



# Federal Register

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**Friday,  
July 14, 2000**

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**Part II**

## **Environmental Protection Agency**

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**40 CFR Part 63**

**National Emission Standards for  
Hazardous Air Pollutants for Boat  
Manufacturing; Proposed Rule**

**ENVIRONMENTAL PROTECTION AGENCY****40 CFR Part 63**

[FRL-6719-3]

RIN 2060-AG27

**National Emission Standards for Hazardous Air Pollutants for Boat Manufacturing**

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

**SUMMARY:** This action proposes national emission standards for hazardous air pollutants (NESHAP) for new and existing boat manufacturing facilities. The processes regulated include fiberglass resin and gel coat operations, carpet and fabric adhesive operations, and aluminum boat painting operations. The EPA has identified boat manufacturing as a major source of hazardous air pollutants (HAP), such as styrene, methyl methacrylate (MMA), methylene chloride (dichloromethane), toluene, xylenes, n-hexanes, methyl ethyl ketone (MEK), methyl isobutyl ketone (MIBK), and methyl chloroform (1,1,1-trichloroethane). These proposed standards will implement section 112(d) of the Clean Air Act (CAA) by requiring all major sources to meet HAP emission standards reflecting the application of the maximum achievable control technology (MACT). We estimate the proposed NESHAP would reduce nationwide emissions of HAP from these facilities by approximately 36 percent from the 1997 level of emissions.

**DATES:** *Comments.* Submit comments on or before September 12, 2000.

*Public Hearing.* If anyone contacts the EPA requesting to speak at a public hearing by August 3, 2000, a public hearing will be held on August 14, 2000.

**ADDRESSES:** *Comments.* Written comments should be submitted (in duplicate if possible) to: Air and Radiation Docket and Information Center (6102), Attention Docket Number A-95-44, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460. The EPA requests a separate copy also be sent to the contact person listed below (see **FOR FURTHER INFORMATION CONTACT**).

*Public Hearing.* If a public hearing is held, it will be held at EPA's Office of Administration Auditorium, Research Triangle Park, North Carolina.

*Docket.* Docket No. A-95-44 contains supporting information used in developing the standards. The docket is located at the U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460, and may be inspected from 8:30 a.m. to 5:30 p.m., Monday through Friday, excluding legal holidays.

**FOR FURTHER INFORMATION CONTACT:**

Mark Morris, Organic Chemicals Group, Emission Standards Division (MD-13), U.S. EPA, Research Triangle Park, North Carolina 27711, (919) 541-5416, morris.mark@epamail.epa.gov. For public hearing information contact Maria Noell, Organic Chemicals Group, Emission Standards Division (MD-13), U.S. EPA, Research Triangle Park, North Carolina 27711, (919) 541-5607.

**SUPPLEMENTARY INFORMATION:**

*Docket.* The docket is an organized and complete file of all the information considered by the EPA in the development of this rulemaking. The docket is a dynamic file because material is added throughout the rulemaking process. The docketing system is intended to allow members of the public and industries involved to readily identify and locate documents so that they can effectively participate in the rulemaking process. Along with the proposed and promulgated standards and their preambles, the contents of the docket will serve as the record in the case of judicial review. (See section 307(d)(7)(A) of the CAA.) The regulatory text and other materials related to this rulemaking are available for review in the docket or copies may be mailed on request from the Air Docket by calling (202) 260-7548. A reasonable fee may be charged for copying docket materials.

*Public Hearing.* Persons interested in presenting oral testimony or inquiring as to whether a hearing is to be held should contact Maria Noell, Organic Chemicals Group, Emission Standards Division (MD-13), U.S. EPA, Research Triangle Park, North Carolina 27711, (919) 541-5607 at least 2 days in advance of the public hearing. Persons interested in attending the public hearing must also call Maria Noell to verify the time, date, and location of the hearing. The public hearing will provide

interested parties the opportunity to present data, views, or arguments concerning these proposed emission standards.

*Comments.* Comments and data may be submitted by electronic mail (e-mail) to: a-and-r-docket@epa.gov. Electronic comments must be submitted as an ASCII file to avoid the use of special characters and encryption problems and will also be accepted on disks in WordPerfect™ version 5.1, 6.1 or Corel 8 file format. All comments and data submitted in electronic form must note the docket number: A-95-44. No confidential business information (CBI) should be submitted by e-mail. Electronic comments may be filed online at many Federal Depository Libraries.

Commenters wishing to submit proprietary information for consideration must clearly distinguish such information from other comments and clearly label it as CBI. Send submissions containing such proprietary information directly to the following address, and not to the public docket, to ensure that proprietary information is not inadvertently placed in the docket: Attention: Mark Morris, c/o OAQPS Document Control Officer (Room 740B), U.S. EPA, 411 W. Chapel Hill Street, Durham, NC 27701. The EPA will disclose information identified as CBI only to the extent allowed by the procedures set forth in 40 CFR part 2. If no claim of confidentiality accompanies a submission when it is received by the EPA, the information may be made available to the public without further notice to the commenter.

*Worldwide Web (WWW).* In addition to being available in the docket, an electronic copy of the proposed NESHAP will also be available on the WWW through the Technology Transfer Network (TTN). Following signature, a copy of the proposed NESHAP will be posted on the TTN's policy and guidance page for newly proposed or promulgated rules at <http://www.epa.gov/ttn/oarpg>. The TTN provides information and technology exchange in various areas of air pollution control. If more information regarding the TTN is needed, call the TTN HELP line at (919) 541-5384.

*Regulated Entities.* Categories and entities potentially regulated by this action include:

Category	NAICS code	SIC code	Examples of regulated entities
Industrial .....	336612	3732	Boat manufacturing facilities that perform fiberglass production operations or aluminum coating operations.
		3731	Shipbuilding and repair facilities that perform fiberglass production operations or aluminum coating operations.
Federal Government ..	336612	3731	Federally owned facilities (e.g., Navy shipyards) that perform fiberglass production operations or aluminum coating operations.
		3732	

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. To determine whether your facility is regulated by this action, you should examine the applicability criteria in section II.A. of this preamble. If you have any questions regarding the applicability of this action to a particular entity, consult the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

*Outline.* The information presented in this preamble is organized as follows:

- I. Introduction
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  - C. What are the potential health effects of the HAP emitted by the boat manufacturing industry?
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  - D. What is a new affected source?

- E. How did EPA determine the MACT floor for existing sources?
- F. How did EPA determine the MACT floor for new sources?
- G. Did EPA consider control options more stringent than the MACT floor?
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- I. How did EPA select the format of the proposed NESHAP?
- J. How did EPA select the test methods for determining compliance with the proposed NESHAP?
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- L. How did EPA select the notification and reporting requirements?
- V. Relationship to Other Standards and Programs under the CAA
  - A. National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices, and Routing to a Fuel Gas System or a Process (40 CFR Part 63, Subpart SS)
  - B. Shipbuilding and Repair (Surface Coating) NESHAP (40 CFR Part 63, Subpart II)
  - C. Wood Furniture Manufacturing Operations NESHAP (40 CFR Part 63 Subpart JJ)
  - D. Plastic Parts and Products (Surface Coating) NESHAP
  - E. Relationship Between Operating Permit Program and the Proposed Standards
- VI. Administrative Requirements
  - A. Executive Order 12866, Regulatory Planning and Review
  - B. Paperwork Reduction Act
  - C. Executive Order 13132, Federalism
  - D. Executive Order 13084, Consultation and Coordination with Indian Tribal Governments
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  - G. National Technology Transfer and Advancement Act
  - H. Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks

## I. Introduction

### A. What Is the Purpose of the Proposed NESHAP?

The purpose of the proposed NESHAP is to protect the public health by reducing emissions of HAP from boat manufacturing facilities.

### B. What Is the Statutory Authority for the Proposed NESHAP?

The CAA was created, in part, "\* \* \*" to protect and enhance the quality of the

Nation's air resources so as to promote the public health and welfare and the productive capacity of its population \* \* \*" (see section 101(b) of the CAA). The proposed NESHAP are consistent with the requirements of the CAA.

Section 112 of the CAA requires that we promulgate regulations for the control of HAP from both new and existing major sources. The CAA requires the regulations to reflect the maximum degree of reduction in emissions of HAP that is achievable taking into consideration the cost of achieving the emissions reductions, any non-air-quality health and environmental impacts, and energy requirements. This level of control is commonly referred to as the maximum achievable control technology.

We based the proposed NESHAP for boat manufacturing for new and existing sources on the MACT floor control level. The MACT floor is the minimum control level allowed for NESHAP and is defined under section 112(d)(3) of the CAA. In essence, the MACT floor ensures that all major HAP emission sources achieve the level of control already achieved by the better-controlled and lower-emitting sources in each category. For new sources, the MACT floor cannot be less stringent than the emission control that is achieved in practice by the best-controlled similar source. The standards for existing sources can be less stringent than standards for new sources, but they cannot be less stringent than the average emission limitation achieved by the best-performing 12 percent of existing sources (or the best-performing 5 sources for categories or subcategories with fewer than 30 sources).

We estimate that major sources in the boat manufacturing source category collectively emit 9,000 megagrams per year (Mg/yr) (9,920 tons per year (tons/yr)) of HAP. A major source of HAP is defined as any stationary source or group of stationary sources within a contiguous area and under common control that emits or has the potential to emit, considering controls, in the aggregate, 9.1 Mg/yr (10 tons/yr) or more of any single HAP or 22.7 Mg/yr or more (25 tons/yr) of multiple HAP.

In developing MACT, we also must consider control options that are more stringent than the floor. We may establish standards more stringent than the floor based on the consideration of cost, non-air-quality health and environmental impacts, and energy requirements.

*C. What Are the Potential Health Effects of the HAP Emitted by the Boat Manufacturing Industry?*

The following is a summary of the potential health and environmental effects associated with exposure, at some level, to emitted pollutants that the proposed NESHAP would reduce.

*Styrene.* Humans exposed to styrene for short periods through inhalation may exhibit irritation of the eyes and mucous membranes, and gastrointestinal effects. Styrene inhalation over longer periods may cause central nervous system effects including headache, fatigue, weakness, and depression. Exposure may also damage peripheral nerves and cause changes to the kidney and blood. Chronic inhalation studies with animals have indicated that styrene affects the central nervous system, liver, and kidney, and irritates eye and nasal membranes. The EPA has developed a reference concentration of 1 milligram per cubic meter ( $\text{mg}/\text{m}^3$ ) for styrene based on central nervous system effects in exposed workers. Inhalation of this concentration or less over a lifetime would be unlikely to result in adverse noncancer effects. Epidemiological studies have suggested an association between styrene exposure and increased incidence of leukemia and lymphoma. The EPA considers this evidence to be inconclusive because of multiple chemical exposures and inadequate information on the levels and duration of exposure. Animal cancer studies have produced variable results but provide limited evidence for carcinogenicity. The EPA has not classified styrene with respect to carcinogenicity. The EPA is currently reviewing its assessment of styrene.

*Methyl methacrylate.* Humans exposed to MMA for short periods through inhalation may experience depression of the central nervous system and irritation of the skin, eyes, and mucous membranes. Dermal exposure may cause a severe allergic response. Short-term animal studies have indicated that MMA inhalation damages the liver and lung. Kidney and liver lesions have been observed in humans who ingested MMA over longer periods and in animals exposed either orally or by inhalation. Workers exposed through inhalation have

indicated headaches, fatigue, sleeping disturbances, and irritability. Exposed workers have also suffered reproductive effects, including pregnancy complications in women and sexual disorders in both men and women. Fetal abnormalities have been reported in animals exposed to MMA by injection and inhalation. The EPA has developed a reference concentration of  $0.7 \text{ mg}/\text{m}^3$  for MMA. Inhalation of this concentration or less over a lifetime would be unlikely to result in adverse noncancer effects. Several animal studies observed no carcinogenic effects. The EPA has classified MMA in Group E, not likely to be carcinogenic in humans.

*Methylene chloride.* Short-term exposure of humans to high-levels of methylene chloride affects the central nervous system, causing impairment of vision and hearing. These effects are reversible once exposure ceases. Long-term exposure also affects the central nervous system, causing headaches, dizziness, nausea, and memory loss. Studies of methylene chloride exposure to animals have indicated effects to the liver, kidney, and cardiovascular system. Animal studies have indicated that methylene chloride inhalation causes tumors of the lung, liver, and mammary glands. Based on this evidence, EPA has classified methylene chloride in Group B2, a probable human carcinogen, with an inhalation unit risk of  $4.7 \times 10^{-7}$  per microgram per cubic meter ( $\mu\text{g}/\text{m}^3$ ).

*Toluene.* Humans exposed to toluene for short periods may experience irregular heartbeat and effects to the central nervous system such as fatigue, sleepiness, headache, and nausea. Repeated exposure to high concentrations may induce loss of coordination, tremors, decreased brain size, and involuntary eye movements, and may impair speech, hearing, and vision. Chronic exposure to toluene in humans has also been indicated to irritate the skin, eyes, and respiratory tract, and to cause dizziness, headaches, and difficulty with sleep. Children exposed to toluene before birth may suffer central nervous system dysfunction, attention deficits, and minor face and limb defects. Inhalation of toluene by pregnant women may increase the risk of spontaneous abortion. The EPA has developed a reference concentration of  $0.4 \text{ mg}/\text{m}^3$  for toluene. Inhalation of this concentration or less over a lifetime would be unlikely to result in adverse noncancer effects. No data exist that suggest toluene is carcinogenic. The EPA has classified toluene in Group D, not classifiable as to human carcinogenicity.

*Xylenes.* Short-term inhalation of mixed xylenes (a mixture of three closely related compounds) in humans may cause irritation of the nose and throat, nausea, vomiting, gastric irritation, mild transient eye irritation, and neurological effects. Long-term inhalation of xylenes in humans may result in central nervous system effects such as headache, dizziness, fatigue, tremors, and incoordination. Other reported effects include labored breathing, heart palpitation, severe chest pain, abnormal electrocardiograms, and possible effects on the blood and kidneys. Developmental effects have been indicated from xylene exposure via inhalation in animals. Not enough information exists to determine the carcinogenic potential of mixed xylenes. The EPA has classified xylenes in Group D, not classifiable as to human carcinogenicity.

*n-Hexane.* Short-term inhalation exposure of humans to high levels of n-hexane causes mild central nervous system depression. Dermal exposure may cause irritation of the skin and mucous membrane. The nervous system effects include dizziness, giddiness, slight nausea, and headache in humans, with numbness in the extremities, muscular weakness, blurred vision, headache, and fatigue observed. Neurotoxic effects have also been exhibited in rats. Mild inflammatory and degenerative lesions in the nasal cavity have been observed in rodents chronically exposed through inhalation. The reference concentration for hexane is  $0.2 \text{ mg}/\text{m}^3$ . The EPA estimates that inhalation of this concentration or less over a lifetime would not likely result in the occurrence of chronic noncancer effects. No information is available on the carcinogenic effects of hexane in humans or animals. The EPA has classified hexane as a Group D, not classifiable as to human carcinogenicity.

*Methyl ethyl ketone (MEK).* Short-term inhalation exposure to MEK in humans may irritate the eyes, nose, and throat, and cause central nervous system depression. Limited information is available on long-term effects of MEK exposure to humans, but chronic inhalation studies in animals have indicated effects on the central nervous system, liver, and respiratory system. The EPA's reference concentration for MEK is  $1 \text{ mg}/\text{m}^3$ , based on decreased fetal birth weight in mice. Inhalation of this concentration or less over a lifetime would be unlikely to result in adverse noncancer effects. Limited data exist on carcinogenic effects of MEK. The EPA has classified MEK in Group D, not classifiable as to human carcinogenicity.

*Methyl isobutyl ketone (MIBK).* Short-term exposure to MIBK may irritate the eyes and mucous membranes, and cause weakness, headache, and nausea. Long-term exposure by workers has been observed to cause nausea, headache, burning eyes, insomnia, intestinal pain, and slight enlargement of the liver. No information is available on reproductive or developmental effects of MIBK in humans, but studies with rats and mice have indicated neurological effects and increased liver and kidney weights. The EPA has not established a reference concentration or classified MIBK with respect to carcinogenicity.

*1,1,1-trichloroethane.* Short-term inhalation exposure of humans to 1,1,1-trichloroethane causes mild hepatic effects, central nervous system depression, dizziness, nausea, vomiting, diarrhea, loss of consciousness, and decreased blood pressure. Cardiac arrhythmia and respiratory arrest may result from the depression of the central nervous system. After long-term inhalation exposure to 1,1,1-trichloroethane, some liver damage was observed in mice and ventricular arrhythmias in humans. The reference concentration for 1,1,1-trichloroethane is under review by EPA. The EPA has classified 1,1,1-trichloroethane as a Group D, not classifiable as to human carcinogenicity, based on no reported human data and inadequate animal data.

#### *D. How Were the Proposed NESHAP Developed?*

We consulted many representatives of the boat manufacturing industry, State and Federal representatives, and material and equipment vendors in developing the proposed NESHAP. We held a series of approximately 50 stakeholder meetings over a period of nearly 4 years. These meetings were held to keep stakeholders informed and to solicit data and information on issues relevant to the NESHAP development. Stakeholders helped in data gathering, arranged site visits, and reviewed questionnaires. Stakeholders also shared data, identified issues and provided information to help resolve issues in the rulemaking process.

We identified the MACT floor control level with information obtained through questionnaire responses, site visits, telephone contacts, and operating permits.

#### *E. What Processes and Operations Constitute Boat Manufacturing?*

The proposed NESHAP regulate fiberglass and aluminum boat manufacturing operations. The emissions from these boat

manufacturing operations and processes are fugitive emissions. Fugitive emissions result from HAP evaporating from the resins, gel coats, solvents, adhesives, and surface coatings used in manufacturing processes.

The following is a brief description of these processes and operations found at boat manufacturing facilities: fiberglass boat manufacturing operations; fabric and carpet adhesive operations; and aluminum boat surface coating operations.

*Fiberglass boat manufacturing operations.* Fiberglass boats are built from glass fiber reinforcements laid in a mold and saturated with a polyester or vinylester plastic resin. The resin hardens to form a rigid plastic part reinforced with the fiberglass. The resin is mixed with a catalyst as it is applied that causes a cross-linking reaction between the resin molecules. The cross-linking reaction causes the resin to harden from a liquid to a solid.

Fiberglass manufacturing processes are generally considered either "open molding" or "closed molding." In open molding, fiberglass boat parts are built "from the outside in" according to three basic process steps:

(1) The mold is sprayed with a layer of gel coat, which is a pigmented polyester resin that hardens and becomes the smooth outside surface of the part.

(2) The inside of the hardened gel coat layer is coated with a "skin coat" of chopped glass fibers and polyester or vinylester resin.

(3) Additional layers of fiberglass cloth or chopped glass fibers saturated with resin are added until the part is the final thickness.

The same basic process is used to build or repair molds with tooling gel coat and tooling resin.

