The EPA Administrator, Andrew R. Wheeler, signed the following notice on 4/18/2019, and EPA is submitting it for publication in the *Federal Register* (FR). While we have taken steps to ensure the accuracy of this Internet version of the rule, it is not the official version of the rule for purposes of compliance. Please refer to the official version in a forthcoming FR publication, which will appear on the Government Printing Office's govinfo website (<u>https://www.govinfo.gov/app/collection/fr</u>) and on Regulations.gov (<u>https://www.regulations.gov</u>) in Docket No. EPA-HQ-OAR-2016-0447 and EPA-HQ-OAR-2016-0449. Once the official version of this document is published in the FR, this version will be removed from the Internet and replaced with a link to the official version.

6560-50-P

## ENVIRONMENTAL PROTECTION AGENCY

#### 40 CFR Part 63

[EPA-HQ-OAR-2016-0447 and EPA-HQ-OAR-2016-0449; FRL-]

## **RIN 2060-AT12**

## National Emission Standards for Hazardous Air Pollutants: Boat Manufacturing and

## Reinforced Plastic Composites Production Residual Risk and Technology Review

AGENCY: Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** The Environmental Protection Agency (EPA) is proposing amendments to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Boat Manufacturing and the NESHAP for Reinforced Plastic Composites Production. The proposed amendments address the results of the residual risk and technology review (RTR) conducted as required under the Clean Air Act (CAA) for these source categories. The EPA is proposing to find the risks due to emissions of air toxics from these source categories under the current standards to be acceptable and that the standards provide an ample margin of safety to protect public health. We are proposing no revisions to the numerical emission limits or other aspects of the rules based on these risk analyses or technology reviews. Additionally, the EPA is proposing to amend provisions addressing emissions during periods of startup, shutdown, and malfunction (SSM) and to amend provisions regarding electronic reporting of certain notifications, performance test results, and semiannual reports.

DATES: Comments. Comments must be received on or before [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. Under the Paperwork Reduction Act (PRA), comments on the information collection provisions are best assured of consideration if the Office of Management and Budget (OMB) receives a copy of your comments on or before [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

Public Hearing. If anyone contacts us requesting a public hearing on or before [INSERT DATE 5 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], we will hold a hearing. Additional information about the hearing, if requested, will be published in a subsequent Federal Register document and posted at *https://www.epa.gov/stationary-sourcesair-pollution/boat-manufacturing-national-emission-standards-hazardous-air* for the Boat Manufacturing NESHAP, and *https://www.epa.gov/stationary-sources-air-pollution/reinforcedplastic-composites-production-national-emission* for the Reinforced Plastic Composites Production NESHAP. See SUPPLEMENTARY INFORMATION for information on requesting and registering for a public hearing.

**ADDRESSES:** *Comments.* Submit your comments, identified by Docket ID No. EPA-HQ-OAR-2016-0447 for the Boat Manufacturing NESHAP and Docket ID No. EPA-HQ-OAR-2016-0449 for the Reinforced Plastic Composites Production NESHAP, at *https://www.regulations.gov.* Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. See **SUPPLEMENTARY INFORMATION** for detail about how the EPA treats submitted comments. Regulations.gov is our preferred method of receiving comments. However, the following other submission methods are also accepted:

- *Email:* a-and-r-docket@epa.gov. Include Docket ID No. EPA-HQ-OAR-2016-0447 for the Boat Manufacturing NESHAP or Docket ID No. EPA-HQ-OAR-2016-0449 for the Reinforced Plastic Composites Production NESHAP in the subject line of the message.
- *Fax:* (202) 566-9744. Attention Docket ID No. EPA-HQ-OAR-2016-0447 for the Boat Manufacturing NESHAP or Docket ID No. EPA-HQ-OAR-2016-0449 for the Reinforced Plastic Composites Production NESHAP.
- Mail: To ship or send mail via the United States Postal Service, use the following address: U.S. Environmental Protection Agency, EPA Docket Center, Docket ID No. EPA-HQ-OAR-2016-0447 for the Boat Manufacturing NESHAP or Docket ID No. EPA-HQ-OAR-2016-0449 for the Reinforced Plastic Composites Production NESHAP, Mail Code 28221T, 1200 Pennsylvania Avenue, NW, Washington, DC 20460.
- *Hand/Courier Delivery:* Use the following Docket Center address if you are using express mail, commercial delivery, hand delivery, or courier: EPA Docket Center, EPA WJC West Building, Room 3334, 1301 Constitution Avenue, NW, Washington, DC 20004. Delivery verification signatures will be available only during regular business hours.

**FOR FURTHER INFORMATION CONTACT:** For questions about this proposed action, contact Mr. Brian Storey, Sector Policies and Programs Division (D243-04), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541-1103; fax number: (919) 541-4991; and email address: *storey.brian@epa.gov*. For specific information regarding the risk modeling methodology, contact Mr. James Hirtz, Health and Environmental Impacts Division (C539-02), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research

Triangle Park, North Carolina 27711; telephone number: (919) 541-0881; fax number: (919) 541-0840; and email address: *hirtz.james@epa.gov*. For information about the applicability of the Boat Manufacturing NESHAP or Reinforced Plastic Composites Production NESHAP to a particular entity, contact Mr. John Cox, Office of Enforcement and Compliance Assurance, U.S. Environmental Protection Agency, EPA WJC South Building (Mail Code 2221A), 1200 Pennsylvania Avenue, NW, Washington DC 20460; telephone number: (202) 564-1395; and email address: *cox.john@epa.gov*.

#### **SUPPLEMENTARY INFORMATION:**

*Public hearing*. Please contact Ms. Nancy Perry at (919) 541-5628 or by email at *perry.nancy@epa.gov* to request a public hearing, to register to speak at the public hearing, or to inquire as to whether a public hearing will be held.

*Docket.* The EPA has established a docket for this rulemaking under Docket ID No. EPA-HQ-OAR-2016-0447 for the Boat Manufacturing NESHAP or Docket ID No. EPA-HQ-OAR-2016-0449 for the Reinforced Plastic Composites Production NESHAP. All documents in the docket are listed in Regulations.gov. Although listed, some information is not publicly available, *e.g.*, Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy. Publicly available docket materials are available either electronically in Regulations.gov or in hard copy at the EPA Docket Center, Room 3334, EPA WJC West Building, 1301 Constitution Avenue, NW, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the EPA Docket Center is (202) 566-1742.

Instructions. Direct your comments to Docket ID No. EPA-HQ-OAR-2016-0447 for the Boat Manufacturing NESHAP or Docket ID No. EPA-HQ-OAR-2016-0449 for the Reinforced Plastic Composites Production NESHAP. The EPA's policy is that all comments received will be included in the public docket without change and may be made available online at https://www.regulations.gov, including any personal information provided, unless the comment includes information claimed to be CBI or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through https://www.regulations.gov or email. This type of information should be submitted by mail as discussed below.

The EPA may publish any comment received to its public docket. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (*i.e.*, on the Web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit *https://www2.epa.gov/dockets/commenting-epa-dockets*.

The *https://www.regulations.gov* website allows you to submit your comment anonymously, which means the EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to the EPA without going through *https://www.regulations.gov*, your email address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, the EPA recommends that you

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include your name and other contact information in the body of your comment and with any digital storage media you submit. If the EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, the EPA may not be able to consider your comment. Electronic files should not include special characters or any form of encryption and be free of any defects or viruses. For additional information about the EPA's public docket, visit the EPA Docket Center homepage at *https://www.epa.gov/dockets*.

Submitting CBI. Do not submit information containing CBI to the EPA through https://www.regulations.gov or email. Clearly mark the part or all of the information that you claim to be CBI. For CBI information on any digital storage media that you mail to the EPA, mark the outside of the digital storage media as CBI and then identify electronically within the digital storage media the specific information that is claimed as CBI. In addition to one complete version of the comments that includes information claimed as CBI, you must submit a copy of the comments that does not contain the information claimed as CBI directly to the public docket through the procedures outlined in *Instructions* above. If you submit any digital storage media that does not contain CBI, mark the outside of the digital storage media clearly that it does not contain CBI. Information not marked as CBI will be included in the public docket and the EPA's electronic public docket without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 Code of Federal Regulations (CFR) part 2. Send or deliver information identified as CBI only to the following address: OAQPS Document Control Officer (C404-02), OAQPS, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, Attention Docket ID No. EPA-HQ-OAR-2016-0447 for the Boat Manufacturing NESHAP or Docket ID No. EPA-HQ-OAR-2016-0449 for the Reinforced Plastic Composites Production NESHAP.

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Preamble Acronyms and Abbreviations. We use multiple acronyms and terms in this

preamble. While this list may not be exhaustive, to ease the reading of this preamble and for

reference purposes, the EPA defines the following terms and acronyms here:

AEGL	acute exposure guideline level	
AERMOD	air dispersion model used by the HEM-3 model	
ATSDR	Agency for Toxic Substances and Disease Registry	
BMC	bulk molding compound	
CAA	Clean Air Act	
CalEPA	California EPA	
CBI	Confidential Business Information	
CEDRI	compliance and emissions data reporting interface	
CFR	Code of Federal Regulations	
EPA	Environmental Protection Agency	
ERPG	Emergency Response Planning Guideline	
ERT	electronic reporting tool	
GACT	generally available control technologies	
HAP	hazardous air pollutant(s)	
HC1	hydrochloric acid	
HEM-3	Human Exposure Model, Version 1.1.0	
HF	hydrogen fluoride	
HI	hazard index	
HQ	hazard quotient	
ICR	information collection request	
IRIS	Integrated Risk Information System	
km	kilometer	
MACT	maximum achievable control technology	
MDI	4,4'-diphenylmethane diisocyanate	
mg/m <sup>3</sup>	milligrams per cubic meter	
MIR	maximum individual risk	
MMA	methyl methacrylate	
NAAQS	National Ambient Air Quality Standards	
NAICS	North American Industry Classification System	
NEI	national emissions inventory	
NESHAP	national emission standards for hazardous air pollutants	
NSR	new source review	
NTTAA	National Technology Transfer and Advancement Act	

OAQPS	Office of Air Quality Planning and Standards	
OMB	Office of Management and Budget	
PB-HAP	hazardous air pollutants known to be persistent and bio-accumulative in the environment	
РОМ	polycyclic organic matter	
ppm	parts per million	
PRA	Paperwork Reduction Act	
RBLC	Reasonably Available Control Technology, Best Available Control Technology, and Lowest Achievable Emission Rate (RACT/BACT/LAER) Clearinghouse	
REL	reference exposure level	
RFA	Regulatory Flexibility Act	
RfC	reference concentration	
RTR	residual risk and technology review	
SAB	Science Advisory Board	
SMC	sheet molding compound	
SSM	startup, shutdown, and malfunction	
TOSHI	target organ-specific hazard index	
tpy	tons per year	
TRIM.FaTE	Total Risk Integrated Methodology. Fate,	
	Transport, and Ecological Exposure model	
UF	uncertainty factor	
$\mu g/m^3$	microgram per cubic meter	
UMRA	Unfunded Mandates Reform Act	
URE	unit risk estimate	

Organization of this Document. The information in this preamble is organized as follows:

- I. General Information
- A. Does this action apply to me?
- B. Where can I get a copy of this document and other related information?
- II. Background
- A. What is the statutory authority for this action?
- B. What is this source category and how does the current NESHAP regulate its HAP emissions?
- C. What data collection activities were conducted to support this action?
- D. What other relevant background information and data are available?
- III. Analytical Procedures and Decision Making
- A. How do we consider risk in our decision-making?
- B. How do we perform the technology review?
- C. How do we estimate post-MACT risk posed by the source category?
- IV. Analytical Results and Proposed Decisions

A. What are the results of the risk assessment and analyses for the Boat Manufacturing source category?

B. What are our proposed decisions regarding risk acceptability, ample margin of safety, and adverse environmental effect for the Boat Manufacturing source category?

C. What are the results and proposed decisions based on our technology review for the Boat Manufacturing source category?

D. What other actions are we proposing for the Boat Manufacturing source category?

E. What compliance dates are we proposing for the Boat Manufacturing source category?

F. What are the results of the risk assessment and analyses for the Reinforced Plastic Composites Production source category?

G. What are our proposed decisions regarding risk acceptability, ample margin of safety, and adverse environmental effect for the Reinforced Plastic Composites Production source category? H. What are the results and proposed decisions based on our technology review for the Reinforced Plastic Composites Production source category?

I. What other actions are we proposing for the Reinforced Plastic Composites Production source category?

J. What compliance dates are we proposing for the Reinforced Plastic Composites Production source category?

V. Summary of Cost, Environmental, and Economic Impacts

A. What are the affected sources?

B. What are the air quality impacts?

C. What are the cost impacts?

D. What are the economic impacts?

E. What are the benefits?

VI. Request for Comments

VII. Submitting Data Corrections

VIII. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563:

Improving Regulation and Regulatory Review

B. Executive Order 13771: Reducing Regulation and Controlling Regulatory Costs

C. Paperwork Reduction Act (PRA)

D. Regulatory Flexibility Act (RFA)

E. Unfunded Mandates Reform Act (UMRA)

F. Executive Order 13132: Federalism

G. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

H. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

J. National Technology Transfer and Advancement Act (NTTAA)

K. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

# I. General Information

# A. Does this action apply to me?

Table 1 of this preamble lists the NESHAP and associated regulated industrial source categories that are the subject of this proposal. Table 1 is not intended to be exhaustive, but rather provides a guide for readers regarding the entities that this proposed action is likely to affect. The proposed standards, once promulgated, will be directly applicable to the affected sources. Federal, state, local, and tribal government entities would not be affected by this proposed action.

NESHAP and Source Category	NAICS Code <sup>1</sup>	Regulated Entities
Boat Manufacturing	336612	Boat manufacturing facilities that perform fiberglass production operations or aluminum coating operations.
Reinforced Plastic Composites Production	326113 326121 326122 326130 326140 326191 327110 327991 332321 332420 333132 333415 333611 333924 334310 335313 335932 336111 336211 336213	Reinforced plastic composites production facilities that manufacture intermediate and/or final products using styrene containing thermoset resins and gel coats.

Table 1. NESHAP and Industrial Source Categories Affected By This Proposed Action

336214	
336320	
336413	
336510	
337110	
337125	
337127	
337215	
339920	
339991	

<sup>1</sup> North American Industry Classification System.

## B. Where can I get a copy of this document and other related information?

In addition to being available in the docket, an electronic copy of this action is available on the Internet. Following signature by the EPA Administrator, the EPA will post a copy of this proposed action at *https://www.epa.gov/stationary-sources-air-pollution/boat-manufacturingnational-emission-standards-hazardous-air* for the Boat Manufacturing NESHAP, and *https://www.epa.gov/stationary-sources-air-pollution/reinforced-plastic-composites-productionnational-emission* for the Reinforced Plastic Composites Production NESHAP. Following publication in the **Federal Register**, the EPA will post the **Federal Register** version of the proposal and key technical documents at this same website. Information on the overall RTR program is available at *https://www3.epa.gov/ttn/atw/rrisk/rtrpg.html*.

A redline version of the regulatory language that incorporates the proposed changes in this action is available in the docket for this action (Docket ID No. EPA-HQ-OAR-2016-0447 for the Boat Manufacturing NESHAP or Docket ID No. EPA-HQ-OAR-2016-0449 for the Reinforced Plastic Composites Production NESHAP).

#### II. Background

## *A. What is the statutory authority for this action?*

The statutory authority for this action is provided by sections 112 and 301 of the CAA, as amended (42 U.S.C. 7401 et seq.). Section 112 of the CAA establishes a two-stage regulatory process to develop standards for emissions of hazardous air pollutants (HAP) from stationary sources. Generally, the first stage involves establishing technology-based standards and the second stage involves evaluating those standards that are based on maximum achievable control technology (MACT) to determine whether additional standards are needed to address any remaining risk associated with HAP emissions. This second stage is commonly referred to as the "residual risk review." In addition to the residual risk review, the CAA also requires the EPA to review standards set under CAA section 112 every 8 years to determine if there are "developments in practices, processes, or control technologies" that may be appropriate to incorporate into the standards. This review is commonly referred to as the "technology review." When the two reviews are combined into a single rulemaking, it is commonly referred to as the "risk and technology review." The discussion that follows identifies the most relevant statutory sections and briefly explains the contours of the methodology used to implement these statutory requirements. A more comprehensive discussion appears in the document titled CAA Section 112 Risk and Technology Reviews: Statutory Authority and Methodology in the docket for this rulemaking.

In the first stage of the CAA section 112 standard setting process, the EPA promulgates technology-based standards under CAA section 112(d) for categories of sources identified as emitting one or more of the HAP listed in CAA section 112(b). Sources of HAP emissions are either major sources or area sources, and CAA section 112 establishes different requirements for major source standards and area source standards. "Major sources" are those that emit or have the potential to emit 10 tons per year (tpy) or more of a single HAP or 25 tpy or more of any

combination of HAP. All other sources are "area sources." For major sources, CAA section 112(d)(2) provides that the technology-based NESHAP must reflect the maximum degree of emission reductions of HAP achievable (after considering cost, energy requirements, and non-air quality health and environmental impacts). These standards are commonly referred to as MACT standards. CAA section 112(d)(3) also establishes a minimum control level for MACT standards, known as the MACT "floor." The EPA must also consider control options that are more stringent than the floor. Standards more stringent than the floor are commonly referred to as beyond-the-floor standards. In certain instances, as provided in CAA section 112(h), the EPA may set work practice standards where it is not feasible to prescribe or enforce a numerical emission standard. For area sources, CAA section 112(d)(5) gives the EPA discretion to set standards based on generally available control technologies or management practices (GACT standards) in lieu of MACT standards.

The second stage in standard-setting focuses on identifying and addressing any remaining (*i.e.*, "residual") risk according to CAA section 112(f). For source categories subject to MACT standards, section 112(f)(2) of the CAA requires the EPA to determine whether promulgation of additional standards is needed to provide an ample margin of safety to protect public health or to prevent an adverse environmental effect. Section 112(d)(5) of the CAA provides that this residual risk review is not required for categories of area sources subject to GACT standards. Section 112(f)(2)(B) of the CAA further expressly preserves the EPA's use of the two-step approach for developing standards to address any residual risk and the Agency's interpretation of "ample margin of safety" developed in the *National Emissions Standards for Hazardous Air Pollutants: Benzene Emissions from Maleic Anhydride Plants, Ethylbenzene/Styrene Plants, Benzene Storage Vessels, Benzene Equipment Leaks, and Coke By-Product Recovery Plants* 

(Benzene NESHAP) (54 FR 38044, September 14, 1989). The EPA notified Congress in the Risk Report that the Agency intended to use the Benzene NESHAP approach in making CAA section 112(f) residual risk determinations (EPA–453/R–99–001, p. ES–11). The EPA subsequently adopted this approach in its residual risk determinations and the United States Court of Appeals for the District of Columbia Circuit (the Court) upheld the EPA's interpretation that CAA section 112(f)(2) incorporates the approach established in the Benzene NESHAP. See *NRDC v. EPA*, 529 F.3d 1077, 1083 (D.C. Cir. 2008).

The approach incorporated into the CAA and used by the EPA to evaluate residual risk and to develop standards under CAA section 112(f)(2) is a two-step approach. In the first step, the EPA determines whether risks are acceptable. This determination "considers all health information, including risk estimation uncertainty, and includes a presumptive limit on maximum individual lifetime [cancer] risk (MIR)<sup>1</sup> of approximately 1 in 10 thousand." 54 FR 38045, September 14, 1989. If risks are unacceptable, the EPA must determine the emissions standards necessary to reduce risk to an acceptable level without considering costs. In the second step of the approach, the EPA considers whether the emissions standards provide an ample margin of safety to protect public health "in consideration of all health information, including the number of persons at risk levels higher than approximately 1 in 1 million, as well as other relevant factors, including costs and economic impacts, technological feasibility, and other factors relevant to each particular decision." *Id.* The EPA must promulgate emission standards necessary to provide an ample margin of safety to protect public health. After conducting the ample margin of safety analysis, we consider whether a more stringent standard is necessary to

<sup>&</sup>lt;sup>1</sup> Although defined as "maximum individual risk," MIR refers only to cancer risk. MIR, one metric for assessing cancer risk, is the estimated risk if an individual were exposed to the maximum level of a pollutant for a lifetime.

This document is a prepublication version, signed by EPA Administrator, Andrew R. Wheeler on 4/18/2019. We have taken steps to ensure the accuracy of this version, but it is not the official version.

prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect.

CAA section 112(d)(6) separately requires the EPA to review standards promulgated under CAA section 112 and revise them "as necessary (taking into account developments in practices, processes, and control technologies)" no less often than every 8 years. In conducting this review, which we call the "technology review," the EPA is not required to recalculate the MACT floor. *Natural Resources Defense Council (NRDC) v. EPA*, 529 F.3d 1077, 1084 (D.C. Cir. 2008). *Association of Battery Recyclers, Inc. v. EPA*, 716 F.3d 667 (D.C. Cir. 2013). The EPA may consider cost in deciding whether to revise the standards pursuant to CAA section 112(d)(6).

B. What is this source category and how does the current NESHAP regulate its HAP emissions?1. What is the Boat Manufacturing source category and how does the current NESHAP regulate its HAP emissions?

The Boat Manufacturing NESHAP was promulgated on August 22, 2001 (66 FR 44218), and codified at 40 CFR part 63, subpart VVVV. As promulgated, the Boat Manufacturing NESHAP applies to fiberglass and aluminum boat manufacturing operations located at facilities considered to be major sources of HAP emissions. The HAP 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.

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*Fiberglass boat manufacturing operations*. Fiberglass boat manufacturing involves using glass fiber reinforcements laid in a mold and saturating the fiberglass with resin. The resin hardens to form a rigid plastic part reinforced with fiberglass. Manufacturing processes are generally considered either "open molding" or "closed molding."

In open molding, the outer parts of the boat are built by first spraying a mold with a layer of gel coat, which is a pigmented polyester resin that hardens and becomes the smooth outside surface of the part. The inside of the hardened gel coat layer is coated with chopped glass fibers and polyester or vinylester resin. 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.

Closed molding processes include resin infusion molding and resin transfer molding. These processes are typically used to produce smaller boat parts and involve packing a mold cavity with fiberglass reinforcement and infusing the fiber with resin either under pressure, where the resin is "pushed" into the mold cavity, or under vacuum, where the air of the mold cavity is removed and replaced by resin. In either process, the mold is sealed, to effectively transfer the resin into the mold cavity and to control the saturation of the fiber reinforcement.

The resins that are used in fiberglass boat manufacturing contain styrene as a solvent and a cross-linking agent. Gel coats contain styrene and methyl methacrylate (MMA) which provides resistance to degradation of the gel coat by ultraviolet light. Styrene and MMA are HAP, and, in an open mold process, 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 the manufacturing process. Mixing is done to resins or gel coats to mix the resins and gel coats with promoters, fillers, or other additives before being applied to the mold. Some HAP from the resins

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and gel coats 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 can catalyze in the hoses or gun if not flushed with a solvent after each use.

For some types of boats, the void spaces between the walls of the boat are filled with a foam to provide additional buoyancy to the boat, once constructed. The foam is formed by pouring a two-part foam product into the void space. The two-part product consists of resin, where the HAP is predominantly styrene and 4,4'-diphenylmethane diisocyanate (MDI), another HAP in the process. The MDI component of the foam is a reactant that reacts with the resin, when combined, to form the hardened polyurethane foam.

*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 adhesives can include HAP such as methylene chloride, toluene, xylenes, and methyl chloroform.

*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.

The Boat Manufacturing NESHAP regulates organic HAP from sources that manufacture non-commercial and non-military aluminum boats or all types of fiberglass boats. Coating operations on vessels used for commercial and military purposes are covered by the Shipbuilding and Repair NESHAP (40 CFR part 63, subpart II). The Boat Manufacturing NESHAP applies to

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the following operations: all open molding operations, including pigmented gel coat, clear gel coat, production resin, tooling resin, and tooling gel coat, and all closed molding resin operations. The NESHAP regulates HAP emissions by setting a HAP content limit for the resins and gel coats used at each regulated open molding resin and gel coat operation. For each regulated open molding resin operation, the NESHAP establishes separate HAP content limits for atomized and non-atomized resin application methods. For closed molding operations, no limits apply to the resin application operation if it meets the specific definition of closed molding provided in the NESHAP. If a molding operation does not meet the definition of closed molding that is provided in the NESHAP, then it must comply with the applicable emission limits for open molding. Other operations are subject to either work practice requirements or HAP content limits, including the following:

- All resin and gel coat application equipment cleaning;
- All resin and gel coat mixing operations; and
- All carpet and fabric adhesive operations.

