# Subpart II—National Emission Standards for Shipbuilding and Ship Repair (Surface Coating)

SOURCE: 60 FR 64336, Dec. 15, 1995, unless otherwise noted.

## § 63.780 Relationship of subpart II to subpart A of this part.

Table 1 of this subpart specifies the provisions of subpart A of this part that apply to owners and operators of sources subject to the provisions of this subpart.

## § 63.781 Applicability.

(a) The provisions of this subpart apply to shipbuilding and ship repair operations at any facility that is a major source.

(b) The provisions of this subpart do not apply to coatings used in volumes of less than 200 liters (52.8 gallons) per year, provided the total volume of coating exempt under this paragraph does not exceed 1,000 liters per year (264 gallons per year) at any facility. Coatings exempt under this paragraph shall be clearly labeled as ''low-usage exempt,'' and the volume of each such coating applied shall be maintained in the facility's records.

(c) The provisions of this subpart do not apply to coatings applied with hand-held, nonrefillable, aerosol containers or to unsaturated polyester resin (i.e., fiberglass lay-up) coatings. Coatings applied to suitably prepared fiberglass surfaces for protective or decorative purposes are subject to this subpart.

(d) The provisions in subpart A of this part pertaining to startups, shutdowns, and malfunctions and continuous monitoring do not apply to this source category unless an add-on control system is used to comply with this subpart in accordance with §63.783(c).

## § 63.782 Definitions.

Terms used in this subpart are defined in the Clean Air Act (CAA), in subpart A of part 63, or in this section as follows:

*Add-on control system* means an air pollution control device such as a carbon absorber or incinerator that reduces pollution in an air stream by destruction or removal prior to discharge to the atmosphere.

*Affected source* means any shipbuilding or ship repair facility having surface coating operations with a minimum 1,000 liters (L) (264 gallons [gal]) annual marine coating usage that is subject to this subpart.

*Air flask specialty coating* means any special composition coating applied to interior surfaces of high pressure breathing air flasks to provide corrosion resistance and that is certified safe for use with breathing air supplies.

*Antenna specialty coating* means any coating applied to equipment through which electromagnetic signals must pass for reception or transmission.

*Antifoulant specialty coating* means any coating that is applied to the underwater portion of a vessel to prevent or reduce the attachment of biological organisms and that is registered with the EPA as a pesticide under the Federal Insecticide, Fungicide, and Rodenticide Act.

*As applied* means the condition of a coating at the time of application to the substrate, including any thinning solvent.

*As supplied* means the condition of a coating before any thinning, as sold and delivered by the coating manufacturer to the user.

*Batch* means the product of an individual production run of a coating manufacturer's process. A batch may vary in composition from other batches of the same product.

*Bitumens* mean black or brown materials that are soluble in carbon disulfide and consist mainly of hydrocarbons.

*Bituminous resin coating* means any coating that incorporates bitumens as a principal component and is formulated primarily to be applied to a substrate or surface to resist ultraviolet radiation and/or water.

*Certify* means, in reference to the volatile organic compounds (VOC) content or volatile organic hazardous air pollutants (VOHAP) content of a coating, to attest to the VOC content as determined through analysis by Method 24 of appendix A to 40 CFR part 60 or through use of forms and procedures outlined in appendix A of this subpart,

or to attest to the VOHAP content as determined through an Administrator-approved test method. In the case of conflicting results, Method 24 of Appendix A to 40 CFR part 60 shall take precedence over the forms and procedures outlined in appendix A to this subpart for the options in which VOC is used as a surrogate for VOHAP.

*Coating* means any material that can be applied as a thin layer to a substrate and which cures to form a continuous solid film.

*Cold-weather time period* means any time during which the ambient temperature is below 4.5 °C (40 °F) and coating is to be applied.

*Container of coating* means the container from which the coating is applied, including but not limited to a bucket or pot.

*Cure volatiles* means reaction products which are emitted during the chemical reaction which takes place in some coating films at the cure temperature. These emissions are other than those from the solvents in the coating and may, in some cases, comprise a significant portion of total VOC and/or VOHAP emissions.

*Epoxy* means any thermoset coating formed by reaction of an epoxy resin (i.e., a resin containing a reactive epoxide with a curing agent).

*Exempt compounds* means specified organic compounds that are not considered VOC due to negligible photochemical reactivity. Exempt compounds are specified in 40 CFR 51.100(s).

*Facility* means all contiguous or adjoining property that is under common ownership or control, including properties that are separated only by a road or other public right-of-way.