In closed molding, the resin is applied to fabric placed between the halves of a two-piece mold. Three basic types of closed molding used in boat manufacturing are resin infusion molding, resin transfer molding (RTM), and compression molding with sheet molding compound (SMC).

The polyester and vinylester resins that are used in fiberglass boat manufacturing contain styrene as a solvent and a cross-linking agent. Gel coats also contain MMA as a solvent, and styrene. Styrene and MMA are HAP, and a fraction evaporates during resin and gel coat application and curing. Resins and gel coats containing styrene and MMA are also used to make the molds used in producing fiberglass parts.

Mixing is done to stir the resin or gel coat and promoters, fillers, or other

additives before being applied to the parts. Some HAP from the resin and gel coat are emitted during the mixing process.

Resin and gel coat application equipment requires solvent cleaning to remove uncured resin or gel coat when not in use. The resin or gel coat will catalyze in the hoses or gun if not flushed with a solvent after each use.

*Fabric and carpet adhesive operations.* The interiors of many types of fiberglass boats and aluminum boats are covered with carpeting or fabric to improve the appearance, provide traction, or deaden sound. The material is bonded to the interior with contact adhesives. The HAP-containing solvents, such as methylene chloride, toluene, xylenes, and methyl chloroform (1,1,1-trichloroethane), are used in these adhesives. The solvents evaporate as the adhesives dry.

*Aluminum boat surface coatings.* Aluminum boat hull topsides and decks are painted with coatings applied with spray guns. These coatings may be high-gloss polyurethane coatings or low-gloss single-part coatings. These surface coatings often contain HAP solvents, such as toluene, xylenes, and isocyanates.

The HAP-containing solvents are also used to clean surfaces before finishing (wipe-down solvents) and for cleaning paint and coating spray guns.

## **II. Summary of Proposed NESHAP**

This preamble section discusses the proposed NESHAP as they apply to "you," the owner or operator of a new or existing boat manufacturing facility.

### *A. What Sources and Operations Are Subject to the Proposed NESHAP?*

The proposed NESHAP would regulate HAP from major sources that manufacture fiberglass boats or noncommercial, nonmilitary aluminum boats. Coating operations on aluminum commercial and military vessels are covered by the shipbuilding and repair NESHAP (40 CFR part 63, subpart II).

The proposed NESHAP apply to fiberglass boat manufacturers making all sizes and types of fiberglass boats using the operations listed below:

- All open molding operations, including pigmented gel coat, clear gel coat, production resin, tooling resin, and tooling gel coat.
- All closed molding resin operations.
- All resin and gel coat application equipment cleaning.
- All resin and gel coat mixing operations.
- All carpet and fabric adhesive operations.

The proposed NESHAP apply to aluminum boat manufacturing facilities performing the operations listed below:

- All aluminum boat surface coatings and associated spray gun cleaning and wipe-down solvent operations.
- All carpet and fabric adhesive operations.

*B. What Pollutants are Regulated by the Proposed NESHAP?*

The proposed NESHAP regulate the total HAP content in the materials used in each regulated operation. The proposed NESHAP do not set limits for individual species of HAP. The HAP emitted by boat manufacturing facilities typically include styrene, MMA, toluene, xylenes, methyl chloroform (1,1,1-trichloroethane), MEK, n-hexane, and MIBK. However, the total HAP content limit includes all HAP listed in section 112(b) of the CAA.

*C. What Do the Proposed NESHAP Require?*

The proposed NESHAP have various formats for the different operations being regulated. For open molding resin and gel coat operations, you must comply with a HAP emission limit that is calculated for your facility using MACT model point value equations, which are described in section II.D., for each open molding operation.

You can demonstrate compliance with the HAP emissions limit for your facility either by (1) averaging emissions with the MACT model point value equations, (2) complying with equivalent material HAP content requirements for each type of open molding operation, or (3) using an add-on control device. The HAP emissions limit and equivalent HAP content requirements are the same for new and existing sources. You may use averaging for all of your open molding operations or only for some of them. For those operations not included in the emissions average, you must comply with one of the alternative provisions.

For resin operations, different HAP content requirements apply to atomized and nonatomized resin application methods. The HAP content requirements for open molding are presented in table 2 of the proposed NESHAP. If you use an add-on control device to meet the emissions limit, the emissions limit is calculated using the MACT model point value operations and is in units of kilograms (kg) of HAP per megagram (1000 kg) of resin or gel coat consumed.

As stated above, you may use a combination of compliance options for the different resin and gel coat operations within your facility. For

example, a hull production line may use several resins and gel coats. The skin coat resin may comply with the HAP content requirements, while you may decide to use the averaging approach to comply by averaging between the laminating resin and production gel coats. In another example, you could include in the average all production resins and pigmented gel coats at your facility, but decide not to include clear gel coat, tooling resin, and tooling gel coat. You could also use averaging to use a mix of atomized and nonatomized resin application methods but at different HAP contents from those in table 2 of the proposed NESHAP.

Other operations regulated by the proposed NESHAP would be subject to work practice requirements or HAP content limits. Resin and gel coat mixing containers with a capacity of 208 liters (55 gallons) or more must be covered. Routine resin and gel coat application equipment cleaning operations must use zero-HAP solvents, but solvents used to remove cured resin or gel coat from equipment would be exempt. The containers used to hold the exempt solvent and to soak the equipment with cured resin and gel coat must be covered. Carpet and fabric adhesive operations must use zero-HAP adhesives. Aluminum boat wipedown solvents and surface coatings would be subject to HAP content limits. Aluminum boat spray gun cleaning operations would be subject to a work practice requirement. The NESHAP for these operations are the same for new and existing sources. The proposed NESHAP have no averaging compliance options for these operations. Today's proposed NESHAP contain the specific requirements for each operation regulated by this proposal.

Compliance with all of the emissions limits in the proposed NESHAP are based on a 3-month rolling average except when an add-on control device is used. At the end of every month, you determine compliance for each operation based on the HAP content and material consumption data collected over the past 3 months. When an add-on control device is used, compliance is determined through a one-time test and subsequent monitoring.

*D. What Is the MACT Model Point Value and How Is It Used In the Proposed NESHAP?*

The MACT model point value is a number calculated for each open molding operation and is a surrogate for emissions. The MACT model point value is a way to rank the relative performance of different resin and gel coat emissions reduction techniques.

This approach allows you to create control strategies using different resin and gel coat emissions reduction techniques. The proposed NESHAP provide equations to calculate MACT model point values based on HAP content and application method for each material that you use. These MACT model point values are then averaged and compared to limits in the proposed NESHAP to determine if your open molding operations are in compliance.

The MACT model point values have units of kilograms of HAP per megagram of resin or gel coat applied. It is important to note that the MACT model point values are surrogates for emissions, and the MACT model point value equations are used only for determining compliance with the emissions limit for open molding operations. The MACT model point value equations should not be used in other environmental programs for estimating emissions in place of true emission factor equations.

The MACT model point value equations account only for HAP content and application method. Other factors (including curing time, part thickness, and operator technique) can have significant effects on emissions, and these factors are not accounted for in the MACT model point value equations. Determining the HAP content of materials and the method of application is relatively easy, but it is difficult to determine the other factors. Therefore, these factors are not included in the MACT model point value equations.

*E. When Must I Comply With the Proposed NESHAP?*

Existing boat manufacturing facilities must comply within 3 years of the date the promulgated NESHAP are published in the **Federal Register**. New sources that commence construction after today's date must comply immediately upon startup or by the promulgation date, whichever is later.

*F. How Do I Demonstrate Compliance With the Proposed NESHAP?*

Unless you are using an add-on control device, you must measure and record the HAP contents of all the materials regulated by the proposed NESHAP. You may determine HAP content using EPA Method 311, but you may also use documentation provided by the material manufacturer, such as a material safety data sheet (MSDS) or HAP data sheet to show compliance. Although you may use either EPA Method 311 or the manufacturer's documentation to show compliance, EPA will use EPA Method 311 results to

determine compliance if they differ from the manufacturer's documentation.

Compliance with the HAP content limits is based on the weighted-average HAP content for each material on a 3-month rolling-average basis. Compliance is determined at the end of every month (12 times per year) based on the past 3 months of data. To determine weighted-average HAP content, you will also need to monitor and record the amount of each regulated material used per month, as well as HAP content.

If all of the material in a particular operation meets the applicable HAP content limit, then you would not need to record the amount of material used. Likewise, you would not need to perform and record any calculations to determine weighted-average HAP content.

For open molding resin and gel coat operations, how you show compliance will depend on which compliance option you choose. For example, if you choose to average among several open molding resin and gel coat operations, you will have greater operating flexibility, but you will also need to do more recordkeeping and calculations to show compliance than if you comply with the HAP content limits. Also, you must complete an implementation plan for the open molding operations at your facility that are included in an averaging option. The implementation plan must describe the resin and gel coat materials you plan to use, their HAP contents, and how you will apply those materials so that you are in compliance. The plan must also include calculations showing that your choice of materials and application methods will achieve compliance.

You must keep records of the HAP content of all materials that are subject to HAP content limits. You must also keep records of the amount of material used and any calculations you perform to determine compliance using weighted-average HAP contents or the averaging option for open molding operations. Every month, you must inspect the covers required by the work practice standards for resin and gel coat mixing containers and aluminum boat coating spray gun cleaners. You must also keep records of the results of these inspections and any repairs made to the covers. All records must be kept for 5 years (at least the last 2 years of records must be kept onsite).

Today's proposed NESHAP contain the specific monitoring, recordkeeping, and reporting requirements for each operation regulated by this proposal.

*G. How Do I Demonstrate Compliance If I Use an Enclosure and an Add-On Control Device?*

If you use an enclosure (such as a spray booth) and add-on control, you must use EPA Method 204 to prove that the enclosure is a total enclosure. If the enclosure is not a total enclosure, you must use a temporary enclosure to measure the fugitive emissions from the enclosure and the control device. Stack testing is used to determine compliance with the emissions limit. You must use either EPA Method 25A to measure emissions as total hydrocarbons (as a surrogate for total HAP) or EPA Method 18 for specific HAP.

During and after the initial performance test, you must monitor and record certain control device parameters to ensure that the control device continues to be operated as it was

during the test. For example, for thermal oxidizers, you must monitor and record combustion temperature and maintain the temperature above an allowable minimum value. The monitoring requirements for several add-on control devices (including absorbers, adsorbers, and condensers) are contained in 40 CFR part 63, subpart SS, and are referenced in the proposed NESHAP. For other control devices not listed in subpart SS, you must identify parameters that demonstrate proper control device operation and have these parameters approved by the EPA. Monitored operating parameters must be kept within the allowable ranges to demonstrate compliance with the control device operating requirements.

**III. Summary of Environmental, Energy, and Economic Impacts**

*A. What Facilities Are Affected by the Proposed NESHAP?*

There are approximately 119 existing facilities manufacturing fiberglass boats or aluminum boats that are major sources and would be subject to the proposed NESHAP. The rate of growth for the boat manufacturing industry is estimated to be five new facilities per year for the next 5 years.

*B. What Are the Air Quality Impacts?*

The 1997 baseline emissions from the boat manufacturing industry are approximately 9,000 Mg/yr (9,920 tons/yr). The proposed NESHAP would reduce HAP from existing sources by 3,220 Mg/yr (3,550 tons/yr) from the baseline level, a reduction of 36 percent. Table 2 shows the amount of HAP reduced by each type of operation.

TABLE 2.—NATIONAL BASELINE EMISSIONS AND EMISSIONS REDUCTIONS FOR EACH TYPE OF OPERATION (1997 DATA)

Operation	Baseline emissions		Potential emissions reductions	
	Mg/yr	Percent of total	Mg/yr	Percent
Production resin .....	5,320	59.2	2,020	38
Tooling resin .....	80	0.9	30	43
Pigmented gel coat .....	2,440	27.0	330	14
Clear gel coat .....	190	2.1	5	2
Tooling gel coat .....	40	0.4	7	19
Closed molding resin .....	NE	NE	NE	NE
Resin and gel coat mixing .....	NE	NE	NE	NE
Fiberglass application equipment cleaning solvents .....	130	1.5	130	100
Carpet and fabric adhesives .....	543	6.0	540	100
Aluminum Wipedown Solvents .....	60	0.7	40	65
Aluminum Boat Surface Coatings .....	190	2.1	100	54
<b>Totals .....</b>	<b>9,000</b>	<b>.....</b>	<b>3,223</b>	<b>36</b>

NE means "not estimated."

The proposed NESHAP will not result in any increase in other air pollution

emissions. While combustion devices can result in increased sulfur dioxide

and oxides of nitrogen emissions, we do not expect anyone to comply by

installing new combustion devices during the next 5 years.

*C. What Are the Water Quality Impacts?*

We estimate that the proposed boat manufacturing NESHAP will have no adverse water quality impacts. We do not expect anyone to comply by using add-on control devices or process modifications that would generate wastewater.

*D. What Are the Solid and Hazardous Waste Impacts?*

We estimate that the proposed NESHAP will decrease the amount of solid waste generated by the boat manufacturing industry by approximately 360 Mg/yr (400 tons/yr). The decrease in solid waste is directly related to switching to nonatomized resin application equipment (*i.e.*, flowcoaters and resin rollers). Switching to flowcoaters results in a decrease in overspray because of a greater transfer efficiency of resin from flowcoaters to the part being manufactured. A decrease in resin overspray consequently reduces the amount of waste from disposable floor coverings, cured resin waste, and personal protective equipment (PPE) for workers. Disposable floor coverings are replaced on a periodic basis to prevent resin buildup on the floor. We estimate that solid waste generation of floor coverings will decrease by approximately 320 Mg/yr (350 tons/yr), and that cured resin solid waste will decrease by approximately 45 Mg/yr (50 tons/yr).

Decreased overspray from flowcoaters will result in a decreased usage of PPE, which also consequently reduces the

amount of solid waste. Workers who use flowcoaters typically wear less PPE than when using spray guns because of the reduced presence of resin aerosols and lower styrene levels in the workplace. Because we did not have information on the many different types of PPE currently used, we did not estimate this decrease in solid waste.

Some facilities that switch from spray guns to flowcoaters may have a small increase of hazardous waste from the used flowcoater cleaning solvents. However, most facilities will not see an increase, and the overall impact on the industry will be small relative to the solid waste reductions. Nearly all flowcoaters require resin and catalyst to be mixed inside the gun (internal-mix) and must be flushed when work is stopped for more than a few minutes. External-mix spray guns do not need to be flushed because resin is mixed with catalyst outside the gun. Facilities that switch from external-mix spray guns to flowcoaters will use more solvent. Solvent usage should not change at facilities switching from internal-mix spray guns to flowcoaters.

The most common flushing solvents are acetone and water-based emulsifiers. Only a couple of ounces of solvent are typically needed to flush the mixing chamber and nozzle of flowcoaters and internal-mix spray guns. We have observed during site visits that this small quantity of solvent is usually sprayed into the air or onto the floor coverings and allowed to evaporate.

The EPA does not have adequate data to predict the potential solvent waste impact from switching to flowcoaters. The magnitude of the impact depends

on the type of gun currently used (internal- or external-mix), the frequency of flushing, and the type of solvent used. However, because of the small amount of solvent used, and since most is allowed to evaporate, we believe the overall solvent waste increase will be small compared to the solid waste reductions.

*E. What Are the Energy Impacts?*

We estimate that energy consumption for new and existing facilities will not increase. No new or existing facilities are expected to install add-on control devices to comply with the proposed NESHAP in the first 5 years after promulgation. One facility currently uses a thermal oxidizer to control some of their styrene and MMA emissions from fiberglass boat manufacturing operations. No increase in energy use is anticipated to comply with the proposed NESHAP.

*F. What Are the Cost Impacts?*

We estimate that nationwide annual compliance costs for the existing facilities will be \$14 million. This estimate includes annualized capital costs and increased material costs for purchasing more expensive, lower-HAP materials. Annual costs also include monitoring, recordkeeping, and reporting costs. The estimated annual cost of reduced HAP is \$4,350/Mg (\$3,950/ton).

Table 3 shows the estimated costs to reduce emissions from the operations at the 119 major source boat manufacturing facilities regulated by the proposed NESHAP.

TABLE 3.—COST IMPACTS

Type of operation	Nationwide annual costs (millions) in 1998 dollars
Production resin (including nonspray equipment) .....	4.9
Pigmented gel coat .....	2.1
Clear gel coat .....	0.05
Tooling resin .....	0.9
Tooling gel coat .....	0.1
Resin and gel coat new product testing cost .....	0.5
Fiberglass application equipment cleaning .....	0.3
Resin and gel coat mixing .....	0.04
Closed molding resin .....	0
Aluminum and fiberglass boat carpet and fabric adhesives and application equipment .....	2.5
Aluminum wipedown solvent .....	0.03
Aluminum boat surface coating .....	1.0
Monitoring, recordkeeping and reporting costs .....	1.6
<b>Total .....</b>	<b>14</b>

The capital costs would be for purchase of new resin application equipment, resin mixer covers, and

adhesive application equipment. The estimated cost of new resin application equipment (flowcoaters) is \$6,000 per

unit (includes flowcoater, hoses, and resin and catalyst pumps). The estimated cost of new adhesive



application equipment is also approximately \$6,000 per unit. The resin and gel coat mixer covers will be approximately \$180 per year per container.

No capital costs are predicted for mold construction or aluminum boat surface coating operations.

*G. What Are the Economic Impacts?*

The EPA prepared an economic impact analysis to evaluate the primary and secondary impacts of the proposed

NESHAP on the boat manufacturing market, consumers, and society. Because the characteristics of boats vary greatly throughout the industry, we evaluated the market by assessing the impacts on six separate market segments of the industry, including: outboard boats, inboard runabouts/sterndrive, inboard cruisers/yachts, jet boats/personal watercraft, sailboats, and canoes. The total annualized social cost (in 1994 dollars) of the proposed

NESHAP on the industry is \$13.0 million, which is 0.2 percent of total baseline revenue. Generally, the analysis indicates a minimal change in market prices and quantity of boats sold. Imports will increase negligibly, with a corresponding decrease in exports. The analysis also suggests a loss (at the maximum) of 48 employees out of the 51,500 employees in the industry. The impacts on specific market segments are summarized in the table below.

TABLE 4.—ECONOMIC IMPACT OF PROPOSED NESHAP ON BOAT MARKET SEGMENTS

Boat market segment	Change in price (percent)	Change in market output (percent)
Outboard Boats .....	0.1	-0.3
Inboard Runabouts/Sterndrive .....	0.1	-0.1
Inboard Cruisers/Yachts .....	0.0	-0.0
Jet Boats/Personal Watercraft .....	0.0	-0.0
Sailboats .....	0.1	-0.2
Canoes .....	0.1	-0.1

The analysis also predicts the number of facilities that would close as a result of the cost of complying with the proposed NESHAP. The EPA used market level information on total predicted change in quantity to infer how many plants would close if the quantity decrease was borne entirely by one (or more) facility. For example, if the market analysis predicts that 1,000 fewer boats are produced and the average facility produces 500 boats, then the impact is equivalent to two facility closures. Using this approach, the predicted reduction in quantity did not equal even one facility closure in any of the six market segments. While this does not mean that no facilities will close as a result of the proposed NESHAP, it does indicate that the proposed NESHAP have minimal total impacts, and that any facility closure will likely be the result of poor baseline cost conditions rather than a direct result of the compliance burden.