Resin and gel coat mixing containers with a capacity of 208 liters (55 gallons) or more must be covered with tightly fitted lids. Routine resin and gel coat equipment cleaning operations must use solvents containing no more than 5-percent organic HAP, but solvents used to remove cured resin or gel coat from equipment are exempt from the HAP content limits. However, the containers used to hold the exempt solvent and to clean equipment being used with cured resin and gel coat must be covered, and there is an annual limit on the amount of exempt solvent that can be used. Lastly, the NESHAP includes HAP limits for carpet and fabric adhesives operations, limiting use to those adhesives that contain no more than 5-percent organic HAP by weight.

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The Boat Manufacturing NESHAP applies to aluminum recreational boat manufacturing facilities performing the following operations:

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

The NESHAP includes the following requirements for aluminum recreational boat manufacturing:

- Aluminum wipe-down solvents are limited to no more than 0.33 kilograms of organic HAP per liter of total coating solids applied (2.75 pounds per gallon) from aluminum primers, clear coats, and top coats combined (no limit applies when cleaning surfaces are receiving decals or adhesive graphics).
- Aluminum recreational boat surface coatings (including thinners, activators, primers, topcoats, and clear coats) are limited to no more than 1.22 kilograms of organic HAP per liter of total coating solids applied (10.18 pounds per gallon) from aluminum primers, clear coats, and top coats combined.
- Combined aluminum surface coatings and aluminum wipe-down solvents are limited to no more than 1.55 kilograms of organic HAP per liter of total coating solids applied (12.9 pounds per gallon) from aluminum primers, clear coats, and top coats combined.

In addition, aluminum recreational boat manufacturing facilities must meet work practice standards to ensure that spray guns are cleaned and the cleaning solvent is stored in an enclosed device, and that the enclosure remains closed when not in use.

The applicability of Boat Manufacturing NESHAP requirements is described in greater detail in the 2001 rule (66 FR 44218) and 40 CFR part 63, subpart VVVV.

2. What is the Reinforced Plastic Composites Production source category and how does the current NESHAP regulate its HAP emissions?

The Reinforced Plastic Composites Production NESHAP was originally promulgated on April 21, 2003 (68 FR 19375) and was amended on August 25, 2005 (70 FR 50118). The requirements are codified at 40 CFR part 63, subpart WWWW. The Reinforced Plastic Composites Production source category includes the manufacturing of reinforced and nonreinforced plastic composite products and the production of plastic molding compounds used in the production of plastic composite products. As with boat manufacturing, reinforced plastic composite products are manufactured using resins containing styrene. Some processes use gel coats containing styrene and MMA. Operations also include mixing, tooling, and equipment cleaning. Many of the reinforced plastic composites products are manufactured using an open molding process similar to the boat manufacturing industry. As with boat manufacturing, the air emissions resulting from an open mold manufacturing process are fugitive in nature. Additionally, however, the reinforced plastic composites production processes can include pultrusion, sheet molding compound (SMC) and bulk molding compound (BMC) manufacturing, filament winding, casting, and other processes. The following paragraphs provide a brief description of some of the various processes utilized in the Reinforced Plastic Composites Production source category.

*Open Mold Process.* The use of open molds is similar to the boat manufacturing operations, where the mold is sprayed with a layer of gel coat, or chopped glass fibers and polyester or vinylester resin. Additional layers of fiberglass and resin are added until the manufactured part is the final thickness. In addition, woven roving or mats can also be used instead of chopped fiber, in which case a spray gun would apply resin to saturate the fiberglass

mat. Once the material has been applied to the mold, brushes or rollers are used to remove any entrapped air and to assure that the laminate is thoroughly "wet."

*Pultrusion*. Pultrusion is a continuous manufacturing process that produces parts with constant cross-sectional shapes. In a pultrusion operation, the composite is pulled through an extrusion-type die by a gripper/puller system. Reinforcing fibers are pulled through a resin bath where all materials are thoroughly impregnated with liquid resin. The wet fibrous laminate is formed to the desired geometric shape in a pre-forming section and pulled into the heated steel die. As an alternative to using a resin bath, resin can be injected into the pre-forming section (resin injection) or directly into the forming die (die injection). In the die, the resin cure is initiated by elevated temperatures. The laminate solidifies in the exact shape of the die cavity as it is being continuously pulled by the pultrusion machine. The cured product can then be cut to desired lengths.

*Compression Molding*. Compression molding operations involve compressing the composite material under hydraulic pressure in matched metal dies and holding the configured, condensed material in the desired shape until the resin system has cured. The composite materials used in the compression molding process include SMC and BMC. SMC manufacturing includes an integrated composite material which contains all reinforcement, resin, fillers, chemical thickeners, catalyst, mold release agents, and other ingredients in an easily handled sheet. BMC manufacturing includes preparing a putty-like molding compound, which contains resins, catalysts, fillers, and reinforcements in a "ready-to-mold" form. The production output in compression molding is relatively high because the molding compounds cure rapidly in the heated mold. The materials generally yield a good finish without application of gel coat. Both surfaces of the molded product will be as smooth as the mold surface.

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*Filament Winding*. Filament winding is a composite production process for manufacturing products that are surfaces of revolution. In this process, fibers are impregnated with resin in a resin bath and wrapped around a rotating mold surface following a machine controlled geometric pattern. The product is then cured in an oven or at room temperature. All types of reinforcing fibers can be utilized in filament winding, but continuous glass fiber is most commonly used due to its high specific strength and relative low cost. Different winding patterns can be applied alone or in combination to achieve the desired strength and shape characteristics.

*Polymer Casting*. In the polymer casting process, polymers, fillers, and additives are combined by pouring or dispensing these materials into open or partially open molds and allowing the materials to cure. Fiberglass reinforcement is generally not used in cast polymer products. In the polymer casting process, the resin matrix is catalyzed and cast onto the mold which is usually vibrated to allow air bubbles to escape. Following vibration, the product enters an exothermic stage in which the matrix's chemical reaction generates heat that causes the product to cure. In some cases, an oven is used to accelerate cure.

*Centrifugal Casting*. In centrifugal casting, resin and fiber reinforcements (if needed) are deposited against the inside surface of a rotating mold. A resin applicator which is often located in the center of the rotating mold supplies the resin to the inside of the cast. Centrifugal force holds the material in place while the part is cured. The outside surface of the part, which is cured against the inside surface of the mold, represents the finished surface. The interior surface of the centrifugally cast part can be improved by adding an additional coat of pure resin.

The Reinforced Plastic Composites Production NESHAP applies to owners/operators of reinforced plastic composites production facilities located at major sources of HAP emissions. Applicable production is limited to operations in which reinforced and/or nonreinforced plastic

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composites or plastic molding compounds are manufactured using thermoset resins and/or gel coats that contain styrene to produce plastic composites. Applicable operations also include cleaning, mixing, HAP-containing materials storage, and repair operations associated with the production of plastic composites. The Reinforced Plastic Composites Production NESHAP does not apply to those facilities who only repair reinforced plastic composites products. These repairs include the non-routine manufacturing of individual components or parts intended to repair a larger item. Additionally, the Reinforced Plastic Composites Production NESHAP does not apply to research and development facilities, as defined in section 112(c)(7) of the CAA. Lastly, the Reinforced Plastic Composites Production NESHAP is limited to those facilities that use greater than 1.2 tpy of thermoset resins and gel coats (combined) that contain styrene. Facilities are required to incorporate pollution-prevention techniques in their production processes. These techniques include the following:

- Using raw materials containing low amounts of air toxics;
- Non-atomized resin application; and
- Covering open resin baths and tanks.

In general, the Reinforced Plastic Composites Production NESHAP requirements apply to three groups of operations, which include the following:

- Sources required to reduce HAP emissions by 95 percent;
- Sources required to comply with work practice standards; and
- Sources required to comply with emission limits.

The applicability of these requirements is described in greater detail in the 2003 rule (68 FR

19375), and 40 CFR part 63, subpart WWWW.

C. What data collection activities were conducted to support this action?

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For the residual risk assessment, the EPA sent out an information collection request (ICR) to nine parent companies subject to the Boat Manufacturing NESHAP, requesting information regarding the boat manufacturing process and the associated air emissions. The information requested included description of HAP-emitting processes, information on the HAP-containing materials used, estimates of emissions, and descriptions of control technologies, if present. After receiving information, as requested, from the boat manufacturing facilities surveyed, the EPA compiled the data with the intent to use the information as a reference to develop the risk assessment modeling file. The ICR information provided supplemental information regarding processes, the sources of HAP emissions, material usages, and stack information. No ICR was sent to sources in the Reinforced Plastic Composites Production source category.

For both the Boat Manufacturing NESHAP RTR and the Reinforced Plastic Composites Production NESHAP RTR, the EPA used data from the 2014 National Emissions Inventory (NEI). The NEI is a database that contains information about sources that emit criteria air pollutants, their precursors, and HAP. The database includes estimates of annual air pollutant emissions from point, nonpoint, and mobile sources in the 50 states, the District of Columbia, Puerto Rico, and the Virgin Islands. The EPA collects this information and releases an updated version of the NEI database every 3 years. The NEI includes data necessary for conducting risk modeling, including annual HAP emissions estimates from individual emission points at facilities and the related emissions release parameters. The EPA used NEI emissions and supporting data as the primary data to develop the model input files for the residual risk assessments for the Boat Manufacturing and Reinforced Plastic Composites Production source categories. Additional information on the development of the modeling file for each source

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category can be found in Appendix 1 to the *Residual Risk Assessment for the Boat Manufacturing Source Category in Support of the 2018 Risk and Technology Review Proposed Rule* (Docket ID No. EPA-HQ-OAR-2016-0447) and Appendix 1 to the *Residual Risk Assessment for the reinforced Plastic Composites Production Source Category in Support of the 2018 Risk and Technology Review Proposed Rule* (Docket ID No. EPA-HQ-OAR-2016-0449).

For both the risk modeling and technology review portion of these RTRs, the EPA visited one boat manufacturing facility and six reinforced plastic composites production facilities. During the visits, the EPA discussed process operations, compliance with the existing NESHAP, description of the emission points, process controls, unregulated emissions, and other aspects of facility operations. We used the information provided by the facilities to understand the various operations, and in our evaluation of existing controls and new developments in practices, processes, and control technologies for both source categories. The site visit reports are included as attachments to the memorandum, *Technology Review for Boat Manufacturing and Reinforced Plastic Composites Production Source Category*, in the docket for each source category (Docket ID No. EPA-HQ-OAR-2016-0447 for the Boat Manufacturing NESHAP and Docket ID No. EPA-HQ-OAR-2016-0449 for the Reinforced Plastic Composites Production NESHAP).

For both the risk modeling and technology review, the EPA also gathered data from facility construction and operating permits regarding emission points, air pollution control devices, and process operations. We collected permits and supporting documentation from state permitting authorities through state-maintained online databases. The facility permits were also used to confirm that the facilities were major sources of HAP and were subject to the NESHAP that are the subject of these risk assessments. In certain cases, we contacted facility owners or operators to confirm and clarify the sources of emissions that were reported in the NEI.

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#### D. What other relevant background information and data are available?

For the technology review portion of these RTRs, we collected information from the Reasonably Available Control Technology, Best Available Control Technology, and Lowest Achievable Emission Rate Clearinghouse (RBLC). This is a database that contains case-specific information on air pollution technologies that have been required to reduce the emissions of air pollutants from stationary sources. Under the EPA's New Source Review (NSR) program, if a facility is planning new construction or a modification that will increase the air emissions above certain defined thresholds, an NSR permit must be obtained. The RBLC promotes the sharing of information among permitting agencies and aids in case-by-case determinations for NSR permits. We examined information contained in the RBLC to determine what technologies are currently used for these source categories to reduce air emissions.

Additional information about these data collection activities for the technology reviews is contained in the technology review memorandum titled *Technology Review for Boat Manufacturing and Reinforced Plastic Composites Production Source Category* (Docket ID No. EPA-HQ-OAR-2016-0447 for the Boat Manufacturing NESHAP and Docket ID No. EPA-HQ-OAR-2016-0449 for the Reinforced Plastic Composites Production NESHAP).

#### **III. Analytical Procedures and Decision-Making**

In this section, we describe the analyses performed to support the proposed decisions for the RTR and other issues addressed in this proposal.

#### A. How do we consider risk in our decision-making?

As discussed in section II.A of this preamble and in the Benzene NESHAP, in evaluating and developing standards under CAA section 112(f)(2), we apply a two-step approach to determine whether or not risks are acceptable and to determine if the standards provide an ample

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margin of safety to protect public health. As explained in the Benzene NESHAP, "the first step judgment on acceptability cannot be reduced to any single factor" and, thus, "[t]he Administrator believes that the acceptability of risk under section 112 is best judged on the basis of a broad set of health risk measures and information." 54 FR 38046, September 14, 1989. Similarly, with regard to the ample margin of safety determination, "the Agency again considers all of the health risk and other health information considered in the first step. Beyond that information, additional factors relating to the appropriate level of control will also be considered, including cost and economic impacts of controls, technological feasibility, uncertainties, and any other relevant factors." *Id.* 

The Benzene NESHAP approach provides flexibility regarding factors the EPA may consider in making determinations and how the EPA may weigh those factors for each source category. The EPA conducts a risk assessment that provides estimates of the MIR posed by the HAP emissions from each source in the source category, the hazard index (HI) for chronic exposures to HAP with the potential to cause noncancer health effects, and the hazard quotient (HQ) for acute exposures to HAP with the potential to cause noncancer health effects.<sup>2</sup> The assessment also provides estimates of the distribution of cancer risk within the exposed populations, cancer incidence, and an evaluation of the potential for an adverse environmental effect. The scope of the EPA's risk analysis is consistent with the EPA's response to comments on our policy under the Benzene NESHAP where the EPA explained that:

"[t]he policy chosen by the Administrator permits consideration of multiple measures of health risk. Not only can the MIR figure be considered, but also incidence, the presence of non-cancer health effects, and the uncertainties of the risk estimates. In this way, the

 $<sup>^2</sup>$  The MIR is defined as the cancer risk associated with a lifetime of exposure at the highest concentration of HAP where people are likely to live. The HQ is the ratio of the potential exposure to the HAP to the level at or below which no adverse chronic noncancer effects are expected; the HI is the sum of HQs for HAP that affect the same target organ or organ system.

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effect on the most exposed individuals can be reviewed as well as the impact on the general public. These factors can then be weighed in each individual case. This approach complies with the *Vinyl Chloride* mandate that the Administrator ascertain an acceptable level of risk to the public by employing his expertise to assess available data. It also complies with the Congressional intent behind the CAA, which did not exclude the use of any particular measure of public health risk from the EPA's consideration with respect to CAA section 112 regulations, and thereby implicitly permits consideration of any and all measures of health risk which the Administrator, in his judgment, believes are appropriate to determining what will 'protect the public health'."

See 54 FR 38057, September 14, 1989. Thus, the level of the MIR is only one factor to be weighed in determining acceptability of risk. The Benzene NESHAP explained that "an MIR of approximately one in 10 thousand should ordinarily be the upper end of the range of acceptability. As risks increase above this benchmark, they become presumptively less acceptable under CAA section 112, and would be weighed with the other health risk measures and information in making an overall judgment on acceptability. Or, the Agency may find, in a particular case, that a risk that includes an MIR less than the presumptively acceptable level is unacceptable in the light of other health risk factors." Id. at 38045. Similarly, with regard to the ample margin of safety analysis, the EPA stated in the Benzene NESHAP that: "EPA believes the relative weight of the many factors that can be considered in selecting an ample margin of safety can only be determined for each specific source category. This occurs mainly because technological and economic factors (along with the health-related factors) vary from source category to source category." Id. at 38061. We also consider the uncertainties associated with the various risk analyses, as discussed earlier in this preamble, in our determinations of acceptability and ample margin of safety.

The EPA notes that it has not considered certain health information to date in making residual risk determinations. At this time, we do not attempt to quantify the HAP risk that may be associated with emissions from other facilities that do not include the source categories under

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review, mobile source emissions, natural source emissions, persistent environmental pollution, or atmospheric transformation in the vicinity of the sources in the categories.

The EPA understands the potential importance of considering an individual's total exposure to HAP in addition to considering exposure to HAP emissions from the source category and facility. We recognize that such consideration may be particularly important when assessing noncancer risk, where pollutant-specific exposure health reference levels (*e.g.*, reference concentrations (RfCs)) are based on the assumption that thresholds exist for adverse health effects. For example, the EPA recognizes that, although exposures attributable to emissions from a source category or facility alone may not indicate the potential for increased risk of adverse noncancer health effects in a population, the exposures resulting from emissions from the facility in combination with emissions from all of the other sources (*e.g.*, other facilities) to which an individual is exposed may be sufficient to result in an increased risk of adverse noncancer health effects. In May 2010, the Science Advisory Board (SAB) advised the EPA "that RTR assessments will be most useful to decision makers and communities if results are presented in the broader context of aggregate and cumulative risks, including background concentrations and contributions from other sources in the area."<sup>3</sup>

In response to the SAB recommendations, the EPA incorporates cumulative risk analyses into its RTR risk assessments, including those reflected in this proposal. The Agency (1) conducts facility-wide assessments, which include source category emission points, as well as other emission points within the facilities; (2) combines exposures from multiple sources in the

<sup>&</sup>lt;sup>3</sup> Recommendations of the SAB Risk and Technology Review (RTR) Panel are provided in their report, which is available at:

https://yosemite.epa.gov/sab/sabproduct.nsf/4AB3966E263D943A8525771F00668381/\$File/EP A-SAB-10-007-unsigned.pdf.

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same category that could affect the same individuals; and (3) for some persistent and bioaccumulative pollutants, analyzes the ingestion route of exposure. In addition, the RTR risk assessments consider aggregate cancer risk from all carcinogens and aggregated noncancer HQs for all noncarcinogens affecting the same target organ or target organ system.

Although we are interested in placing source category and facility-wide HAP risk in the context of total HAP risk from all sources combined in the vicinity of each source, we are concerned about the uncertainties of doing so. Estimates of total HAP risk from emission sources other than those that we have studied in depth during this RTR review would have significantly greater associated uncertainties than the source category or facility-wide estimates. Such aggregate or cumulative assessments would compound those uncertainties, making the assessments too unreliable.

#### B. How do we perform the technology review?

Our technology review focuses on the identification and evaluation of developments in practices, processes, and control technologies that have occurred since the MACT standards were promulgated. Where we identify such developments, we analyze their technical feasibility, estimated costs, energy implications, and non-air environmental impacts. We also consider the emission reductions associated with applying each development. This analysis informs our decision of whether it is "necessary" to revise the emissions standards. In addition, we consider the appropriateness of applying controls to new sources versus retrofitting existing sources. For this exercise, we consider any of the following to be a "development":

• Any add-on control technology or other equipment that was not identified and considered during development of the original MACT standards;

- Any improvements in add-on control technology or other equipment (that were identified and considered during development of the original MACT standards) that could result in additional emissions reduction;
- Any work practice or operational procedure that was not identified or considered during development of the original MACT standards;
- Any process change or pollution prevention alternative that could be broadly applied to the industry and that was not identified or considered during development of the original MACT standards; and
- Any significant changes in the cost (including cost effectiveness) of applying controls (including controls the EPA considered during the development of the original MACT standards).

In addition to reviewing the practices, processes, and control technologies that were considered at the time we originally developed the NESHAP, we review a variety of data sources in our investigation of potential practices, processes, or controls to consider. See sections II.C and II.D of this preamble for information on the specific data sources that were reviewed as part of the technology review.

#### C. How do we estimate post-MACT risk posed by the source category?

In this section, we provide a complete description of the types of analyses that we generally perform during the risk assessment process. In some cases, we do not perform a specific analysis because it is not relevant. For example, in the absence of emissions of HAP known to be persistent and bioaccumulative in the environment (PB-HAP), we would not perform a multipathway exposure assessment. Where we do not perform an analysis, we state that we do not and provide the reason. While we present all of our risk assessment methods, we This document is a prepublication version, signed by EPA Administrator, Andrew R. Wheeler on 4/18/2019. We have taken steps to ensure the accuracy of this version, but it is not the official version.

only present risk assessment results for the analyses actually conducted (see sections IV.B and IV.G).

The EPA conducts a risk assessment that provides estimates of the MIR for cancer posed by the HAP emissions from each source in the source category, the HI for chronic exposures to HAP with the potential to cause noncancer health effects, and the HQ for acute exposures to HAP with the potential to cause noncancer health effects. The assessment also provides estimates of the distribution of cancer risk within the exposed populations, cancer incidence, and an evaluation of the potential for an adverse environmental effect. The seven sections that follow this paragraph describe how we estimated emissions and conducted the risk assessment. The docket for the Boat Manufacturing NESHAP rulemaking contains the following document which provides more information on the risk assessment inputs and models: Residual Risk Assessment for Boat Manufacturing Source Category in Support of the 2018 Risk and Technology Review Proposed Rule. The docket for the Reinforced Plastic Composites Production NESHAP rulemaking contains the following document which provides more information on the risk assessment inputs and models: Residual Risk Assessment for Reinforced Plastic Composites Production Source Category in Support of the 2018 Risk and Technology Review Proposed Rule. The methods used to assess risk (as described in the seven primary steps below) are consistent with those described by the EPA in the document reviewed by a panel of the EPA's SAB in 2009<sup>4</sup>; and described in the SAB review report issued in 2010. They are also consistent with the key recommendations contained in that report.

<sup>&</sup>lt;sup>4</sup> U.S. EPA. Risk and Technology Review (RTR) Risk Assessment Methodologies: For Review by the EPA's Science Advisory Board with Case Studies – MACT I Petroleum Refining Sources and Portland Cement Manufacturing, June 2009. EPA-452/R-09-006. https://www3.epa.gov/airtoxics/rrisk/rtrpg.html.

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1. How did we estimate actual emissions and identify the emissions release characteristics?

The actual emissions and the emission release characteristics for each facility in each of the two source categories were obtained from the 2014 NEI. In addition, the EPA provided draft actual emissions data and stack parameters to facilities in the two source categories for review and confirmation. In some cases, facilities were contacted to confirm emissions that appeared to be outliers, that were otherwise inconsistent with our understanding of the industry, or that were associated with high risk values in our initial risk screening analyses. Where appropriate, emission values and release characteristics were corrected, based on revised stack parameter information provided by the facilities. These revisions were documented and are included in the docket for each source category. Additional information on the development of the modeling file for each source category, including the development of the actual emissions and emissions release characteristics, can be found in Appendix 1 to the Residual Risk Assessment for Boat Manufacturing Source Category in Support of the 2018 Risk and Technology Review Proposed Rule document and Appendix 1 to the Residual Risk Assessment for Reinforced Plastic Composites Production Source Category in Support of the 2018 Risk and Technology Review Proposed Rule document, located in the docket for each source category (Docket ID No. EPA-HQ-OAR-2016-0447 for the Boat Manufacturing NESHAP and Docket ID No. EPA-HQ-OAR-2016-0449 for the Reinforced Plastic Composites Production NESHAP).

2. How did we estimate MACT-allowable emissions?

The available emissions data in the RTR emissions dataset include estimates of the mass of HAP emitted during a specified annual time period. These "actual" emission levels are often lower than the emission levels allowed under the requirements of the current MACT standards. The emissions allowed under the MACT standards are referred to as the "MACT-allowable"

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emissions. We discussed the consideration of both MACT-allowable and actual emissions in the final Coke Oven Batteries RTR (70 FR 19998–19999, April 15, 2005) and in the proposed and final Hazardous Organic NESHAP RTR (71 FR 34428, June 14, 2006, and 71 FR 76609, December 21, 2006, respectively). In those actions, we noted that assessing the risk at the MACT-allowable level is inherently reasonable since that risk reflects the maximum level facilities could emit and still comply with national emission standards. We also explained that it is reasonable to consider actual emissions, where such data are available, in both steps of the risk analysis, in accordance with the Benzene NESHAP approach. (54 FR 38044, September 14, 1989.)

