

Title 26

DEPARTMENT OF THE ENVIRONMENT

Subtitle 11 AIR QUALITY

**Chapter 19 Volatile Organic Compounds from Specific Processes**

**.27 Control of Volatile Organic Compounds from Marine Vessel Coating Operations.**

A. Applicability. This regulation applies to marine vessel coating operations at a premises where the total potential to emit VOC emissions equals or exceeds 25 tons (22.75 metric tons) per year or actual emissions of 20 pounds (9 kilograms) per day from all marine vessel coating operations at the premises.

B. Definitions. In this regulation, the following terms have the meanings indicated:

(1) "Air flask coating" means a special composition coating applied to interior surfaces of high pressure breathing air flasks to provide corrosion resistance.

(2) "Antenna coating" means a coating applied to equipment on a vessel through which electromagnetic signals must pass for reception or transmission.

(3) "Antifoulant coating" means a coating that is:

(a) Applied to the underwater portion of a vessel to prevent or reduce the attachment of biological organisms; and

(b) Registered with the EPA as a pesticide under the Federal Insecticide, Fungicide, and Rodenticide Act.

(4) "Chemical agent resistant coatings (CARC)" means an exterior topcoat applied to military or U.S. Coast Guard ships that are subject to specific chemical, biological, and radiological washdown requirements.

(5) "Heat resistant coating" means a coating that during normal use must withstand a temperature of at least 204(C (400(F).

(6) "High-gloss coating" means a coating that achieves at least 85 percent reflectance on a 60 degree meter when tested by ASTM Method D-523.

(7) "High-temperature coating" means a coating that during normal use must withstand a temperature of at least 426(C (800(F).

(8) "Inorganic zinc (high-build) coating" means a coating that contains 8 pounds

(3.6 kilograms) or more elemental zinc incorporated into an inorganic silicate binder that is applied to steel to provide galvanic corrosion resistance.

(9) "Marine vessel coating operation" means the application of coatings to a ship.

(10) "Mist/tack coating" means a low viscosity, thin film, epoxy coating applied to but not limited to an inorganic zinc primer.

(11) "Navigational aids coating" means a coating applied to Coast Guard buoys or other Coast Guard waterway markers.

(12) "Nonskid coating" means a coating applied to the surfaces of a ship for the purpose of providing slip resistance.

(13) "Nuclear coating" means a protective coating used to seal porous surfaces such as steel or concrete that otherwise would be subject to intrusion by radioactive materials.

(14) "Organic zinc coating" means a coating derived from zinc dust incorporated into an organic binder, that:

(a) Contains more than 8 pounds (3.6 kilograms) of elemental zinc per gallon of coating, as applied; and

(b) Is used for the express purpose of corrosion protection.

(15) "Pretreatment wash primer coating" means a coating that contains a minimum of 0.5 percent acid, by weight, and is applied only to bare metal to etch the surface and enhance adhesion of subsequent coatings.

(16) "Rubber camouflage coating" means a specially formulated epoxy coating used as a camouflage topcoat for exterior submarine hulls and sonar domes.

(17) "Sealant coating" means an epoxy coating applied over thermal spray aluminum surfaces.

(18) Ship.

(a) "Ship" means a marine vessel used for military or commercial operations, including self-propelled vessels, those propelled by other craft (barges), and navigational aids (buoys and markers).

(b) "Ship" includes:

(i) All military and Coast Guard vessels;

(ii) Commercial cargo and passenger (cruise) ships;

- (iii) Ferries;
- (iv) Barges;
- (v) Tankers;
- (vi) Container ships;
- (vii) Patrol and pilot boats; and
- (viii) Dredges.

(c) "Ship" does not include offshore oil and gas drilling platforms unless they are moved to an on-shore marine vessel coating operation.

(19) "Special marking coating" means a coating that is used for safety or identification applications.

(20) "Specialty interior coating" means a coating used on interior surfaces aboard U.S. military vessels pursuant to a coating specification that requires that the coating have specified fire retardant properties and a toxicity index of less than 0.03, in addition to the otherwise applicable military physical and performance requirements.

(21) "Thermoplastic coating" means a vinyl, chlorinated rubber, acrylic, or bituminous resin coating that is used to recoat a vessel with the same type of coating as its existing coating.

(22) "Undersea weapons systems coating" means a coating applied to any component of a weapons system intended to be launched or fired from under the sea.

(23) "Weld-through (shop) preconstruction primer" means a coating which provides temporary corrosion protection for steel while it remains in inventory.

### C. Coating Requirements.

(1) Except as provided in §C(5) of this regulation, a person who owns or operates a marine vessel coating operation subject to this regulation may not apply a coating that exceeds the standards in §C(2), (3), and (4) of this regulation.

#### (2) Coating Standards.

Coating	Maximum VOC content Pounds per Gallon as applied (Grams per Liter)
Air flask	2.83 (340)
Antenna	4.42 (530)

Antifoulant	3.42 (400)
CARC	2.83 (340)
Heat resistant	3.50 (420)
High gloss	3.50 (420)
High temperature	4.17 (500)
Inorganic zinc high build primer	2.83 (340)
Mist/Tack	5.08 (610)
Navigational aids	4.58 (550)
Nonskid	2.83 (340)
Nuclear	3.50 (420)
Organic Zinc	3.00 (360)
Pre-treatment wash primer	6.50 (780)
Rubber camouflage	2.83 (340)
Sealant coat for thermal spray aluminum	5.08 (610)
Special marking	4.08 (490)
Specialty interior	2.83 (340)
Thermoplastic coating	4.58 (550)
Undersea weapons systems	2.83 (340)
Weld-through (shop) primer	5.42 (650)

(3) If a coating satisfies the definition of more than one category of coating listed in §C(2) of this regulation, then the coating is subject to the maximum VOC content for any applicable category.

(4) Any other coating used in a marine vessel coating operation not listed in §C(2) of this regulation may not exceed a VOC content of 2.83 pounds per gallon (340 grams per liter), as applied.

(5) A person who owns or operates a marine vessel coating operation subject to this regulation may apply a coating that exceeds the VOC content established in this regulation if:

(a) The VOC content of the coating does not exceed the otherwise applicable standard in §C(2), (3), or (4) of this regulation by more than 20 percent; and

(b) The coating exceeding the standards in §C(2), (3), or (4) of this regulation is used only during the period from November 1 of a year through March 31 of the following year.

D. Cleanup requirements. A person who owns or operates a marine vessel coating operation subject to this regulation shall take reasonable precautions to minimize the release of VOC into the atmosphere including:

(1) Storing all waste materials containing VOC, including cloth and paper, in closed containers;

(2) Maintaining lids on any VOC-bearing materials when not in use; and

(3) Using enclosed containers or VOC recycling equipment to clean spray gun equipment.

E. Compliance with the requirements of this regulation shall be achieved using the test methods and procedures in Regulation .02 of this chapter.

F. Record Keeping.

(1) A person who owns or operates a marine vessel coating operation subject to this regulation shall maintain the following records:

(a) The monthly total volume and VOC content of each coating and coating solvent used that contain VOCs; and

(b) The monthly total volume and VOC content of each cleanup solvent used that contains VOCs.

(2) Records shall be retained for 3 years and be made available to the Department on request.

(3) Compliance with the record-keeping requirements in §F(1) and (2) of this regulation constitutes compliance with Regulation .02F of this chapter.