**IV. Rationale for Proposed NESHAP**

*A. How Did EPA Determine the Source Category To Regulate?*

The proposed NESHAP applies to fiberglass boat and aluminum boat manufacturing facilities that are located at major sources of HAP. Section 112(c) of the CAA directs us to list each category of major source emitting any HAP listed in section 112(b). Boat manufacturing (major sources only) was included on the initial list of source categories published on July 16, 1992 (57 FR 31576). The initial notice of the source category list stated that we

would refine category descriptions during the rulemaking process, based on additional information available.

We redefined the category to include aluminum boat manufacturing facilities (64 FR 63025, November 18, 1999). The initial source category definition included only fiberglass boat manufacturing operations. We added aluminum boat manufacturing facilities to the source category because many of these facilities are major sources of HAP. Aluminum boats are defined as noncommercial, nonmilitary aluminum boats. Aluminum commercial and military boats are not included in the source category because the HAP-emitting process in the construction of these boats (surface coatings) is regulated by the shipbuilding and repair NESHAP (40 CFR 63, subpart II).

*B. What Pollutants Are Regulated Under the Proposed NESHAP?*

The proposed NESHAP regulate total HAP, rather than individual HAP compounds. A standard for total HAP simplifies compliance and enforcement, compared with standards for individual HAP compounds. Moreover, the proposed NESHAP will affect the formulation of chemical products used by the industry. It is not reasonable to regulate the content of individual constituents in these complex mixtures. Styrene is the HAP emitted in the largest magnitude (about 87 percent of emissions). Other HAP emitted from boat manufacturing facilities include MMA, methylene chloride (dichloromethane), toluene, xylenes,

methyl chloroform (1,1,1-trichloroethane), n-hexane, and MIBK.

*C. What Is the "Affected Source" and How Did EPA Select the Operations To Be Regulated by the Proposed NESHAP?*

The affected source is the combination of all regulated operations at a single boat manufacturing facility. The following regulated operations are typically performed at fiberglass boat manufacturing facilities and are part of the affected source:

- Open molding operations, including pigmented gel coat, clear gel coat, production resin, tooling resin, and tooling gel coat;
- Closed molding resin operations;
- Resin and gel coat application equipment cleaning operations; and
- Resin and gel coat mixing operations.

Carpet and fabric adhesive operations are performed at both fiberglass boat and aluminum boat manufacturing facilities and are part of the affected source at those facilities.

The following regulated operations are typically performed at aluminum boat manufacturing facilities and are part of the affected source:

- Aluminum wipedown solvent operations;
- Aluminum boat surface coating operations; and
- Aluminum coating spray gun cleaning operations.

These are the typical operations found at fiberglass boat and aluminum boat manufacturing facilities, and we were able to determine MACT for these operations. If a single facility

manufactures both aluminum boat and fiberglass boats, the facility is a single affected source.

Mold sealing and release agents, mold stripping and cleaning solvents, solvents used to clean cured resin and gel coat from application equipment, wood coatings, fiberglass hull and deck coatings, and antifoulant coatings are not covered by the proposed NESHAP. See section IV.H. for the rationale for why these operations are not regulated by the proposed NESHAP.

We defined the affected source as the combination of all of these operations at a site to provide compliance flexibility. This broad source definition allows a manufacturer to determine compliance by averaging the HAP content of different products used throughout the facility within certain defined operations, and to use different application techniques as needed to meet product quality specifications. This approach is consistent with the way that the HAP content and application data were analyzed to determine the MACT floor.

#### *D. What Is a New Affected Source?*

A new affected source is any fiberglass boat or aluminum boat manufacturing facility that meets both of these criteria:

- It began construction after today's date, and
- It is a new fiberglass or aluminum boat manufacturing operation at a site that does not presently contain any boat manufacturing operations.

We selected this broad definition of new source for two reasons. First, the MACT for new and existing sources is the same, so there is no difference in emission control requirements for new and existing sources. Second, we concluded that it would be unreasonably costly to demonstrate compliance separately for both new and existing source operations that are located at the same site. Because the equipment is easily portable, it can be difficult to define exactly what would constitute a new line or operation. Also, it would be burdensome to monitor and record equipment and material usage for separate operations that were considered new and existing because the equipment is portable, and material is often dispensed from centralized bulk storage containers.

Although some sources might be required to achieve compliance earlier under a narrower new source definition, the small emissions reductions do not justify the additional long-term compliance burden.

#### *E. How Did EPA Determine the MACT Floor for Existing Sources?*

We determined separate MACT floors for each type of boat manufacturing operation based on data collected from about one-half of the major source boat manufacturers. We received data through questionnaire responses from 54 fiberglass and 13 aluminum boat manufacturers, site visits to 10 boat manufacturers (9 fiberglass and 1 aluminum), and through telephone contacts and operating permits for several more boat manufacturers. The data collected from the fiberglass boat manufacturers represent both large and small companies, as well as power and sailboat manufacturers who build vessels ranging in size from small runabouts to large, luxury yachts. Therefore, we believe the data are representative of the fiberglass boat industry segment. Our database also includes all the major source aluminum boat manufacturers known to us; therefore, the database also accurately represents this industry segment.

Using the data collected from boat manufacturers, we determined separate existing source MACT floors for each type of boat manufacturing operation (e.g., open molding operations, carpet and fabric adhesives operations). For each operation, the facilities were ranked from lowest to highest emitting. Emissions were computed as a facilitywide average for each operation to account for the variety of materials within each operation that are required to construct a boat. For open molding resin operations (production and tooling), we estimated the HAP using the MACT model point value equations. This approach takes into account the combined effect of application method and the HAP content of the resins used, but is not an estimate of actual HAP to the atmosphere.

To determine MACT floors for the production resin operations, we evaluated open molding and closed molding as separate types of emission sources. Closed molding is a lower-emitting operation than open molding, but at this time has not been demonstrated to be generally applicable for all types of boats. Boat manufacturers typically use closed molding to achieve specific product qualities, such as two finished sides, higher fiber-to-resin ratios, or higher production levels that cannot be achieved with open molding. Therefore, closed molding operations were not used in setting the MACT floor for open molding.

Also, we determined MACT floors separately for fiberglass and aluminum

boat manufacturers because the regulated operations at these facilities differ. The one exception was for carpet and fabric adhesive operations, where the MACT floor analysis was based on a combined data set. Fiberglass and aluminum boat manufacturers both have carpet and fabric adhesive operations and use the same adhesives.

We determined MACT floors based on the median facility of the lowest-emitting 12 percent for production resin, pigmented gel coat, tooling resin, tooling gel coat, resin and gel coat application equipment cleaning and carpet and fabric adhesives. For clear gel coat, closed molding resin, aluminum boat surface coatings, aluminum coating spray gun cleaning operations, and aluminum wipe-down solvents, we used the median of the five lowest-emitting facilities because we had data on fewer than 30 sources. We selected the median facility rather than the arithmetic average of the lowest-emitting facilities in order to represent the performance of an actual facility.

A more detailed summary of the results of the MACT floor analysis, the data and the considerations used to determine the MACT floors for the boat manufacturing source category can be found in Docket No. A-95-44.

#### *F. How Did EPA Determine the MACT Floor for New Sources?*

We believe that the existing source MACT floor also represents the new source floor. The existing source MACT floor represents the greatest degree of emissions reductions that is achievable under all circumstances within each particular operation regulated by the proposed NESHAP.

For new sources, the CAA requires the MACT floor to be based on the degree of emissions reductions achieved in practice by the best-controlled similar source. A variety of chemical materials and application methods are available for each operation within the boat manufacturing source category. The suitability of these materials and methods depends on several product and manufacturing requirements. These requirements typically include part size and shape, strength, durability, production volume and schedule, product mix, color, and worker safety.

Therefore, an emission control option (e.g., HAP content and application method) that is applicable at one facility with a particular mix of these requirements may not be applicable at another facility with different requirements. While some facilities are using lower-HAP materials and techniques than represented by the existing source MACT floor, we do not

believe that the lowest-emitting options are universally applicable to all new boat manufacturers. Sometimes, the lower-HAP materials are used to produce particular colors and geometric shapes that do not represent the range of boats that are manufactured. Accordingly, the lowest-HAP-emitting facilities may not be using materials or techniques that can be used by new sources in all circumstances.

Some facilities do use the lower-HAP materials or techniques for particular products. However, we have no data to precisely define the particular combination of requirements where these lower-emitting options can be used and still maintain the minimum required strength and durability requirements of these products. These facilities, consequently, do not represent the new source MACT floor, and we are unable to establish subcategories for purposes of determining a more stringent MACT floor for new sources. The existing source MACT floor level of control is universally applicable to all boat manufacturers because it has been demonstrated at several different facilities that produce a range of products that represent the industry, and that use different combinations of materials and methods to achieve the emissions reductions. Therefore, the existing source MACT floor is achievable by all new sources and also represents the new source floor.

#### *G. Did EPA Consider Control Options More Stringent Than the MACT Floor?*

Because no control options more stringent than the MACT floor are feasible for new and existing sources, we have determined that MACT for new and existing sources is the MACT floor level of control. We considered three potential options for MACT that might be more stringent than the MACT floors, but found that these options were not achievable. The options we considered were lower-HAP materials, zero-HAP materials and add-on control devices. The following analysis applies equally to new and existing source MACT.

As noted in the discussion of the new source MACT floor in the previous section, some facilities use materials with HAP contents lower than the new and existing source MACT floor. However, as also noted in that discussion, EPA does not have the data to define subcategories in which these lower-HAP materials can be used. Therefore, these lower-HAP materials are not a viable option more stringent than the MACT floor for new or existing sources.

For carpet and fabric adhesives, as well as resin and gel coat application

equipment cleaning solvents, the new and existing source MACT floor is zero-HAP materials. In these two cases, zero-HAP materials are also MACT for new and existing sources because no more stringent level of control is achievable.

For the other operations regulated by the proposed NESHAP, no zero-HAP substitutes are currently available. No zero-HAP substitutes for polyester and vinylester resins or gel coats have been demonstrated for large-scale production boat manufacturing. The zero-HAP alternatives for aluminum wipe-down solvents, such as acetone, are too volatile and flammable for this operation. No waterborne coatings or powder coatings have been demonstrated as substitutes for the solvent-borne coatings currently used in aluminum boat surface coating operations.

We also evaluated add-on control devices. We are aware of one facility using a thermal oxidizer to control HAP from resin and gel coat operations in the manufacture of small jet boats. Thermal oxidizers are generally effective controls for HAP emission sources.

The experience of the jet boat facility with thermal oxidation suggests that thermal oxidation has not been effectively demonstrated as a control option for boat manufacturing. During the MACT analysis, no emission test data were available to us or to the State permitting authority to confirm the performance of this control device. Also, after several years of operation, the facility had not received an operating permit with an enforceable emission limit and was still operating under an extension of their construction permit.

Moreover, the facility with the thermal oxidizer uses restricted airflow to capture concentrated HAP near the surface of the molds. The restricted airflow management is feasible at this facility because the facility is dedicated to the construction of only two models of small jet boats, 4.4 and 5.5 meters (14.5 and 18 feet, respectively) long. The restricted airflow management was implemented with the intention to use robotics to apply some of the resin and gel coat.

The restricted airflow management as practiced at this facility would not be suitable for other facilities in the industry. All other facilities produce a variety of products and parts and must have the operational flexibility to change product mix over time. Restricted airflow management would not be feasible in operations where workers apply the resin and gel coat, and a range of different types of boats are produced.

Accordingly, we have concluded that thermal oxidizers have not been demonstrated for this industry. While theoretically feasible, we have no data to demonstrate the cost or the effectiveness of the thermal oxidizer at the air flow rates and HAP concentrations that exist at typical boat manufacturing plants.

#### *H. Why Are Some Boat Manufacturing Operations Not Being Covered by the Proposed NESHAP?*

The proposed NESHAP would not regulate the following operations:

- Mold sealing and release agents;
  - Mold stripping and cleaning solvents;
  - Solvents used to clean cured resin and gel coat from application equipment;
  - Wood coatings;
  - Fiberglass hull and deck coatings;
- and
- Antifoulant coatings.

We excluded wood finishing operations, fiberglass hull and deck coating operations, and antifoulant coating (bottom coating) operations because they are performed only by a relatively small percentage of boat manufacturers and are not typical of the majority of major source boat manufacturers. These three operations collectively account for about only 0.5 percent of HAP from major source boat manufacturers.

The proposed NESHAP would not regulate mold sealing and release agents and mold stripping and cleaning solvents because we were unable to set MACT floors or determine MACT for these operations. In both cases, the information and data available to us suggest that mold maintenance practices, part shape and size, and production schedules determine emissions more than the HAP content of these materials. The EPA does not have sufficient data to identify and prescribe work practices to reduce emissions from these operations. Therefore, the proposed NESHAP do not regulate these materials. A more detailed explanation of why we could not determine the MACT is in Docket No. A-95-44. These two operations collectively emit less than 1 percent of HAP from boat manufacturing.

Most boat manufacturers in our database use mold sealing and release agents that contain only a small percentage of HAP (less than 10 percent HAP) sold by two suppliers. Boat manufacturers use the same group of products but in different amounts leading to differences in facilitywide average HAP. Differences among facilities are probably due to differences

in facility-specific work practices that are dictated by production requirements, such as mold cycle time and frequency, the size and shape of parts, and mold maintenance. We do not have sufficient data to identify the MACT floor or MACT based on differences in work practices among facilities.

Mold stripping and cleaning solvents are not regulated by the proposed NESHAP because we do not have sufficient data to determine a MACT floor. The amount of HAP used per unit of mold surface area applied depends on facility-specific mold maintenance practices and production requirements. These may include mold cycle time, how often the mold is used, and even whether the mold is stored indoors or outdoors. The size of the part may also influence mold maintenance. We do not have sufficient data to identify those differences in production requirements or work practices that determine mold cleaning solvent usage. Therefore, we cannot identify a MACT floor or MACT.

We are not regulating solvents used for cleaning cured resin or gel coat from application equipment because we know of no emission controls. Cured resin or gel coat inside a gun is usually the result of operator error or an equipment failure. To clean cured resin and gel coat, an aggressive solvent is needed and no low-HAP alternatives are available. The equipment is usually soaked in a covered bucket resulting in little evaporation of the solvent. The amount of solvent needed per year is determined by the size of the facility, degree of operator error, and equipment failure rates. Because operator error and equipment failure are hard to predict, we could determine no basis for an annual limit of solvent usage that would be achievable by all facilities. The proposed NESHAP, therefore, allow HAP-containing solvents only for cleaning cured resin and gel coat from the application equipment. The use of HAP-containing solvents for routine gun flushing is prohibited.

#### *I. How Did EPA Select the Format of the Proposed NESHAP?*

We decided to offer several formats for complying with the proposed NESHAP. The purpose of multiple formats is to provide the flexibility to comply in the most cost effective and efficient manner. We considered the following factors in selecting the format of the proposed NESHAP:

- The format must allow for multiple compliance techniques for the various types of facilities in the industry.

- The format must simplify compliance and ensure that the cost of compliance is not excessive.

- The format must be enforceable.

The format of the proposed NESHAP is based on a combination of HAP content limits, equipment standards, and work practice standards. Section 112(h) of the CAA states that “\* \* \* if it is not feasible in the judgement of the Administrator to prescribe or enforce an emission standard for control of a hazardous air pollutant or pollutants, the Administrator may, in lieu thereof, promulgate a design, equipment, work practice, or operational standard, or combination thereof \* \* \*.” Section 112(h)(2) further defines the phrase “not feasible to prescribe or enforce an emission standard” as any situation in which “\* \* \* a hazardous air pollutant or pollutants cannot be emitted through a conveyance designed and constructed to emit or capture such pollutant, \* \* \* or the application of measurement methodology to a particular class of sources is not practicable \* \* \*.”

In general, numerical emission limits are not feasible to prescribe or enforce. Most boat manufacturing operations occur in large buildings where emissions are released to the atmosphere through general building ventilation, windows, and doors. These emission points have high air volumes and low HAP concentrations that would pose unreasonably high costs to capture the emissions. Some coating operations are carried out in spray booths that are vented through a single stack, but these emissions also have high air volumes and low HAP concentrations. Therefore, the most reasonable format for these situations is to specify HAP content limits for materials, application equipment requirements, and work practices to minimize emissions.

The formats of the proposed NESHAP include both numerical emission limits and work practice/equipment standards (HAP content limits and application equipment requirements). We included both types of formats so boat manufacturers could choose to comply using either averaging provisions, low-HAP materials and alternative application equipment, or add-on controls. However, very few boat manufacturers will probably choose to comply with emission limit controls because it is not practical to capture the emissions for use with add-on controls.

The following subsections describe the selection of the formats for each type of limit included in the proposed NESHAP.

*HAP Content Limits for Fiberglass Boat Manufacturing Operations.* The proposed NESHAP for open molding

operations, resin and gel coat equipment cleaning solvents, and carpet and fabric adhesives include weight-percent HAP content limits for these materials. The HAP content is an accurate measure of the relative emission potential of materials. The HAP content is already reported on the material safety data sheet for each material. Therefore, HAP content can simplify compliance by allowing you to purchase compliant materials. If you add HAP to your materials before use, you must include the additional HAP in your HAP content calculations; do not include HAP catalysts used for resins and gel coats in the HAP content calculation.

*Emission Averaging Using Kilogram of HAP per Megagram of Material Applied.* The proposed NESHAP for open molding operations include a HAP emissions limit that is kilogram of HAP per megagram of material applied. This format is used in the emissions averaging compliance option. This format was selected to provide compliance flexibility by allowing you to use varying HAP content materials and different application techniques in the open molding operations and average the emissions using the MACT model point value equations described in section II.D. The averaging approach will allow you to use higher-HAP materials and spray application techniques for some open molding operations while using lower-HAP materials and lower-emitting application methods for others.

The proposed NESHAP do not allow you to average between open and closed molding resin operations. However, the EPA is soliciting comments on allowing averaging between open and closed molding operations under certain circumstances. Industry representatives have requested this option and have argued that it will encourage pollution prevention and long-term emissions reductions by encouraging the development of more widely applicable closed molding technologies.

The EPA developed separate MACT floors and standards for open and closed molding processes because open molding is currently considered a separate manufacturing process from closed molding. The NESHAP for open molding require you to use low-emitting resins and application methods to reduce emissions. On the other hand, closed molding is an inherently low-emitting process, so the proposed NESHAP impose no additional requirements to reduce emissions from closed molding. Because today's proposed NESHAP have no numerical emission limit for closed molding, you cannot “over control” closed molding

for greater emissions reductions to offset excess emissions from open molding. Therefore, the proposed NESHAP do not include closed molding in the averaging approach that is based on a source-wide emission limit for resin and gel coat operations.