The MACT for each of the two source categories includes HAP limits for materials (*i.e.*, resin and gel coats) used during open molding operations. A majority of the facilities in both source categories use compliant materials to demonstrate compliance. The EPA's actual emissions estimates were based on the category information reported in the 2014 NEI. Since the majority of facilities use compliant materials, it is reasonable to assume that the actual emissions and the allowable emissions are equal. This is because the allowable limits of the MACT represent the HAP content of the materials being used. Further, this compliance approach is referenced in, and, therefore, required by facility permits. However, to supplement this information, and to estimate a more conservative allowable emissions multiplier, the EPA gathered current and historical publicly available category-specific data from the U.S. Census Bureau over a 5-year period (2010 to 2014). Based an analysis of the source categories, and the utilization information indicated by the U.S. Census Bureau data for both source categories, the EPA calculated allowable emissions by developing a multiplier applied to the current actual emission rates. The multiplier is based on historical data and utilization rates for each category

for the years 2010 to 2014. The multiplier developed for both source categories is the ratio of the peak utilization rate to the average utilization rate for the years 2005 to 2014. Details regarding the development of the allowable multiplier are presented in the memorandum, *Emissions Data for the National Emission Standards for Hazardous Air Pollutants for Boat Manufacturing and the National Emission Standards for Hazardous Air Pollutants for Reinforced Plastic Composites Production*, located in the docket for each source category (Docket ID No. EPA-

HQ-OAR-2016-0447 for the Boat Manufacturing NESHAP and Docket ID No. EPA-HQ-OAR-2016-0449 for the Reinforced Plastic Composites Production NESHAP).

3. How do we conduct dispersion modeling, determine inhalation exposures, and estimate individual and population inhalation risk?

Both long-term and short-term inhalation exposure concentrations and health risk from the source category addressed in this proposal were estimated using the Human Exposure Model (HEM-3).<sup>5</sup> The HEM-3 performs three primary risk assessment activities: (1) conducting dispersion modeling to estimate the concentrations of HAP in ambient air, (2) estimating longterm and short-term inhalation exposures to individuals residing within 50 kilometer (km) of the modeled sources, and (3) estimating individual and population-level inhalation risk using the exposure estimates and quantitative dose-response information.

#### a. Dispersion Modeling

The air dispersion model AERMOD, used by the HEM-3 model, is one of the EPA's preferred models for assessing air pollutant concentrations from industrial facilities.<sup>6</sup> To perform

<sup>&</sup>lt;sup>5</sup> For more information about HEM-3, go to *https://www.epa.gov/fera/risk-assessment-and-modeling-human-exposure-model-hem*.

<sup>&</sup>lt;sup>6</sup> U.S. EPA. Revision to the *Guideline on Air Quality Models: Adoption of a Preferred General Purpose (Flat and Complex Terrain) Dispersion Model and Other Revisions* (70 FR 68218, November 9, 2005).

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the dispersion modeling and to develop the preliminary risk estimates, HEM-3 draws on three data libraries. The first is a library of meteorological data, which is used for dispersion calculations. This library includes 1 year (2016) of hourly surface and upper air observations from 824 meteorological stations selected to provide coverage of the United States and Puerto Rico. A second library of United States Census Bureau census block<sup>7</sup> internal point locations and populations provides the basis of human exposure calculations (U.S. Census, 2010). In addition, for each census block, the census library includes the elevation and controlling hill height, which are also used in dispersion calculations. A third library of pollutant-specific dose-response values is used to estimate health risk. These are discussed below.

#### b. Risk from Chronic Exposure to HAP

In developing the risk assessment for chronic exposures, we use the estimated annual average ambient air concentrations of each HAP emitted by each source in the source category. The HAP air concentrations at each nearby census block centroid located within 50 km of the facility are a surrogate for the chronic inhalation exposure concentration for all the people who reside in that census block. A distance of 50 km is consistent with both the analysis supporting the 1989 Benzene NESHAP (54 FR 38044, September 14, 1989) and the limitations of Gaussian dispersion models, including AERMOD.

For each facility, we calculate the MIR as the cancer risk associated with a continuous lifetime (24 hours per day, 7 days per week, 52 weeks per year, 70 years) exposure to the maximum concentration at the centroid of each inhabited census block. We calculate individual cancer risk by multiplying the estimated lifetime exposure to the ambient concentration of each HAP (in micrograms per cubic meter ( $\mu$ g/m<sup>3</sup>)) by its unit risk estimate (URE). The URE is an

<sup>&</sup>lt;sup>7</sup> A census block is the smallest geographic area for which census statistics are tabulated. This document is a prepublication version, signed by EPA Administrator, Andrew R. Wheeler on 4/18/2019. We have taken steps to ensure the accuracy of this version, but it is not the official version.

upper-bound estimate of an individual's incremental risk of contracting cancer over a lifetime of exposure to a concentration of 1 microgram of the pollutant per cubic meter of air. For residual risk assessments, we generally use UREs from the EPA's Integrated Risk Information System (IRIS). For carcinogenic pollutants without IRIS values, we look to other reputable sources of cancer dose-response values, often using California EPA (CalEPA) UREs, where available. In cases where new, scientifically credible dose-response values have been developed in a manner consistent with EPA guidelines and have undergone a peer review process similar to that used by the EPA, we may use such dose-response values in place of, or in addition to, other values, if appropriate. The pollutant-specific dose-response values used to estimate health risk are available at *https://www.epa.gov/fera/dose-response-assessment-assessing-health-risks-associated-exposure-hazardous-air-pollutants*.

In March 2018, the International Agency for Research on Cancer (IARC) revised the weight of evidence classification of styrene to Group 2A – "probably carcinogenic to humans." Presently, the EPA's IRIS database and other reputable peer-reviewed sources of cancer dose-response values are not available to assess cancer risks for this pollutant.<sup>8</sup>

To estimate individual lifetime cancer risks associated with exposure to HAP emissions from each facility in the source category, we sum the risks for each of the carcinogenic HAP<sup>9</sup>

<sup>&</sup>lt;sup>8</sup> https://monographs.iarc.fr/list-of-classifications-volumes/.

<sup>&</sup>lt;sup>9</sup> The EPA's 2005 *Guidelines for Carcinogen Risk Assessment* classifies carcinogens as: "carcinogenic to humans," "likely to be carcinogenic to humans," and "suggestive evidence of carcinogenic potential." These classifications also coincide with the terms "known carcinogen, probable carcinogen, and possible carcinogen," respectively, which are the terms advocated in the EPA's *Guidelines for Carcinogen Risk Assessment*, published in 1986 (51 FR 33992, September 24, 1986). In August 2000, the document, *Supplemental Guidance for Conducting Health Risk Assessment of Chemical Mixtures* (EPA/630/R-00/002), was published as a supplement to the 1986 document. Copies of both documents can be obtained from *https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=20533&CFID=70315376&CFTOKEN=* 

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emitted by the modeled facility. We estimate cancer risk at every census block within 50 km of every facility in the source category. The MIR is the highest individual lifetime cancer risk estimated for any of those census blocks. In addition to calculating the MIR, we estimate the distribution of individual cancer risks for the source category by summing the number of individuals within 50 km of the sources whose estimated risk falls within a specified risk range. We also estimate annual cancer incidence by multiplying the estimated lifetime cancer risk at each census block by the number of people residing in that block, summing results for all of the census blocks, and then dividing this result by a 70-year lifetime.

To assess the risk of noncancer health effects from chronic exposure to HAP, we calculate either an HQ or a target organ-specific hazard index (TOSHI). We calculate an HQ when a single noncancer HAP is emitted. Where more than one noncancer HAP is emitted, we sum the HQ for each of the HAP that affects a common target organ or target organ system to obtain a TOSHI. The HQ is the estimated exposure divided by the chronic noncancer dose-response value, which is a value selected from one of several sources. The preferred chronic noncancer dose-response value is the EPA RfC, defined as "an estimate (with uncertainty spanning perhaps an order of magnitude) of a continuous inhalation exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime"

(https://iaspub.epa.gov/sor\_internet/registry/termreg/searchandretrieve/glossariesandkeywordlis

<sup>71597944.</sup> Summing the risk of these individual compounds to obtain the cumulative cancer risk is an approach that was recommended by the EPA's SAB in their 2002 peer review of the EPA's National Air Toxics Assessment (NATA) titled *NATA - Evaluating the National-scale Air Toxics* Assessment 1996 Data -- an SAB Advisory, available at

https://yosemite.epa.gov/sab/sabproduct.nsf/214C6E915BB04E14852570CA007A682C/\$File/ec adv02001.pdf.

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*ts/search.do?details=&vocabName=IRIS%20Glossary*). In cases where an RfC from the EPA's IRIS is not available or where the EPA determines that using a value other than the RfC is appropriate, the chronic noncancer dose-response value can be a value from the following prioritized sources, which define their dose-response values similarly to the EPA: (1) The Agency for Toxic Substances and Disease Registry (ATSDR) Minimum Risk Level (*https://www.atsdr.cdc.gov/mrls/index.asp*); (2) the CalEPA Chronic Reference Exposure Level (REL) (*https://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0*); or (3), as noted above, a scientifically credible dose-response value that has been developed in a manner consistent with the EPA guidelines and has undergone a peer review process similar to that used by the EPA. The pollutant-specific dose-response values used to estimate health risks are available at *https://www.epa.gov/fera/dose-response-assessment-assessing-health-risks-associated-exposure-hazardous-air-pollutants*.

c. Risk from Acute Exposure to HAP that May Cause Health Effects Other Than Cancer

For each HAP for which appropriate acute inhalation dose-response values are available, the EPA also assesses the potential health risks due to acute exposure. For these assessments, the EPA makes conservative assumptions about emission rates, meteorology, and exposure location. We use the peak hourly emission rate,<sup>10</sup> worst-case dispersion conditions, and, in accordance

<sup>&</sup>lt;sup>10</sup> In the absence of hourly emission data, we develop estimates of maximum hourly emission rates by multiplying the average actual annual emissions rates by a factor to account for variability. This is documented in *Residual Risk Assessment for Boat Manufacturing Source Category in Support of the 2018 Risk and Technology Review Proposed Rule* document and the *Residual Risk Assessment for Reinforced Plastic Composites Production Source Category in Support of the 2018 Risk and Technology Review Proposed Rule*, and in Appendix 5 of the report: *Analysis of Data on Short-term Emission Rates Relative to Long-term Emission Rates*. Both are available in the docket for this rulemaking.

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with our mandate under section 112 of the CAA, the point of highest off-site exposure to assess the potential risk to the maximally exposed individual.

To characterize the potential health risks associated with estimated acute inhalation exposures to a HAP, we generally use multiple acute dose-response values, including acute RELs, acute exposure guideline levels (AEGLs), and emergency response planning guidelines (ERPG) for 1-hour exposure durations), if available, to calculate acute HQs. The acute HQ is calculated by dividing the estimated acute exposure by the acute dose-response value. For each HAP for which acute dose-response values are available, the EPA calculates acute HQs.

An acute REL is defined as "the concentration level at or below which no adverse health effects are anticipated for a specified exposure duration."<sup>11</sup> Acute RELs are based on the most sensitive, relevant, adverse health effect reported in the peer-reviewed medical and toxicological literature. They are designed to protect the most sensitive individuals in the population through the inclusion of margins of safety. Because margins of safety are incorporated to address data gaps and uncertainties, exceeding the REL does not automatically indicate an adverse health impact. AEGLs represent threshold exposure limits for the general public and are applicable to emergency exposures ranging from 10 minutes to 8 hours.<sup>12</sup> They are guideline levels for "once-

<sup>12</sup> National Academy of Sciences, 2001. *Standing Operating Procedures for Developing Acute Exposure Levels for Hazardous Chemicals*, page 2. Available at *https://www.epa.gov/sites/production/files/2015-*

<sup>&</sup>lt;sup>11</sup> CalEPA issues acute RELs as part of its Air Toxics Hot Spots Program, and the 1-hour and 8-hour values are documented in *Air Toxics Hot Spots Program Risk Assessment Guidelines, Part I, The Determination of Acute Reference Exposure Levels for Airborne Toxicants*, which is available at *https://oehha.ca.gov/air/general-info/oehha-acute-8-hour-and-chronic-reference-exposure-level-rel-summary*.

<sup>09/</sup>documents/sop\_final\_standing\_operating\_procedures\_2001.pdf. Note that the National Advisory Committee for Acute Exposure Guideline Levels for Hazardous Substances ended in October 2011, but the AEGL program continues to operate at the EPA and works with the National Academies to publish final AEGLs (*https://www.epa.gov/aegl*).

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in-a-lifetime, short-term exposures to airborne concentrations of acutely toxic, high-priority chemicals." *Id.* at 21. The AEGL–1 is specifically defined as "the airborne concentration (expressed as parts per million (ppm) or milligrams per cubic meter (mg/m<sup>3</sup>)) of a substance above which it is predicted that the general population, including susceptible individuals, could experience notable discomfort, irritation, or certain asymptomatic nonsensory effects. However, the effects are not disabling and are transient and reversible upon cessation of exposure." The document also notes that "Airborne concentrations below AEGL–1 represent exposure levels that can produce mild and progressively increasing but transient and nondisabling odor, taste, and sensory irritation or certain asymptomatic, nonsensory effects." *Id.* AEGL–2 are defined as "the airborne concentration (expressed as parts per million or milligrams per cubic meter) of a substance above which it is predicted that the general population, including susceptible individuals, could experience irreversible or other serious, long-lasting adverse health effects or an impaired ability to escape." *Id.* 

ERPGs are "developed for emergency planning and are intended as health-based guideline concentrations for single exposures to chemicals."<sup>13</sup> *Id.* at 1. The ERPG–1 is defined as "the maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to 1 hour without experiencing other than mild transient adverse health effects or without perceiving a clearly defined, objectionable odor." *Id.* at 2. Similarly, the ERPG–2 is defined as "the maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to one hour without experiencing or developing irreversible

 <sup>13</sup> ERPGS Procedures and Responsibilities. March 2014. American Industrial Hygiene Association. Available at: https://www.aiha.org/getinvolved/AIHAGuidelineFoundation/EmergencyResponsePlanningGuidelines/Documents/ERPG %20Committee%20Standard%20Operating%20Procedures%20%20-%20March%202014%20Revision%20%28Updated%2010-2-2014%29.pdf.
 This document is a prepublication version, signed by EPA Administrator, Andrew R. Wheeler on 4/18/2019. We have taken steps to ensure the accuracy of this version, but it is not the official version. or other serious health effects or symptoms which could impair an individual's ability to take protective action." *Id.* at 1.

An acute REL for 1-hour exposure durations is typically lower than its corresponding AEGL–1 and ERPG–1. Even though their definitions are slightly different, AEGL–1s are often the same as the corresponding ERPG–1s, and AEGL–2s are often equal to ERPG–2s. The maximum HQs from our acute inhalation screening risk assessment typically result when we use the acute REL for a HAP. In cases where the maximum acute HQ exceeds 1, we also report the HQ based on the next highest acute dose-response value (usually the AEGL–1 and/or the ERPG–1).

For the Boat Manufacturing and Reinforced Plastic Composites Production source categories, the hourly emission rates of the various HAP will not have high variability during the manufacturing processes and, therefore, are expected to remain constant over the time the process is operating. This is because the application of resins and gel coats, adhesives, foam, and other regulated sources of HAP in the source categories are most efficient when applied at a constant pressure, with maximum coverage, with the most efficient spray patterns and number of passes made by the operator. Based on this information, the default acute emission factor of 10 times the annual hourly emission rate is not reasonable for the Boat Manufacturing and Reinforced Plastic Composites Production source categories. However, many facilities do not operate three shifts a day. Therefore, a days worth of emissions may occur over a time period of as little as 8 hours. With this understanding of the processes, we, therefore, assumed the maximum rate of emissions would occur in this 8-hour period each day. Based on this information, an acute emission factor of 3 was calculated to be applied to actual annual hourly emission rates, derived from the ratio of an 8-hour shift in a 24-hour day. A further discussion of

why this factor was chosen can be found in the memorandum, *Emissions Data for the National Emission Standards for Hazardous Air Pollutants for Boat Manufacturing and the National Emission Standards for Hazardous Air Pollutants for Reinforced Plastic Composites Production*, available in the dockets for this rulemaking (Docket ID No. EPA-HQ-OAR-2016-0447 for the Boat Manufacturing NESHAP and Docket ID No. EPA-HQ-OAR-2016-0449 for the Reinforced Plastic Composites Production NESHAP).

In our acute inhalation screening risk assessment, acute impacts are deemed negligible for HAP for which acute HQs are less than or equal to 1 (even under the conservative assumptions of the screening assessment), and no further analysis is performed for these HAP. In cases where an acute HQ from the screening step is greater than 1, we consider additional sitespecific data to develop a more refined estimate of the potential for acute exposures of concern. These refinements are discussed more fully in the *Residual Risk Assessment for Boat Manufacturing Source Category in Support of the 2018 Risk and Technology Review Proposed Rule* document and the *Residual Risk Assessment for Reinforced Plastic Composites Production Source Category in Support of the 2018 Risk and Technology Review Proposed Rule* document, which are available in the docket for each of the respective source categories.

4. How do we conduct the multipathway exposure and risk screening assessment?

The EPA conducts a tiered screening assessment examining the potential for significant human health risks due to exposures via routes other than inhalation (*i.e.*, ingestion). We first determine whether any sources in the source categories emit any HAP known to be PB-HAP, as identified in the EPA's Air Toxics Risk Assessment Library (See Volume 1, Appendix D, at *https://www2.epa.gov/fera/risk-assessment-and-modeling-air-toxics-risk-assessment-reference-library*).

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For the Boat Manufacturing source category, we identified PB-HAP emissions of arsenic, polycyclic organic matter (POM), and cadmium, and for the Reinforced Plastic Composites Production source category, we identified PB-HAP emissions of arsenic, POM, cadmium, and mercury, so we proceeded to the next step of the evaluation. In this step, we determine whether the facility-specific emission rates of the emitted PB-HAP are large enough to create the potential for significant human health risk through ingestion exposure under reasonable worstcase conditions. To facilitate this step, we use previously developed screening threshold emission rates for several PB-HAP that are based on a hypothetical upper-end screening exposure scenario developed for use in conjunction with the EPA's Total Risk Integrated Methodology.Fate, Transport, and Ecological Exposure (TRIM.FaTE) model. The PB-HAP with screening threshold emission rates are arsenic compounds, cadmium compounds, chlorinated dibenzodioxins and furans, mercury compounds, and POM. Based on the EPA estimates of toxicity and bioaccumulation potential, the pollutants above represent a conservative list for inclusion in multipathway risk assessments for RTR rules. (See Volume 1, Appendix D at https://www.epa.gov/sites/production/files/201308/documents/volume 1 reflibrary.pdf). In the assessments for the Boat Manufacturing source category, and for the Reinforced Plastic Composites Production source category, we compare the facility-specific emission rates of these PB-HAP to the screening threshold emission rates for each PB-HAP to assess the potential for significant human health risks via the ingestion pathway. We call this application of the TRIM.FaTE model the Tier 1 screening assessment. The ratio of a facility's actual emission rate to the Tier 1 screening threshold emission rate is a "screening value."

We derive the Tier 1 screening threshold emission rates for these PB-HAP (other than lead compounds) to correspond to a maximum excess lifetime cancer risk of 1-in-1 million (*i.e.*,

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for arsenic compounds, polychlorinated dibenzodioxins and furans and POM) or, for HAP that cause noncancer health effects (*i.e.*, cadmium compounds and mercury compounds), a maximum HQ of 1. If the emission rate of any one PB-HAP or combination of carcinogenic PB-HAP in the Tier 1 screening assessment exceeds the Tier 1 screening threshold emission rate for any facility (*i.e.*, the screening value is greater than 1), we conduct a second screening assessment, which we call the Tier 2 screening assessment.

In the Tier 2 screening assessment, the location of each facility that exceeds a Tier 1 screening threshold emission rate is used to refine the assumptions associated with the Tier 1 fisher and farmer exposure scenarios at that facility. A key assumption in the Tier 1 screening assessment is that a lake and/or farm is located near the facility. As part of the Tier 2 screening assessment, we use a United States Geological Survey (USGS) database to identify actual waterbodies within 50 km of each facility. We also examine the differences between local meteorology near the facility and the meteorology used in the Tier 1 screening assessment. We then adjust the previously-developed Tier 1 screening threshold emission rates for each PB-HAP for each facility based on an understanding of how exposure concentrations estimated for the screening scenario change with the use of local meteorology and USGS waterbody data. If the PB-HAP emission rates for a facility exceed the Tier 2 screening threshold emission rates and data are available, we may conduct a Tier 3 screening assessment. If PB-HAP emission rates do not exceed a Tier 2 screening value of 1, we consider those PB-HAP emissions to pose risks below a level of concern.

There are several analyses that can be included in a Tier 3 screening assessment, depending upon the extent of refinement warranted, including validating that the lakes are fishable, considering plume-rise to estimate emissions lost above the mixing layer, and

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considering hourly effects of meteorology and plume rise on chemical fate and transport. If the Tier 3 screening assessment indicates that risks above levels of concern cannot be ruled out, the EPA may further refine the screening assessment through a site-specific assessment.

In evaluating the potential multipathway risk from emissions of lead compounds reported by both source categories, rather than developing a screening threshold emission rate, we compare maximum estimated chronic inhalation exposure concentrations to the level of the current National Ambient Air Quality Standard (NAAQS) for lead.<sup>14</sup> Values below the level of the primary (health-based) lead NAAQS are considered to have a low potential for multipathway risk.

For further information on the multipathway assessment approach, see the *Residual Risk* Assessment for Boat Manufacturing Source Category in Support of the 2018 Risk and Technology Review Proposed Rule document and the Residual Risk Assessment for Reinforced Plastic Composites Production Source Category in Support of the 2018 Risk and Technology Review Proposed Rule document, which are available in the respective dockets for the source categories in this action.

5. How do we conduct the environmental risk screening assessment?

a. Adverse Environmental Effect, Environmental HAP, and Ecological Benchmarks

<sup>&</sup>lt;sup>14</sup> In doing so, the EPA notes that the legal standard for a primary NAAQS – that a standard is requisite to protect public health and provide an adequate margin of safety (CAA section 109(b)) – differs from the CAA section 112(f) standard (requiring, among other things, that the standard provide an "ample margin of safety to protect public health"). However, the primary lead NAAQS is a reasonable measure of determining risk acceptability (*i.e.*, the first step of the Benzene NESHAP analysis) since it is designed to protect the most susceptible group in the human population – children, including children living near major lead emitting sources. 73 FR 67002/3; 73 FR 67000/3; 73 FR 67005/1. In addition, applying the level of the primary lead NAAQS at the risk acceptability step is conservative, since that primary lead NAAQS reflects an adequate margin of safety.

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The EPA conducts a screening assessment to examine the potential for an adverse environmental effect as required under section 112(f)(2)(A) of the CAA. Section 112(a)(7) of the CAA defines "adverse environmental effect" as "any significant and widespread adverse effect, which may reasonably be anticipated, to wildlife, aquatic life, or other natural resources, including adverse impacts on populations of endangered or threatened species or significant degradation of environmental quality over broad areas."

The EPA focuses on eight HAP, which are referred to as "environmental HAP," in its screening assessment: six PB-HAP and two acid gases. The PB-HAP included in the screening assessment are arsenic compounds, cadmium compounds, dioxins/furans, POM, mercury (both inorganic mercury and methyl mercury), and lead compounds. The acid gases included in the screening assessment are hydrochloric acid (HCl) and hydrogen fluoride (HF).

