

Title 26 DEPARTMENT OF THE ENVIRONMENT

Subtitle 11 AIR QUALITY

Chapter 19 Volatile Organic Compounds from Specific Processes

.15 Paint, Resin, and Adhesive Manufacturing and Adhesive Application.

A. Definitions.

(1) "Adhesive application" means the application of adhesives to a product and the assembly and curing of that product.

(2) "Honeycomb core installation" means an operation that applies an adhesive to a metal foil or other substrate which is stacked, cured, and either expanded or corrugated to create a cellular matrix structure used in aircraft construction and related industries.

(3) "Resin thin down tank" means a vessel in which VOC is added to reduce the viscosity of resin.

(3-1) "Sealant" has the meaning stated in COMAR 26.11.35.03B.

(3-2) "Sealant application" means the application and curing of a sealant.

(3-3) "Specialty electronic systems and subsystems for defense and homeland security" has the meaning stated in COMAR 26.11.35.03B.

(4) "Specialty footwear manufacturing" means the manufacturing of special cold weather shoes or boots in accordance with military specifications.

(5) "Specialty spiral tube winding" means a process that is used to manufacture a plastic spirally wound tube for high temperature insulation application in the electric motor manufacturing industry.

(6) "Spiral tube winding" means a process that is used to manufacture spirally wound plastic tubes that are used to insulate electric wire and electronic components.

(7) "Spiral wound tube impregnating and curing" means a batch-fed process that is used to impregnate spirally wound tubes with resin under pressure and cure them at elevated temperatures.

B. Standards for Paint, Resin, and Adhesive Manufacturing.

(1) Resin Reactor. A person may not quench a resin with VOC in a resin reactor unless the reactor is equipped with a condenser that cools the discharged vapors to a temperature of less than 120°F (49°C).

(2) Resin Thin Down Tank. A person may not use a resin thin down tank unless the tank is equipped with a condenser that cools the discharged vapor to a temperature of less than 120°F.

(3) Monitoring Requirements. A person subject to §B(1) or (2), above, shall install and maintain a temperature indicator on the vapor discharge line from the condenser. The indicator shall be located so that it is clearly visible to the operator of the equipment.

(4) Paint Manufacturing. A person who manufactures paint may not use any open top vessel or tank to mix paint, disperse pigment, or adjust the viscosity or color of a paint unless the vessel or tank opening is covered.

(5) Adhesives Manufacturing. A person may not use any open top vessel or tank to manufacture an adhesive unless the vessel or tank opening is covered.

(6) The covers required by §B(4) and (5) of this regulation shall be VOC impermeable and may be equipped with an opening not larger than necessary for safe clearance of the mixer shaft. A person shall keep the vessel or tank opening covered at all times except when operator access is necessary.

(7) A person who uses a vessel or tank to manufacture paint, resin, or adhesives shall clean the vessel or tank with detergent, hot alkali, high pressure water, or use other reasonable precautions approved by the Department that minimize emissions of VOC.

(8) A person who uses a vessel or tank to manufacture paint may not transfer VOC into the tank or vessel unless submerged filling or a side diversion method (referred to as cascade filling) that forces the VOC to the sidewalls to prevent splashing is used.

C. Standards for Adhesive and Sealant Application.

(1) Honeycomb Core Installation. A person may not:

(a) Use an adhesive that contains more than 5.8 pounds of VOC per gallon (0.70 kilogram/liter) of adhesive applied (minus water) in any honeycomb core installation that discharges more than 50 pounds per day of VOC;

(b) Cause or permit the discharge of VOC emissions from any honeycomb core printing or corrugating installation in excess of 200 pounds (90.7 kilograms) per day.

(2) Footwear Manufacturing.

(a) A person who manufactures specialty footwear may not cause or permit the discharge of VOC into the atmosphere unless the average VOC content of all VOC materials used at the premises is 0.5 pound of VOC per pair of boots manufactured, or less.

(b) Compliance with the emissions standard in §C(2)(a) of this regulation shall be determined on the basis of monthly material consumption.

(c) A person subject to the requirements of this subsection shall submit a monthly report to the Department on or before the 15th of the following month. Each report shall include the:

- (i) VOC content of each adhesive used at the source;
- (ii) Total daily production of footwear;
- (iii) Total amount of each adhesive used each day; and
- (iv) Total VOC emissions for each day.

(3) Spiral Tube Winding and Impregnating. A person may not:

(a) Use an adhesive to manufacture any specialty spiral tube that exceeds 5 pounds of VOC per gallon (0.60 kilogram/liter) of adhesive as applied, minus water;

(b) Use an adhesive to manufacture any spiral tube that exceeds 2.9 pounds of VOC per gallon (0.35 kilogram/liter) of adhesive as applied, minus water;

(c) Cause or permit the discharge into the atmosphere of more than 200 pounds (91 kilograms) per day of VOC from any specialty spiral tube winding; and

(d) Use any resin that exceeds 4 pounds of VOC per gallon (0.48 kilogram/liter) of resin as applied, minus water, in any spiral wound tube impregnating and curing.

(4) Specialty Electronic Systems and Subsystems for Defense and Homeland Security.

(a) A person may not cause or permit the discharge into the atmosphere of more than 25 pounds per day of VOC from the application of adhesives or sealants to specialty electronic systems and subsystems for defense and homeland security.

(b) Compliance with the emissions limitation in §C(4)(a) of this regulation shall be determined each month, by calculating the average of the total daily amounts of VOC discharged to the atmosphere from all applications of adhesive and sealant to specialty electronic systems and subsystems for defense and homeland security at the premises for the prior month.