The EPA is, however, considering the feasibility of allowing closed molding as a control technology in a source-wide limit in cases where the closed molding is used as a substitute or replacement for an existing open molding operation. Here, any reduction from switching to closed molding could be applied to excess emissions from other open molding operations. Consider, for example, a boat manufacturing facility that makes 16-foot and 20-foot boats on two separate lines using open molding. If the facility adopts closed molding on the 20-foot line and ceases open molding, then this is an operational change that reduces emissions from the 20-foot boat line. The excess emissions reductions (above the level that would be required by the open molding standard) would allow the operator to use higher-HAP materials on the 16-foot boat line.

Under this proposal, EPA would allow averaging only when the closed molding resin application is a replacement for existing open molding resin application. This proposal includes this restriction because MACT for open molding resin application is nonatomized application of resin with 35 percent HAP content. If this restriction were not included, a facility spray applying a higher-HAP resin and using closed molding could comply without any emissions reductions simply by averaging the open and closed molding. Moreover, a facility that adds new closed molding capacity to increase production would be allowed to switch to higher HAP materials in their existing open molding operations. In these cases, the facility would not be reducing emissions from the open molding operations and would not be achieving an open molding control level equal to MACT (*i.e.*, 35 percent HAP content and nonatomized application).

Therefore, EPA is soliciting comments on allowing averaging between open and closed molding by including closed molding in a source-wide emission limit. Under this proposal, you could average open and closed molding if you meet all of the following three conditions: (1) Your facility must be an existing source that is operating prior to today's proposal date, (2) you must begin the closed molding operation after today's proposal date, and (3) the closed molding operation must replace an equivalent amount of open molding

production capacity that existed before today's proposal date. The EPA welcomes comments on the feasibility of this approach, and whether it would provide any additional operating flexibility to existing boat manufacturing facilities or encourage more closed molding.

*HAP Content Limits for Aluminum Boat Surface Coatings.* The proposed standard for aluminum boat surface coatings is expressed as mass of HAP per volume of coating solids. For coating operations, weight-percent HAP is not an accurate predictor of relative HAP. For this operation, the amount of coating needed to cover a surface is determined by the solids content of the coating. Coatings with similar weight-percent HAP contents, but different solids contents, will have different HAP because different amounts of coating will be needed for the same job.

In addition, coatings often have low-HAP solvents added to control viscosity and achieve other coating liquid properties. Such low-HAP solvents reduce HAP content as weight-percent, but increase the volume needed to achieve the same dry-film thickness. The proposed format of mass of HAP per volume of coating solids assures that coatings are being compared on an equal basis.

*HAP Content Limit for Aluminum Wipe-Down Solvents.* The proposed standard for aluminum wipe-down solvents is expressed as mass of HAP per volume of solids from aluminum primers or clear coats applied to bare aluminum. This format allows you to use a greater range of solvents and compares HAP on an equal basis.

The data available to us indicate that weight-percent HAP content for the wipe-down solvents is not an accurate predictor of emissions. Some facilities using higher-HAP solvents have lower HAP per unit of coating applied than those using lower-HAP solvents. These data indicate it is possible to use some higher-HAP solvents more efficiently than lower-HAP solvents and, therefore, a limit on solvent HAP content could be counterproductive.

Ideally, we would use HAP mass per unit surface area, but this is not practicable. It is not practical to measure or monitor the surface area to be cleaned prior to coating because of the complicated three-dimensional shape of aluminum boats and the variety of boats produced. Therefore, the volume of solids of aluminum clear coat primer applied to bare aluminum was selected as a surrogate for the amount of surface area to be cleaned prior to coating.

*Selection of Averaging Time for Demonstrating Compliance.* As a boat

manufacturer, you must show compliance with the emissions limits in the proposed NESHAP on a 3-month, rolling-average basis. You must determine compliance at the end of each month from the data collected over the past 3 months. A 3-month averaging time provides a balance between operating flexibility and enforceability of the proposed standard. The 3-month period is sufficiently long so that you can identify potential compliance problems and change your operations in time to maintain compliance. The rolling-average aspect provides an enforceable emission limit 12 times per year.

Many boat manufacturers already track material usage monthly to comply with State regulations and permit requirements, so monthly tracking is consistent with current practice. Tracking on a more frequent basis would be unnecessarily burdensome. Boat manufacturers need a 3-month rolling-average period to respond to both short-term variations in HAP content that is inherent in all chemical products and short-term needs for higher-HAP materials.

#### *J. How Did EPA Select the Test Methods for Determining Compliance With the Proposed NESHAP?*

The proposed NESHAP give you the option of complying by either meeting HAP content limits (among other requirements) or using an enclosure and add-on control device to meet numerical emission limits. The reference method for measuring the HAP content of resin, gel coat, adhesives, aluminum boat surface coatings, and wipe-down solvents subject to the proposed NESHAP is EPA Method 311 (Analysis of Hazardous Air Pollutant Compounds in Paints and Coatings by Direct Injection Into a Gas Chromatograph). This is an established method that is appropriate for measuring the types of HAP used in these materials. You may use alternative methods for measuring HAP content if approved by EPA.

The proposed NESHAP do not require a compliance test for HAP content, nor do they require you to test every shipment of materials that you receive. You are responsible, however, for ensuring, by any means that you choose (*e.g.*, periodic testing, manufacturers' certification), that the HAP content of your materials complies with the requirements of the proposed NESHAP. We may require you to conduct a test at any time using EPA Method 311 (or any approved alternative method) to confirm the HAP content in the compliance reports that you submit. If there is any inconsistency between the results of the

EPA Method 311 test and any other means of determining HAP content, the Method 311 results will govern.

If you choose to use an enclosure and add-on control device, you must determine the capture efficiency of the enclosure and measure the HAP from the control device. To determine the capture efficiency of the enclosure, you must use EPA Method 204 (Criteria for and Verification of Permanent or Temporary Total Enclosure). If the enclosure meets the criteria in EPA Method 204 for a permanent total enclosure, then you may assume that its capture efficiency is 100 percent. If the enclosure is not a total enclosure, then you must build a total temporary enclosure (TTE) around it that meets the definition of a TTE in EPA Method 204. You must then measure emissions from both the control device and the TTE and use the combined emissions to determine compliance.

To measure HAP, you may use either EPA Method 18 (Measurement of Gaseous Organic Compound Emissions by Gas Chromatography) to measure the sum of individual species of HAP or EPA Method 25A (Determination of Total Gaseous Organic Matter Concentration Using a Flame Ionization Analyzer) for total hydrocarbons (THC) as a surrogate for total HAP. The EPA Method 25A allows you the flexibility to use a simpler method than EPA Method 18 that does not speciate HAP in cases where measuring THC is sufficient to demonstrate compliance. You can measure THC as a surrogate for total HAP if most of the THC emitted from an enclosure are HAP, such as styrene and MMA from resin and gel coat operations. For compliance determinations, the EPA will assume that all THC measured with EPA Method 25A are HAP.

#### *K. How Did EPA Determine the Monitoring and Recordkeeping Requirements?*

The monitoring and recordkeeping requirements you must meet will depend on how you choose to comply with the proposed NESHAP. For each compliance option, the proposed monitoring and recordkeeping requirements are the minimum necessary to determine initial and ongoing compliance and are consistent with the general provisions (40 CFR part 63, subpart A).

*Compliance with HAP Content Limits.* For all operations subject to HAP content limits, you must perform three tasks: monitor and record the HAP content of the material used, monitor and record the monthly consumption of the material, and record the

computations to show that the weighted average HAP content over the past 3 months meets the standard. If all the materials used in an operation meet the HAP content limit, then you only need to record HAP content, and you do not need to track monthly consumption or record the computations.

*Compliance with Averaging Provisions.* To comply with the averaging provisions for open molding operations, you must monitor and record HAP content, amount of material applied by spray, and the amount applied by nonspray; and you must record the computations needed to show compliance. You must use these data as well as the MACT model point value equations in the proposed NESHAP to calculate the HAP emitted for the materials used in that operation for the past 3 months. Compliance is then determined relative to the allowable HAP limit calculated for those operations for the past 3 months.

*Compliance with Equipment and Work Practice Standards.* The proposed NESHAP require resin and gel coat mixing containers to be fitted with covers that have no visible gaps. The proposed NESHAP also require that aluminum coating spray guns be cleaned in enclosed gun cleaners or sprayed into containers that can be closed when not in use. You will be required to inspect container covers and enclosed gun cleaners each month to ensure the covers are in place and properly maintained. You must record the results of the inspections. The inspections should be sufficient to ensure that the covers are in place and properly maintained. We believe that monthly inspections are a reasonable interval because the nature of failure in these pieces of equipment is likely due to wear and tear and not a sudden failure. Longer time periods between inspections, however, would allow a failure to go too long before being repaired.

The proposed NESHAP for production resin and tooling resin will require most manufacturers to use nonatomized resin application methods to comply. These methods include flowcoaters and pressure-fed resin rollers, among others. We could identify no parameters to monitor whether these methods were being used. Rather, compliance would be determined during enforcement inspections as to whether these methods were being used. As long as flowcoaters, pressure-fed resin rollers, or other similar devices are installed and operated according to manufacturer's specifications, they will comply with the requirements to use nonatomized resin application methods.

*Compliance for Sources Using Enclosures and Add-on Control Devices.* You have the option of using an enclosure and add-on control instead of complying with HAP content or application equipment standards. The requirements in the proposed NESHAP are consistent with other air quality regulations that require capture and control of emissions. They are the minimum needed to demonstrate that the capture and control system is operated properly.

You must initially demonstrate compliance with the emission limit by demonstrating that the enclosure is a total enclosure or by also measuring the fugitive emissions that escape the enclosure. You must also measure the efficiency of the add-on control using EPA Method 25A for THC (as a surrogate for HAP) or EPA Method 18 for HAP. The EPA Method 18 measures individual HAP that you sum to calculate total HAP.

After the initial compliance test, you must monitor control device parameters to demonstrate that the control device continues to be operated as it was during the initial test. In the case of thermal oxidizers, you must monitor and record combustion temperature every 15 minutes both during and after the performance test. You must calculate the average temperature achieved during the test. After the test, you must maintain the average temperature at or above the temperature achieved during the performance test. Temperature monitors and recorders are standard features on thermal oxidizers. For other devices, you must determine appropriate parameters to monitor and receive our approval to use these parameters.

#### *L. How Did EPA Select the Notification and Reporting Requirements?*

The required notices and reports are the minimum needed to determine if you are subject to the proposed NESHAP and whether you are in compliance. You must submit an initial notification stating that you are subject to the proposed NESHAP. After the compliance date for your facility, you must submit a notification of your compliance status. You must also submit semiannual reports of your compliance status. If you have an add-on control device and you identify deviations, you must submit quarterly reports of your compliance status until we approve a request to return to semiannual reporting.

If your facility is a new source, you will have additional preconstruction notification requirements. You will also have additional notification and

reporting requirements if you use an add-on control device, including notifications and reports for the control device performance test. These notification and reporting requirements are consistent with those specified in the general provisions (subpart A) for part 63 and are the minimum needed for us to determine compliance for sources with add-on control devices.

The startup, shutdown, and malfunction plan specified by the general provisions will be required only for sources using an add-on control device and will apply only to the add-on control device. For operations not using a control device, the nature of the materials and equipment used to comply with the proposed boat manufacturing NESHAP is such that malfunctions will not lead to excess emissions.

## V. Relationship to Other Standards and Programs Under the CAA

### A. National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices, and Routing to a Fuel Gas System or a Process (40 CFR Part 63, Subpart SS)

If you use an add-on control device other than a thermal oxidizer to control emissions from resin and gel coat operations, you will need to comply with certain provisions in 40 CFR part 63, subpart SS, for add-on controls. The standards in subpart SS cited by the proposed NESHAP are applicable to most sources using an add-on control device. The proposed NESHAP cite these sections in subpart SS rather than repeating them in the proposed regulatory text.

### B. Shipbuilding and Repair (Surface Coating) NESHAP (40 CFR Part 63, Subpart II)

Coating operations on commercial or military aluminum boats and ships are subject to the Shipbuilding and Repair NESHAP. Today's proposed boat manufacturing NESHAP cover coating operations only on nonmilitary and noncommercial aluminum boats. Some boat manufacturers may be potentially subject to both NESHAP because they manufacturer both noncommercial, nonmilitary aluminum boats and either commercial or military vessels. However, there is no conflict between the two NESHAP because the coating operations on any single vessel would be subject to only one NESHAP depending on the intended function of that vessel.

### C. Wood Furniture Manufacturing Operations NESHAP (40 CFR Part 63, Subpart JJ)

Boat manufacturers, particularly builders of large yachts, build wood furniture (such as beds, cabinets, and partitions) into the boat interiors and finish this furniture with stains, sealers, and varnishes that are similar to finishing materials used for household furniture. However, wood furniture finishing operations on boats are not subject to the requirements of 40 CFR part 63, subpart JJ, because the EPA has determined that wood furniture on a boat is integral to the boat cabin and is not comparable to the furniture regulated by 40 CFR part 63, subpart JJ (see Docket No. A-95-44). Wood surface coating operations are not covered by the proposed boat manufacturing NESHAP.

### D. Plastic Parts and Products (Surface Coating) NESHAP

The NESHAP for plastic parts are still being developed and could potentially cover antifoulant and hull and deck surface coating operations at fiberglass boat facilities.

### E. Relationship Between Operating Permit Program and the Proposed Standards

Under the operating permit program codified at 40 CFR parts 70 and 71, all major sources subject to standards under section 111 or 112 of the CAA must obtain an operating permit (See § 70.3(a)(1) and § 71.3(a)(1)). Therefore, all major sources subject to the proposed NESHAP must obtain an operating permit. Area sources in this source category are not regulated by the proposed NESHAP, and, therefore, would not be required to obtain an operating permit unless a State with an approved operating permit program chooses to permit all nonmajor sources.

Some boat manufacturers may be major sources based solely on their potential to emit even though their actual emissions are below the major source level. These boat manufacturers may choose to obtain a federally enforceable limit on their potential to emit so that they are no longer considered major sources and not subject to the proposed NESHAP. Sources that opt to limit their potential to emit (e.g., limits on operating hours or amount of material used) are referred to by the EPA as "synthetic area" sources. To become a synthetic area source, you must contact your local permitting authority to obtain an operating permit with the appropriate operating limits. These operating limits

will then be federally enforceable under § 70.6(b).

The EPA believes that the boat manufacturing category could benefit from the development of a general permit. Under part 70, State permitting authorities are allowed to develop general permits for categories of sources containing numerous similar sources. In deciding which source should be covered by general permits, State regulators must consider three primary criteria: (1) Source categories covered by general permits should contain similar operations and emit pollutants with similar characteristics; (2) sources should not be subject to case-by-case standards; and (3) sources should be subject to the same or substantially similar requirements governing operation, emissions, monitoring, reporting, and recordkeeping.

There are several benefits to a general permit. If a general permit developed by a permitting authority has been approved after public participation and EPA and affected State review, the permitting authority may then grant or deny a general permit to a source without further public participation or EPA and affected State review. The action of granting or denying a general permit is also not subject to judicial review. Another benefit of a general permit that would be particularly advantageous for the boat manufacturing industry is that sources may use general permits strictly for the purposes of becoming synthetic area sources (i.e., limiting their potential to emit).

## VI. Administrative Requirements

### A. Executive Order 12866: Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), we must determine whether a proposed regulatory action is "significant" and therefore subject to Office of Management and Budget (OMB) review and the requirements of the Executive Order. The order defines "significant regulatory action" as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) Materially alter the budgetary impact of entitlements, grants, user fees,

or loan programs or the rights and obligations of recipients thereof; or

(4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

It has been determined that this proposed rule is not a "significant regulatory action" under the terms of Executive Order 12866 and is, therefore, not subject to OMB review.

*B. Paperwork Reduction Act*

The information collection requirements in this proposed rule have been submitted for approval to the OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* An ICR document has been prepared by EPA (ICR No. 1966.01) and a copy may be obtained from Sandy Farmer by mail at the Collection Strategies Division, Office of Environmental Information, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Avenue, NW, Washington, DC 20460, by e-mail at

"farmer.sandy@epa.gov," or by calling (202) 260-2740. A copy may also be downloaded from the internet at "http://www.epa.gov/icr."

The proposed NESHAP contain monitoring, reporting, and recordkeeping requirements. The required notices and reports are the minimum needed by us to determine who is subject to the NESHAP and whether you are in compliance. The proposed recordkeeping requirements are the minimum necessary to determine initial and ongoing compliance. Based on reported information, we would decide which boat manufacturers and what records or processes should be inspected. The recordkeeping and reporting requirements are consistent with the general provisions of 40 CFR part 63.

These recordkeeping and reporting requirements are specifically authorized by section 114 of the CAA (42 U.S.C. 7414). All information submitted to us

for which a claim of confidentiality is made will be safeguarded according to our policies in 40 CFR part 2, subpart B, "Confidentiality of Business Information."

The EPA expects the proposed NESHAP to affect a total of 134 boat manufacturing facilities over the first 3 years. The EPA assumes that five new boat manufacturing facilities will become subject to the proposed NESHAP during each of the first 3 years. The EPA expects 119 existing facilities to be affected by the proposed NESHAP, and these existing facilities will begin complying in the third year.

The estimated average annual burden for the first 3 years after promulgation of the proposed NESHAP for industry and the implementing agency is outlined below. You can find the details of this information collection in the "Standard Form 83 Supporting Statement for ICR No. 1966.01," in Docket No. A-95-44.

Affected entity	Total hours	Labor costs	Capital costs	Operating and maintenance costs	Total costs
Industry .....	10,343	635,526	0	895	636,421
Implementing agency .....	2,456	141,073	0	0	141,073

The EPA estimates that there are no capital or startup costs for these new facilities because they are expected to comply by limiting the HAP content of materials. The implementing agency would not incur any capital or startup costs.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Control numbers for

EPA's regulations are listed in 40 CFR part 9 and 48 CFR chapter 15.

Comments are requested on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques. Send comments on the ICR to the Director, Collection Strategies Division, Office of Environmental Information, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Avenue NW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, marked "Attention: Desk Officer for EPA." Include the ICR number in any correspondence. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after July 14, 2000, a comment to OMB is best assured of having its full effect if OMB receives it by August 14, 2000. The final rule will respond to any OMB or public comments on the information collection requirements contained in this proposal.

*C. Executive Order 13132, Federalism*

Executive Order 13132, entitled "Federalism" (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" is defined in the Executive Order to include regulations that have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government." Under Executive Order 13132, EPA may not issue a regulation that has federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, or EPA consults with State and local officials early in the process of developing the proposed rule. The EPA also may not issue a regulation that has federalism implications and that preempts State law unless the Agency consults with State and local



officials early in the process of developing the proposed rule.