HAP that persist and bioaccumulate are of particular environmental concern because they accumulate in the soil, sediment, and water. The acid gases, HCl and HF, are included due to their well-documented potential to cause direct damage to terrestrial plants. In the environmental risk screening assessment, we evaluate the following four exposure media: terrestrial soils, surface water bodies (includes water-column and benthic sediments), fish consumed by wildlife, and air. Within these four exposure media, we evaluate nine ecological assessment endpoints, which are defined by the ecological entity and its attributes. For PB-HAP (other than lead), both community-level and population-level endpoints are included. For acid gases, the ecological assessment evaluated is terrestrial plant communities.

An ecological benchmark represents a concentration of HAP that has been linked to a particular environmental effect level. For each environmental HAP, we identified the available ecological benchmarks for each assessment endpoint. We identified, where possible, ecological

benchmarks at the following effect levels: probable effect levels, lowest-observed-adverse-effect level, and no-observed-adverse-effect level. In cases where multiple effect levels were available for a particular PB-HAP and assessment endpoint, we use all of the available effect levels to help us to determine whether ecological risks exist and, if so, whether the risks could be considered significant and widespread.

For further information on how the environmental risk screening assessment was conducted, including a discussion of the risk metrics used, how the environmental HAP were identified, and how the ecological benchmarks were selected, see Appendix 9 of the *Residual Risk Assessment for Boat Manufacturing Source Category in Support of the 2018 Risk and Technology Review Proposed Rule* document and the *Residual Risk Assessment for Reinforced Plastic Composites Production Source Category in Support of the 2018 Risk and Technology Review Proposed Rule* document, which are available in the docket for the source categories in this action.

## b. Environmental Risk Screening Methodology

For the environmental risk screening assessment, the EPA first determined whether any facilities in the Boat Manufacturing or Reinforced Plastic Composites Production source categories emitted any of the environmental HAP. For the Boat Manufacturing source category, we identified emissions of arsenic, POM, cadmium, and HCl. For the Reinforced Plastic Composites Production source category, we identified emissions of arsenic, POM, cadmium, and HCl. For the Reinforced Plastic Manufacturing, and HCl. Because one or more of the environmental HAP evaluated above are emitted by at least one facility in the source categories, we proceeded to the second step of the evaluation.

## c. PB-HAP Methodology

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The environmental screening assessment includes six PB-HAP, arsenic compounds, cadmium compounds, dioxins/furans, POM, mercury (both inorganic mercury and methyl mercury), and lead compounds. With the exception of lead, the environmental risk screening assessment for PB-HAP consists of three tiers. The first tier of the environmental risk screening assessment uses the same health-protective conceptual model that is used for the Tier 1 human health screening assessment. TRIM.FaTE model simulations were used to back-calculate Tier 1 screening threshold emission rates. The screening threshold emission rates represent the emission rate in tpy that results in media concentrations at the facility that equal the relevant ecological benchmark. To assess emissions from each facility in the category, the reported emission rate for each PB-HAP was compared to the Tier 1 screening threshold emission rate for that PB-HAP for each assessment endpoint and effect level. If emissions from a facility do not exceed the Tier 1 screening threshold emission rate, the facility "passes" the screening assessment, and, therefore, is not evaluated further under the screening approach. If emissions from a facility exceed the Tier 1 screening threshold emission rate, we evaluate the facility further in Tier 2.

In Tier 2 of the environmental screening assessment, the screening threshold emission rates are adjusted to account for local meteorology and the actual location of lakes in the vicinity of facilities that did not pass the Tier 1 screening assessment. For soils, we evaluate the average soil concentration for all soil parcels within a 7.5-km radius for each facility and PB-HAP. For the water, sediment, and fish tissue concentrations, the highest value for each facility for each pollutant is used. If emission concentrations from a facility do not exceed the Tier 2 screening threshold emission rate, the facility "passes" the screening assessment and typically is not evaluated further. If emissions from a facility exceed the Tier 2 screening threshold emission rate, we evaluate the facility further in Tier 3.

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As in the multipathway human health risk assessment, in Tier 3 of the environmental screening assessment, we examine the suitability of the lakes around the facilities to support life and remove those that are not suitable (*e.g.*, lakes that have been filled in or are industrial ponds), adjust emissions for plume-rise, and conduct hour-by-hour time-series assessments. If these Tier 3 adjustments to the screening threshold emission rates still indicate the potential for an adverse environmental effect (*i.e.*, facility emission rate exceeds the screening threshold emission rate), we may elect to conduct a more refined assessment using more site-specific information. If, after additional refinement, the facility emission rate still exceeds the screening threshold emission rate, the facility may have the potential to cause an adverse environmental effect.

To evaluate the potential for an adverse environmental effect from lead, we compared the average modeled air concentrations (from HEM-3) of lead around each facility in the source category to the level of the secondary NAAQS for lead. The secondary lead NAAQS is a reasonable means of evaluating environmental risk because it is set to provide substantial protection against adverse welfare effects which can include "effects on soils, water, crops, vegetation, man-made materials, animals, wildlife, weather, visibility and climate, damage to and deterioration of property, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being."

## d. Acid Gas Environmental Risk Methodology

The environmental screening assessment for acid gases evaluates the potential phytotoxicity and reduced productivity of plants due to chronic exposure to HF and HCl. The environmental risk screening methodology for acid gases is a single-tier screening assessment that compares modeled ambient air concentrations (from AERMOD) to the ecological benchmarks for each acid gas. To identify a potential adverse environmental effect (as defined in

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section 112(a)(7) of the CAA) from emissions of HF and HCl, we evaluate the following metrics: the size of the modeled area around each facility that exceeds the ecological benchmark for each acid gas, in acres and km<sup>2</sup>; the percentage of the modeled area around each facility that exceeds the ecological benchmark for each acid gas; and the area-weighted average screening value around each facility (calculated by dividing the area-weighted average concentration over the 50-km modeling domain by the ecological benchmark for each acid gas). For further information on the environmental screening assessment approach, see Appendix 9 of the *Residual Risk Assessment for Boat Manufacturing Source Category in Support of the 2018 Risk and Technology Review Proposed Rule* document and the *Residual Risk Assessment for Reinforced Plastic Composites Production Source Category in Support of the 2018 Risk and Technology Review Proposed Rule* document, which are available in the docket for the source categories in this action.

# 6. How do we conduct facility-wide assessments?

To put the source category risks in context, we typically examine the risks from the entire "facility," where the facility includes all HAP-emitting operations within a contiguous area and under common control. In other words, we examine the HAP emissions not only from the source category emission points of interest, but also emissions of HAP from all other emission sources at the facility for which we have data. For the source categories in this action, we conducted the facility-wide assessment using datasets compiled from the 2014 NEI. The source category records of that NEI dataset were removed, evaluated, and updated as described in section II.C of this preamble: What data collection activities were conducted to support this action? Once a quality assured source category dataset was available, it was placed back with the remaining records from the NEI for that facility. The facility-wide file was then used to analyze risks due to

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the inhalation of HAP that are emitted "facility-wide" for the populations residing within 50 km of each facility, consistent with the methods used for the source category analysis described above. For these facility-wide risk analyses, the modeled source category risks were compared to the facility-wide risks to determine the portion of the facility-wide risks that could be attributed to the source category addressed in this proposal. We also specifically examined the facility that was associated with the highest estimate of risk and determined the percentage of that risk attributable to the source category of interest. The *Residual Risk Assessment for Boat Manufacturing Source Category in Support of the 2018 Risk and Technology Review Proposed Rule* document, available through the docket for the source categories in this action, provides the methodology and results of the facility-wide risks, including all facility-wide risks and the percentage of source category contribution to facility-wide risks.

## 7. How do we consider uncertainties in risk assessment?

Uncertainty and the potential for bias are inherent in all risk assessments, including those performed for this proposal. Although uncertainty exists, we believe that our approach, which used conservative tools and assumptions, ensures that our decisions are health and environmentally protective. A brief discussion of the uncertainties in the RTR emissions datasets, dispersion modeling, inhalation exposure estimates, and dose-response relationships follows below. Also included are those uncertainties specific to our acute screening assessments, multipathway screening assessments, and our environmental risk screening assessments. A more thorough discussion of these uncertainties is included in the *Residual Risk Assessment for Boat Manufacturing Source Category in Support of the 2018 Risk and Technology Review Proposed* 

Rule document and the Residual Risk Assessment for Reinforced Plastic Composites Production Source Category in Support of the 2018 Risk and Technology Review Proposed Rule document, which are available in the source category dockets for this action.

# a. Uncertainties in the RTR Emissions Dataset

Although the development of the RTR emissions datasets involved quality assurance/quality control processes, the accuracy of emissions values will vary depending on the source of the data, the degree to which data are incomplete or missing, the degree to which assumptions made to complete the datasets are accurate, errors in emission estimates, and other factors. The emission estimates considered in the analysis for each source category generally are annual totals for 2014, and they do not reflect short-term fluctuations during the course of a year or variations from year to year. The estimates of peak hourly emission rates for the acute effects screening assessment were based on an emission adjustment factor applied to the average annual hourly emission rates, which are intended to account for emission fluctuations due to normal facility operations.

#### b. Uncertainties in Dispersion Modeling

We recognize there is uncertainty in ambient concentration estimates associated with any model, including the EPA's recommended regulatory dispersion model, AERMOD. In using a model to estimate ambient pollutant concentrations, the user chooses certain options to apply. For RTR assessments, we select some model options that have the potential to overestimate ambient air concentrations (*e.g.*, not including plume depletion or pollutant transformation). We select other model options that have the potential to underestimate ambient impacts (*e.g.*, not including building downwash). Other options that we select have the potential to either under- or overestimate ambient levels (*e.g.*, meteorology and receptor locations). On balance, considering

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the directional nature of the uncertainties commonly present in ambient concentrations estimated by dispersion models, the approach we apply in the RTR assessments should yield unbiased estimates of ambient HAP concentrations. We also note that the selection of meteorology dataset location could have an impact on the risk estimates. As we continue to update and expand our library of meteorological station data used in our risk assessments, we expect to reduce this variability.

## c. Uncertainties in Inhalation Exposure Assessment

Although every effort is made to identify all of the relevant facilities and emission points, as well as to develop accurate estimates of the annual emission rates for all relevant HAP, the uncertainties in our emission inventory likely dominate the uncertainties in the exposure assessment. Some uncertainties in our exposure assessment include human mobility, using the centroid of each census block, assuming lifetime exposure, and assuming only outdoor exposures. For most of these factors, there is neither an under nor overestimate when looking at the maximum individual risk or the incidence, but the shape of the distribution of risks may be affected. With respect to outdoor exposures, actual exposures may not be as high if people spend time indoors, especially for very reactive pollutants or larger particles. For all factors, we reduce uncertainty when possible. For example, with respect to census-block centroids, we analyze large blocks using aerial imagery and adjust locations of the block centroids to better represent the population in the blocks. We also add additional receptor locations where the population of a block is not well represented by a single location.

#### d. Uncertainties in Dose-Response Relationships

There are uncertainties inherent in the development of the dose-response values used in our risk assessments for cancer effects from chronic exposures and noncancer effects from both

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chronic and acute exposures. Some uncertainties are generally expressed quantitatively, and others are generally expressed in qualitative terms. We note, as a preface to this discussion, a point on dose-response uncertainty that is stated in the EPA's *2005 Guidelines for Carcinogen Risk Assessment*; namely, that "the primary goal of EPA actions is protection of human health; accordingly, as an Agency policy, risk assessment procedures, including default options that are used in the absence of scientific data to the contrary, should be health protective" (the EPA's *2005 Guidelines for Carcinogen Risk Assessment*, page 1-7). This is the approach followed here as summarized in the next paragraphs.

Cancer UREs used in our risk assessments are those that have been developed to generally provide an upper bound estimate of risk.<sup>15</sup> That is, they represent a "plausible upper limit to the true value of a quantity" (although this is usually not a true statistical confidence limit). In some circumstances, the true risk could be as low as zero; however, in other circumstances the risk could be greater.<sup>16</sup> Chronic noncancer RfC and reference dose values represent chronic exposure levels that are intended to be health-protective levels. To derive dose-response values that are intended to be "without appreciable risk," the methodology relies upon an uncertainty factor (UF) approach,<sup>17</sup> which considers uncertainty, variability, and gaps in the available data. The UFs are applied to derive dose-response values that are intended to protect against appreciable risk of deleterious effects.

<sup>&</sup>lt;sup>15</sup> IRIS glossary

<sup>(</sup>https://ofmpub.epa.gov/sor\_internet/registry/termreg/searchandretrieve/glossariesandkeywordli sts/search.do?details=&glossaryName=IRIS%20Glossary).

<sup>&</sup>lt;sup>16</sup> An exception to this is the URE for benzene, which is considered to cover a range of values, each end of which is considered to be equally plausible, and which is based on maximum likelihood estimates.

<sup>&</sup>lt;sup>17</sup> See A Review of the Reference Dose and Reference Concentration Processes, U.S. EPA, December 2002, and Methods for Derivation of Inhalation Reference Concentrations and Application of Inhalation Dosimetry, U.S. EPA, 1994.

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Many of the UFs used to account for variability and uncertainty in the development of acute dose-response values are quite similar to those developed for chronic durations. Additional adjustments are often applied to account for uncertainty in extrapolation from observations at one exposure duration (*e.g.*, 4 hours) to derive an acute dose-response value at another exposure duration (*e.g.*, 1 hour). Not all acute dose-response values are developed for the same purpose, and care must be taken when interpreting the results of an acute assessment of human health effects relative to the dose-response value or values being exceeded. Where relevant to the estimated exposures, the lack of acute dose-response values at different levels of severity should be factored into the risk characterization as potential uncertainties.

Uncertainty also exists in the selection of ecological benchmarks for the environmental risk screening assessment. We established a hierarchy of preferred benchmark sources to allow selection of benchmarks for each environmental HAP at each ecological assessment endpoint. We searched for benchmarks for three effect levels (*i.e.*, no-effects level, threshold-effect level, and probable effect level), but not all combinations of ecological assessment/environmental HAP had benchmarks for all three effect levels. Where multiple effect levels were available for a particular HAP and assessment endpoint, we used all of the available effect levels to help us determine whether risk exists and whether the risk could be considered significant and widespread.

Although we make every effort to identify appropriate human health effect dose-response values for all pollutants emitted by the sources in this risk assessment, some HAP emitted by these source categories are lacking dose-response assessments. Accordingly, these pollutants cannot be included in the quantitative risk assessment, which could result in quantitative estimates understating HAP risk. To help to alleviate this potential underestimate, where we

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conclude similarity with a HAP for which a dose-response value is available, we use that value as a surrogate for the assessment of the HAP for which no value is available. To the extent use of surrogates indicates appreciable risk, we may identify a need to increase priority for an IRIS assessment for that substance. We additionally note that, generally speaking, HAP of greatest concern due to environmental exposures and hazard are those for which dose-response assessments have been performed, reducing the likelihood of understating risk. Further, HAP not included in the quantitative assessment are assessed qualitatively and considered in the risk characterization that informs the risk management decisions, including consideration of HAP reductions achieved by various control options.

For a group of compounds that are unspeciated (*e.g.*, glycol ethers), we conservatively use the most protective dose-response value of an individual compound in that group to estimate risk. Similarly, for an individual compound in a group (*e.g.*, ethylene glycol diethyl ether) that does not have a specified dose-response value, we also apply the most protective dose-response value from the other compounds in the group to estimate risk.

## e. Uncertainties in Acute Inhalation Screening Assessments

In addition to the uncertainties highlighted above, there are several factors specific to the acute exposure assessment that the EPA conducts as part of the risk review under section 112 of the CAA. The accuracy of an acute inhalation exposure assessment depends on the simultaneous occurrence of independent factors that may vary greatly, such as hourly emissions rates, meteorology, and the presence of humans at the location of the maximum concentration. In the acute screening assessment that we conduct under the RTR program, we assume that peak emissions from the source category and worst-case meteorological conditions co-occur, thus, resulting in maximum ambient concentrations. These two events are unlikely to occur at the

same time, making these assumptions conservative. We then include the additional assumption that a person is located at this point during this same time period. For this source category, these assumptions would tend to be worst-case actual exposures, as it is unlikely that a person would be located at the point of maximum exposure during the time when peak emissions and worstcase meteorological conditions occur simultaneously.

## f. Uncertainties in the Multipathway and Environmental Risk Screening Assessments

For each source category, we generally rely on site-specific levels of PB-HAP or environmental HAP emissions to determine whether a refined assessment of the impacts from multipathway exposures is necessary or whether it is necessary to perform an environmental screening assessment. This determination is based on the results of a three-tiered screening assessment that relies on the outputs from models – TRIM.FaTE and AERMOD – that estimate environmental pollutant concentrations and human exposures for five PB-HAP (dioxins, POM, mercury, cadmium, and arsenic) and two acid gases (HF and HCl). For lead, we use AERMOD to determine ambient air concentrations, which are then compared to the secondary NAAQS standard for lead. Two important types of uncertainty associated with the use of these models in RTR risk assessments and inherent to any assessment that relies on environmental modeling are model uncertainty and input uncertainty.<sup>18</sup>

Model uncertainty concerns whether the model adequately represents the actual processes (*e.g.*, movement and accumulation) that might occur in the environment. For example, does the model adequately describe the movement of a pollutant through the soil? This type of uncertainty

<sup>&</sup>lt;sup>18</sup> In the context of this discussion, the term "uncertainty" as it pertains to exposure and risk encompasses both *variability* in the range of expected inputs and screening results due to existing spatial, temporal, and other factors, as well as *uncertainty* in being able to accurately estimate the true result.

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is difficult to quantify. However, based on feedback received from previous EPA SAB reviews and other reviews, we are confident that the models used in the screening assessments are appropriate and state-of-the-art for the multipathway and environmental screening risk assessments conducted in support of RTR.

Input uncertainty is concerned with how accurately the models have been configured and parameterized for the assessment at hand. For Tier 1 of the multipathway and environmental screening assessments, we configured the models to avoid underestimating exposure and risk. This was accomplished by selecting upper-end values from nationally representative datasets for the more influential parameters in the environmental model, including selection and spatial configuration of the area of interest, lake location and size, meteorology, surface water, soil characteristics, and structure of the aquatic food web. We also assume an ingestion exposure scenario and values for human exposure factors that represent reasonable maximum exposures.

In Tier 2 of the multipathway and environmental screening assessments, we refine the model inputs to account for meteorological patterns in the vicinity of the facility versus using upper-end national values, and we identify the actual location of lakes near the facility rather than the default lake location that we apply in Tier 1. By refining the screening approach in Tier 2 to account for local geographical and meteorological data, we decrease the likelihood that concentrations in environmental media are overestimated, thereby increasing the usefulness of the screening assessment. In Tier 3 of the screening assessments, we refine the model inputs again to account for hour-by-hour plume rise and the height of the mixing layer. We can also use those hour-by-hour meteorological data in a TRIM.FaTE run using the screening configuration corresponding to the lake location. These refinements produce a more accurate estimate of chemical concentrations in the media of interest, thereby reducing the uncertainty with those

estimates. The assumptions and the associated uncertainties regarding the selected ingestion exposure scenario are the same for all three tiers.

For the environmental screening assessment for acid gases, we employ a single-tiered approach. We use the modeled air concentrations and compare those with ecological benchmarks.

For all tiers of the multipathway and environmental screening assessments, our approach to addressing model input uncertainty is generally cautious. We choose model inputs from the upper end of the range of possible values for the influential parameters used in the models, and we assume that the exposed individual exhibits ingestion behavior that would lead to a high total exposure. This approach reduces the likelihood of not identifying high risks for adverse impacts.

Despite the uncertainties, when individual pollutants or facilities do not exceed screening threshold emission rates (*i.e.*, screen out), we are confident that the potential for adverse multipathway impacts on human health is very low. On the other hand, when individual pollutants or facilities do exceed screening threshold emission rates, it does not mean that impacts are significant, only that we cannot rule out that possibility and that a refined assessment for the site might be necessary to obtain a more accurate risk characterization for the source category.

The EPA evaluates the following HAP in the multipathway and/or environmental risk screening assessments, where applicable: arsenic, cadmium, dioxins/furans, lead, mercury (both inorganic and methyl mercury), POM, HCl, and HF. These HAP represent pollutants that can cause adverse impacts either through direct exposure to HAP in the air or through exposure to HAP that are deposited from the air onto soils and surface waters and then through the environment into the food web. These HAP represent those HAP for which we can conduct a

meaningful multipathway or environmental screening risk assessment. For other HAP not included in our screening assessments, the model has not been parameterized such that it can be used for that purpose. In some cases, depending on the HAP, we may not have appropriate multipathway models that allow us to predict the concentration of that pollutant. The EPA acknowledges that other HAP beyond these that we are evaluating may have the potential to cause adverse effects and, therefore, the EPA may evaluate other relevant HAP in the future, as modeling science and resources allow.

## **IV. Analytical Results and Proposed Decisions**

*A. What are the results of the risk assessment and analyses for the Boat Manufacturing source category?* 

1. Inhalation Risk Assessment Results

Table 2 of this preamble provides an overall summary of the inhalation risk results. The results of the chronic baseline inhalation cancer risk assessment indicate that, based on estimates of current actual and allowable emissions, the MIR posed by the Boat Manufacturing source category was estimated to be 0.2-in-1 million and 0.3-in-1 million, respectively, from HAP being emitted from the open molding (resin/gelcoat) manufacturing process. The total estimated cancer incidence from the Boat Manufacturing source category based on actual emission levels is 0.00001 excess cancer cases per year, or one case in every 100,000 years. The total estimated cancer incidence from boat manufacturing industry emission sources based on allowable emission levels is 0.00002 excess cancer cases per year, or one case in every 50,000 years. Emissions of nickel compounds, ethyl benzene, and tetrachloroethene contributed 95 percent to this cancer incidence. Based upon actual or allowable emissions, no people were exposed to cancer risks greater than or equal to 1-in-1 million.

	Cancer MIR (in-1 million)			Population	Population	Max Chronic
	Based on Actual Emissions	Based on Allowable Emissions	Cancer Incidence (cases per year)	with Risk of 1-in-1 Million or Greater	with Risk of 10-in-1 Million or Greater	Noncancer HI (actuals and allowables)
Source Category	0.2 (nickel compounds, ethyl benzene, tetrachloroeth ene)	0.3 (nickel compounds, ethyl benzene, tetrachloroet hene)	0.00001	0	0	HI < 1
Whole Facility	0.4 (naphthalene)		0.00004	0	0	HI = 1

Table 2: Inhalation Risk Assessment Summary for Boat Manufacturing Source Category

The maximum chronic noncancer TOSHI values for the source category, based on actual and allowable emissions, were estimated to be less than 1, with cobalt compounds driving the TOSHI value from open contact molding (resin spray layup and spray gel coat application) processes.

# 2. Acute Risk Results

Worst-case acute HQs were calculated for every HAP for which there is an acute health benchmark using actual emissions. The maximum acute noncancer HQ value for the source category was equal to 1 from styrene emissions (based on the acute (1-hr) REL for styrene). As noted above in section III.C.3.c, the highest HQ assumes that the primary source of the styrene emissions from open molding (resin/gelcoat) operations was modeled with an hourly emissions multiplier of 3 times the annual emissions rate. Acute HQs are not calculated for allowable or whole facility emissions.

# 3. Multipathway Risk Screening Results

Results of the worst-case Tier 1 screening analysis indicated one facility reporting PB-HAP emissions (based on estimates of actual emissions) for the source category, with no This document is a prepublication version, signed by EPA Administrator, Andrew R. Wheeler on 4/18/2019. We have taken steps to ensure the accuracy of this version, but it is not the official version.

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exceedences of the screening values for the carcinogenic PB-HAP (arsenic and POM compounds) or the noncarcinogenic PB-HAP (cadmium). The remaining PB-HAP, mercury and dioxins/furans, were not emitted by any facility in the source category.

In evaluating the potential for multipathway effects from emissions of lead, we compared modeled hourly lead concentrations to the secondary NAAQS for lead (0.15  $\mu$ g/m<sup>3</sup>). The highest hourly lead concentration, 0.054  $\mu$ g/m<sup>3</sup>, is below the NAAQS for lead, indicating a low potential for multipathway impacts of concern due to lead.