*General use coating* means any coating that is not a specialty coating.

*Hazardous air pollutants (HAP)* means any air pollutant listed in or pursuant to section 112(b) of the CAA.

*Heat resistant specialty coating* means any coating that during normal use must withstand a temperature of at least 204 °C (400 °F).

*High-gloss specialty coating* means any coating that achieves at least 85 percent reflectance on a 60 degree meter when tested by ASTM D523–89 (incorporation by reference—see § 63.14).

*High-temperature specialty coating* means any coating that during normal use must withstand a temperature of at least 426 °C (800 °F).

*Inorganic zinc (high-build) specialty coating* means a coating that contains 960 grams per liter (8 pounds per gallon) or more elemental zinc incorporated into an inorganic silicate binder that is applied to steel to provide galvanic corrosion resistance. (These coatings are typically applied at more than 2 mil dry film thickness.)

*Major source* means any source that emits or has the potential to emit, in the aggregate, 9.1 megagrams per year (10 tons per year) or more of any HAP or 22.7 megagrams per year (25 tons per year) or more of any combination of HAP.

*Maximum allowable thinning ratio* means the maximum volume of thinner that can be added per volume of coating without violating the standards of § 63.783(a), as determined using Equation 1 of this subpart.

*Military exterior specialty coating* or Chemical Agent Resistant Coatings (''CARC'') means any exterior topcoat applied to military or U.S. Coast Guard vessels that are subject to specific chemical, biological, and radiological washdown requirements.

*Mist specialty coating* means any low viscosity, thin film, epoxy coating applied to an inorganic zinc primer that penetrates the porous zinc primer and allows the occluded air to escape through the paint film prior to curing.

*Navigational aids specialty coating* means any coating applied to Coast Guard buoys or other Coast Guard waterway markers when they are recoated aboard ship at their usage site and immediately returned to the water.

*Nonskid specialty coating* means any coating applied to the horizontal surfaces of a marine vessel for the specific purpose of providing slip resistance for personnel, vehicles, or aircraft.

*Nonvolatiles (or volume solids)* means substances that do not evaporate readily. This term refers to the film-forming material of a coating.

*Normally closed* means a container or piping system is closed unless an operator is actively engaged in adding or removing material.

*Nuclear specialty coating* means any protective coating used to seal porous surfaces such as steel (or concrete) that otherwise would be subject to intrusion by radioactive materials. These coatings must be resistant to long-term (service life) cumulative radiation exposure (ASTM D4082–89 [incorporation by reference—see § 63.14]), relatively easy to decontaminate (ASTM D4256–89 or 94 [reapproved 1994] [incorporation by reference—see § 63.14]), and resistant to various chemicals to which the coatings are likely to be exposed (ASTM D3912–80 [incorporation by reference—see § 63.14]). [For nuclear coatings, see the general protective requirements outlined by the U.S. Nuclear Regulatory Commission in a report entitled ''U.S. Atomic Energy Commission Regulatory Guide 1.54'' dated June 1973, available through the Government Printing Office at (202) 512–2249 as document number A74062–00001.]

*Operating parameter value* means a minimum or maximum value established for a control device or process parameter that, if achieved by itself or in combination with one or more other operating parameter values, determines that an owner or operator has complied with an applicable emission limitation or standard.

*Organic zinc specialty coating* means any coating derived from zinc dust incorporated into an organic binder that contains more than 960 grams of elemental zinc per liter (8 pounds per gallon) of coating, as applied, and that is used for the expressed purpose of corrosion protection.

*Pleasure craft* means any marine or fresh-water vessel used by individuals for noncommercial, nonmilitary, and recreational purposes that is less than 20 meters in length. A vessel rented exclusively to or chartered by individuals for such purposes shall be considered a pleasure craft.

*Pretreatment wash primer specialty coating* means any coating that contains a minimum of 0.5 percent acid, by mass, and is applied only to bare metal to etch the surface and enhance adhesion of subsequent coatings.

*Repair and maintenance of thermoplastic coating of commercial vessels (specialty coating)* means any vinyl, chlorinated rubber, or bituminous resin coating that is applied over the same type of existing coating to perform the partial recoating of any in-use commercial vessel. (This definition does not include coal tar epoxy coatings, which are considered ''general use'' coatings.)

*Rubber camouflage specialty coating* means any specially formulated epoxy coating used as a camouflage topcoat for exterior submarine hulls and sonar domes.

*Sealant for thermal spray aluminum* means any epoxy coating applied to thermal spray aluminum surfaces at a maximum thickness of 1 dry mil.