If EPA complies by consulting, Executive Order 13132 requires EPA to provide to OMB, in a separately identified section of the preamble to the rule, a federalism summary impact statement (FSIS). The FSIS must include a description of the extent of EPA's prior consultation with State and local officials, a summary of the nature of their concerns and the Agency's position supporting the need to issue the regulation, and a statement of the extent to which the concerns of State and local officials have been met. Also, when EPA transmits a draft final rule with federalism implications to OMB for review pursuant to Executive Order 12866, EPA must include a certification from the Agency's Federalism Official stating that EPA has met the requirements of Executive Order 13132 in a meaningful and timely manner.

This proposed rule will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. No boat manufacturing facilities subject to the proposed NESHAP are owned by State or local governments. Therefore, State and local governments will not have any direct compliance costs resulting from this proposed rule. Furthermore, EPA is directed to develop the proposed NESHAP by section 112 of the CAA. Thus, the requirements of section 6 of the Executive Order do not apply to this proposed rule.

#### *D. Executive Order 13084, Consultation and Coordination With Indian Tribal Governments*

Under Executive Order 13084, we may not issue a regulation that is not required by statute, that significantly or uniquely affects the communities of Indian tribal governments, and that imposes substantial direct compliance costs on those communities unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by the tribal governments, or we consult with those governments. If we comply by consulting, we are required by Executive Order 13084 to provide to the OMB in a separately identified section of the preamble to the rule, a description of the extent of our prior consultation with representatives of affected tribal governments, a summary of the nature of their concerns, and a statement supporting the need to issue the regulation. In addition, Executive

Order 13084 requires us to develop an effective process permitting elected officials and other representatives of Indian tribal governments "to provide meaningful and timely input in the development of regulatory policies on matters that significantly or uniquely affect their communities."

Today's proposed rule does not significantly or uniquely affect the communities of Indian tribal governments. No tribal governments are believed to be affected by this proposed rule. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this proposed rule.

#### *E. Unfunded Mandates Reform Act of 1995*

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Pub. L. 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, we must generally prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to State, local, and tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any 1 year. Before promulgating a rule for which a written statement is needed, section 205 of the UMRA generally requires us to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost effective, or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows us to adopt an alternative other than the least costly, most cost effective, or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before we establish any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of our regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

We have determined that this rule does not contain a Federal mandate that

may result in expenditures of \$100 million or more by State, local, and tribal governments, in the aggregate, or the private sector in any 1 year. The total cost to the private sector is approximately \$14 million per year. This proposed rule contains no mandates affecting State, local, or Tribal governments. Thus, today's proposed rule is not subject to the requirements of sections 202 and 205 of the UMRA.

We have determined that this proposed rule contains no regulatory requirements that might significantly or uniquely affect small governments because it contains no requirements that apply to such governments or impose obligations upon them.

#### *F. Regulatory Flexibility Act*

The Regulatory Flexibility Act (RFA) of 1980 (5 U.S.C. 601, *et seq.*), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), requires us to give special consideration to the effect of Federal regulations on small entities and to consider regulatory options that might mitigate any such impacts. We must prepare a regulatory flexibility analysis unless we certify that the rule will not have a "significant economic impact on a substantial number of small entities." Small entities include small businesses, small organizations, and small governmental jurisdictions.

For the purposes of assessing the impacts of today's proposed rule on small entities, a small entity is defined as: (1) A small business whose parent company has fewer than 500 employees; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; or (3) a small organization that is "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field."

We have determined that 66 out of the 2,307 small firms in the industry (2.9 percent) may be affected by this proposed rule. In a screening of impacts on these small firms, we found that 47 firms have costs that comprise less than 1 percent of firm revenues, and 19 firms have estimated compliance costs that exceed 1 percent of their revenues. Based on available data of industry profit margins, the average return on sales for the industry is 3.4 percent. Of the 19 firms with costs greater than one percent of revenues, only one firm is estimated to experience costs exceeding 3 percent of revenues. Thus, reviewing the range of costs to be borne by small businesses in light of the 3.4 percent profit margins typical of this industry, the Agency has determined the costs are

typically small and, overall, do not constitute a significant impact on a substantial number. In addition, this proposed rule is likely to also increase profits at the 2,241 small firms that are not affected by the proposed rule due to the very slight increase in market prices. The economic impacts are summarized in section III.G. of this document and in the economic impact analysis contained in Docket No. A-95-44.

Although this proposed rule will not have a significant economic impact on a substantial number of small entities, EPA has tried to reduce the impact of this proposed rule on small entities. We have met with ten of these small firms and their trade association. They have been fully involved in this rulemaking, and their concerns have been considered in the development of this proposed rule. In developing these proposed standards, we have provided the maximum degree of flexibility to minimize impacts on small businesses by providing several different compliance options, several of which require a minimum amount of recordkeeping and reporting. Also, these proposed standards, which are based on MACT floor level control technology, reflect the minimum level of control allowed under the CAA. Small businesses that are subject to the proposed rule will not be systematically impacted more than larger operations. We continue to be interested in the potential impacts of the proposed rule on small entities and welcome comments on issues related to such impacts.

Pursuant to the provisions of 5 U.S.C. 605(b), we hereby certify that this proposed rule, if promulgated, will not have a significant economic impact on a substantial number of small entities.

#### *G. National Technology Transfer and Advancement Act*

Under section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) of 1995 (Publication L. No. 104-113), all Federal agencies are required to use voluntary consensus standards in their regulatory and procurement activities unless doing so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (*e.g.*, materials specifications, test methods, sampling procedures, business practices) developed or adopted by one or more voluntary consensus bodies. The NTTAA requires Federal agencies to provide Congress, through annual reports to OMB, with explanations when an agency does not use available and applicable voluntary consensus standards.

Consistent with the NTTAA, EPA conducted searches to identify voluntary consensus standards for use in emissions testing. The search for emissions testing procedures identified 16 voluntary consensus standards that appeared to have possible use in lieu of EPA standard reference methods. However, after reviewing the available standards, EPA determined that six of the candidate consensus standards identified for measuring emissions of HAP or surrogates subject to emission standards in the rule would not be practical due to lack of equivalency, documentation and validation data. Nine of the remaining candidate consensus standards are under development or under EPA review. The EPA plans to follow, review and consider adopting these standards after their development and further review by EPA is completed.

The ASTM D4457-85 (Reapproved 1991) is an acceptable alternative to EPA Method 311 for only dichloromethane (methylene chloride) and 1,1,1-trichloroethane (methyl chloroform). The EPA is requesting comment on the incorporation by reference of ASTM D4457 for the purposes of the proposed NESHAP. Five consensus standards (ASTM D1979-91, ASTM D3432-89, ASTM D4747-87, ASTM D4827-93, and ASTM PS 9-94) are already incorporated by reference in EPA Method 311.

The ASTM D6420-99 is currently under EPA review as an approved alternative to EPA Method 18. The EPA will compare this final ASTM standard to methods previously approved as alternatives to EPA Method 18 with specific applicability limitations. These methods, designated as ALT-017 and CTM-028, are available through EPA's Emission Measurement Center Internet site at [www.epa.gov/ttn/emc/tmethods.html](http://www.epa.gov/ttn/emc/tmethods.html). The final ASTM D6420-99 standard is very similar to these approved alternative methods, which may be equally suitable for specific applications. The EPA plans to continue their review of the final standard and will consider adopting the ASTM standard at a later date.

The EPA requests comment on compliance demonstration requirements proposed in this rulemaking and specifically invites the public to identify potentially applicable voluntary consensus standards. Comments should explain why this regulation should adopt these voluntary consensus standards in lieu of EPA's standards. Emission test methods and performance specifications submitted for evaluation should be accompanied with a basis for the recommendation, including method

validation data and the procedure used to validate the candidate method (if method other than Method 301, 40 CFR part 63, appendix A was used).

#### *H. Executive Order 13045, Protection of Children From Environmental Health Risks and Safety Risks*

Executive Order 13045 (62 FR 19885, April 23, 1997) applies to any rule that: (1) Is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that we have reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that are based on health or safety risks, such that the analysis required under section 5-501 of the Order has the potential to influence the regulation. This proposal is not subject to Executive Order 13045 because it is based on technology performance and not on health or safety risks. Additionally, this proposed rule is not economically significant as defined by Executive Order 12866.

#### **List of Subjects in 40 CFR Part 63**

Environmental protection, Air pollution control, Hazardous air pollutants, Reporting and recordkeeping requirements, and Volatile organic compounds.

Dated: June 12, 2000.

**Carol M. Browner,**  
*Administrator.*

For the reasons stated in the preamble, title 40, chapter I, part 63 of the Code of Federal Regulations is proposed to be amended as follows:

#### **PART 63—[AMENDED]**

1. The authority citation for part 63 continues to read as follows:

**Authority:** 42 U.S.C. 7401 *et seq.*

2. Part 63 is amended by adding subpart VVVV to read as follows:

#### **Subpart VVVV—National Emission Standards for Hazardous Air Pollutants for Boat Manufacturing**

Sec.

#### **What the Subpart Covers**

63.5680 What is the purpose of this subpart?

- 63.5683 Does this subpart apply to me?  
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#### What the Subpart Covers

##### § 63.5680 What is the purpose of this subpart?

(a) This subpart establishes national emission standards for hazardous air pollutants (HAP) for new and existing boat manufacturing facilities with resin and gel coat operations, carpet and fabric adhesive operations, or aluminum boat surface coating operations. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission standards.

##### § 63.5683 Does this subpart apply to me?

- (a) This subpart applies to you if you meet both of the criteria listed in paragraphs (a)(1) and (2) of this section.  
 (1) You are the owner or operator of a boat manufacturing facility that builds fiberglass boats or aluminum boats.  
 (2) Your boat manufacturing facility is a major source of HAP either in and of

itself, or because it is collocated with other sources of HAP, such that all sources combined constitute a major source.

(b) A boat manufacturing facility is a facility that manufactures hulls or decks of boats from fiberglass or aluminum, or assembles boats from premanufactured hulls and decks, or builds molds to make fiberglass hulls or decks. A facility that manufactures only parts of boats (such as hatches, seats, or lockers) or boat trailers is not considered a boat manufacturing facility for the purpose of this subpart.

(c) A major source is any stationary source or group of stationary sources located within a contiguous area and under common control that emits or can potentially emit, considering controls, in the aggregate, 9.1 megagrams (10 tons) or more per year of a single HAP or 22.7 megagrams (25 tons) or more per year of a combination of HAP.

(d) This subpart does not apply to aluminum coating operations on aluminum boats intended for commercial or military use, antifoulant coatings, fiberglass assembly adhesives, fiberglass hull and deck coatings, mold sealing and release agents, mold stripping and cleaning solvents, and wood coatings as defined in § 63.5779. This subpart does not apply to materials contained in handheld aerosol cans.

##### § 63.5686 How do I demonstrate that my facility is not a major source?

(a) To demonstrate that your facility is not a major source based on emissions, you must demonstrate that your facility does not emit, and does not have the potential to emit, considering federally enforceable permit limits, 9.1 megagrams (10 tons) or more per year of a single HAP or 22.7 megagrams (25 tons) or more per year of a combination of HAP. To calculate your facility's potential to emit, you must include emissions from the boat manufacturing facility and all other sources that are collocated and under common ownership or control with the boat manufacturing facility.

(b) To demonstrate that you are not a major source based on material consumption, you must: manufacture either fiberglass or aluminum boats at your facility, but not both; demonstrate that you are not collocated with another source of HAP; and meet the requirement in paragraph (b)(1) or (2) of this section.

(1) If your facility is a fiberglass boat manufacturing facility, you must demonstrate that it consumes less than 45.4 megagrams (50 tons) per year of all polyester- and vinylester-based resins and gel coats, including tooling and

production resins and gel coats, and clear gel coats.

(2) If your facility is an aluminum boat manufacturing facility, you must demonstrate that it consumes less than 18.2 megagrams (20 tons) per year of all carpet and fabric adhesives, surface wipe-down and application gun cleaning solvents, and paints and coatings.

**§ 63.5689 What parts of my facility are covered by this subpart?**

The affected source (the portion of your boat manufacturing facility covered by this subpart) is the combination of all of the boat manufacturing operations listed in paragraphs (a) through (f) of this section.

(a) Open molding resin and gel coat operations (including pigmented gel coat, clear gel coat, production resin, tooling gel coat, and tooling resin).

(b) Closed molding resin operations.

(c) Resin and gel coat mixing operations.

(d) Resin and gel coat application equipment cleaning operations.

(e) Carpet and fabric adhesive operations.

(f) Aluminum hull and deck coating operations, including solvent wipe-down operations and paint spray gun cleaning operations, on aluminum boats.

**§ 63.5692 How do I know if my boat manufacturing facility is a new affected source or an existing affected source?**

(a) A boat manufacturing facility is a new affected source if it meets the criteria in paragraphs (a)(1) through (3) of this section.

(1) You commence construction of the affected source after July 14, 2000.

(2) It is a major source.

(3) It is a completely new boat manufacturing affected source where no other boat manufacturing affected source existed prior to the construction of the new affected source.

(b) For the purposes of this subpart, an existing affected source is any affected source that is not a new affected source.

**§ 63.5695 When must I comply with this subpart?**

You must comply with the standards in this subpart by the dates specified in table 1 to this subpart.

**Standards for Open Molding Resin and Gel Coat Operations**

**§ 63.5698 What emission standard must I meet for open molding resin and gel coat operations?**

(a) You must control HAP emissions from the five open molding operations listed in paragraphs (a)(1) through (5) of this section to the emission standard specified in paragraph (b) of this section.

(1) Production resin.

(2) Pigmented gel coat.

(3) Clear gel coat.

(4) Tooling resin.

(5) Tooling gel coat.

(b) You must limit HAP emissions from open molding operations to the standard specified by equation 1, based on a 3-month rolling average.

$$\text{HAP Limit} = [46 (M_R) + 159 (M_{PG}) + 291 (M_{CG}) + 54 (M_{TR}) + 214 (M_{TG})] \quad (\text{Eq. 1})$$

Where:

HAP Limit= total allowable HAP that can be emitted from the open molding operations, kilograms.

$M_R$  = mass of production resin used in the past 3 months, megagrams.

$M_{PG}$  = mass of pigmented gel coat used in the past 3 months, megagrams.

$M_{CG}$  = mass of clear gel coat used in the past 3 months, megagrams.

$M_{TR}$  = mass of tooling resin used in the past 3 months, megagrams.

$M_{TG}$  = mass of tooling gel coat used in the past 3 months, megagrams.

(c) The open molding emission standard is the same for both new and existing sources.

**§ 63.5701 What are my options for complying with the open molding emission standard?**

You must use one or more of the options listed in paragraphs (a) through (c) of this section to meet the emission standard in § 63.5698 for the resins and gel coats used in open molding operations at your facility.

(a) *Maximum achievable control technology (MACT) model point value averaging option.* (1) Demonstrate that emissions from the open molding resin and gel coat operations that you average meet the emission standard in § 63.5698 based on weighted-average MACT model point values as described in

§ 63.5710. Compliance with this option is based on a 3-month rolling average.

(2) Those operations and materials not included in the average must comply with either paragraph (b) or (c) of this section.

(b) *Compliant materials option.* Demonstrate compliance with the emission standard in § 63.5698 by using open molding resins and gel coats that meet the HAP content requirements in table 2 to this subpart. Compliance with this option is based on a 3-month rolling average.

(c) *Add-on control option.* Use an enclosure and add-on control device and demonstrate that the resulting emissions meet the emission standard in § 63.5698. Compliance with this option is based on a control device performance test and control device monitoring.

**§ 63.5704 What are the general requirements for complying with the open molding emission standard?**

(a) *Maximum achievable control technology model point value averaging option.* For those open molding operations and materials complying using the MACT model point value averaging option, you must demonstrate compliance by performing the steps in paragraphs (a)(1) through (5) of this section.

(1) Use the methods specified in § 63.5758 to determine the HAP content of resins and gel coats.

(2) Complete the calculations described in § 63.5710 to show that the HAP emissions do not exceed the standard specified in § 63.5698.

(3) Keep records as specified in paragraphs (a)(3)(i) through (iv) of this section for each resin and gel coat.

(i) Hazardous air pollutant content.

(ii) Amount of material used per month.

(iii) Application method used for production resin and tooling resin. This record is not required if all production resins and tooling resins are applied with nonatomized technology.

(iv) Calculations performed to demonstrate compliance based on MACT model point values, as described in § 63.5710.

(4) Prepare and submit the implementation plan described in § 63.5707 to the Administrator and keep it up to date.

(5) Submit semiannual compliance reports to the Administrator as specified in § 63.5764.

(b) *Compliant materials option.* For each open molding operation complying using the compliant materials option, you must demonstrate compliance by performing the steps in paragraphs (b)(1) through (4) of this section.

(1) Use the methods specified in § 63.5758 to determine the HAP content of resins and gel coats.

(2) Complete the calculations described in § 63.5713 to show that the weighted-average HAP content does not exceed the requirement specified in table 2 to this subpart.

(3) Keep records as specified in paragraphs (b)(3)(i) through (iv) of this section for each resin and gel coat.

(i) Hazardous air pollutant content.

(ii) Application method for production resin and tooling resin. This record is not needed if all production resins and tooling resins are applied with nonatomized technology.

(iii) Amount of material used per month. This record is not needed for an operation if all materials used for that operation comply with the HAP content requirements.

(iv) Calculations performed, if needed, to demonstrate compliance based on weighted-average HAP content as described in § 63.5713.

(4) Submit semiannual compliance reports to the Administrator as specified in § 63.5764.

(c) *Add-on control option.* If you are using an add-on control device, you must demonstrate compliance by performing the steps in paragraphs (c)(1) through (5) of this section.

(1) Conduct a performance test of the control device as specified in §§ 63.5719 and 63.5722 to demonstrate initial compliance.

(2) Use the performance test results to determine control device parameters to monitor after the performance test as specified in § 63.5725.

(3) Comply with the control device monitoring and operating requirements specified in § 63.5725 to demonstrate continuous compliance.

(4) Keep the records specified in § 63.5767.

(5) Submit to the Administrator the notifications and reports specified in §§ 63.5761 and 63.5764.

**§ 63.5707 What is an implementation plan for open molding operations and when do I need to prepare one?**

(a) You must prepare an implementation plan for all open molding operations for which you comply by using the MACT model point value averaging option described in § 63.5704(a).

(b) The implementation plan must describe the steps you will take to bring the open molding operations covered by this subpart into compliance. For each operation included in the MACT model point value average, your implementation plan must include, at a minimum, the elements listed in paragraphs (b)(1) through (3).

(1) A description of each operation included in the average.

(2) The maximum HAP content of the materials used, the application method used (if any atomized resin application methods are used in the average), and

any other methods used to control emissions.

(3) Calculations showing that the operations covered by the plan will comply with the open molding emission standard specified in § 63.5698.

(c) You must submit the implementation plan to the Administrator with the notification of compliance status specified in § 63.5761.

(d) You must keep the implementation plan on site and provide it to the Administrator when asked.