4. Environmental Risk Screening Results

As described in section III.A of this preamble, we conducted an environmental risk screening assessment for the Boat Manufacturing source category for the following five pollutants: cadmium, arsenic, lead, POM, and HCl. For the three remaining pollutants (dioxin/furans, mercury, and HF) an environmental risk screening assessment was not performed because these pollutants are not emitted by the Boat Manufacturing source category.

In the Tier 1 screening analysis for PB-HAP (other than lead, which was evaluated differently), we did not find any exceedances of the ecological benchmarks evaluated. For lead, we did not find any exceedances of the secondary lead NAAQS. For HCl, the average modeled concentration around each facility (*i.e.*, the average concentration of all off-site data points in the modeling domain) did not exceed any ecological benchmark. In addition, each individually modeled concentration of HCl (*i.e.*, each off-site data point in the modeling domain) was below the ecological benchmarks for all facilities. Based on the results of the environmental risk screening analysis, we do not expect an adverse environmental effect as a result of PB-HAP emissions from this source category.

5. Facility-Wide Risk Results

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Results of the assessment of facility-wide emissions indicate none of the 93 facilities have a facility-wide cancer risk greater than or equal to 1-in-1 million; refer to Table 2. The maximum facility-wide cancer risk is 0.4-in-1 million, mainly driven by naphthalene emissions from fiberglass resin product (atomized spray of gel coat) processes.

The total estimated cancer incidence from the whole facility is 0.00004 excess cancer cases per year, or one case in every 25,000 years, with no people estimated to have cancer risks greater than or equal to 1-in-1 million from exposure to whole facility emissions.

The maximum facility-wide chronic noncancer TOSHI is estimated to be equal to 1, mainly driven by emissions of styrene from open contact molding (resin spray layup and spray gel coat application) processes.

6. What demographic groups might benefit from this regulation?

To examine the potential for any environmental justice issues that might be associated with the source category, we performed a demographic analysis, which is an assessment of risks to individual demographic groups of the populations living within 5 km and within 50 km of the facilities. In the analysis, we evaluated the distribution of HAP-related cancer and noncancer risks from the Boat Manufacturing source category across different demographic groups within the populations living near facilities.<sup>19</sup>

Results of the demographic analysis indicate that, for 7 of the 11 demographic groups, Hispanic or Latino, minority, people living below the poverty level, linguistically isolated people, adults without a high school diploma, adults 65 years of age or older, and African

<sup>&</sup>lt;sup>19</sup> Demographic groups included in the analysis are: White, African American, Native American, other races and multiracial, Hispanic or Latino, children 17 years of age and under, adults 18 to 64 years of age, adults 65 years of age and over, adults without a high school diploma, people living below the poverty level, people living two times the poverty level, and linguistically isolated people.

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Americans, the percentage of the population that resides within 5 km of facilities in the source category is greater than the corresponding national percentage for the same demographic groups. When examining the risk levels of those exposed to emissions from boat manufacturing facilities, we find that no one is exposed to a cancer risk at or above 1-in-1 million or to a chronic noncancer TOSHI greater than 1.

The methodology and the results of the demographic analysis are presented in a technical report, *Risk and Technology Review – Analysis of Demographic Factors for Populations Living Near Boat Manufacturing Source Category Operations*, available in the docket for this action. *B. What are our proposed decisions regarding risk acceptability, ample margin of safety, and adverse environmental effect for the Boat Manufacturing source category?* 

# 1. Risk Acceptability

As noted in section II.A of this preamble, the EPA sets standards under CAA section 112(f)(2) using "a two-step standard-setting approach, with an analytical first step to determine an 'acceptable risk' that considers all health information, including risk estimation uncertainty, and includes a presumptive limit on MIR of approximately 1-in-10 thousand" (54 FR 38045, September 14, 1989).

For the Boat Manufacturing source category, the risk analysis indicates that the cancer risks to the individual most exposed could be up to 0.2-in-1 million due to actual emissions and up to 0.3-in-1 million based on allowable emissions. These risks are considerably less than 100-in-1 million, which is the presumptive upper limit of acceptable risk. The risk analysis also shows very low cancer incidence (0.00001 cases per year for actual emissions and 0.00002 cases per year for allowable emissions). We did not identify potential for adverse chronic noncancer health effects. The acute noncancer risks based on actual emissions are low at an HQ of 1 for styrene. Therefore, we find there is little potential concern of acute noncancer health impacts This document is a prepublication version, signed by EPA Administrator, Andrew R. Wheeler on 4/18/2019. We have taken steps to ensure the accuracy of this version, but it is not the official version.

from actual emissions. In addition, the risk assessment indicates no significant potential for multipathway health effects.

Considering all of the health risk information and factors discussed above, including the uncertainties discussed in section III.C.7 of this preamble, we propose that the risks from the Boat Manufacturing source category are acceptable.

## 2. Ample Margin of Safety Analysis

Under the ample margin of safety analysis, we evaluated the cost and feasibility of available control technologies and other measures (including the controls, measures, and costs reviewed under the technology review) that could be applied in this source category to further reduce the risks (or potential risks) due to emissions of HAP, considering all of the health risks and other health information considered in the risk acceptability determination described above. In this analysis, we considered the results of the technology review, risk assessment, and other aspects of our MACT rule review to determine whether there are any cost-effective controls or other measures that would reduce emissions further and would be necessary to provide an ample margin of safety to protect public health.

Our risk analysis indicated the risks from the Boat Manufacturing source category are low for both cancer and noncancer health effects, and, therefore, any risk reductions from further available control options would result in minimal health benefits. As noted in section VI.A of this preamble, no additional control measures were identified for reducing HAP emissions from the Boat Manufacturing source category. Thus, we are proposing that the Boat Manufacturing NESHAP provides and ample margin of safety to protect health.

3. Adverse Environmental Effect

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As described in section III.A, and in section IV.A.4 of this preamble, we conducted an environmental risk screening assessment for the Boat Manufacturing source category for the following five pollutants: cadmium, arsenic, lead, POM, and HCl. For the three remaining pollutants (dioxin/furans, mercury, and HF), an environmental risk screening assessment was not performed because these pollutants are not emitted by the Boat Manufacturing source category.

In the Tier 1 screening analysis for PB-HAP (other than lead, which was evaluated differently), we did not find any exceedances of the ecological benchmarks evaluated. For lead, we did not find any exceedances of the secondary lead NAAQS. For HCl, the average modeled concentration around each facility (*i.e.*, the average concentration of all off-site data points in the modeling domain) did not exceed any ecological benchmark. In addition, each individually modeled concentration of HCl (*i.e.*, each off-site data point in the modeling domain) was below the ecological benchmarks for all facilities. Therefore, we do not expect adverse environmental effects as a result of HAP emissions from this source category and we are proposing that it is not necessary to set a more stringent standard to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect.

# *C. What are the results and proposed decisions based on our technology review for the Boat Manufacturing source category?*

As described in section III.B of this preamble, our technology review focused on the identification and evaluation of developments in practices, processes, and control technologies that have occurred since the MACT standards were promulgated. In conducting the technology review, we reviewed various informational sources regarding the emissions from the Boat Manufacturing source category. The review included a search of the RBLC database, reviews of air permits for boat manufacturing facilities, and a review of relevant literature. We reviewed these data sources for information on practices, processes, and control technologies that were not This document is a prepublication version, signed by EPA Administrator, Andrew R. Wheeler on 4/18/2019. We have taken steps to ensure the accuracy of this version, but it is not the official version.

considered during the development of the Boat Manufacturing NESHAP. We also looked for information on improvements in practices, processes, and control technologies that have occurred since the development of the Boat Manufacturing NESHAP.

After reviewing information from the aforementioned sources, we did not identify any new developments in processes or control technologies used at boat manufacturing facilities. We also considered improvements in thermal oxidizers as HAP controls, given they were identified as potential add-on controls in the July 14, 2000, proposed rule (65 FR 43851). We did not identify any improvements in performance of thermal oxidizers, and we continue to believe that a thermal oxidizer is not a cost-effective add-on control option for this source category, due to the direct costs associated with high energy requirements for dilute HAP streams or the costs associated with operating a capture and control system (for concentrated HAP streams).

Based on the technology review, we have determined that there are no cost-effective developments in processes or control technologies that warrant revisions to the MACT standards for this source category. We identified and seek comment on a general practice utilized by many boat manufacturing facilities that has potential to reduce the amount of HAP emissions emitted in open molding resin and gel coat application operations. Specifically, we reviewed the practice that some facilities in the boat manufacturing industry have implemented which includes training their spray gun operators to deliver a controlled spray when applying resin and/or gel coat during open molding production. Industry representatives indicated that controlling the amount of overspray from resins and/or gel coat application during open molding operations could potentially reduce HAP emissions by 40 to 50 percent. From a practical standpoint, controlling overspray reduces the amount of resin or gel coat that is wasted and not applied to the product being manufactured; the EPA seeks comment to determine whether this practice is widely used

by industry, whether significant HAP reductions are achieved industry-wide, or whether HAP reductions can be achieved in the manufacturing of large and small boats or large and small boat parts.

The EPA will review the information provided in public responses to determine whether the rule should be amended to include a controlled-spray training program as a work practice standard. Additional information of our technology review can be found in the memorandum, *Technology Review for Boat Manufacturing and Reinforced Plastic Composites Production Source Category*, which is available in the docket for this action (Docket ID No. EPA-HQ-OAR-2016-0447).

# D. What other actions are we proposing for the Boat Manufacturing source category?

In addition to the proposed actions described above, we are proposing additional revisions to the Boat Manufacturing NESHAP. We are proposing revisions to the SSM provisions of the rule in order to ensure that it is consistent with the Court decision in *Sierra Club v. EPA*, 551 F. 3d 1019 (D.C. Cir. 2008), which vacated two provisions that exempted sources from the requirement to comply with otherwise applicable CAA section 112(d) emission standards during periods of SSM. We also are proposing to revise the Boat Manufacturing NESHAP to include electronic reporting provisions. Our analyses and proposed changes related to these issues are discussed below.

#### 1. SSM Requirements

#### a. Proposed Elimination of the SSM Exemption

In its 2008 decision in *Sierra Club v. EPA*, 551 F.3d 1019 (D.C. Cir. 2008), the Court vacated portions of two provisions in the EPA's CAA section 112 regulations governing the emissions of HAP during periods of SSM. Specifically, the Court vacated the SSM exemption

contained in 40 CFR 63.6(f)(1) and 40 CFR 63.6(h)(1), holding that under section 302(k) of the CAA, emissions standards or limitations must be continuous in nature and that the SSM exemption violates the CAA's requirement that some CAA section 112 standards apply continuously.

We are proposing the elimination of SSM exemptions in this rule, including any reference to requirements included in 40 CFR part 63, part A (General Provisions). Consistent with *Sierra Club v. EPA*, we are proposing standards in this rule that apply at all times. We are also proposing several revisions to Table 8 to 40 CFR part 63, subpart VVVV, as is explained in more detail below. For example, we are proposing to eliminate the incorporation of the General Provisions' requirement that each source develop an SSM plan. We also are proposing to eliminate and revise certain recordkeeping and reporting requirements related to the SSM exemption as further described below.

The EPA has attempted to ensure that the provisions we are proposing to eliminate are inappropriate, unnecessary, or redundant in the absence of the SSM exemption. We are specifically seeking comment on whether we have successfully done so.

In proposing the standards in this rule, the EPA has taken into account startup and shutdown periods and, for the reasons explained below, has not proposed alternate standards for those periods.

Periods of startup, normal operations, and shutdown are all predictable and routine aspects of a source's operations. Malfunctions, in contrast, are neither predictable nor routine. Instead they are, by definition, sudden, infrequent, and not reasonably preventable failures of emissions control, process, or monitoring equipment. (40 CFR 63.2, Definition of malfunction). The EPA interprets CAA section 112 as not requiring emissions that occur during periods of

malfunction to be factored into development of CAA section 112 standards, and this reading has been upheld as reasonable by the Court in U.S. Sugar Corp. v. EPA, 830 F.3d 579, 606-610 (2016). Under CAA section 112, emissions standards for new sources must be no less stringent than the level "achieved" by the best controlled similar source and for existing sources generally must be no less stringent than the average emission limitation "achieved" by the best performing 12 percent of sources in the category. There is nothing in CAA section 112 that directs the Agency to consider malfunctions in determining the level "achieved" by the best performing sources when setting emission standards. As the Court has recognized, the phrase "average emissions limitation achieved by the best performing 12 percent of' sources "says nothing about how the performance of the best units is to be calculated." Nat'l Ass'n of Clean Water Agencies v. EPA, 734 F.3d 1115, 1141 (D.C. Cir. 2013). While the EPA accounts for variability in setting emissions standards, nothing in CAA section 112 requires the Agency to consider malfunctions as part of that analysis. The EPA is not required to treat a malfunction in the same manner as the type of variation in performance that occurs during routine operations of a source. A malfunction is a failure of the source to perform in a "normal or usual manner" and no statutory language compels the EPA to consider such events in setting CAA section 112 standards.

As the Court recognized in *U.S. Sugar Corp*, accounting for malfunctions in setting standards would be difficult, if not impossible, given the myriad different types of malfunctions that can occur across all sources in the category and given the difficulties associated with predicting or accounting for the frequency, degree, and duration of various malfunctions that might occur. *Id.* at 608 ("The EPA would have to conceive of a standard that could apply equally to the wide range of possible boiler malfunctions, ranging from an explosion to minor mechanical defects. Any possible standard is likely to be hopelessly generic to govern such a

wide array of circumstances.") As such, the performance of units that are malfunctioning is not "reasonably" foreseeable. See, e.g., Sierra Club v. EPA, 167 F.3d 658, 662 (D.C. Cir. 1999) ("The EPA typically has wide latitude in determining the extent of data-gathering necessary to solve a problem. We generally defer to an agency's decision to proceed on the basis of imperfect scientific information, rather than to 'invest the resources to conduct the perfect study.") See also, Weyerhaeuser v. Costle, 590 F.2d 1011, 1058 (D.C. Cir. 1978) ("In the nature of things, no general limit, individual permit, or even any upset provision can anticipate all upset situations. After a certain point, the transgression of regulatory limits caused by 'uncontrollable acts of third parties,' such as strikes, sabotage, operator intoxication or insanity, and a variety of other eventualities, must be a matter for the administrative exercise of case-by-case enforcement discretion, not for specification in advance by regulation."). In addition, emissions during a malfunction event can be significantly higher than emissions at any other time of source operation. For example, if an air pollution control device with 99-percent removal goes off-line as a result of a malfunction (as might happen if, for example, the bags in a baghouse catch fire) and the emission unit is a steady state type unit that would take days to shut down, the source would go from 99-percent control to zero control until the control device was repaired. The source's emissions during the malfunction would be 100 times higher than during normal operations. As such, the emissions over a 4-day malfunction period would exceed the annual emissions of the source during normal operations. As this example illustrates, accounting for malfunctions could lead to standards that are not reflective of (and significantly less stringent than) levels that are achieved by a well-performing non-malfunctioning source. It is reasonable to interpret CAA section 112 to avoid such a result. The EPA's approach to malfunctions is consistent with CAA section 112 and is a reasonable interpretation of the statute.

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Although no statutory language compels the EPA to set standards for malfunctions, the EPA has the discretion to do so where feasible. For example, in the Petroleum Refinery Sector Risk and Technology Review, the EPA established a work practice standard for unique types of malfunction that result in releases from pressure relief devices or emergency flaring events because the EPA had information to determine that such work practices reflected the level of control that applies to the best performers. 80 FR 75178, 75211-14 (December 1, 2015). The EPA will consider whether circumstances warrant setting standards for a particular type of malfunction and, if so, whether the EPA has sufficient information to identify the relevant best performing sources and establish a standard for such malfunctions. We also encourage commenters to provide any such information.

In the event that a source fails to comply with the applicable CAA section 112(d) standards as a result of a malfunction event, the EPA would determine an appropriate response based on, among other things, the good faith efforts of the source to minimize emissions during malfunction periods, including preventative and corrective actions, as well as root cause analyses to ascertain and rectify excess emissions. The EPA would also consider whether the source's failure to comply with the CAA section 112(d) standard was, in fact, sudden, infrequent, not reasonably preventable, and was not instead caused, in part, by poor maintenance or careless operation. 40 CFR 63.2 (Definition of malfunction).

If the EPA determines in a particular case that an enforcement action against a source for violation of an emission standard is warranted, the source can raise any and all defenses in that enforcement action and the federal district court will determine what, if any, relief is appropriate. The same is true for citizen enforcement actions. Similarly, the presiding officer in an

administrative proceeding can consider any defense raised and determine whether administrative penalties are appropriate.

In summary, the EPA interpretation of the CAA and, in particular, CAA section 112 is reasonable and encourages practices that will avoid malfunctions. Administrative and judicial procedures for addressing exceedances of the standards fully recognize that violations may occur despite good faith efforts to comply and can accommodate those situations. *U.S. Sugar Corp. v. EPA*, 830 F.3d 579, 606-610 (2016).

### b. Proposed Revisions to the General Provisions Applicability Table

We are proposing to revise the General Provisions table (Table 8 to 40 CFR part 63, subpart VVVV) entry for 40 CFR 63.6(e)(3) by changing the "yes" in column 3 to a "no." Generally, these paragraphs require development of an SSM plan and specify SSM recordkeeping and reporting requirements related to the SSM plan. As noted, the EPA is proposing to remove the SSM exemptions. Therefore, affected units will be subject to an emission standard during such events. The applicability of a standard during such events will ensure that sources have ample incentive to plan for and achieve compliance and, thus, the SSM plan requirements are no longer necessary.

We are proposing to revise Table 8 to 40 CFR part 63, subpart VVVV, to indicate that 40 CFR 63.8(c)(1)(i) and (iii) does not apply to 40 CFR part 63, subpart VVVV. The cross-references to the general duty and SSM plan requirements in those subparagraphs of the General Provisions are not necessary in light of other requirements of 40 CFR 63.8 that require good air pollution control practices (40 CFR 63.8(c)(1)) and that set out the requirements of a quality control program for monitoring equipment (40 CFR 63.8(d)).

We are proposing to revise Table 8 to 40 CFR part 63, subpart VVVV, to indicate that 40 CFR 63.8(d)(3) does not apply to 40 CFR part 63, subpart VVVV. The final sentence in 40 CFR 63.8(d)(3) refers to the General Provisions' SSM plan requirement which is no longer applicable.

We are proposing to revise the Table 8 to 40 CFR part 63, subpart VVVV, entry for 40 CFR 63.10(b)(2)(i) by changing the "yes" in column 3 to a "no." Section 63.10(b)(2)(i) describes the recordkeeping requirements during startup and shutdown. These recording provisions are no longer necessary because the EPA is proposing that recordkeeping and reporting applicable to normal operations will apply to startup and shutdown. In the absence of special provisions applicable to startup and shutdown, such as a startup and shutdown plan, there is no reason to retain additional recordkeeping for startup and shutdown periods.

We are proposing to revise Table 8 to 40 CFR part 63, subpart VVVV, to indicate 40 CFR 63.10(b)(2)(ii), 40 CFR 63.10(b)(2)(iv), and 40 CFR 63.10(b)(2)(v) do not apply. Section 63.10(b)(2)(ii) describes the recordkeeping requirements during a malfunction. The EPA is proposing to amend the requirements of 40 CFR 63.5767(d) to indicate that if a facility has an add-on control device, they must keep records of any failures to meet the applicable standards, including the date, time, and duration of the failure. The EPA is also proposing to add to 40 CFR 63.5767(d) a requirement that sources keep records that include a list of the affected add-on control device and actions taken to minimize emissions, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions. The EPA is proposing to require that sources keep records of this information to ensure that there is adequate information to allow the EPA to determine the severity of any failure to meet a standard, and to provide data that may document how the source

met the general duty to minimize emissions when the source has failed to meet an applicable standard.

The provision of 40 CFR 63.10(b)(2)(iv), when applicable, requires sources to record actions taken during SSM events when actions were inconsistent with their SSM plan. The requirement is no longer appropriate because SSM plans will no longer be required. The requirement previously applicable under 40 CFR 63.10(b)(2)(iv)(B) to record actions to minimize emissions and record corrective actions is now applicable by reference to 40 CFR 63.5767(d).

The provision of 40 CFR 63.10(b)(2)(v), when applicable, requires sources to record actions taken during SSM events to show that actions taken were consistent with their SSM plan. The requirement is no longer appropriate because SSM plans will no longer be required.

We are proposing to revise Table 8 to 40 CFR part 63, subpart VVVV, to indicate that 40 CFR 63.10(c)(15) does not apply. When applicable, the provision allows an owner or operator to use the affected source's SSM plan or records kept to satisfy the recordkeeping requirements of the SSM plan specified in 40 CFR 63.6(e) to also satisfy the requirements of 40 CFR 63.10(c)(10) through (12). The EPA is proposing to eliminate this requirement because SSM plans would no longer be required, and, therefore, 40 CFR 63.10(c)(15) no longer serves any useful purpose for affected units.

We are proposing to revise the Table 8 to 40 CFR part 63, subpart VVVV, entry for 40 CFR 63.10(d)(5) by changing the "yes" in column 3 to a "no." Section 63.10(d)(5) describes the reporting requirements for startups, shutdowns, and malfunctions. To replace the General Provisions reporting requirement, the EPA is proposing to add reporting requirements to 40 CFR 63.5764. The replacement language differs from the General Provisions requirement in that it

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eliminates periodic SSM reports as a stand-alone report. We are proposing language that requires sources with add-on control devices that fail to meet an applicable standard at any time to report the information concerning such events in a compliance report already required under this rule on a semiannual basis. We are proposing that the report must contain the number, date, time, duration, and the cause of such events (including unknown cause, if applicable), a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.

Examples of such methods would include product-loss calculations, mass balance calculations, measurements when available, or engineering judgment based on known process parameters. The EPA is proposing this requirement to ensure that there is adequate information to determine compliance, to allow the EPA to determine the severity of the failure to meet an applicable standard, and to provide data that may document how the source met the general duty to minimize emissions during a failure to meet an applicable standard.

We will no longer require owners or operators to determine whether actions taken to correct a malfunction are consistent with an SSM plan because plans would no longer be required. The proposed amendments, therefore, eliminate the cross reference to 40 CFR 63.10(d)(5)(i) that contains the description of the previously required SSM report format and submittal schedule from this section. These specifications are no longer necessary because the events will be reported in otherwise required reports with similar format and submittal requirements.

The proposed amendments also eliminate the cross reference to 40 CFR 63.10(d)(5)(ii). Section 63.10(d)(5)(ii) describes an immediate report for startups, shutdowns, and malfunctions when a source failed to meet an applicable standard, but did not follow the SSM plan. We will no

longer require owners and operators to report when actions taken during a startup, shutdown, or malfunction were not consistent with an SSM plan because plans would no longer be required. *c. Definitions* 

We are proposing that definitions of "Startup" and "Shutdown" be added to 40 CFR 63.5779. The current rule relies on the 40 CFR part 63, subpart A, definitions of these terms which are based on the setting in operation of, and cessation of operation of add-on control devices. Because we are proposing that standards in this rule apply at all times, we find it appropriate to propose definitions of startup and shutdown based on these periods to clarify that it is the setting in operation of, and cessation of operation of add-on control devices that define startup and shutdown for purposes of 40 CFR part 63, subpart VVVV.

We are proposing that the definition of "Deviation" in 40 CFR 63.5779 be revised to remove language that differentiates between normal operations, startup and shutdown, and malfunction events.

### 2. Electronic Reporting Requirements

The EPA is proposing that owners and operators of facilities subject to the Boat Manufacturing NESHAP submit electronic copies of initial notifications required in 40 CFR 63.9(b), notifications of compliance status required in 40 CFR 63.9(h), performance test reports, and semiannual reports through the EPA's Central Data Exchange (CDX), using the Compliance and Emissions Data Reporting Interface (CEDRI). A description of the electronic data submission process is provided in the memorandum, "*Electronic Reporting Requirements for New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) Rules,*" available in Docket ID No. EPA-HQ-OAR-2016-0447. The proposed rule requires that performance test results collected using test methods that are

supported by the EPA's Electronic Reporting Tool (ERT) as listed on the ERT website<sup>20</sup> at the time of the test be submitted in the format generated through the use of the ERT and that other performance test results be submitted in portable document format using the attachment module of the ERT. For semiannual reports, the proposed rule requires that owners and operators use the appropriate spreadsheet template to submit information to CEDRI. A draft version of the proposed template for these reports is included in the docket for this rulemaking (Docket ID No. EPA-HQ-OAR-2016-0447). The EPA specifically requests comment on the content, layout, and overall design of the template.

