

Regulation Revision -Addition of Table 2105.86

Deletions are shown with strikethroughs. Additions are shown in **larger font, bolded, and underlined**.

§2105.86 CONTROL OF VOC EMISSIONS FROM FIBERGLASS BOAT MANUFACTURING MATERIALS *{Added May 29, 2013, effective June 8, 2013. Table 2105.86 added May 8, 2015, effective May 18, 2015.}*

a. **Applicability.** Beginning January 1, 2014, this section applies to the owner or operator of a fiberglass boat manufacturing facility, where the total actual VOC emissions from fiberglass boat manufacturing materials, including related cleaning activities, at that facility are equal to or greater than 15 pounds (6.8 kilograms) per day or 2.7 tons (2,455 kilograms) per twelve month rolling period, before controls. This regulation applies to facilities that manufacture hulls or decks of boats from fiberglass, or build molds to make fiberglass boat hulls or decks. This regulation does not apply to facilities that manufacture solely fiberglass parts of boats such as hatches, seats, lockers, or boat trailers.

b. **Exemptions.** This regulation does not extend to surface coatings applied to fiberglass boats, and industrial adhesives used in the assembly of fiberglass boats. Surface coating for fiberglass and metal recreational boats, also called pleasure crafts, are addressed in regulation § 2105.83 CONTROL OF VOC EMISSIONS FROM MISCELLANEOUS METAL AND/OR PLASTIC PARTS SURFACE COATING PROCESSES. Industrial adhesives used in fiberglass boat assembly are addressed in regulation § 2105.85 CONTROL OF VOC EMISSIONS FROM MISCELLANEOUS INDUSTRIAL ADHESIVES.

c. **Limitations.** A person may not cause or permit the emission into the outdoor atmosphere of VOCs from fiberglass boat manufacturing materials, unless one of the following limitations is met:

I. Fiberglass boat manufacturing facilities shall use resins and/or gel coats that are equal to or less than the applicable weighted average monomer VOC content limit specified in Table 2105.86 and the non-monomer VOC limit shall not exceed 5 percent, by weight, of resin and/or gel coat.

A. The weighted average monomer VOC content shall be calculated as follows:

$$\frac{\sum (M_i \times \text{VOC}_j)}{\sum M_i} \text{ Weighted Average Monomer VOC Content} = \text{-----}$$

Where:

M_i = Mass of open molding resin or gel coat i used in the past 12 months in an operation in pounds (kg)

VOC_j = Monomer VOC content, by weight percent, of open molding resin or gel coat i used in the past 12 months in an operation

d. **Records.** A facility, regardless of the facility's annual emission rate, which uses fiberglass boat manufacturing materials, shall maintain records sufficient to demonstrate compliance with this section. At a minimum, a facility shall maintain daily records of:

1. The following parameters for each material either resin and/or gel as supplied:

- A. The name and identification number of each resin and/or gel;
- B. The volume used;
- C. The mass of materials used;
- D. The monomer VOC content, by weight percent, of resin or gel coat used; The non-monomer VOC content, by weight percent, of each resin or gel coat;

The records shall be maintained for 2 years and shall be submitted to the Department on a schedule reasonably prescribed by the Department.

e. **Cleaning Material Standards.** The VOC content of cleaning solvents employed for routine application equipment cleaning shall contain a maximum of 5 percent VOC, by weight, or have a composite partial vapor pressure of no more than 0.50 mm Hg at sixty-eight degrees Fahrenheit. Only non-VOC solvents shall be used to remove cured resin and gel coat from application equipment.

f. **Work Practice Standards.** All resin and gel coat mixing containers with a capacity equal to or greater than 208 liters (55 gallons), including those used for onsite mixing of putties and polyputties, have a cover with no visible gaps in place at all times. This work practice standard does not apply when material is being manually added to or removed from a container, or when mixing or pumping equipment is being placed in or removed from a container.

g. **Measurements.** Measurements of the volatile fraction of resin and gels, used at fiberglass boat manufacturing facilities shall be performed according to the applicable procedures established in §2107.04 of this Article.

(All material on this page as written below (in red text) was added for full approval of this part.)

Table 2105.86 Monomer VOC Content Limitations for Open Molding Resin and Gel Coat Operations

Material Application Method Weight Average Monomer VOC Content Limit (weight percent)

Production Resin	Atomized (spray)	28
Production Resin	Nonatomized	35
Pigmented Gel Coat	Any Method	33
Clear Gel Coat	Any Method	48
Tooling Resin	Atomized	30
Tooling Resin	Nonatomized	39
Tooling Gel Coat	Any Method	40