(e) If you revise the implementation plan, you must submit the revised plan with your next semiannual compliance report specified in § 63.5764.

**§ 63.5710 How do I demonstrate compliance using MACT model point value averaging?**

(a) Compliance using the MACT model point value averaging option is demonstrated on a 3-month rolling-average basis and is determined at the end of every month (12 times per year).

(b) At the end of every month, use equation 2 to demonstrate that the HAP emissions from those operations included in the average do not exceed the emission standard in § 63.5698. (Include terms in equation 1 in § 63.5698 and equation 2 for only those operations and materials included in the average.)

$$\text{HAP emissions} = \left[ (PV_R) (M_R) + (PV_{PG}) (M_{PG}) + (PV_{CG}) (M_{CG}) + (PV_{TR}) (M_{TR}) + (PV_{TG}) (M_{TG}) \right] \quad (\text{Eq. 2})$$

Where:

HAP emissions=HAP emissions calculated using MACT model point values for each operation included in the average, kilograms.

$PV_R$ =Weighted-average MACT model point value for production resin used in the past 3 months, kilograms per megagram.

$M_R$ =Mass of production resin used in the past 3 months, megagrams.

$PV_{PG}$ =Weighted-average MACT model point value for pigmented gel coat used in the past 3 months, kilograms per megagram.

$M_{PG}$ =Mass of pigmented gel coat used in the past 3 months, megagrams.

$PV_{CG}$ =Weighted-average MACT model point value for clear gel coat used in the past 3 months, kilograms per megagram.

$M_{CG}$ =Mass of clear gel coat used in the past 3 months, megagrams.

$PV_{TR}$ =Weighted-average MACT model point value for tooling resin used in

the past 3 months, kilograms per megagram.

$M_{TR}$ =Mass of tooling resin used in the past 3 months, megagrams.

$PV_{TG}$ =Weighted-average MACT model point value for tooling gel coat used in the past 3 months, kilograms per megagram.

$M_{TG}$ =Mass of tooling gel coat used in the past 3 months, megagrams.

(c) At the end of every month, use equation 3 to compute the weighted-average MACT model point value for each open molding resin and gel coat operation included in the average.

$$PV_{OP} = \frac{\sum_{i=1}^n (M_i PV_i)}{\sum_{i=1}^n (M_i)} \quad (\text{Eq. 3})$$

Where:

$PV_{OP}$ =weighted-average MACT model point value for each open molding

operation ( $PV_R$ ,  $PV_{PG}$ ,  $PV_{CG}$ ,  $PV_{TR}$ , and  $PV_{TG}$ ) included in the average, kilograms of HAP per megagram of material applied.

$M_i$ =mass of resin or gel coat  $i$  used within an operation in the past 3 months, megagrams.

$n$ =number of different open molding resins or gel coats used within an operation in the past 3 months.

$PV_i$ =the MACT model point value for resin or gel coat  $i$  used within an operation in the past 3 months, kilograms of HAP per megagram of material applied.

(d) You must use the equations in table 3 to this subpart to calculate the MACT model point value ( $PV_i$ ) for each resin and gel coat used in each operation in the past 3 months.

(e) If the HAP emissions, as calculated in paragraph (b) of this section, are less than the HAP limit calculated in § 63.5698(b), then you are in compliance with the emission standard in § 63.5698

for those operations and materials included in the average.

**§ 63.5713 How do I demonstrate compliance using compliant materials?**

(a) Compliance using the HAP content requirements listed in table 2 to this subpart is based on a 3-month rolling average that is calculated at the end of every month.

(b) At the end of every month, review the HAP contents of the resins and gel coats used in the past 3 months in each operation. If all resins and gel coats used in an operation have HAP contents no greater than the applicable HAP content requirements in table 2 to this subpart, then you are in compliance with the emission standard specified in § 63.5698 for that 3-month period for

that operation. In addition, you do not need to complete the weighted-average HAP content calculation contained in paragraph (c) of this section for that operation.

(c) At the end of every month, you must use equation 4 to calculate the weighted-average HAP content for all resins and gel coats used in that operation in the past 3 months.

$$\text{Weighted-Average HAP Content (\%)} = \frac{\sum_{i=1}^n (M_i \text{HAP}_i)}{\sum_{i=1}^n (M_i)} \quad (\text{Eq. 4})$$

Where:

$M_i$  = mass of open molding resin or gel coat  $i$  used in the past 3 months in an operation, megagrams.

$\text{HAP}_i$  = HAP content, by weight percent, of open molding resin or gel coat  $i$  used in the past 3 months in an operation. Use the methods in § 63.5758 to determine HAP content.

$n$  = number of different open molding resins or gel coats used in the past 3 months in an operation.

(d) If the weighted-average HAP content does not exceed the applicable HAP content requirement specified in table 2 to this subpart, then you are in compliance with the emission standard specified in § 63.5698.

**Demonstrating Compliance for Open Molding Operations Controlled by Add-On Control Devices**

**§ 63.5716 When must I conduct a performance test?**

(a) You must conduct an initial control device performance test within 180 calendar days after the compliance date specified in § 63.5695 and according to the provisions in § 63.7(a)(2).

(b) If you commenced construction between today's date and the effective date of the subpart, you must demonstrate initial compliance with either the proposed emission standard or the promulgated emission standard no later than 180 calendar days after the effective date of the regulation or within 180 calendar days after startup of the source, whichever is later, according to § 63.7(a)(2)(ix).

(c) If you commenced construction between today's date and the effective date of the subpart, and you chose to comply with the proposed emission standard when demonstrating initial compliance, you must conduct a second compliance demonstration for the

promulgated emission standard within 3 years and 180 calendar days after the effective date of the subpart, or after startup of the source, whichever is later, according to § 63.7(a)(2)(ix).

(d) You must conduct a performance test every 5 years as part of renewing your 40 CFR part 70 or part 71 operating permit.

**§ 63.5719 How do I conduct a performance test?**

(a) You must capture the emissions using a permanent enclosure (such as a spray booth or similar containment device) and direct the captured emissions to the add-on control device.

(b) You must measure emissions as specified in paragraph (b)(1) or (2) of this section.

(1) If the enclosure vented to the control device is a permanent total enclosure as defined in Method 204 of appendix M to 40 CFR part 51, then you may measure emissions only at the outlet of the control device.

(2) If the permanent enclosure vented to the control device is not a total enclosure, you must build a temporary total enclosure, as defined in Method 204 of appendix M to 40 CFR part 51, around the permanent enclosure. You must then simultaneously measure emissions from the control device outlet and the emissions from the total temporary enclosure outlet. You determine compliance from the combined emissions from the control device outlet and the total temporary enclosure outlet.

(c) You must conduct the control device performance test using the emission measurement methods specified in paragraphs (c)(1) through (3) of this section.

(1) Use either Method 1 or 1A of appendix A to 40 CFR part 60, as appropriate, to select the sampling sites.

(2) Use Method 2, 2A, 2C, 2D, 2F or 2G of appendix A to 40 CFR part 60, as

appropriate, to measure gas volumetric flow rate.

(3) Use Method 18 of appendix A to 40 CFR part 60 to measure HAP emissions or use Method 25A of appendix A to 40 CFR part 60 to measure total gaseous organic emissions as a surrogate for total HAP emissions. If you use Method 25A, you must assume that all gaseous organic emissions measured as carbon are HAP emissions. If you use Method 18 and the number of HAP in the exhaust stream exceeds five, you must take into account the use of multiple chromatographic columns and analytical techniques to get an accurate measure of at least 90 percent of the total HAP mass emissions. Do not use Method 18 to measure HAP emissions from a combustion device; use instead Method 25A and assume that all gaseous organic mass emissions measured as carbon are HAP emissions.

(d) The control device performance test must consist of three runs and each run must last at least 1 hour. The production conditions during the test runs must represent normal production conditions with respect to the types of parts being made and material application methods. The production conditions during the test must also represent maximum potential emissions with respect to the HAP content of the materials being applied and the material application rates.

(e) During the test, you must also monitor and record separately the amounts of production resin, tooling resin, pigmented gel coat, clear gel coat, and tooling gel coat applied inside the enclosure that is vented to the control device.

**§ 63.5722 How do I use the performance test data to demonstrate initial compliance?**

Demonstrate initial compliance with the open molding emission standard as

described in paragraphs (a) through (c) of this section:

(a) Calculate the HAP limit you must achieve using equation 1 in § 63.5698. For determining initial compliance, the HAP limit is based on the amount of material used during the performance test, in megagrams, rather than during the past 3 months. Calculate the limit using the megagrams of resin and gel coat applied inside the enclosure during the three runs of the performance test and equation 1 in § 63.5698.

(b) Add the total measured emissions, in kilograms, from all three of the 1-hour runs of the performance test.

(c) If the total emissions from the three 1-hour runs of the performance test are less than the HAP limit calculated in paragraph (a) of this section, then you have demonstrated initial compliance with the emission standard in § 63.5698 for those operations performed in the enclosure and controlled by the add-on control device.

**§ 63.5725 What are the requirements for monitoring and demonstrating continuous compliance?**

(a) You must establish control device parameters that indicate proper operation of the control device.

(b) You must install, operate, and maintain a continuous parameter monitoring system as specified in paragraphs (b)(1) through (6) of this section.

(1) The continuous parameter monitoring system must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four successive cycles of operation to have a valid hour of data.

(2) You must have valid data from at least 90 percent of the hours during which the process operated.

(3) You must determine the hourly average of all recorded readings.

(4) You must determine the daily average of all recorded readings for each operating day.

(5) You must determine the 30-day average for each 30-day period.

(6) You must record the results of each inspection, calibration, and validation check.

(c) *Enclosure bypass line.* You must meet the requirements of paragraph (c)(1) and either paragraph (c)(2) or (3) of this section for each enclosure ventilation system that contains bypass lines that could divert emissions from a control device.

(1) If the bypass lines are opened, you must include a description of the bypass and its duration in the compliance reports required in § 63.5764(c).

(2) You must properly install, operate, and maintain a flow measurement device that records the presence of a gas stream flow in each bypass line. You must meet the requirements in paragraph (b) and paragraphs (c)(2)(i) through (v) of this section for each flow measurement device.

(i) Locate the flow sensor and other necessary equipment such as straightening vanes in a position that provides a representative flow.

(ii) Use a flow sensor with a minimum tolerance of 2 percent of the flow rate.

(iii) Reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.

(iv) Conduct a flow sensor calibration check at least semi-annually.

(v) At least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

(3) You must secure the bypass line in a nondiverting position with a seal in such a way that the valve or closure mechanism cannot be opened without breaking the seal. You must inspect the seal at least once per month and record the results of the inspection.

(d) *Thermal oxidizers.* If you are using a thermal oxidizer or incinerator as an add-on control device, you must comply with the requirements in paragraphs (d)(1) through (6) of this section.

(1) You must install a combustion temperature monitoring device in the firebox of the thermal oxidizer or incinerator, or in the duct immediately downstream of the firebox before any substantial heat exchange occurs. You must meet the requirements in paragraph (b) and paragraphs (d)(1)(i) through (vii) of this section for each temperature monitoring device.

(i) Locate the temperature sensor in a position that provides a representative temperature.

(ii) Use a temperature sensor with a minimum tolerance of 2.2° C or 0.75 percent of the temperature value, whichever is larger.

(iii) Shield the temperature sensor system from electromagnetic interference and chemical contaminants.

(iv) If a chart recorder is used, it must have a sensitivity in the minor division of at least 20° F.

(v) Perform an electronic calibration at least semiannually according to the procedures in the manufacturer's owners manual. Following the electronic calibration, you must conduct a temperature sensor validation check in which a second or redundant temperature sensor placed nearby the process temperature sensor must yield a

reading within 16.7° C of the process temperature sensor's reading.

(vi) Conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor.

(vii) At least monthly, inspect all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion.

(2) Before or during the performance test, you must conduct a performance evaluation of the combustion temperature monitoring system according to § 63.8(e). Section 63.8(e) specifies the general requirements for continuous monitoring systems and requirements for notifications, the site-specific performance evaluation plan, conduct of the performance evaluation, and reporting of performance evaluation results.

(3) During the performance test required by § 63.5716, you must monitor and record the combustion temperature and determine the average combustion temperature for the three 1-hour test runs.

(4) Following the performance test, you must continuously monitor the combustion temperature and record the average combustion temperature no less frequently than every 15 minutes.

(5) You must operate the incinerator or thermal oxidizer so that the average combustion temperature in any 3-hour period does not fall below the average combustion temperature recorded during the performance test.

(6) If the average combustion temperature in any 3-hour period falls below the average combustion temperature recorded during the performance test, or if you fail to collect the minimum data specified in paragraph (d)(4) of this section, it is a deviation.

(e) *Absorbers, condensers, and carbon adsorbers.* If you are using an absorber, condenser, or carbon adsorber as an add-on control device, you must comply with the operating, testing, and monitoring requirements in § 63.990.

(f) *Other control devices.* If you are using a control device other than those listed in paragraphs (d) and (e) of this section, then you must comply with the operating, testing, and monitoring requirements in § 63.995.

**Standards for Closed Molding Resin Operations**

**§ 63.5728 What standards must I meet for closed molding resin operations?**

(a) If a resin application operation meets the definition of closed molding specified in § 63.5779, there is no

requirement to reduce emissions from that operation.

(b) If the resin application operation does not meet the definition of closed molding, then you must comply with the standard for open molding resin operations specified in § 63.5698.

(c) Open molding resin operations that precede a closed molding operation must comply with the standard for open molding resin and gel coat operations specified in § 63.5698. Examples of these operations include gel coat or skin coat layers that are applied before lamination is performed by closed molding.

### Standards for Resin and Gel Coat Mixing Operations

#### § 63.5731 What standards must I meet for resin and gel coat mixing operations?

(a) All resin and gel coat mixing containers with a capacity equal to or greater than 208 liters (55 gallons) must have a cover with no visible gaps in place at all times.

(b) The work practice standard in paragraph (a) of this section 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.

(c) To demonstrate compliance with the work practice standard in paragraph (a) of this section, you must visually inspect all mixing containers subject to this standard at least once per month. The inspection should ensure that all containers have covers with no visible gaps between the cover and the container, or between the cover and equipment passing through the cover.

(d) You must keep records of which mixing containers are subject to this standard and the results of the inspections, including a description of any repairs or corrective actions taken.

### Standards for Resin and Gel Coat Application Equipment Cleaning Operations

#### § 63.5734 What standards must I meet for resin and gel coat application equipment cleaning operations?

(a) For routine flushing of resin and gel coat application equipment (e.g., spray guns, flowcoaters, brushes, rollers, and squeegees), you must use a cleaning solvent that contains no HAP. This emission standard does not apply to solvents used for removing cured resin or gel coat from application equipment.

(b) You must store HAP-containing solvents used for removing cured resin or gel coat in containers with covers. The covers must have no visible gaps and must be in place at all times, except

when equipment is placed in or removed from the container. Cured resin or gel coat means resin or gel coat that has changed irreversibly from a liquid to a solid.

(c) Recycled cleaning solvents that contain trace amounts of HAP (5 percent HAP or less by weight) are considered to contain no HAP for the purposes of this subpart.

#### § 63.5737 How do I demonstrate compliance with the resin and gel coat application equipment cleaning standards?

(a) Determine and record the HAP content of the cleaning solvents subject to the standards specified in § 63.5734 using the methods specified in § 63.5758.

(b) Record the amount of cleaning solvents purchased as recycled cleaning solvents, and, therefore, may contain trace amounts of HAP.

(c) At least once per month, you must visually inspect any containers holding HAP-containing solvents used for removing cured resin and gel coat to ensure that the containers have covers with no visible gaps. Keep records of the monthly inspections and any repairs made to the covers.

### Standards for Carpet and Fabric Adhesive Operations

#### § 63.5740 What standards must I meet for carpet and fabric adhesive operations?

(a) You must use carpet and fabric adhesives that contain no HAP.

(b) To demonstrate compliance with the emission standard in paragraph (a) of this section, you must determine and record the HAP content of the carpet and fabric adhesives using the methods in § 63.5758.

### Standards for Aluminum Boat Surface Coating Operations

#### § 63.5743 What standards must I meet for aluminum boat surface coating operations?

(a) You must use aluminum wipe-down solvents with a weighted-average HAP content that does not exceed 2.57 kilograms of HAP per liter of solids from aluminum primers and clear coats applied over bare aluminum (21.5 pounds of HAP per gallon of solids). Compliance is based on a 3-month rolling average that is calculated at the end of every month. This limit does not apply to surfaces receiving decals or adhesive graphics.

(b) You must use aluminum boat surface coatings (including thinners, activators, primers, topcoats, and clear coats) with a weighted-average HAP content that does not exceed 1.22 kilograms of HAP per liter of coating solids (10.2 pounds of HAP per gallon of coating solids). Compliance is based

on a 3-month rolling average that is calculated at the end of every month.

(c) You must comply with the work practice standard in paragraph (c)(1), (2), or (3) of this section when cleaning aluminum coating spray guns with HAP-containing solvents. You do not need to comply with these work practice standards if you are using a cleaning solvent that contains no HAP.

(1) Clean spray guns in an enclosed device. Keep the device closed except when you place spray guns in or remove them from the device.

(2) Disassemble the spray gun and manually clean the components in a vat. Keep the vat closed when you are not using it.

(3) Clean spray guns by placing solvent in the pressure pot and forcing the solvent through the gun. Do not use atomizing air during this procedure. Direct the used cleaning solvent from the spray gun into a container that you keep closed when you are not using it.

#### § 63.5746 How do I demonstrate compliance with the standards for aluminum wipe-down solvents and aluminum coatings?

To demonstrate compliance with the emission standards for aluminum wipe-down solvents and aluminum coatings specified in § 63.5743 (a) and (b), you must meet the requirements of paragraphs (a) through (f) of this section.

(a) Determine and record the HAP content (kilograms of HAP per kilogram of material, or weight fraction) of each aluminum wipe-down solvent and aluminum coating (including primers, topcoats, clear coats, thinners, and activators). Use the methods in § 63.5758 to determine HAP content.

(b) Obtain from the aluminum coating manufacturer's formulation the solids content (liters of solids per liter of coating, or volume fraction) of each aluminum surface coating, including primers, topcoats, and clear coats. Keep records of the solids content.

(c) Compliance is based on a 3-month rolling average calculated at the end of every month.

(d) At the end of every month, use the procedures in § 63.5749 to calculate the HAP from aluminum wipe-down solvents per liter of coating solids. Use the procedures in § 63.5752 to calculate the kilograms of HAP from aluminum coatings per liter of coating solids.

(e) Keep records of the calculations used to determine compliance.

(f) *Approval of alternative means of demonstrating compliance.* You may apply to the Administrator for permission to use an alternative means (such as an add-on control system) of limiting emissions from aluminum



wipe-down solvent and coating operations and demonstrating compliance with the standards in paragraphs (a) and (b) in § 63.5743.

(1) The application must include the information listed in paragraphs (f)(1)(i) through (iii) of this section.