Additionally, by making the reports addressed in this proposed rulemaking readily available, the EPA, the regulated community, and the public will benefit when the EPA conducts its CAA-required technology and risk-based reviews. As a result of having performance test reports and air emission data readily accessible, our ability to carry out comprehensive reviews will be increased and achieved within a shorter period of time. These data will provide useful information on control efficiencies being achieved and maintained in practice within a source category and across source categories for regulated sources and pollutants. These reports can also be used to inform the technology-review process by providing information on improvements to add-on technology and new control technology.

Under an electronic reporting system, the EPA's Office of Air Quality Planning and Standards (OAQPS) would have air emissions and performance test data in hand; OAQPS would not have to collect these data from the EPA Regional offices or from delegated air agencies or industry sources in cases where these reports are not submitted to the EPA Regional offices. Thus, we anticipate fewer or less substantial ICRs may be needed in conjunction with

<sup>&</sup>lt;sup>20</sup> https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert. This document is a prepublication version, signed by EPA Administrator, Andrew R. Wheeler on 4/18/2019. We have taken steps to ensure the accuracy of this version, but it is not the official version.

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prospective CAA-required technology and risk-based reviews. We expect this to result in a decrease in time spent by industry to respond to data collection requests. We also expect the ICRs to contain less extensive stack testing provisions, as we will already have stack test data electronically. Reduced testing requirements would be a cost savings to industry. The EPA should also be able to conduct these required reviews more quickly, as OAQPS will not have to include the ICR collection time in the process or spend time collecting reports from the EPA Regional offices. While the regulated community may benefit from a reduced burden of ICRs, the general public benefits from the Agency's ability to provide these required reviews more quickly, resulting in increased public health and environmental protection.

Electronic reporting minimizes submission of unnecessary or duplicative reports in cases where facilities report to multiple government agencies and the agencies opt to rely on the EPA's electronic reporting system to view report submissions. Where air agencies continue to require a paper copy of these reports and will accept a hard copy of the electronic report, facilities will have the option to print paper copies of the electronic reporting forms to submit to the air agencies, and, thus, minimize the time spent reporting to multiple agencies. Additionally, maintenance and storage costs associated with retaining paper records could likewise be minimized by replacing those records with electronic records of electronically submitted data and reports.

Air agencies could benefit from more streamlined and automated review of the electronically submitted data. For example, because performance test data would be readilyavailable in standard electronic format, air agencies would be able to review reports and data electronically rather than having to conduct a review of the reports and data manually. Having reports and associated data in electronic format facilitates review through the use of software

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"search" options, as well as the downloading and analyzing of data in spreadsheet format.

Additionally, air agencies would benefit from the reported data being accessible to them through the EPA's electronic reporting system wherever and whenever they want or need access (as long as they have access to the Internet). The ability to access and review reports electronically assists air agencies in determining compliance with applicable regulations more quickly and accurately, potentially allowing a faster response to violations, which could minimize harmful air emissions. This benefits both air agencies and the general public.

The proposed electronic reporting of test data is consistent with electronic data trends (*e.g.*, electronic banking and income tax filing). Electronic reporting of environmental data is already common practice in many media offices at the EPA. The changes being proposed in this rulemaking are needed to continue the EPA's transition to electronic reporting.

Additionally, the EPA has identified two broad circumstances in which electronic reporting extensions may be provided. In both circumstances, the decision to accept the claim of needing additional time to report is within the discretion of the Administrator, and reporting should occur as soon as possible. The EPA is providing these potential extensions to protect owners and operators from noncompliance in cases where they cannot successfully submit a report by the reporting deadline for reasons outside of their control. The situation where an extension may be warranted due to outages of the EPA's CDX or CEDRI which precludes an owner or operator from accessing the system and submitting required reports is addressed in 40 CFR 63.5764. The situation where an extension may be warranted due to a force majeure event, which is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents an owner or operator from complying with the requirement to submit a report

electronically as required by this rule is addressed in 40 CFR 63.5764. Examples of such events are acts of nature, acts of war or terrorism, equipment failure, or safety hazards beyond the control of the facility.

The electronic submittal of the reports addressed in this proposed rulemaking will increase the usefulness of the data contained in those reports, is in keeping with current trends in data availability and transparency, will further assist in the protection of public health and the environment, will improve compliance by facilitating the ability of regulated facilities to demonstrate compliance with requirements and by facilitating the ability of delegated state, local, tribal, and territorial air agencies and the EPA to assess and determine compliance, and will ultimately reduce burden on regulated facilities, delegated air agencies, and the EPA. Electronic reporting also eliminates paper-based, manual processes, thereby saving time and resources, simplifying data entry, eliminating redundancies, minimizing data reporting errors, and providing data quickly and accurately to the affected facilities, air agencies, the EPA, and the public. Moreover, electronic reporting is consistent with the EPA's plan<sup>21</sup> to implement Executive Order 13563 and is in keeping with the EPA's Agency-wide policy<sup>22</sup> developed in response to the White House's Digital Government Strategy.<sup>23</sup> For more information on the benefits of electronic reporting, see the memorandum, *Electronic Reporting Requirements for* 

<sup>&</sup>lt;sup>21</sup> EPA's Final Plan for Periodic Retrospective Reviews, August 2011. Available at: *https://www.regulations.gov/document?D=EPA-HQ-OA-2011-0156-0154*.

<sup>&</sup>lt;sup>22</sup> E-Reporting Policy Statement for EPA Regulations, September 2013. Available at: *https://www.epa.gov/sites/production/files/2016-03/documents/epa-ereporting-policy-statement-2013-09-30.pdf*.

<sup>&</sup>lt;sup>23</sup> Digital Government: Building a 21<sup>st</sup> Century Platform to Better Serve the American People, May 2012. Available at:

https://obamawhitehouse.archives.gov/sites/default/files/omb/egov/digital-government/digital-government.html.

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New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) Rules, available in Docket ID No. EPA-HQ-OAR-2016-0447.

In this action, we are amending the rule to include 40 CFR 63.5765 describing the provisions for electronic reporting. In addition, 40 CFR 63.5770 has been amended to indicate that records may be stored as electronic documents.

E. What compliance dates are we proposing for the Boat Manufacturing source category?

The EPA is proposing that affected sources that commenced construction or reconstruction on or before [INSERT DATE OF PUBLICATION IN THE FEDERAL

**REGISTER**] must comply with all of the amendments, with the exception of the proposed electronic format for submitting notifications and compliance reports, no later than 180 days after the effective date of the final rule, or upon startup, whichever is later. Affected sources that commence construction or reconstruction after **[INSERT DATE OF PUBLICATION IN THE** 

**FEDERAL REGISTER]** must comply with all requirements of the subpart, including the amendments being proposed, with the exception of the proposed electronic format for submitting notifications and compliance reports, no later than the effective date of the final rule or upon startup, whichever is later. All affected facilities would have to continue to meet the current requirements of 40 CFR part 63, subpart VVVV, until the applicable compliance date of the amended rule. The final action is not expected to be a "major rule" as defined by 5 U.S.C. 804(2), so the effective date of the final rule will be the promulgation date as specified in CAA section 112(d)(10).

For existing sources, we are proposing two changes that would impact ongoing compliance requirements for 40 CFR part 63, subpart VVVV. As discussed elsewhere in this preamble, we are proposing to add a requirement that notifications, performance test results, and

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compliance reports be submitted electronically. We are also proposing to change the requirements for SSM by removing the exemption from the requirements to meet the standard during SSM periods and by removing the requirement to develop and implement an SSM plan. Our experience with similar industries that are required to convert reporting mechanisms to install necessary hardware and software, become familiar with the process of submitting performance test results electronically through the EPA's CEDRI, test these new electronic submission capabilities, and reliably employ electronic reporting shows that a time period of a minimum of 90 days, and, more typically, 180 days is generally necessary to successfully accomplish these revisions. Our experience with similar industries further shows that this sort of regulated facility generally requires a time period of 180 days to read and understand the amended rule requirements; to evaluate their operations to ensure that they can meet the standards during periods of startup and shutdown as defined in the rule and make any necessary adjustments; and to update their operation, maintenance, and monitoring plan to reflect the revised requirements. The EPA recognizes the confusion that multiple different compliance dates for individual requirements would create and the additional burden such an assortment of dates would impose. From our assessment of the timeframe needed for compliance with the entirety of the revised requirements, the EPA considers a period of 180 days to be the most expeditious compliance period practicable and, thus, is proposing that all affected sources that commenced construction or reconstruction on or before [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER] be in compliance with all of this regulation's revised requirements within 180 days of the regulation's effective date.

We solicit comment on the proposed compliance periods, and we specifically request submission of information from sources in this source category regarding specific actions that

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would need to be undertaken to comply with the proposed amended requirements and the time needed to make the adjustments for compliance with any of the revised requirements. We note that information provided may result in changes to the proposed compliance dates.

*F. What are the results of the risk assessment and analyses for the Reinforced Plastic Composites Production source category?* 

1. Inhalation Risk Assessment Results

Table 3 of this preamble provides an overall summary of the inhalation risk results. The results of the chronic baseline inhalation cancer risk assessment indicate that, based on estimates of current actual and allowable emissions, the MIR posed by the Reinforced Plastic Composites Production source category was estimated to be 4-in-1 million for both model runs, from volatile organic compound HAP being emitted from pultrusion processes. The total estimated cancer incidence from reinforced plastic composites production emission sources based on actual and allowable emission levels is 0.001 excess cancer cases per year, or one case in every 1,000 years. Emissions of acrylonitrile, naphthalene, ethyl benzene, and benzo(ghi)perylene contributed 91 percent to this cancer incidence. Based upon actual emissions, 1,500 people were exposed to cancer risks greater than or equal to 1-in-1 million; for allowable emissions, approximately 2,100 people were estimated to be exposed to cancer risks greater than or equal to 1-in-1 million; for allowable emissions, approximately 2,100

Table 3: Inhalation Risk Assessment Summary for Reinforced Plastic Composites	
Production Source Category	

	Cancer (in-1 m		Cancer with I n Incidence of 1-i le (cases per Millio	Population Population		Max Chronic
	Based on Actual Emissions	Based on Allowable Emissions		with Risk of 1-in-1 Million or Greater	of 10-in-1	Noncancer HI (actuals and allowables)
Source Category	4	4	0.001	1,500	0	HI = 1

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	(formaldehyde , ethyl benzene)	(formaldehyde , ethyl benzene)				
Whole Facility	20 (cadmium,7- 12- dimethylbenz [a]anthracene, nickel, formaldehyde		0.001	4,500	800	HI = 1

The maximum chronic noncancer TOSHI values for the source category, based on actual emissions, were estimated to be 1, with cobalt compounds driving the TOSHI value from the application of gel-coat and resins.

# 2. Acute Risk Results

Worst-case acute HQs were calculated for every HAP for which there is an acute health benchmark using actual emissions. The maximum off-site acute noncancer HQ value for the source category was equal to 3 from styrene emissions (based on the acute (1-hour) REL). The acute risks were based on actual emissions utilizing an hourly emissions multiplier of 3 times the annual emissions rate. Acute HQs are not calculated for allowable or whole facility emissions.

3. Multipathway Risk Screening Results

Results of the worst-case Tier 1 screening analysis indicate that PB-HAP emissions (based on estimates of actual emissions) from the source category did not exceed the screening values for the carcinogenic PB-HAP (arsenic compounds) or the noncarcinogenic PB-HAP (cadmium and mercury) that were emitted by 100 facilities of the 448 facilities in the source category. The only carcinogenic PB-HAP to exceed the Tier 1 screening value of 1 was POM compounds from two facilities with a maximum Tier 1 cancer screening value of 6. No additional multipathway screening was conducted for this source category.

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An exceedance of a screening value in any of the tiers cannot be equated with a risk value or a HQ (or HI). Rather, it represents a high-end estimate of what the risk or hazard may be. For example, facility emissions exceeding the screening value by a factor of 2 for a non-carcinogen can be interpreted to mean that we are confident that the HQ would be lower than 2. Similarly, facility emissions exceeding the screening value by a factor of 20 for a carcinogen means that we are confident that the risk is lower than 20-in-1 million. Our confidence comes from the healthprotective assumptions that are in the screens: we choose inputs from the upper end of the range of possible values for the influential parameters used in the screens; and we assume that the exposed individual exhibits ingestion behavior that would lead to a high total exposure.

In evaluating the potential for multipathway effects from emissions of lead, we compared modeled hourly lead concentrations to the secondary NAAQS for lead (0.15  $\mu$ g/m<sup>3</sup>). The highest hourly lead concentration, 0.013  $\mu$ g/m<sup>3</sup>, is below the NAAQS for lead, indicating a low potential for multipathway impacts of concern due to lead.

### 4. Environmental Risk Screening Results

As described in section III.A of this preamble, we conducted an environmental risk screening assessment for the Reinforced Plastic Composites Production source category for the following six pollutants: cadmium, mercury, arsenic, lead, POM, and HCl. For the remaining two pollutants (dioxin/furans and HF), an environmental risk screening assessment was not performed because these pollutants are not emitted by the Reinforced Plastic Composites Production source category.

In the Tier 1 screening analysis for PB-HAP (other than lead, which was evaluated differently), we did not find any exceedances of the ecological benchmarks evaluated. For lead, we did not estimate any exceedances of the secondary lead NAAQS. For HCl, the average

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modeled concentration around each facility (*i.e.*, the average concentration of all off-site data points in the modeling domain) did not exceed any ecological benchmark. In addition, each individual modeled concentration of HCl (*i.e.*, each off-site data point in the modeling domain) was below the ecological benchmarks for all facilities. Based on the results of the environmental risk screening analysis, we do not expect an adverse environmental effect as a result of HAP emissions from this source category.

### 5. Facility-Wide Risk Results

Results of the assessment of facility-wide emissions indicate that eleven of the 448 facilities have a facility-wide cancer risk greater than or equal to 1-in-1 million, and 1 facility has a facility-wide cancer risk greater than or equal to 10-in-1 million; refer to Table 4. The maximum facility-wide cancer risk is 20-in-1 million, mainly driven by cadmium compounds emissions from in-process fuel use of natural gas.

The total estimated cancer incidence from the whole facility is 0.001 excess cancer cases per year, or one case in every 1,000 years, with 4,500 people estimated to have cancer risks greater than or equal to 1-in-1 million from exposure to whole facility emissions and 800 people estimated to have cancer risks greater than or equal to 10-in-1 million.

The maximum facility-wide chronic non-cancer TOSHI is estimated to be equal to 1, mainly driven by cobalt emissions from the application of gel-coats and resins.

6. What demographic groups might benefit from this regulation?

To examine the potential for any environmental justice issues that might be associated with the source category, we performed a demographic analysis, which is an assessment of risk to individual demographic groups of the populations living within 5 km and within 50 km of the facilities. In the analysis, we evaluated the distribution of HAP-related cancer and noncancer risk

from the Reinforced Plastic Composites Production source category across different

demographic groups within the populations living near facilities.<sup>24</sup>

The results of the demographic analysis are summarized in Table 4 below. These results, for various demographic groups, are based on the estimated risk from actual emissions levels for the population living within 50 km of the facilities.

Total Population	Nationwide 317,746,049 R	Population with Cancer Risk at or Above 1-in-1 Million Due to Reinforced Plastic Composites Production 1,564 .ace by Percent	Population with Chronic HI Above 1 Due to Reinforced Plastic Composites Production 0		
White	62%	62%	0%		
All Other Races	38%	38%	0%		
		ace by Percent			
White	62%	62%	0%		
African American	12%	26%	0%		
Native American	0.8%	0%	0%		
Hispanic or Latino	18%	7%	0%		
Other and Multiracial	7%	5%	0%		
	Eth	nicity by Percent			
Hispanic	18%	7%	0%		
Non-Hispanic	82%	93%	0%		
Income by Percent					
Below Poverty Level	14%	42%	0%		
Above Poverty Level	86%	58%	0%		
Education by Percent					
Over 25 and without High School Diploma	14%	16%	0%		

Table 4. Reinforced Plastic Composites Production Demographic Risk Analysis Results
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<sup>&</sup>lt;sup>24</sup> Demographic groups included in the analysis are: White, African American, Native American, other races and multiracial, Hispanic or Latino, children 17 years of age and under, adults 18 to 64 years of age, adults 65 years of age and over, adults without a high school diploma, people living below the poverty level, people living two times the poverty level, and linguistically isolated people.

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Over 25 and with a			
High School	86%	84%	0%
Diploma			

The results of the Reinforced Plastic Composites Production source category demographic analysis indicate that emissions from the source category expose approximately 1,600 people to a cancer risk at or above 1-in-1 million and no people to a chronic noncancer TOSHI greater than 1. The percentages of the at-risk population for 3 of the 11 demographic groups, people living below the poverty level, adults without a high school diploma, and African Americans, that reside within 50 km of facilities in the source category are greater than the corresponding national percentage for the same demographic groups.

The methodology and the results of the demographic analysis are presented in a technical report, *Risk and Technology Review – Analysis of Demographic Factors for Populations Living Near Reinforced Plastic Composites Production Source Category*, available in the docket for this action.

*G. What are our proposed decisions regarding risk acceptability, ample margin of safety, and adverse environmental effect for the Reinforced Plastic Composites Production source category?* 

1. Risk Acceptability

As noted in section II.A of this preamble, the EPA sets standards under CAA section 112(f)(2) using "a two-step standard-setting approach, with an analytical first step to determine an 'acceptable risk' that considers all health information, including risk estimation uncertainty, and includes a presumptive limit on MIR of approximately 1-in-10 thousand" (54 FR 38045, September 14, 1989).

For the Reinforced Plastic Composites Production source category, the risk analysis indicates that the cancer risks to the individual most exposed could be up to 4-in-1 million due to actual emissions and up to 4-in-1 million based on allowable emissions. These risks are This document is a prepublication version, signed by EPA Administrator, Andrew R. Wheeler on 4/18/2019. We have taken steps to ensure the accuracy of this version, but it is not the official version.

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considerably less than 100-in-1 million, which is the presumptive upper limit of acceptable risk. The risk analysis also shows very low cancer incidence (0.001 cases per year for actual emissions and 0.001 cases per year for allowable emissions), and we did not identify potential for adverse chronic noncancer health effects. The results of the acute screening analysis estimate a maximum acute noncancer HQ of 3 based on the acute REL for styrene. To better characterize the potential health risks associated with estimated worst-case acute exposures to HAP, we examine a wider range of available acute health metrics than we do for our chronic risk assessments. This is in acknowledgement that there are generally more data gaps and uncertainties in acute reference values than there are in chronic reference values. By definition, the acute REL represents a health-protective level of exposure, with effects not anticipated below those levels, even for repeated exposures; however, the level of exposure that would cause health effects is not specifically known. As the exposure concentration increases above the acute REL, the potential for effects increases. Therefore, when an REL is exceeded and an AEGL-1 or ERPG-1 level is available (*i.e.*, levels at which mild, reversible effects are anticipated in the general public for a single exposure), we typically use them as an additional comparative measure, as they provide an upperbound for exposure levels above which exposed individuals could experience effects.

Based on the AEGL-1 for styrene, the HQ is less than 1 (0.7), below the level at which mild, reversible effects would be anticipated. In addition, the acute screening assessment includes the conservative (health protective) assumptions that every process releases its peak hourly emissions at the same hour, that the worst-case dispersion conditions occur at that same hour, and that an individual is present at the location of maximum concentration for that hour. Together, these factors lead us to conclude that significant acute effects are not anticipated due to

emissions from this category. In addition, the risk assessment indicates no significant potential for multipathway health effects.

Considering all of the health risk information and factors discussed above, we propose to find that the risks from the Reinforced Plastic Composites Production source category are acceptable.

2. Ample Margin of Safety Analysis

Under the ample margin of safety analysis, we evaluated the cost and feasibility of available control technologies and other measures (including the controls, measures, and costs reviewed under the technology review) that could be applied in this source category to further reduce the risks (or potential risks) due to emissions of HAP, considering all of the health risks and other health information considered in the risk acceptability determination described above. In this analysis, we considered the results of the technology review, risk assessment, and other aspects of our MACT rule review to determine whether there are any cost-effective controls or other measures that would reduce emissions further and would be necessary to provide an ample margin of safety to protect public health.

Our risk analysis indicated the risks from the Reinforced Plastic Composites Production source category are low for both cancer and noncancer health effects, and, therefore, any risk reductions from further available control options would result in minimal health benefits. As noted in section IV.I of this preamble, no additional control measures were identified for reducing HAP emissions from sources in the Reinforced Plastic Composites Production source category. Thus, we are proposing that the Reinforced Plastic Composites Production NESHAP provides an ample margin of safety to protect health.

3. Adverse Environmental Effect

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As described in sections III.A and IV.F.4, of this preamble, we conducted an environmental risk screening assessment for the Reinforced Plastic Composites Production source category for the following six pollutants: cadmium, mercury, arsenic, lead, POM, and HCl. For arsenic, an environmental risk screening assessment was not performed because this pollutant is not emitted by the Reinforced Plastic Composites Production source category.

In the Tier 1 screening analysis for PB-HAP (other than lead, which was evaluated differently), we did not find any exceedances of the ecological benchmarks evaluated. For lead, we did not estimate any exceedances of the secondary lead NAAQS. For HCl, the average modeled concentration around each facility (*i.e.*, the average concentration of all off-site data points in the modeling domain) did not exceed any ecological benchmark. In addition, each individual modeled concentration of HCl (*i.e.*, each off-site data point in the modeling domain) was below the ecological benchmarks for all facilities. Therefore, we do not expect adverse environmental effects as a result of HAP emissions from this source category and we are proposing that it is not necessary to set a more stringent standard to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect.

# *H. What are the results and proposed decisions based on our technology review for the Reinforced Plastic Composites Production source category?*

As described in section III.B of this preamble, our technology review focused on the identification and evaluation of developments in practices, processes, and control technologies that have occurred since the MACT standards were promulgated. In conducting the technology review, we reviewed various informational sources regarding the emissions from the Reinforced Plastic Composites Production source category. The review included a search of the RBLC database, reviews of air permits for reinforced plastic composites production facilities, and a review of relevant literature. We reviewed these data sources for information on practices, This document is a prepublication version, signed by EPA Administrator, Andrew R. Wheeler on 4/18/2019. We have taken steps to ensure the accuracy of this version, but it is not the official version.

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processes, and control technologies that were not considered during the development of the Reinforced Plastic Composites Production NESHAP. We also looked for information on improvements in practices, processes, and control technologies that have occurred since development of the Reinforced Plastic Composites Production NESHAP.

After reviewing information from the aforementioned sources, we did not identify any new developments in processes or control technologies used at reinforced plastic composites production facilities. We considered improvements in thermal oxidizers as HAP controls, given they were identified as potential add-on controls in the August 2, 2001, proposed rule (66 FR 40333). We did not identify any improvements in performance of thermal oxidizers, and we continue to believe that a thermal oxidizer is not a cost effective add-on control option for existing sources in this source category, due to the direct costs associated with high energy requirements for dilute HAP streams or the costs associated with operating a capture and control system. As with the Boat Manufacturing source category, we evaluated a controlled-spray training program as a practice that has potential to reduce the amount of HAP emitted in open molding resin and gel coat application operations. Specifically, we observed some facilities in the Reinforced Plastic Composites Production source category implementing a practice where the amount of overspray, during resin or gel coat application, was being weighed to determine the application efficiency. Further discussions with facility representatives and with the trade association indicated that facilities train their spray gun operators to deliver a controlled spray when applying resin and/or gel coat during open molding production, and that the practice of weighing the amount of overspray is an indicator of the effectiveness of their training program. As with the Boat Manufacturing source category, the EPA is seeking comment to determine the amount of HAP reductions that could be achieved, and whether HAP reductions can be

applicable to all open mold production operations by all facilities in the source category. The EPA seeks comment to determine whether this practice is widely used by industry, whether significant HAP reductions are achieved industry-wide, or whether HAP reductions can be achieved in the manufacturing of large and small parts.