*Ship* means any marine or fresh-water vessel used for military or commercial operations, including self-propelled vessels, those propelled by other craft (barges), and navigational aids (buoys). This definition includes, but is not limited to, all military and Coast Guard vessels, commercial cargo and passenger (cruise) ships, ferries, barges, tankers, container ships, patrol and pilot boats, and dredges. For purposes of this subpart, pleasure crafts and offshore oil and gas drilling platforms are not considered ships.

*Shipbuilding and ship repair operations* means any building, repair, repainting, converting, or alteration of ships.

*Special marking specialty coating* means any coating that is used for safety or identification applications, such as markings on flight decks and ships' numbers.

*Specialty coating* means any coating that is manufactured and used for one of the specialized applications described within this list of definitions.

*Specialty interior coating* means any coating used on interior surfaces aboard U.S. military vessels pursuant to a coating specification that requires the coating to meet specified fire retardant and low toxicity requirements, in addition to the other applicable military physical and performance requirements.

*Tack specialty coating* means any thin film epoxy coating applied at a maximum thickness of 2 dry mils to prepare an epoxy coating that has dried beyond the time limit specified by the manufacturer for the application of the next coat.

*Thinner* means a liquid that is used to reduce the viscosity of a coating and that evaporates before or during the cure of a film.

*Thinning ratio* means the volumetric ratio of thinner to coating, as supplied.

*Thinning solvent:* see Thinner.

*Undersea weapons systems specialty coating* means any coating applied to any component of a weapons system intended to be launched or fired from under the sea.

*Volatile organic compounds (VOC)* is as defined in §51.100(s) of this chapter.

*Volatile organic hazardous air pollutants (VOHAP)* means any compound listed in or pursuant to section 112(b) of the CAA that contains carbon, excluding metallic carbides and carbonates. This definition includes VOC listed as HAP and exempt compounds listed as HAP.

*Weld-through preconstruction primer (specialty coating)* means a coating that provides corrosion protection for steel during inventory, is typically applied at less than 1 mil dry film thickness, does not require removal prior to welding, is temperature resistant (burn back from a weld is less than 1.25 centimeters [0.5 inch]), and does not normally require removal before applying film-building coatings, including inorganic zinc high-build coatings. When constructing new vessels, there may be a need to remove areas of weld-through preconstruction primer due to surface damage or contamination prior to application of film-building coatings.

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### §63.783 Standards.

(a) No owner or operator of any existing or new affected source shall cause or allow the application of any coating to a ship with an as-applied VOHAP content exceeding the applicable limit given in Table 2 of this subpart, as determined by the procedures described in §63.785 (c)(1) through (c)(4). For the compliance procedures described in §63.785 (c)(1) through (c)(3), VOC shall be used as a surrogate for VOHAP, and Method 24 of Appendix A to 40 CFR part 60 shall be used as the definitive measure for determining compliance. For the compliance procedure described in §63.785(c)(4), an alternative test method capable of measuring independent VOHAP shall be used to determine compliance. The method must be submitted to and approved by the Administrator.

(b) Each owner or operator of a new or existing affected source shall ensure that:

(1) All handling and transfer of VOHAP-containing materials to and from containers, tanks, vats, drums, and piping systems is conducted in a manner that minimizes spills.

(2) All containers, tanks, vats, drums, and piping systems are free of cracks, holes, and other defects and remain closed unless materials are being added to or removed from them.

(c) *Approval of alternative means of limiting emissions.* (1) The owner or operator of an affected source may apply to the Administrator for permission to use an alternative means (such as an add-on control system) of limiting emissions from coating operations. The application must include:

(i) An engineering material balance evaluation that provides a comparison of the emissions that would be achieved using the alternative means to those that would result from using coatings that comply with the limits in Table 2 of this subpart, or the results from an emission test that accurately measures the capture efficiency and control device efficiency achieved by the control system and the composition of the associated coatings so that the emissions comparison can be made;

(ii) A proposed monitoring protocol that includes operating parameter values to be monitored for compliance and an explanation of how the operating parameter values will be established through a performance test; and

(iii) Details of appropriate recordkeeping and reporting procedures.

(2) The Administrator shall approve the alternative means of limiting emissions if, in the Administrator's judgment, postcontrol emissions of VOHAP per volume applied solids will be no greater than those from the use of coatings that comply with the limits in Table 2 of this subpart.

(3) The Administrator may condition approval on operation, maintenance, and monitoring requirements to ensure that emissions from the source are no