(i) An engineering evaluation that compares the emissions using the alternative means to the emissions that would result from using the strategy specified in paragraphs (a) through (d) of this section. The engineering evaluation may include 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.

(iii) Details of appropriate recordkeeping and reporting procedures.

(2) The Administrator will approve the alternative means of limiting emissions if the Administrator determines that HAP emissions will be no greater than if the source uses the procedures described in paragraphs (a)

through (d) of this section to demonstrate compliance.

(3) The Administrator's approval may specify operation, maintenance, and monitoring requirements to ensure that emissions from the regulated operations are no greater than those that would otherwise result from regulated operations in compliance with this subpart.

**§ 63.5749 How do I calculate the HAP content of aluminum wipe-down solvents?**

(a) Use equation 5 to calculate the weighted-average HAP content of aluminum wipe-down solvents used in the past 3 months.

$$\text{HAP}_{\text{WD}} = \frac{\sum_{i=1}^n (\text{Vol}_{\text{WD}i}) (D_{\text{WD}i}) (W_{\text{WD}i})}{\sum_{j=1}^m (\text{Vol}_{\text{P}j}) (\text{Solids}_{\text{P}j})} \quad (\text{Eq. 5})$$

Where:

$\text{HAP}_{\text{WD}}$  = weighted-average HAP content of aluminum wipe-down solvents, kilograms of HAP per liter of solids from aluminum primers and clear coats applied to bare aluminum.

$n$  = number of different wipe-down solvents used in the past 3 months.

$\text{Vol}_{\text{WD}i}$  = volume of aluminum wipe-down solvent  $i$  used in the past 3 months, liters.

$D_{\text{WD}i}$  = density of aluminum wipe-down solvent  $i$ , kilograms per liter.

$W_{\text{WD}i}$  = mass fraction of HAP in aluminum wipe-down solvent  $i$ .

$m$  = number of different aluminum primers and clear coats used in the past 3 months that were applied to bare aluminum.

$\text{Vol}_{\text{P}j}$  = volume of aluminum primer or clear coat  $j$  used in the past 3 months, liters.

$\text{Solids}_{\text{P}j}$  = solids content of aluminum primer or clear coat  $j$ , liter solids per liter of coating.

(b) Compliance is based on a 3-month rolling average. If the weighted-average

HAP content does not exceed 2.57 kilograms of HAP per liter of solids (21.5 pounds of HAP per gallon solids), then you are in compliance with the emission standard specified in § 63.5743(a).

**§ 63.5752 How do I calculate the HAP content of aluminum boat surface coatings?**

(a) Use equation 6 to calculate the weighted-average HAP content for all aluminum surface coatings used in the past 3 months.

$$\text{HAP}_{\text{SC}} = \frac{\sum_{i=1}^m (\text{Vol}_{\text{C}i}) (D_{\text{C}i}) (W_{\text{C}i}) + \sum_{j=1}^n (\text{Vol}_{\text{T}j}) (D_{\text{T}j}) (W_{\text{T}j})}{\sum_{i=1}^m (V_{\text{S}i}) (\text{Vol}_{\text{C}i})} \quad (\text{Eq. 6})$$

Where:

$\text{HAP}_{\text{SC}}$  = weighted-average HAP content for all aluminum coating materials, kilograms of HAP per liter of coating solids.

$m$  = number of different coatings used in the past 3 months.

$\text{Vol}_{\text{C}i}$  = total volume of coating  $i$  used in the past 3 months, liters.

$D_{\text{C}i}$  = density of coating  $i$ , kilograms per liter.

$W_{\text{C}i}$  = mass fraction of HAP in coating  $i$ , kilograms of HAP per kilogram of coating.

$n$  = number of different thinners and activators used in the past 3 months.

$\text{Vol}_{\text{T}j}$  = total volume of thinner or activator  $j$  used in the past 3 months, liters.

$D_{\text{T}j}$  = density of thinner or activator  $j$ , kilograms per liter.

$W_{\text{T}j}$  = mass fraction of HAP in thinner or activator  $j$ , kilograms of HAP per kilogram of thinner or activator.

$V_{\text{S}i}$  = volume fraction of solids in coating  $i$ , liter solids per liter coating, from coating manufacturer's formulation.

(b) Compliance is based on a 3-month rolling average. If the weighted-average HAP content does not exceed 1.22 kilograms of HAP per liter of coating solids (10.2 pound per gallon), then you

are in compliance with the emission standard specified in § 63.5743(b).

**§ 63.5755 How do I demonstrate compliance with the aluminum boat surface coating spray gun cleaning standards?**

You must demonstrate compliance with the aluminum coating spray gun cleaning work practice standards by meeting the requirements of paragraph (a) or (b) of this section.

(a) Demonstrate that solvents used to clean the aluminum coating spray guns contain no HAP by determining HAP content with the methods in § 63.5758. Keep records of the HAP content determination.

(b) For HAP-containing solvents, comply with the requirements in paragraph (b)(1) or (2), and (b)(3) of this section.

(1) If you are using an enclosed spray gun cleaner, visually inspect it at least once per month to ensure that covers are in place and will close properly when the cleaner is not in use, and that there are no leaks from hoses or fittings.

(2) If you are manually cleaning the gun or spraying solvent into a container that can be closed, visually inspect all solvent containers at least once per month to ensure that the containers have covers.

(3) Keep records of the monthly inspections and any repairs that are made to the enclosed gun cleaners or the covers.

### Methods for Determining Air Pollutant Content

#### § 63.5758 How do I determine the HAP content of materials?

(a) To determine the HAP content of the materials used in your open molding resin and gel coat operations, carpet and fabric adhesive operations, or aluminum boat surface coating operations, use EPA Method 311 of appendix A to 40 CFR part 63. You may use EPA Method 311, an alternative method as provided in paragraph (b) of this section, or any other reasonable means for determining the HAP content. Other reasonable means of determining HAP content include, but are not limited to, a material safety data sheet (MSDS) or a manufacturer's hazardous air pollutant data sheet as defined in § 63.5779. You are not required to test the materials that you use, but the Administrator may require a test using EPA Method 311 (or an approved alternative method) to confirm the reported HAP content. If the results of an analysis by EPA Method 311 are different from the HAP content determined by another means, the EPA Method 311 results will govern compliance determinations, except as provided in paragraph (b) of this section.

(b) You may use an alternative to EPA Method 311 for determining HAP content if that method has been approved by the Administrator according to § 63.7(f). The Administrator will approve alternative methods on a case-by-case basis.

(c) If HAP content data are reported by a material supplier or manufacturer as a range, the upper limit of that range will be used for determining compliance.

### Notifications, Reports, and Records

#### 63.5761 What notifications must I submit and when?

(a) You must submit all of the notifications in table 4 to this subpart that apply to you, by the dates in table 4 to this subpart. The notifications are described more fully in the sections of 40 CFR part 63, subpart A, General Provisions, referenced in table 4 to this subpart.

(b) If you change any information submitted in any notification, you must submit the changes in writing to the Administrator within 15 calendar days after the change.

#### 63.5764 What reports must I submit and when?

(a) You must submit the applicable reports specified in paragraphs (b) through (d) of this section. To the extent possible, you must organize each report according to the operations covered by this subpart and the compliance procedure followed for that operation.

(b) If your facility is not controlled by an add-on control device (*i.e.*, you are complying with HAP content limits, application equipment requirements, or MACT model point value averaging provisions), you must submit a semiannual compliance report. The semiannual reporting period is each subsequent 6-month period after your compliance date. Unless the Administrator has approved a different schedule, you must submit each report so that it is postmarked or delivered no later than 30 calendar days following the end of each reporting period. The compliance report must include the information specified in paragraphs (b)(1) through (8) of this section.

(1) Company name and address.

(2) Name, title, and signature of the responsible official certifying the accuracy of the report.

(3) A statement certifying as to the truth, accuracy, and completeness of the report.

(4) The date of the report and the beginning and ending dates of the reporting period.

(5) A description of any changes in the manufacturing process, continuous monitoring system, or controls since the last compliance report.

(6) A statement or table showing, for each regulated operation, the applicable HAP content limit, application equipment requirement, or MACT model point value averaging provision with which you are complying. The statement or table must also show the actual weighted-average HAP content or weighted-average MACT model point value (if applicable) for each operation

during each of the rolling 3-month averaging periods that end during the reporting period.

(7) If you were in compliance with a standard during the reporting period, you must include a statement to that effect.

(8) If you were not in compliance with a standard or identified deviations during the reporting period, you must also include the information listed in paragraphs (b)(8)(i) through (iv) of this section in the semiannual compliance report.

(i) A description of the operation that was not in compliance with the standard.

(ii) The quantity, HAP content, and application method (if relevant) of the materials not in compliance.

(iii) A description of any corrective action you took to minimize noncompliance and actions you have taken to prevent it from happening again.

(iv) A statement of whether or not your facility was in compliance for the 3-month averaging period that ended at the end of the reporting period.

(c) If your facility has an add-on control device, you must submit semiannual compliance reports and quarterly excess emission reports as specified in § 63.10(e). The contents of the reports and the schedule for submitting them are specified in § 63.10(e).

(d) If your facility has an add-on control device, you must complete a startup, shutdown, and malfunction plan as specified in § 63.6(e), and you must submit the startup, shutdown, and malfunction reports specified in § 63.10(e)(5).

#### 63.5767 What records must I keep?

You must keep the records specified in paragraphs (a) through (d) of this section in addition to records specified in individual sections of this subpart.

(a) You must keep a copy of each notification and report that you submitted to comply with this subpart.

(b) You must keep all documentation supporting any notification or report that you submitted.

(c) If your facility is not controlled by an add-on control device (*i.e.*, you are complying with HAP content limits, application equipment requirements, or MACT model point value averaging provisions), you must keep the records specified in paragraphs (c)(1) through (3) of this section.

(1) The total amounts of open molding production resin, pigmented gel coat, clear gel coat, tooling resin, and tooling gel coat used per month and the weighted-average HAP contents for each

operation, expressed as weight-percent. For open molding production resin and tooling resin, you must also record the amounts of each applied by atomized and nonatomized methods.

(2) The total amount of aluminum coating used per month (including primers, top coats, clear coats, thinners, and activators) and the weighted-average HAP content as determined in § 63.5752.

(3) The amount of each aluminum wipe-down solvent used per month and the weighted-average HAP content as determined in § 63.5749.

(d) If your facility has an add-on control device, you must keep the records specified in § 63.10(b) relative to control device startup, shut down, and malfunction events; control device performance tests; and continuous monitoring system performance evaluations.

**63.5770 In what form and for how long must I keep my records?**

(a) Your records must be readily available and in a form so they can be easily inspected and reviewed.

(b) You must keep each record for 5 years following the date that each record is generated.

(c) You must keep each record on site for at least 2 years after the date that each record is generated. You can keep the records offsite for the remaining 3 years.

(d) You can keep the records on paper or an alternative media, such as microfilm, computer, computer disks, magnetic tapes, or on microfiche.

**Other Information You Need to Know**

**63.5773 What parts of the general provisions (40 CFR part 63, subpart A) apply to me?**

You must comply with the requirements of the general provisions in 40 CFR part 63, subpart A, as specified in table 5 to this subpart.

**63.5777 Who implements and enforces this subpart?**

(a) If the Administrator has delegated authority to your State or local agency, the State or local agency has the authority to implement and enforce this subpart.

(b) In delegating implementation and enforcement authority of this subpart to a State or local agency under section 40 CFR part 63, subpart E, the authorities that are retained by the Administrator of the U.S. EPA and are not transferred to the State or local agency are listed in paragraphs (b)(1) and (2) of this section.

(1) Under § 63.6(g), the authority to approve alternatives to the standards listed in paragraphs (b)(1)(i) through (vii) of this section is not delegated.

(i) § 63.5698—Standard for open molding resin and gel coat operations.

(ii) § 63.5728—Standards for closed molding resin operations.

(iii) § 63.5731(a)—Standards for resin and gel coat mixing operations.

(iv) § 63.5734—Standards for resin and gel coat application equipment cleaning operations.

(v) § 63.5740(a)—Standards for carpet and fabric adhesive operations.

(vi) § 63.5743—Standards for aluminum boat surface coating operations.

(vii) § 63.5746(f)—Approval of alternative means of demonstrating compliance with the standards for aluminum boat surface coating operations.

(2) Under § 63.7(f), the authority to approve alternatives to the test methods listed in paragraphs (b)(2)(i) through (iv) of this section are not delegated.

(i) § 63.5719(b)—Method for determining whether an enclosure is a total enclosure.

(ii) § 63.5719(c)—Methods for measuring emissions from a control device.

(iii) § 63.5725(d)(1)—Performance specifications for thermal oxidizer combustion temperature monitors.

(iv) § 63.5758—Method for determining hazardous air pollutant content of regulated materials.

**Definitions**

**§ 63.5779 What definitions apply to this subpart?**

Terms used in this subpart are defined in the Clean Air Act, in § 63.2, and in this section as follows:

*Add-on control* means an air pollution control device, such as a thermal oxidizer, that reduces pollution in an air stream by destruction or removal before discharge to the atmosphere.

*Administrator* means the Administrator of the United States Environmental Protection Agency (EPA) or an authorized representative (for example, a State delegated the authority to carry out the provisions of this subpart).

*Aluminum boat* means any marine or freshwater vessel that meets both of the following two criteria: the hull or the deck is constructed primarily of aluminum, and the vessel is designed and manufactured for noncommercial and nonmilitary purposes.

*Aluminum boat surface coating operation* means the application of primers or top coats to aluminum boats. Aluminum boat surface coating operations do not include the application of wood coatings or antifoulant coatings to aluminum boats.

*Aluminum coating spray gun cleaning* means the process of flushing or removing paints or coatings from the interior or exterior of a spray gun used to apply aluminum primers or top coats to aluminum boats.

*Aluminum wipe-down solvents* means solvents used to remove oil, grease, welding smoke, or other contaminants from the aluminum surfaces of a boat before priming or painting. Aluminum wipe-down solvents contain no coating solids; aluminum surface preparation materials that contain solids are considered coatings for the purpose of this subpart and are not wipe-down solvents.

*Antifoulant coating* means any coating that is applied to the underwater portion of a boat specifically to prevent or reduce the attachment of biological organisms and that is registered with EPA as a pesticide under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. section 136, *et seq.*). For the purpose of this subpart, primers used with antifoulant coatings to prepare the surface to accept the antifoulant coating are considered antifoulant coatings.

*Atomized resin application* means a resin application technology in which the resin leaves the application equipment and breaks into droplets or an aerosol as it travels from the application equipment to the surface of the part. Atomized resin application includes, but is not limited to, resin spray guns and resin chopper spray guns.

*Boat* means any type of vessel, other than a seaplane, that can be used for transportation on the water.

*Boat manufacturing facility* means a facility that manufactures the hulls or decks of boats from fiberglass or aluminum or assembles boats from premanufactured hulls and decks or builds molds to make fiberglass hulls or decks. A facility that manufactures only parts of boats (such as hatches, seats, or lockers) or boat trailers, but no boat hulls or decks or molds for fiberglass boat hulls or decks, is not considered a boat manufacturing facility for the purpose of this subpart.

*Carpet and fabric adhesive* means any chemical material that permanently attaches carpet, fabric, or upholstery to any surface of a boat.

*Clear gel coat* means gel coats that are clear or translucent so that underlying colors are visible. Clear gel coats are used to manufacture parts for sale. Clear gel coats do not include tooling gel coats used to build or repair molds.

*Closed molding* means any molding process in which pressure is used to distribute the resin through the

reinforcing fabric placed between two mold surfaces to either saturate the fabric or fill the mold cavity. The pressure may be clamping pressure, fluid pressure, atmospheric pressure, or vacuum pressure used either alone or in combination. The mold surfaces may be rigid or flexible. Closed molding includes, but is not limited to, compression molding with sheet molding compound, infusion molding, resin injection molding (RIM), vacuum-assisted resin transfer molding (VARTM), resin transfer molding (RTM), and vacuum-assisted compression molding. Processes in which a closed mold is used only to compact saturated fabric or remove air or excess resin from the fabric (such as in vacuum bagging), are not considered closed molding. Open molding steps, such as application of a gel coat or skin coat layer by conventional open molding prior to a closed molding process, are not closed molding.

*Cured resin and gel coat* means resin or gel coat that has been catalyzed and changed from a liquid to a solid.

*Deviation* means any instance in which an affected source subject to this subpart or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including, but not limited to, any emission limit, operating limit, or work practice requirement;

(2) Fails to meet any term or condition which is adopted to implement an applicable requirement in this subpart and which is included in the operating permit for any affected source required to obtain such permit; or

(3) Fails to meet any emission limit, operating limit, or work practice requirement in this subpart during any startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

*Enclosure* means a structure, such as a spray booth, that surrounds a source of emissions and captures and directs the emissions to an add-on control device.

*Fiberglass assembly adhesive* means any chemical material used in the joining of one fiberglass part to another to form a temporary or permanently bonded assembly. Assembly adhesives include, but are not limited to, methacrylate adhesives and putties made from polyester or vinyl ester resin mixed with inert fillers or fibers.

*Fiberglass boat* means a vessel in which either the hull or deck is built from a composite material consisting of a thermosetting resin matrix reinforced with fibers of glass, carbon, aramid, or other material.

*Fiberglass hull and deck coatings* means coatings applied to the exterior or interior surface of fiberglass boat hulls and decks on the completed boat. Polyester and vinyl ester resins and gel coats used in building fiberglass parts are not fiberglass hull and deck coatings for the purpose of this subpart.

*Gel coat* means a thermosetting resin surface coating containing styrene (Chemical Abstract Service or CAS No. 100-42-5) or methyl methacrylate (CAS No. 80-62-6), either pigmented or clear, that provides a cosmetic enhancement or improves resistance to degradation from exposure to the elements.

*Hazardous air pollutant or HAP* means any air pollutant listed in, or added to the list in section 112(b) of the Clean Air Act.

*Hazardous air pollutant content or HAP content* means the amount of HAP contained in a regulated material at the time it is applied to the part being manufactured. If no HAP is added to a material as a thinner or diluent, then the HAP content is the same as the HAP content of the material as purchased from the supplier. For resin and gel coat, HAP content does not include any HAP contained in the catalyst added to the resin or gel coat during application to initiate curing. For filled resins, HAP content is the fraction of HAP contained in the resin before any filler is added.

*Hazardous air pollutant data sheet (HDS)* means documentation furnished by a material supplier or an outside laboratory to provide the HAP content of the material by weight, measured using EPA Method 311, manufacturer's formulation data, or an equivalent method. For aluminum coatings, the HDS also documents the solids content by volume, determined from the manufacturer's formulation data. The purpose of the HDS is to help the affected source in showing compliance with the HAP content limits contained in this subpart. The HDS must state the maximum total HAP concentration, by weight, of the material. It must include any HAP concentrations equal to or greater than 0.1 percent by weight for individual HAP that are carcinogens, as defined by the Occupational Safety and Health Administration Hazard Communication Standard (29 CFR part 1910), and 1.0 percent by weight for all other individual HAP, as formulated. The HDS must also include test conditions if EPA Method 311 is used for determining HAP content.