Based on the technology review, we determined that there are no cost-effective developments in processes or control technologies that warrant revisions to the MACT standards for this source category. We will review any information provided in public responses to determine whether the rule should be amended to include a controlled-spray training program as standard cost-effective means to reduce HAP emissions. Additional details of our technology review can be found in the memorandum, *Technology Review for Boat Manufacturing and Reinforced Plastic Composites Production Source Category*, which is available in the docket for this action (Docket ID No. EPA-HQ-OAR-2016-0449).

# *I. What other actions are we proposing for the Reinforced Plastic Composites Production source category?*

In addition to the proposed actions described above, we are proposing additional revisions to the Reinforced Plastic Composites Production NESHAP. We are proposing revisions to the SSM provisions in order to ensure that they are consistent with the Court decision in *Sierra Club v. EPA*, 551 F. 3d 1019 (D.C. Cir. 2008), which vacated two provisions that exempted sources from the requirement to comply with otherwise applicable CAA section 112(d) emission standards during periods of SSM. We also are proposing to revise the Reinforced Plastic Composites Production NESHAP to include electronic reporting provisions. Our analyses and proposed changes related to these issues are discussed below.

### 1. SSM Requirements

### a. Proposed Elimination of the SSM Exemption

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We are proposing the elimination of the SSM exemption in the Reinforced Plastic Composites Production NESHAP which appears at 40 CFR 63.5835(b). As discussed at greater length in section IV.D.a and consistent with *Sierra Club v. EPA*, we are proposing standards in this rule that apply at all times. We are also proposing several revisions to Table 15 to 40 CFR part 63, subpart WWWW (the General Provisions Applicability Table), as is explained in more detail below. For example, we are proposing to eliminate the incorporation of the General Provisions' requirement that each source develop an SSM plan. We also are proposing to eliminate and revise certain recordkeeping and reporting requirements related to the SSM exemption as further described below.

The EPA has attempted to ensure that the provisions we are proposing to eliminate are inappropriate, unnecessary, or redundant in the absence of the SSM exemption. We are specifically seeking comment on whether we have successfully done so.

In proposing the standards in this rule, the EPA has taken into account startup and shutdown periods and, for the reasons explained in section IV.I.1 of this preamble, has not proposed alternate standards for those periods.

### b. Proposed Revisions to the General Provisions Applicability Table

We are proposing to revise the General Provisions table (Table 15 to 40 CFR part 63, subpart WWWW) to indicate that 40 CFR 63.6(e)(1)(i) does not apply to the Reinforced Plastic Composites Production NESHAP. We are proposing instead to add general duty regulatory text at 40 CFR 63.5835(b) that reflects the general duty to minimize emissions while eliminating the reference to periods covered by an SSM exemption. The current language in 40 CFR 63.6(e)(1)(i) characterizes what the general duty entails during periods of SSM. With the elimination of the SSM exemption, there is no need to differentiate between normal operations,

startup and shutdown, and malfunction events in describing the general duty. Therefore, the language the EPA is proposing for 40 CFR 63.5835(b) does not include that language from 40 CFR 63.6(e)(1).

We are also proposing to revise Table 15 to 40 CFR part 63, subpart WWWW, to indicate that 40 CFR 63.6(e)(1)(ii) does not apply.

We are proposing to revise the Table 15 to 40 CFR part 63, subpart WWWW, entry for 40 CFR 63.6(e)(3) by changing the "yes" in column 3 to a "no." As previously stated, these paragraphs require development of an SSM plan and specify SSM recordkeeping and reporting requirements related to the SSM plan. As noted, since the EPA is proposing to remove the SSM exemptions, affected units will be subject to an emission standard during such events. The applicability of a standard during such events will ensure that sources have ample incentive to plan for and achieve compliance and, thus, the SSM plan requirements are no longer necessary.

We are proposing to revise the Table 15 to 40 CFR part 63, subpart WWWW, entry for 40 CFR 63.6(f)(1) by changing the "yes" in column 3 to a "no." The current language of 40 CFR 63.6(f)(1) exempts sources from non-opacity standards during periods of SSM. As discussed above, the Court in *Sierra Club* vacated the exemptions contained in this provision and held that the CAA requires that some CAA section 112 standards apply continuously. Consistent with *Sierra Club*, the EPA is proposing to revise standards in this rule to apply at all times.

We are proposing to revise Table 15 to 40 CFR part 63, subpart WWWW, to indicate that 40 CFR 63.7(e)(1) does not apply. Section 63.7(e)(1) describes performance testing requirements. The EPA is instead proposing to revise performance testing requirement at 40 CFR 63.5850(d). The performance testing requirements we are proposing to add differ from the General Provisions performance testing provisions in several respects. The regulatory text does

not include the language in 40 CFR 63.7(e)(1) that restated the SSM exemption and language that precluded startup and shutdown periods from being considered "representative" for purposes of performance testing. The proposed performance testing provisions exclude periods of startup and shutdown. As in 40 CFR 63.7(e)(1), performance tests conducted under this subpart should not be conducted during malfunctions because conditions during malfunctions are often not representative of normal operating conditions. The EPA is proposing to add language that requires the owner or operator to record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Section 63.7(e) requires that the owner or operator make available to the Administrator such records "as may be necessary to determine the condition of the performance test" available to the Administrator upon request, but does not specifically require the information to be recorded. The regulatory text the EPA is proposing to add to this provision builds on that requirement and makes explicit the requirement to record the information.

We are proposing to revise Table 15 to 40 CFR part 63, subpart WWWW, to indicate that 40 CFR 63.8(c)(1)(i) and (iii) do not apply to 40 CFR part 63, subpart WWWW. The cross-references to the general duty and SSM plan requirements in those subparagraphs are not necessary in light of other requirements of 40 CFR 63.8 that require good air pollution control practices (40 CFR 63.8(c)(1)) and that set out the requirements of a quality control program for monitoring equipment (40 CFR 63.8(d)).

We are proposing to revise Table 15 to 40 CFR part 63, subpart WWWW, to indicate 40 CFR 63.8(d)(3) does not apply.

We are proposing to revise the Table 15 to 40 CFR part 63, subpart WWWW, entry for 40 CFR 63.10(b)(2)(i) by changing the "yes" in column 3 to a "no." Section 63.10(b)(2)(i) describes the recordkeeping requirements during startup and shutdown. These recording provisions are no longer necessary because the EPA is proposing that recordkeeping and reporting applicable to normal operations will apply to startup and shutdown. In the absence of special provisions applicable to startup and shutdown, such as a startup and shutdown plan, there is no reason to retain additional recordkeeping for startup and shutdown periods.

We are proposing to revise the Table 15 to 40 CFR part 63, subpart WWWW, entry for 40 CFR 63.10(b)(2)(ii) through (v) by changing the "yes" in column 3 to a "no." Sections 63.10(b)(2)(ii) through (v) describes the recordkeeping requirements during startup, shutdown, and malfunction. The EPA is proposing to add such requirements to 40 CFR 63.5915(a). The regulatory text we are proposing to add differs from the General Provisions it is replacing in that the General Provisions requires the creation and retention of a record of the occurrence and duration of each malfunction of process, air pollution control, and monitoring equipment. The EPA is proposing that this requirement apply to any failure to meet an applicable standard and is requiring that the source record the date, time, and duration of the failure rather than the "occurrence." In this rule amendment the EPA is proposing to add to 40 CFR 63.5915(a) a requirement that sources keep records that include a list of the affected source or equipment and actions taken to minimize emissions, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions. The EPA is proposing to require that sources keep records of this information to ensure that there is adequate information to allow the EPA to determine the severity of any failure to meet a

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standard, and to provide data that may document how the source met the general duty to minimize emissions when the source has failed to meet an applicable standard.

We are proposing to revise Table 15 to 40 CFR part 63, subpart WWWW, to indicate that 40 CFR 63.10(c)(15) does not apply. When applicable, the provision allowed an owner or operator to use the affected source's SSM plan or records kept to satisfy the recordkeeping requirements of the SSM plan, specified in 40 CFR 63.6(e), to also satisfy the requirements of 40 CFR 63.10(c)(10) through (12). The EPA is proposing to eliminate this requirement because SSM plans would no longer be required, and, therefore, 40 CFR 63.10(c)(15) no longer serves any useful purpose for affected units.

We are proposing to revise the Table 15 to 40 CFR part 63, subpart WWWW, entry for 40 CFR 63.10(d)(5) by changing the "yes" in column 3 to a "no." Section 63.10(d)(5) describes the reporting requirements for startups, shutdowns, and malfunctions. To replace the General Provisions reporting requirement, the EPA is proposing to add reporting requirements to 40 CFR 63.5910(h). We are proposing language that requires sources that fail to meet an applicable standard at any time to report the information concerning such events in the semiannual compliance report. We are proposing that the report must contain the number, date, time, duration, and the cause of such events (including unknown cause, if applicable), a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions. The EPA is proposing this requirement to ensure that there is adequate information to determine compliance, to allow the EPA to determine the severity of the failure to meet an applicable standard, and to provide data that may document how the source met the general duty to minimize emissions during a failure to meet an applicable standard.

# c. Proposed Revisions to Definitions

We are proposing that the definition of "Deviation" in 40 CFR 63.5900(e) be revised to remove language that differentiates between normal operations, startup and shutdown, and malfunction events.

### 2. Electronic Reporting Requirements

The EPA is proposing that owners and operators of facilities subject to the Reinforced Plastic Composites Production NESHAP submit electronic copies of initial notifications required in 40 CFR 63.9(b), notifications of compliance status required in 40 CFR 63.9(h), performance test reports, and semiannual reports through the EPA's CDX, using CEDRI. A description of the electronic data submission process is provided in the memorandum, *Electronic Reporting* Requirements for New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) Rules, available in Docket ID No. EPA-HQ-OAR-2016-0449. The proposed rule requires that performance test results collected using test methods that are supported by the EPA's ERT as listed on the ERT website<sup>25</sup> at the time of the test be submitted in the format generated through the use of the ERT and that other performance test results be submitted in portable document format using the attachment module of the ERT. For semiannual reports, the proposed rule requires that owners and operators use the appropriate spreadsheet template to submit information to CEDRI. A draft version of the proposed template for these reports is included in the docket for this rulemaking (Docket ID. No. EPA-HQ-OAR-2016-0449). The EPA specifically requests comment on the content, layout, and overall design of the template.

<sup>&</sup>lt;sup>25</sup> https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert. This document is a prepublication version, signed by EPA Administrator, Andrew R. Wheeler on 4/18/2019. We have taken steps to ensure the accuracy of this version, but it is not the official version.

The EPA has identified two broad circumstances in which electronic reporting extensions may be provided. In both circumstances, the decision to accept the claim of needing additional time to report is within the discretion of the Administrator, and reporting should occur as soon as possible. The EPA is providing these potential extensions to protect owners and operators from noncompliance in cases where they cannot successfully submit a report by the reporting deadline for reasons outside of their control. The situation where an extension may be warranted due to outages of the EPA's CDX or CEDRI which precludes an owner or operator from accessing the system and submitting required reports is addressed in 40 CFR 63.5910. The situation where an extension may be warranted due to a force majeure event, which is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents an owner or operator from complying with the requirement to submit a report electronically as required by this rule is addressed in 40 CFR 63.5910. Examples of such events are acts of nature, acts of war or terrorism, equipment failure, or safety hazards beyond the control of the facility.

The electronic submittal of the reports addressed in this proposed rulemaking will increase the usefulness of the data contained in those reports, is in keeping with current trends in data availability and transparency, will further assist in the protection of public health and the environment, will improve compliance by facilitating the ability of regulated facilities to demonstrate compliance with requirements and by facilitating the ability of delegated state, local, tribal, and territorial air agencies and the EPA to assess and determine compliance, and will ultimately reduce burden on regulated facilities, delegated air agencies, and the EPA. Electronic reporting also eliminates paper-based, manual processes, thereby saving time and resources, simplifying data entry, eliminating redundancies, minimizing data reporting errors, and

providing data quickly and accurately to the affected facilities, air agencies, the EPA, and the public. Moreover, electronic reporting is consistent with the EPA's plan<sup>26</sup> to implement Executive Order 13563 and is in keeping with the EPA's agency-wide policy<sup>27</sup> developed in response to the White House's Digital Government Strategy.<sup>28</sup> For more information on the benefits of electronic reporting, see the memorandum, *Electronic Reporting Requirements for New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) Rules*, available in Docket ID No. EPA-HQ-OAR-2016-0449.

In this action, we are amending the rule to include 40 CFR 63.5912 describing the provisions for electronic reporting. In addition, 40 CFR 63.5920 has been amended to indicate that records may be stored as electronic documents.

3. Correction to Table 4, Work Practice Standards.

In this action, we are adding text to Table 4 to 40 CFR part 63, subpart WWWW to clarify that mixers that route emissions to a capture and control device system that is at least 95-percent efficient overall are not required to have covers. In the 2003 NESHAP rulemaking, we determined that MACT for existing sources was pollution prevention measures (for mixing and BMC manufacturing operations) and that MACT for new sources was 95-percent control. We also considered whether the new source MACT floor for mixing operations should be incorporation of the pollution prevention measures (in this case covering the mixers) combined

<sup>&</sup>lt;sup>26</sup> EPA's Final Plan for Periodic Retrospective Reviews, August 2011. Available at: *https://www.regulations.gov/document?D=EPA-HQ-OA-2011-0156-0154*.

<sup>&</sup>lt;sup>27</sup> E-Reporting Policy Statement for EPA Regulations, September 2013. Available at: *https://www.epa.gov/sites/production/files/2016-03/documents/epa-ereporting-policy-statement-2013-09-30.pdf*.

<sup>&</sup>lt;sup>28</sup> Digital Government: Building a 21<sup>st</sup> Century Platform to Better Serve the American People, May 2012. Available at:

https://obamawhitehouse.archives.gov/sites/default/files/omb/egov/digital-government/digital-government.html.

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with 95-percent control. We determined that the best controlled facilities which route emissions to a 95-percent efficient control device do not also incorporate the best pollution prevention techniques. Therefore, we concluded that combining the pollution prevention requirements with the 95-percent control requirements would result in an overall control level that exceeds the levels at the best controlled facilities. (66 FR 40332, August 2, 2001). However, the text in table 4 of the regulation did not directly address whether mixers that capture and control emissions by 95 percent overall need to have covers. We have added text in line 6 of table 4 to clarify that covers are not required for mixers that fully capture and route emissions to a control device with at least 95-percent efficiency.

J. What compliance dates are we proposing for the Reinforced Plastic Composites Production source category?

The EPA is proposing that affected sources that commenced construction or reconstruction on or before [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER] must comply with all of the amendments, with the exception of the proposed electronic format for submitting notifications and compliance reports, no later than 180 days after the effective date of the final rule. Affected sources that commence construction or reconstruction after [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER] must comply with all requirements of the subpart, including the amendments being proposed, with the exception of the proposed electronic format for submitting notifications and compliance reports, no later than the effective date of the final rule or upon startup, whichever is later. All affected facilities would have to continue to meet the current requirements of 40 CFR part 63, subpart WWWW, until the applicable compliance date of the amended rule. The final action is

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not expected to be a "major rule" as defined by 5 U.S.C. 804(2), so the effective date of the final rule will be the promulgation date as specified in CAA section 112(d)(10).

For existing sources, we are proposing two changes that would impact ongoing compliance requirements for 40 CFR part 63, subpart WWWW. As discussed elsewhere in this preamble, we are proposing to add a requirement that notifications, performance test results, and compliance reports be submitted electronically. We are also proposing to change the requirements for SSM by removing the exemption from the requirements to meet the standard during SSM periods and by removing the requirement to develop and implement an SSM plan. Our experience with similar industries that are required to convert reporting mechanisms to install necessary hardware and software, become familiar with the process of submitting performance test results electronically through the EPA's CEDRI, test these new electronic submission capabilities, and reliably employ electronic reporting shows that a time period of a minimum of 90 days, and, more typically, 180 days is generally necessary to successfully accomplish these revisions. Our experience with similar industries further shows that this sort of regulated facility generally requires a time period of 180 days to read and understand the amended rule requirements; to evaluate their operations to ensure that they can meet the standards during periods of startup and shutdown as defined in the rule and make any necessary adjustments; and to update their operation, maintenance, and monitoring plan to reflect the revised requirements. The EPA recognizes the confusion that multiple different compliance dates for individual requirements would create and the additional burden such an assortment of dates would impose. From our assessment of the timeframe needed for compliance with the entirety of the revised requirements, the EPA considers a period of 180 days to be the most expeditious compliance period practicable and, thus, is proposing that all affected sources that commenced

construction or reconstruction on or before **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]** be in compliance with all of this regulation's revised requirements within 180 days of the regulation's effective date.

We solicit comment on the proposed compliance periods, and we specifically request submission of information from sources in this source category regarding specific actions that would need to be undertaken to comply with the proposed amended requirements and the time needed to make the adjustments for compliance with any of the revised requirements. We note that information provided may result in changes to the proposed compliance dates.

# V. Summary of Cost, Environmental, and Economic Impacts

A. What are the affected sources?

The EPA estimates that there are 93 boat manufacturing facilities that are subject to the Boat Manufacturing NESHAP affected by the proposed amendments to 40 CFR part 63, subpart VVVV, and 448 reinforced plastic composites production facilities subject to the Reinforced Plastic Composites Production NESHAP, affected by the proposed amendments to 40 CFR part 63, subpart WWW. The bases of our estimates of affected facilities are provided in the memorandum, *Emissions Data for the National Emission Standards for Hazardous Air Pollutants for Boat Manufacturing and the National Emission Standards for Hazardous Air Pollutants for Reinforced Plastic Composites Production*, which is available in the respective dockets for this action. We are not currently aware of any planned or potential new or reconstructed manufacturing facilities in either of the source categories.

# B. What are the air quality impacts?

All major sources in the two source categories would be required to comply with the relevant emission standards at all times without the SSM exemption. We were unable to quantify

the specific emissions reductions associated with eliminating the SSM exemption. However, This document is a prepublication version, signed by EPA Administrator, Andrew R. Wheeler on 4/18/2019. We have taken steps to ensure the accuracy of this version, but it is not the official version.

eliminating the SSM exemption has the potential to reduce emissions by requiring facilities to meet the applicable standard during SSM periods.

### *C. What are the cost impacts?*

The one-time cost associated with reviewing the revised rules and becoming familiar with the electronic reporting requirements is estimated to be \$446,448 (2016\$); the one-time cost is composed of \$75,629 for the Boat Manufacturing source category (93 facilities), and \$370,819 for the Reinforced Plastic Composites Production source category (448 facilities). The total cost per facility in the Boat Manufacturing source category is estimated to be \$399 per facility to review the final rule requirements and \$414 per facility to become familiar with the electronic reporting requirements. The total cost per facility in the Reinforced Plastic Composites Production source category is estimated to be \$414 per facility to review the final rule requirements and \$414 per facility to review the final rule requirements. The total cost per facility to review the final rule requirements and \$414 per facility to review the final rule requirements and \$414 per facility to review the final rule requirements and \$414 per facility to review the final rule requirements and \$414 per facility to review the final rule requirements. All other costs associated with notifications, reporting, and recordkeeping are believed to be unchanged because the facilities in each source category are currently required to comply with notification, reporting, and recordkeeping requirements, and will continue to be required to comply with those requirements. The number of personnel-hours required to develop the materials in support of reports required by the NESHAP remain unchanged.

### D. What are the economic impacts?

Economic impact analyses focus on changes in market prices and output levels. If changes in market prices and output levels in the primary markets are significant enough, impacts on other markets may also be examined. Both the magnitude of costs needed to comply with a proposed rule and the distribution of these costs among affected facilities can have a role in determining how the market will change in response to a proposed rule.

The cost per facility for all of the facilities in both source categories to review the proposed rule requirements and to become familiar with the electronic reporting requirements are less than 1 percent of annual sales revenues. These costs are not expected to result in a significant market impact, regardless of whether they are passed on to the purchaser or absorbed by the firms.

In addition, the EPA prepared a small business screening assessment to determine whether any of the identified affected entities are small entities, as defined by the U.S. Small Business Administration. As result of our small business screening, we have identified 73 out of the 93 facilities in the Boat Manufacturing NESHAP as small entities, while 309 out of the 448 facilities in the Reinforced Plastic Composites Production NESHAP are small entities. For both industries, the costs associated with becoming familiar with the proposed rule requirements and to become familiar with the electronic reporting requirements are less than 1 percent of their annual sales revenues. Therefore, there are no significant economic impacts on a substantial number of small entities from these proposed amendments.

### *E. What are the benefits?*

The EPA does not anticipate reductions in HAP emissions as a result of the proposed amendments to the Boat Manufacturing NESHAP or the Reinforced Plastic Composites Production NESHAP. Because these proposed amendments are not considered economically significant, as defined by Executive Order 12866, and because no emission reductions were estimated, we did not estimate any health benefits from reducing emissions.

### **VI. Request for Comments**

We solicit comments on all aspects of this proposed action. In addition to general comments on this proposed action, we are also interested in additional data that may improve the

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risk assessments and other analyses. We are specifically interested in receiving any improvements to the data used in the site-specific emissions profiles used for risk modeling. Such data should include supporting documentation in sufficient detail to allow characterization of the quality and representativeness of the data or information. Section VII of this preamble provides more information on submitting data.

During site visits to various reinforced plastic composites production facilities, the EPA noted that a common practice observed at multiple facilities was the weighing of overspray collected from the floor as an indicator of spray efficiency. Overspray in this context would refer to the resin or gel coat that has left the spray gun, but was not applied to the product being manufactured. The EPA is also aware of a controlled-spray certification program offered by the American Composites Manufacturers Association (ACMA). After discussing the training program in greater detail with ACMA, and general controlled-spray training with the National Marine Manufacturers Association (NMMA), we are soliciting comment to collect information regarding the potential cost and benefit of revising the Boat Manufacturing NESHAP and/or the Reinforced Plastic Composites Production NESHAP to include controlled-spray training as a work practice standard. The work practice standard would apply to operations where styrenecontaining resins and gel coats are sprayed onto an open mold. Refer to the memorandum with the subject, Controlled Spray Program: Request for Comments, in the docket (Docket ID No. EPA-HQ-OAR-2016-0447 for the Boat Manufacturing NESHAP and EPA-HQ-OAR-2016-0449 for the Reinforced Plastic Composites Production NESHAP). The referenced document includes background information related to controlling overspray during open molding operations, description of the type of information we are currently seeking, and proposed work practice

language for the Boat Manufacturing NESHAP and the Reinforced Plastic Composites Manufacturing NESHAP.

#### **VII. Submitting Data Corrections**

The site-specific emissions profiles used in the source category risk and demographic analyses and instructions are available for download on the RTR website at *https://www3.epa.gov/ttn/atw/rrisk/rtrpg.html*. The data files include detailed information for each HAP emissions release point for the facilities in the source category.

If you believe that the data are not representative or are inaccurate, please identify the data in question, provide your reason for concern, and provide any "improved" data that you have, if available. When you submit data, we request that you provide documentation of the basis for the revised values to support your suggested changes. To submit comments on the data downloaded from the RTR website, complete the following steps:

1. Within this downloaded file, enter suggested revisions to the data fields appropriate for that information.

2. Fill in the commenter information fields for each suggested revision (*i.e.*, commenter name, commenter organization, commenter email address, commenter phone number, and revision comments).

3. Gather documentation for any suggested emissions revisions (*e.g.*, performance test reports, material balance calculations).

4. Send the entire downloaded file with suggested revisions in Microsoft® Access format and all accompanying documentation to Docket ID No. EPA-HQ-OAR-2016-0447 for the Boat Manufacturing NESHAP and EPA-HQ-OAR-2016-0449 for the Reinforced Plastic Composites

Production NESHAP (through the method described in the **ADDRESSES** section of this preamble).

