefits will be negligible
- The economic impact of these amendments has been estimated by EPA on a national level. Costs for the controls are expected to be \$4,200/ton of VOC controlled
  - Coatings industry already has products available to meet VOC standards
  - Economic impact upon MD sources should be minimal





# **Maryland Department of the Environment**

## **Air & Radiation Management Administration**

**1800 Washington Boulevard | Baltimore, MD 21230-1718  
410-537-3000 | TTY Users: 1-800-735-2258  
[www.mde.state.md.us](http://www.mde.state.md.us)**