*Maximum achievable control technology (MACT) model point value* means a number calculated for open molding operations that is a surrogate for emissions and is used to determine if your open molding operations are in

compliance with the provisions of this subpart. The units for MACT model point values are kilograms of HAP per megagram of resin or gel coat applied.

*Manufacturer's certification* means documentation furnished by a material supplier that shows the HAP content of a material and includes a HDS.

*Mold* means the cavity or surface into or on which gel coat, resin, and fibers are placed and from which finished fiberglass parts take their form.

*Mold sealing and release agents* means materials applied to a mold to seal, polish, and lubricate the mold to prevent parts from sticking to the mold. Mold sealers, waxes, and glazing and buffing compounds are considered mold sealing and release agents for the purposes of this subpart.

*Mold stripping and cleaning solvents* means materials used to remove mold sealing and release agents from a mold before the mold surface is repaired, polished, or lubricated during normal mold maintenance.

*Month* means a calendar month.

*Nonatomized resin application* means any application technology in which the resin is not broken into droplets or an aerosol as it travels from the application equipment to the surface of the part. Nonatomized resin application technology includes, but is not limited to, flowcoaters, chopper flowcoaters, pressure fed resin rollers, resin impregnators, and hand application (for example, paint brush or paint roller).

*Open molding resin and gel coat operation* means any process in which the reinforcing fibers and resin are placed in the mold and are open to the surrounding air while the reinforcing fibers are saturated with resin. For the purposes of this subpart, open molding includes operations in which a vacuum bag or similar cover is used to compress an uncured laminate to remove air bubbles or excess resin, or to achieve a bond between a core material and a laminate.

*Pigmented gel coat* means opaque gel coats used to manufacture parts for sale. Pigmented gel coats do not include tooling gel coats used to build or repair molds.

*Production resin* means any resin used to manufacture parts for sale. Production resins do not include tooling resins used to build or repair molds, or fiberglass assembly adhesives as defined in this section.

*Recycled resin and gel coat application equipment cleaning solvent* means cleaning solvents returned to the supplier or another party to remove resin or gel coat residues so that the solvent can be reused.

*Resin* means any thermosetting resin containing styrene (CAS No. 100-42-5) or methyl methacrylate (CAS No. 80-62-6) and used to encapsulate and bind together reinforcement fibers in the construction of fiberglass parts.

*Resin and gel coat application equipment cleaning* means the process of flushing or removing resins and gel coats from the interior or exterior of equipment that is used to apply resin or gel coat in the manufacture of fiberglass parts.

*Resin and gel coat mixing operation* means any operation in which resin or gel coat is combined with additives that include, but are not limited to, fillers, promoters, or catalysts.

*Roll-out* means the process of using rollers, squeegees, or similar tools to

compact reinforcing materials saturated with resin to remove trapped air or excess resin.

*Skin coat* is a layer of resin and fibers applied over the gel coat to protect the gel coat from being deformed by the next laminate layers.

*Tooling resin* means the resin used to build or repair molds (also known as tools) or prototypes (also known as plugs) from which molds will be made.

*Tooling gel coat* means the gel coat used to build or repair molds (also known as tools) or prototypes (also known as plugs) from which molds will be made.

*Vacuum bagging* means any molding technique in which the reinforcing fabric is saturated with resin and then covered with a flexible sheet that is

sealed to the edge of the mold and where a vacuum is applied under the sheet to compress the laminate, remove excess resin, or remove trapped air from the laminate during curing. Vacuum bagging does not include processes that meet the definition of closed molding.

*Wood coatings* means coatings applied to wooden parts and surfaces of boats, such as paneling, cabinets, railings, and trim. Wood coatings include, but are not limited to, primers, stains, sealers, varnishes, and enamels. Polyester and vinylester resins or gel coats applied to wooden parts to encapsulate them or bond them to other parts are not wood coatings.

**Tables To Subpart VVVV**

**TABLE 1 TO SUBPART VVVV.—COMPLIANCE DATES FOR NEW AND EXISTING BOAT MANUFACTURING FACILITIES**

If your facility is * * *	and * * *	then you must comply by this date:
1. An existing source .....	is a major source on or before the promulgation date of the rule.	3 years after the promulgation date of the rule.
2. An area source .....	becomes a major source after the promulgation date of the rule.	1 year after becoming a major source or 3 years after the promulgation date of the rule, whichever is later.
3. A new source .....	is a major source at startup <sup>a</sup> .....	upon startup or the promulgation date of the rule, whichever is later.

<sup>a</sup>Your facility is a major source if it is a stationary source or group of stationary sources located within a contiguous area and under common control that emits or can potentially emit, considering controls, in the aggregate, 9.1 megagrams (10 tons) or more per year of a single hazardous air pollutant or 22.7 megagrams (25 tons) or more per year of a combination of hazardous air pollutants.

**TABLE 2 TO SUBPART VVVV.—ALTERNATIVE HAP CONTENT REQUIREMENTS FOR OPEN MOLDING RESIN AND GEL COAT OPERATIONS**

For this operation * * *	And this application method * * *	You must not exceed this weighted-average HAP content (weight percent) requirement:
1. Production resin operations .....	Atomized (spray) .....	28 percent.
2. Production resin operations .....	Nonatomized (nonspray) .....	35 percent.
3. Pigmented gel coat operations .....	Any method .....	33 percent.
4. Clear gel coat operations .....	Any method .....	48 percent.
5. Tooling resin operations .....	Atomized (spray) .....	30 percent.
6. Tooling resin operations .....	Nonatomized (nonspray) .....	39 percent.
7. Tooling gel coat operations .....	Any method .....	40 percent.

**TABLE 3 TO SUBPART VVVV.—MACT MODEL POINT VALUE EQUATIONS FOR OPEN MOLDING OPERATIONS<sup>a</sup>**

For this operation * * *	And this application method * * *	Use this formula to calculate the MACT model plant value for each resin and gel coat
1. Production resin, tooling resin .....	(i) Atomized .....	$0.014 \times (\text{Resin HAP}\%)^{2.425}$
	(ii) Atomized, plus vacuum bagging with roll-out .....	$0.01185 \times (\text{Resin HAP}\%)^{2.425}$
	(iii) Atomized, plus vacuum bagging without roll-out .....	$0.00945 \times (\text{Resin HAP}\%)^{2.425}$
	(iv) Nonatomized .....	$0.014 \times (\text{Resin HAP}\%)^{2.275}$
	(v) Nonatomized, plus vacuum bagging with roll-out .....	$0.0110 \times (\text{Resin HAP}\%)^{2.275}$

TABLE 3 TO SUBPART VVVV.—MACT MODEL POINT VALUE EQUATIONS FOR OPEN MOLDING OPERATIONS <sup>a</sup>—Continued

For this operation * * *	And this application method * * *	Use this formula to calculate the MACT model plant value for each resin and gel coat
	(vi) Nonatomized, plus vacuum bagging without roll-out .....	$0.0076 \times (\text{Resin HAP}\%)^{2.275}$
2. Pigmented gel coat, clear gel coat, tooling gel coat.	All methods .....	$0.445 \times (\text{Gel coat HAP}\%)^{1.675}$

<sup>a</sup>Equations calculate MACT model point value in kilograms of HAP per megagrams of resin or gel coat applied. The equations for vacuum bagging with roll-out are applicable when a facility rolls out the applied resin and fabric prior to applying the vacuum bagging materials. The equations for vacuum bagging without roll-out are applicable when a facility applies the vacuum bagging materials immediately after resin application without rolling out the resin and fabric. HAP% = HAP content expressed as a weight-percent value between 0 and 100%.

TABLE 4. TO SUBPART VVVV—APPLICABILITY AND TIMING OF NOTIFICATIONS

If your facility * * *	You must submit * * *	By this date * * *
1. Is an existing source subject to this subpart ..	an initial notification containing the information specified in § 63.9(b)(2).	no later than the dates specified in § 63.9(b)(2).2.
2. Is a new source subject to this subpart .....	the notifications specified in § 63.9(b)(3) to (5)	no later than the dates specified § 63.9(b)(4) and (5).
3. Qualifies for a compliance extension as specified in § 63.9(c).	a request for a compliance extension as specified in § 63.9(c).	no later than the dates specified in § 63.6(i).
4. Is complying with HAP content limits, application equipment requirements, or MACT model point value averaging provisions.	a notification of compliance status as specified in § 63.9(h).	no later than 30 calendar days after the end of the first 3-month averaging period after your facility's compliance date.
5. Is complying by using an add-on control device.	(i) a notification of intent to conduct a performance test as specified in § 63.9(e).	no later than the date specified in § 63.9(e).
	(ii) a notification of the date for the continuous monitoring system performance evaluation as specified in § 63.9(g).	with the notification of intent to conduct a performance test.
	(iii) a notification of compliance status as specified in § 63.9(h).	no later than 60 calendar days after the completion of the add-on control device performance test and continuous monitoring system performance evaluation.

TABLE 5.—TO SUBPART VVVV.—APPLICABILITY OF GENERAL PROVISIONS (40 CFR PART 63, SUBPART A) TO SUBPART VVVV

Citation	Requirement	Applies to subpart VVVV	Explanation
§ 63.1(a)(1)–(4) .....	General Applicability .....	Yes.	
§ 63.1(a)(5) .....	.....	No .....	[Reserved].
§ 63.1(a)(6)–(8) .....	.....	Yes.	
§ 63.1(a)(9) .....	.....	No .....	[Reserved].
§ 63.1(a)(10)–(14) .....	.....	Yes.	
§ 63.1(b) .....	Initial Applicability Determination .....	Yes.	
§ 63.1(c)(1) .....	Applicability After Standard Established .....	Yes.	
§ 63.1(c)(2) .....	.....	Yes .....	Area sources are not regulated by subpart VVVV.
§ 63.1(c)(3) .....	.....	No .....	[Reserved].
§ 63.1(c)(4)–(5) .....	.....	Yes.	
§ 63.1(d) .....	.....	No .....	[Reserved].
§ 63.1(e) .....	Applicability of Permit Program .....	Yes.	
§ 63.2 .....	Definitions .....	Yes .....	Additional definitions are found in § 63.5779.
§ 63.3 .....	Units and Abbreviations .....	Yes.	
§ 63.4(a)(1)–(3) .....	Prohibited Activities .....	Yes.	
§ 63.4(a)(4) .....	.....	No .....	[Reserved].
§ 63.4(a)(5) .....	.....	Yes.	
§ 63.4(b)–(c) .....	Circumvention/Severability .....	Yes.	
§ 63.5(a) .....	Construction/Reconstruction .....	Yes.	
§ 63.5(b)(1) .....	Requirements for Existing, Newly Constructed, and Reconstructed Sources..	Yes.	
§ 63.5(b)(2) .....	.....	No .....	[Reserved].
§ 63.5(b)(3)–(6) .....	.....	Yes.	

TABLE 5.—TO SUBPART VVVV.—APPLICABILITY OF GENERAL PROVISIONS (40 CFR PART 63, SUBPART A) TO SUBPART VVVV—Continued

Citation	Requirement	Applies to subpart VVVV	Explanation
§ 63.5(c) .....	.....	No .....	[Reserved].
§ 63.5(d) .....	Application for Approval of Construction/Reconstruction.	Yes.	
§ 63.5(e) .....	Approval of Construction/Reconstruction ....	Yes.	
§ 63.5(f) .....	Approval of Construction/Reconstruction Based on prior State Review.	Yes.	
§ 63.6(a) .....	Compliance with Standards and Maintenance Requirements—Applicability.	Yes.	
§ 63.6(b)(1)–(5) .....	Compliance Dates for New and Reconstructed Sources.	Yes .....	§ 63.5695 specifies compliance dates.
§ 63.6(b)(6) .....	.....	No .....	[Reserved].
§ 63.6(b)(7) .....	.....	Yes.	
§ 63.6(c)(1)–(2) .....	Compliance Dates for Existing Sources .....	Yes .....	§ 63.5695 specifies compliance dates.
§ 63.6(c)(3)–(c)(4) .....	.....	No .....	[Reserved].
§ 63.6(c)(5) .....	.....	Yes .....	Any area source that becomes a major source must comply by the date in § 63.5695 for existing sources or by the date 1 year after becoming a major source, whichever is later.
§ 63.6(d) .....	.....	No .....	[Reserved].
§ 63.6(e)(1)–(2) .....	Operation and Maintenance Requirements	No .....	Operating requirements for open molding operations with add-on controls are specified in § 63.5725.
§ 63.6(e)(3) .....	Startup, Shut Down, and Malfunction Plans	Yes .....	Only sources with add-on controls must complete startup, shutdown, and malfunction plans.
§ 63.6(f) .....	Compliance with Nonopacity Emission Standards.	Yes.	
§ 63.6(g) .....	Use of an Alternative Nonopacity Emission Standard.	Yes.	
§ 63.6(h) .....	Compliance with Opacity/Visible Emissions Standards.	No .....	Subpart VVVV does not specify opacity or visible emission standards.
§ 63.6(i)(1)–(14) .....	Extension of Compliance with Emission Standards.	Yes.	
§ 63.6(i)(15) .....	.....	No .....	[Reserved].
§ 63.6(i)(16) .....	.....	Yes.	
§ 63.6(j) .....	Exemption from Compliance with Emission Standards.	Yes.	
§ 63.7 .....	Performance Test Requirements .....	Yes.	
§ 63.8(a)(1)–(2) .....	Monitoring Requirements—Applicability .....	Yes .....	All of § 63.8 applies only to sources with add-on controls. Additional monitoring requirements for sources with add-on controls are found in § 63.5725.
§ 63.8(a)(3) .....	.....	No .....	[Reserved].
§ 63.8(a)(4) .....	.....	No .....	Subpart VVVV does not refer directly or indirectly to § 63.11.
§ 63.8(b)(1) .....	Conduct of Monitoring .....	Yes.	
§ 63.8(b)(2)–(3) .....	Multiple Effluents and Multiple Continuous Monitoring Systems (CMS).	Yes .....	Applies to sources that use a CMS on the control device stack.
§ 63.8(c)(1)–(4) .....	Continuous Monitoring System Operation and Maintenance.	Yes.	
§ 63.8(c)(5) .....	Continuous Opacity Monitoring Systems (COMS).	No .....	Subpart VVVV does not have opacity or visible emission standards.
§ 63.8(c)(6)–(8) .....	Continuous Monitoring System Calibration Checks and Out-of-Control Periods.	Yes.	
§ 63.8(d) .....	Quality Control Program .....	Yes.	
§ 63.8(e) .....	CMS Performance Evaluation .....	Yes.	
§ 63.8(f)(1)–(5) .....	Use of an Alternative Monitoring Method ...	Yes.	
§ 63.8(f)(6) .....	Alternative to Relative Accuracy Test .....	Yes .....	Applies only to sources that use continuous emission monitoring systems (CEMS).
§ 63.8(g) .....	Data Reduction .....	Yes.	
§ 63.9(a) .....	Notification Requirements—Applicability .....	Yes.	
§ 63.9(b) .....	Initial Notifications .....	Yes.	
§ 63.9(c) .....	Request for Compliance Extension .....	Yes.	
§ 63.9(d) .....	Notification That a New Source Is Subject to Special Compliance Requirements.	Yes.	
§ 63.9(e) .....	Notification of Performance Test .....	Yes .....	Applies only to sources with add-on controls.
§ 63.9(f) .....	Notification of Visible Emissions/Opacity Test.	No .....	Subpart VVVV does not have opacity or visible emission standards.

TABLE 5.—TO SUBPART VVVV.—APPLICABILITY OF GENERAL PROVISIONS (40 CFR PART 63, SUBPART A) TO SUBPART VVVV—Continued

Citation	Requirement	Applies to subpart VVVV	Explanation
§ 63.9(g)(1)	Additional CMS Notifications—Date of CMS Performance Evaluation.	Yes	Applies only to sources with add-on controls.
§ 63.9(g)(2)	Use of COMS Data	No	Subpart VVVV does not require the use of COMS.
§ 63.9(g)(3)	Alternative to Relative Accuracy Testing	Yes	Applies only to sources with CEMS.
§ 63.9(h)(1)–(3)	Notification of Compliance Status	Yes.	
§ 63.9(h)(4)	Notification of Compliance Status (continued).	No	[Reserved].
§ 63.9(h)(5)–(6)	Notification of Compliance Status (continued).	Yes.	
§ 63.9(i)	Adjustment of Deadlines	Yes.	
§ 63.9(j)	Change in Previous Information	Yes.	
§ 63.10(a)	Recordkeeping/Reporting—Applicability	Yes.	
§ 63.10(b)(1)	General Recordkeeping Requirements	Yes	§§ 63.5767 and 63.5770 specify additional recordkeeping requirements.
§ 63.10(b)(2)(i)–(xi)	Recordkeeping Relevant to Startup, Shutdown, and Malfunction Periods and CMS.	Yes	Applies only to sources with add-on controls.
§ 63.10(b)(2)(xii)–(xiv)	General Recordkeeping Requirements	Yes.	
§ 63.10(b)(3)	Recordkeeping Requirements for Applicability Determinations.	Yes	Specifies applicability determinations for non-major sources.
§ 63.10(c)	Additional Recordkeeping for Sources with CMS.	Yes	Applies only to sources with add-on controls.
§ 63.10(d)(1)	General Reporting Requirements	Yes	§ 63.5764 specifies additional reporting requirements.
§ 63.10(d)(2)	Performance Test Results	Yes	§ 63.5764 specifies additional requirements for reporting performance test results.
§ 63.10(d)(3)	Opacity or Visible Emissions Observations	No	Subpart VVVV does not specify opacity or visible emission standards.
§ 63.10(d)(4)	Progress Reports for Sources with Compliance Extensions.	Yes.	
§ 63.10(d)(5)	Startup, Shutdown, and Malfunction Reports.	Yes	Applies only to sources with add-on controls
§ 63.10(e)(1)	Additional CMS Reports-General	Yes	Applies only to sources with add-on controls.
§ 63.10(e)(2)	Reporting Results of CMS Performance Evaluations.	Yes	Applies only to sources with add-on controls.
§ 63.10(e)(3)	Excess Emissions/CMS Performance Reports.	Yes	Applies only to sources with add-on controls.
§ 63.10(e)(4)	COMS Data Reports	No	Subpart VVVV does not specify opacity or visible emission standards.
§ 63.10(f)	Recordkeeping/Reporting Waiver	Yes.	
§ 63.11	Control Device Requirements—Applicability	No	Facilities subject to subpart VVVV do not use flares as control devices.
§ 63.12	State Authority and Delegations	Yes	§ 63.5776 lists those sections of subpart A that are not delegated.
§ 63.13	Addresses	Yes.	
§ 63.14	Incorporation by Reference	No	Subpart VVVV does not incorporate any material by reference.
§ 63.15	Availability of Information/ Confidentiality	Yes.	