5. If you are providing comments on a single facility or multiple facilities, you need only submit one file for all facilities. The file should contain all suggested changes for all sources at that facility (or facilities). We request that all data revision comments be submitted in the form of updated Microsoft® Excel files that are generated by the Microsoft® Access file. These files are provided on the RTR website at https://www3.epa.gov/ttn/atw/rrisk/rtrpg.html.

#### **VIII. Statutory and Executive Order Reviews**

Additional information about these statutes and Executive Orders can be found at *https://www.epa.gov/laws-regulations/laws-and-executive-orders*.

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was, therefore, not submitted to OMB for review.

## B. Executive Order 13771: Reducing Regulation and Controlling Regulatory Costs

This action is not expected to be an Executive Order 13771 regulatory action because this action is not significant under Executive Order 12866.

#### C. Paperwork Reduction Act (PRA)

The information collection activities in this proposed rule have been submitted for approval to OMB under the PRA, as discussed for each source category covered by this proposal in sections VIII.C.1 and 2.

1. Boat Manufacturing

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The ICR document that the EPA prepared has been assigned EPA ICR number 1966.06. You can find a copy of the ICR in the docket for this rule, and it is briefly summarized here. We are proposing changes to the recordkeeping and reporting requirements associated with 40 CFR part 63, subpart VVVV, in the form of eliminating the SSM plan and reporting requirements; including reporting requirements for deviations in the semiannual report; and including the requirement for electronic submittal of reports. In addition, the number of facilities subject to the standards changed. The number of respondents was reduced from 441 to 93 based on consultation with industry representatives and state/local agencies.

*Respondents/affected entities:* The respondents to the recordkeeping and reporting requirements are owners or operators of boat manufacturing facilities subject to 40 CFR part 63, subpart VVVV.

Respondent's obligation to respond: Mandatory (40 CFR part 63, subpart VVVV). Estimated number of respondents: 93 facilities.

*Frequency of response:* The frequency of responses varies depending on the burden item. Responses include one-time review of rule amendments, reports of periodic performance tests, and semiannual compliance reports.

*Total estimated burden:* The annual recordkeeping and reporting burden for responding facilities to comply with all of the requirements in the NESHAP, averaged over the 3 years of this ICR, is estimated to be 7,914 hours (per year). The average annual burden to the Agency over the 3 years after the amendments are final is estimated to be 2,318 hours (per year) for the Agency. Burden is defined at 5 CFR 1320.3(b).

*Total estimated cost:* The annual recordkeeping and reporting cost for responding facilities to comply with all of the requirements in the NESHAP, averaged over the 3 years of

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this ICR, is estimated to be \$816,500 (rounded, per year). There are no estimated capital and operation and maintenance (O&M) costs. The total average annual Agency cost over the first 3 years after the amendments are final is estimated to be \$107,700.

2. Reinforced Plastic Composites Production

The ICR document that the EPA prepared has been assigned EPA ICR number 1976.06. You can find a copy of the ICR in the docket for this rule, and it is briefly summarized here. We are proposing changes to the recordkeeping and reporting requirements associated with 40 CFR part 63, subpart WWWW, in the form of eliminating the SSM plan and reporting requirements; including reporting requirements for deviations in the semiannual report; and including the requirement for electronic submittal of reports. In addition, the number of facilities subject to the standards changed. The number of respondents was reduced from 584 to 448 based on consultation with industry representatives and state/local agencies.

*Respondents/affected entities:* The respondents to the recordkeeping and reporting requirements are owners or operators of reinforced plastic composites production facilities subject to 40 CFR part 63, subpart WWWW.

Respondent's obligation to respond: Mandatory (40 CFR part 63, subpart WWWW). Estimated number of respondents: 448 facilities.

*Frequency of response:* The frequency of responses varies depending on the burden item. Responses include one-time review of rule amendments, reports of periodic performance tests, and semiannual compliance reports.

*Total estimated burden:* The annual recordkeeping and reporting burden for responding facilities to comply with all of the requirements in the NESHAP, averaged over the 3 years of this ICR, is estimated to be 38,125 hours (per year). The average annual burden to the Agency

over the 3 years after the amendments are final is estimated to be 2,318 hours (per year) for the Agency. Burden is defined at 5 CFR 1320.3(b).

*Total estimated cost:* The annual recordkeeping and reporting cost for responding facilities to comply with all of the requirements in the NESHAP, averaged over the 3 years of this ICR, is estimated to be \$3,933,400 (rounded, per year). There are no estimated capital and O&M costs. The total average annual Agency cost over the first 3 years after the amendments are final is estimated to be \$107,700.

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. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9.

Submit your comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden to the EPA using the dockets identified at the beginning of this rule. You may also send your ICR-related comments to OMB's Office of Information and Regulatory Affairs via email to *OIRA\_submission@omb.eop.gov*, Attention: Desk Officer for the EPA. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after receipt, OMB must receive comments no later than [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. The EPA will respond to any ICR-related comments in the final rule.

## D. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This action will not impose any requirements on the

boat manufacturing and/or reinforced plastic composites production industries as a whole, and therefore, will not impose any requirements on small entities included in each source category.

### E. Unfunded Mandates Reform Act (UMRA)

This action does not contain an unfunded mandate of \$100 million or more as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local, or tribal governments or the private sector.

#### F. Executive Order 13132: Federalism

This action does not have federalism implications. It 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.

#### G. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175. No tribal facilities are known to be engaged in the Boat Manufacturing or Reinforced Plastic Composites Production source categories, and would not be affected by this action. Thus, Executive Order 13175 does not apply to this action.

H. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. This action's health and risk assessments are contained in sections III.A and IV.A and B of this preamble.

I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211 because it is not a significant regulatory action under Executive Order 12866.

J. National Technology Transfer and Advancement Act (NTTAA)

This rulemaking does not involve technical standards.

K. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA believes that this action does not have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994).

The documentation for this decision is contained in sections IV.A, IV.B, IV.F, and IV.G of this preamble. As discussed in sections IV.A, IV.B, IV.F, and IV.G of this preamble, we performed a demographic analysis for each source category, which is an assessment of risks to individual demographic groups, of the population close to the facilities (within 50 km and within 5 km). In our analysis, we evaluated the distribution of HAP-related cancer risks and noncancer hazards from the Boat Manufacturing source category and the Reinforced Plastic Composites Production source category across different social, demographic, and economic groups within the populations living near operations identified as having the highest risks.

Results of the demographic analysis performed for the Boat Manufacturing source category indicate that, for seven of the 11 demographic groups, Hispanic or Latino, minority, people living below the poverty level, linguistically isolated people, adults without a high school diploma, adults 65 years of age or older, and African Americans that reside within 5 km of

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facilities in the source category is greater than the corresponding national percentage for the same demographic groups. When examining the risk levels of those exposed to emissions from boat manufacturing facilities, we find that no one is exposed to a cancer risk at or above 1-in-1 million or to a chronic noncancer TOSHI greater than 1.

The results of the Reinforced Plastic Composite Production source category demographic analysis indicate that emissions from the source category expose approximately 1,600 people to a cancer risk at or above 1-in-1 million and no people to a chronic noncancer TOSHI greater than 1. The percentages of the at-risk population for three of the 11 demographic groups; people living below the poverty level, adults without a high school diploma, and African Americans that reside within 50 km of facilities in the source category is greater than the corresponding national percentage for the same demographic groups.

## National Emission Standards for Hazardous Air Pollutants: Boat Manufacturing and Reinforced Plastic Composites Production Residual Risk and Technology Review Page 118 of 153

# List of Subjects in 40 CFR Part 63

•

Environmental protection, Air pollution control, Hazardous substances, Reporting and

recordkeeping requirements.

Dated:

Andrew R. Wheeler, Administrator.

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For the reasons set out 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.

### Subpart VVVV – [Amended]

- 2. Section 63.5764 is amended by removing paragraph (e).
- 3. Section 63.5765 is added to read as follows:

#### §63.5765 How do I submit my reports?

(a) Within 60 days after the date of completing each performance test required by this subpart, you must submit the results of the performance test following the procedures specified in paragraphs (a)(1) through (3) of this section.

(1) Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (*https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert*) at the time of the test. Submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). The data must be submitted in a file format generated through the use of the EPA's ERT. Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.

(2) Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test. The results of the performance test must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI.

(3) Confidential business information (CBI). If you claim some of the information submitted under paragraph (a)(1) of this section is CBI, you must submit a complete file, including information claimed to be CBI, to the EPA. The file must be generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described in paragraph (a)(1) of this section.

(b) Within 60 days after the date of completing each continuous monitoring system (CMS) performance evaluation as defined in §63.2, you must submit the results of the performance evaluation following the procedures specified in paragraphs (b)(1) through (3) of this section.

(1) Performance evaluations of CMS measuring relative accuracy test audit (RATA) pollutants that are supported by the EPA's ERT as listed on the EPA's ERT website at the time of the evaluation. Submit the results of the performance evaluation to the EPA via CEDRI, which can be accessed through the EPA's CDX. The data must be submitted in a file format generated through the use of the EPA's ERT. Alternatively, you may submit an electronic file consistent with the XML schema listed on the EPA's ERT website.

(2) Performance evaluations of CMS measuring RATA pollutants that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the evaluation. The results

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of the performance evaluation must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI.

(3) Confidential business information. If you claim some of the information submitted under paragraph (a)(1) of this section is CBI, you must submit a complete file, including information claimed to be CBI, to the EPA. The file must be generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described in paragraph (a)(1) of this section.

(c) You must submit to the Administrator semiannual compliance reports of the information required in 63.5764(c) and (d). Beginning on [date 180 days after date of publication of the final rule in the **FEDERAL REGISTER**], submit all subsequent reports following the procedure specified in paragraph (d) of this section.

(d) If you are required to submit reports following the procedure specified in this paragraph, beginning on [date 180 days after date of publication of the final rule in the **FEDERAL REGISTER**], you must submit all subsequent reports to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). You must use the appropriate electronic report template on the CEDRI website (*https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri*) for this subpart. The date

report templates become available will be listed on the CEDRI website. The report must be submitted by the deadline specified in this subpart, regardless of the method in which the report is submitted. If you claim some of the information required to be submitted via CEDRI is confidential business information (CBI), submit a complete report, including information claimed to be CBI, to the EPA. The report must be generated using the appropriate form on the CEDRI website or an alternate electronic file consistent with the XML schema listed on the CEDRI website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

(e) If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. To assert a claim of EPA system outage, you must meet the requirements outlined in paragraphs (e)(1) through (7) of this section.

(1) You must have been or will be precluded from accessing CEDRI and submitting a required report within the time prescribed due to an outage of either the EPA's CEDRI or CDX systems.

(2) The outage must have occurred within the period of time beginning five business days prior to the date that the submission is due.

(3) The outage may be planned or unplanned.

(4) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(5) You must provide to the Administrator a written description identifying:

(i) The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable;

(ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to EPA system outage;

(iii) Measures taken or to be taken to minimize the delay in reporting; and

(iv) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(6) The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(7) In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved.

(f) If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of force majeure for failure to timely comply with the reporting requirement. To assert a claim of force majuere, you must meet the requirements outlined in paragraphs (f)(1) through (5) of this section.

(1) You may submit a claim if a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning five business days prior to the date the submission is due. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the

control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (*e.g.*, hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (e.g., large scale power outage).

(2) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(3) You must provide to the Administrator:

(i) A written description of the force majeure event;

(ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event;

(iii) Measures taken or to be taken to minimize the delay in reporting; and

(iv) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(4) The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(5) In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs.

4. Section 63.5767 is amended by revising paragraph (d) to read as follows:

#### §63.5767 What records must I keep?

\* \* \* \* \*

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(d) If your facility has an add-on control device, you must keep the records of any failures to meet the applicable standards, including the date, time, and duration of the failure; a list of the affected add-on control device and actions taken to minimize emissions, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions; control device performance tests; and continuous monitoring system performance evaluations.

5. Section 63.5770 is amended to add paragraph (e), which reads as follows:

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

\* \* \* \* \*

(e) Any records required to be maintained by this part that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.

6. Section 63.5779 is amended by removing the definition for "Deviation" and adding definitions for "Deviation after [date 180 days after date of publication of the final rule in the **Federal Register**]," "Deviation before [date 181 days after date of publication of the final rule in the **Federal Register**]," "Shutdown," and "Startup" in alphabetical order to read as follows: §63.5779 What definitions apply to this subpart?

\* \* \* \* \*

*Deviation after* [date 180 days after date of publication of the final rule in the **Federal Register**] 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 standard; or

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

*Deviation before* [date 181 days after date of publication of the final rule in the **Federal Register**] 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 standard; or

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

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

\* \* \* \* \*

*Shutdown* after [date 180 days after date of publication of the final rule in the **Federal Register**] means the cessation of operation of the add-on control devices.

*Startup* after [date 181 days after date of publication of the final rule in the **Federal Register**] means the setting in operation of the add-on control devices.

7. Table 8 to Subpart VVVV is amended to read as follows:

# Table 8 to Subpart VVVV of Part 63—Applicability of General Provisions (40 CFR Part

## 63, Subpart A) to Subpart VVVV

As specified in §63.5773, you must comply with the applicable requirements of the General Provisions according to the following table:

Citation	Requirement	Applies to subpart VVVV	Explanation
§63.1(a)	General Applicability	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)	Prohibited Activities	Yes.	
§63.4(b)-(c)	Circumvention/Severability	Yes.	
§63.5(a)	Construction/Reconstruction	Yes.	
§63.5(b)	Requirements for Existing, Newly Constructed, and Reconstructed Sources	Yes.	
§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)	Compliance Dates for New and Reconstructed Sources	Yes.	§63.695 specifies compliance dates, including the compliance date for new area sources that become major sources after the effective date of the rule.
§63.6(c)	Compliance Dates for Existing Sources	Yes.	§63.5695 specifies compliance dates, including the compliance date for existing area sources that become major sources after the effective date of the rule.
§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	No.	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)	Extension of Compliance with Emission Standards	Yes.	
§63.6(j)	Exemption from Compliance with Emission Standards	Yes.	
§63.7(a)(1)	Performance Test Requirements	Yes.	
§63.7(a)(2)	Dates for performance tests	No.	§63.5716 specifies performance test dates.

§63.7(a)(3)	Performance testing at other times	Yes.	
§63.7(b)-(h)	Other performance testing 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)(i) and (iii)	Continuous Monitoring System Operation and Maintenance	No.	References to startup, shutdown, malfunction are not applicable
§63.8(c)(1)-(4)	Continuous Monitoring System Operation and Maintenance	Yes.	Except those provisions in §63.8(c)(1)(i) and (iii) as noted above
§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.	Except those provisions of §63.8(d)(3) regarding a startup, shutdown, malfunction plan as noted below
§63.8(d)(3)	Quality Control Program	No.	No requirement for a startup, shutdown, malfunction plan.
§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.
§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)	Notification of Compliance Status	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.	§§63.567 and 63.5770 specify additional recordkeeping requirements.
§63.10(b)(2)(i), (iii), (vi)-(xiv)	General Recordkeeping Requirements	Yes.	
\$63.10(b)(2)(ii), (iv), (v)	Recordkeeping Relevant to Startup, Shutdown, and Malfunction Periods	No.	

§63.10(b)(3)	Recordkeeping Requirements for Applicability Determinations	Yes.	§63.5686 specifies applicability determinations for non-major sources.	
• • • • • • • •	Additional Recordkeeping for Sources with CMS	Yes.	Applies only to sources with add-on controls.	
§63.10(c)(15)	Additional Recordkeeping for Sources with CMS	No.	No requirement for a startup, shutdown, malfunction plan.	
§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	No	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.	
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§63.13	Addresses	Yes.		

## Subpart WWWW – [Amended]

8. Section 63.5835 is amended by revising paragraph (b) and deleting paragraph (d). The revisions read as follows:

## §63.5835 What are my general requirements for complying with this subpart?

\* \* \* \* \*

(b) You must be in compliance with all organic HAP emissions limits in this subpart that you meet using add-on controls at all times.

- 9. Section 63.5900 is amended by revising paragraph (c), and deleting paragraphs (d) and
  - (e). The revisions read as follows:

## §63.5900 How do I demonstrate continuous compliance with the standards?

\* \* \* \* \*

(c) You must meet the organic HAP emissions limits and work practice standards that apply to you at all times.

10. Section 63.5910 is amended by deleting paragraph (c)(4), and revising paragraphs (d),

(e), and (h). The revisions read as follows:

## §63.5910 What reports must I submit and when?

\* \* \* \* \*

(d) For each deviation from an organic HAP emissions limitation (*i.e.*, emissions limit and operating limit) and for each deviation from the requirements for work practice standards that occurs at an affected source where you are not using a CMS to comply with the organic HAP emissions limitations or work practice standards in this subpart, the compliance report must contain the information in paragraphs (c)(1) through (4) of this section and in paragraphs (d)(1) and (2) of this section.

\* \* \*

(e) For each deviation from an organic HAP emissions limitation (*i.e.*, emissions limit and operating limit) occurring at an affected source where you are using a CMS to comply with the organic HAP emissions limitation in this subpart, you must include the information in paragraphs (c)(1) through (4) of this section and in paragraphs (e)(1) through (12) of this section.

(1) The date and time that each malfunction started and stopped.

(2) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out of control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped.

(5) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

\* \* \*

(h) Submit compliance reports based on the requirements in table 14 to this subpart, and not based on the requirements in §63.999.

\* \* \* \* \*

11. Section 63.5912 has been added to read as follows:

## §63.5912 How do I submit my reports?

(a) Within 60 days after the date of completing each performance test required by this subpart, you must submit the results of the performance test following the procedures specified in paragraphs (a)(1) through (3) of this section.

(1) Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (*https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert*) at the time of the test. Submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). The data must be submitted in a file format generated through the use of the EPA's ERT. Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.

(2) Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test. The results of the performance test must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI.

(3) Confidential business information (CBI). If you claim some of the information submitted under paragraph (a)(1) of this section is CBI, you must submit a complete file, including information claimed to be CBI, to the EPA. The file must be generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to

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U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described in paragraph (a)(1) of this section.

(b) Within 60 days after the date of completing each continuous monitoring system (CMS) performance evaluation as defined in §63.2, you must submit the results of the performance evaluation following the procedures specified in paragraphs (b)(1) through (3) of this section.

(1) Performance evaluations of CMS measuring relative accuracy test audit (RATA) pollutants that are supported by the EPA's ERT as listed on the EPA's ERT website at the time of the evaluation. Submit the results of the performance evaluation to the EPA via CEDRI, which can be accessed through the EPA's CDX. The data must be submitted in a file format generated through the use of the EPA's ERT. Alternatively, you may submit an electronic file consistent with the XML schema listed on the EPA's ERT website.

(2) Performance evaluations of CMS measuring RATA pollutants that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the evaluation. The results of the performance evaluation must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI.

(3) Confidential business information (CBI). If you claim some of the information submitted under paragraph (a)(1) of this section is CBI, you must submit a complete file, including information claimed to be CBI, to the EPA. The file must be generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the file on a compact disc, flash drive, or other commonly used

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electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described in paragraph (a)(1) of this section.

(c) You must submit to the Administrator semiannual compliance reports containing the information specified in 63.5910(c) through (f). Beginning on [date 180 days after date of publication of the final rule in the **Federal Register**], submit all subsequent reports following the procedure specified in paragraph (d) of this section.

(d) If you are required to submit reports following the procedure specified in this paragraph, beginning on [date 181 days after date of publication of the final rule in the Federal **Register**], you must submit all subsequent reports to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/). You must use the appropriate electronic report template on the CEDRI website (https://www.epa.gov/electronic-reporting-air-emissions/compliance-andemissions-data-reporting-interface-cedri) for this subpart. The date report templates become available will be listed on the CEDRI website. The report must be submitted by the deadline specified in this subpart, regardless of the method in which the report is submitted. If you claim some of the information required to be submitted via CEDRI is confidential business information (CBI), submit a complete report, including information claimed to be CBI, to the EPA. The report must be generated using the appropriate form on the CEDRI website or an alternate electronic file consistent with the XML schema listed on the CEDRI website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office,

Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

(e) If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. To assert a claim of EPA system outage, you must meet the requirements outlined in paragraphs (e)(1) through (7) of this section.

(1) You must have been or will be precluded from accessing CEDRI and submitting a required report within the time prescribed due to an outage of either the EPA's CEDRI or CDX systems.

(2) The outage must have occurred within the period of time beginning five business days prior to the date that the submission is due.

(3) The outage may be planned or unplanned.

(4) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(5) You must provide to the Administrator a written description identifying:

(i) The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable;

(ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to EPA system outage;

(iii) Measures taken or to be taken to minimize the delay in reporting; and

(iv) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(6) The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(7) In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved.

(f) If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of force majeure for failure to timely comply with the reporting requirement. To assert a claim of force majuere, you must meet the requirements outlined in paragraphs (f)(1) through (5) of this section.

(1) You may submit a claim if a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning five business days prior to the date the submission is due. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (*e.g.*, hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (*e.g.*, large scale power outage).

(2) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(3) You must provide to the Administrator:

(i) A written description of the force majeure event;

(ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event;

(iii) Measures taken or to be taken to minimize the delay in reporting; and

(iv) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(4) The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(5) In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs.

12. Section 63.5915 is amended by deleting paragraph (a)(2).

13. Section 63.5920 is amended to add paragraph (e) to read as follows:

## §63.5920 In what form and how long must I keep my records?

\* \* \* \* \*

(e) Any records required to be maintained by this part that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.

14. Section 63.5935 is amended by adding the definition of construction.

#### § 63.5935 What definitions apply to this subpart?

\* \* \* \* \*

*Deviation after* [date 180 days after date of publication of the final rule in the **Federal Register**] 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 standard; or

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

*Deviation before* [date 181 days after date of publication of the final rule in the **Federal Register**] 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 standard; or

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

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

\* \* \* \* \*

15. Table 4 of Subpart WWWW is amended to read as follows:

## Table 4 to Subpart WWWW of Part 63—Work Practice Standards

As specified in §63.5805, you must meet the work practice standards in the following table that apply to you:

For	You must
1. a new or existing closed molding operation using compression/injection molding	uncover, unwrap or expose only one charge per mold cycle per compression/injection molding machine. For machines with multiple molds, one charge means sufficient material to fill all molds for one cycle. For machines with robotic loaders, no more than one charge may be exposed prior to the loader. For machines fed by hoppers, sufficient material may be uncovered to fill the hopper. Hoppers must be closed when not adding materials. Materials may be uncovered to feed to slitting machines. Materials must be recovered after slitting.
2. a new or existing cleaning operation	not use cleaning solvents that contain HAP, except that styrene may be used as a cleaner in closed systems, and organic HAP containing cleaners may be used to clean cured resin from application equipment. Application equipment includes any equipment that directly contacts resin.
3. a new or existing materials HAP-containing materials storage operation	keep containers that store HAP-containing materials closed or covered except during the addition or removal of materials. Bulk HAP- containing materials storage tanks may be vented as necessary for safety.
4. an existing or new SMC manufacturing operation	close or cover the resin delivery system to the doctor box on each SMC manufacturing machine. The doctor box itself may be open.
5. an existing or new SMC manufacturing operation	use a nylon containing film to enclose SMC.
6. all mixing or BMC manufacturing operations <sup>1</sup>	use mixer covers with no visible gaps present in the mixer covers, except that gaps of up to 1 inch are permissible around mixer shafts and any required instrumentation. use mixer covers with no visible gaps present in the mixer covers, except that gaps of up to 1 inch are permissible around mixer shafts and any required instrumentation. Mixers where the emissions are fully captured and routed to a 95 percent efficient control device are exempt from this requirement.

7. all mixing or BMC manufacturing operations <sup>1</sup>	close any mixer vents when actual mixing is occurring, except that venting is allowed during addition of materials, or as necessary prior to adding materials or opening the cover for safety. Vents routed to a 95 percent efficient control device are exempt from this requirement.
8. all mixing or BMC manufacturing operations <sup>1</sup>	keep the mixer covers closed while actual mixing is occurring except when adding materials or changing covers to the mixing vessels.
9. a new or existing pultrusion operation manufacturing parts that meet the following criteria: 1,000 or more reinforcements or the glass equivalent of 1,000 ends of 113 yield roving or more; and have a cross sectional area of 60 square inches or more that is not subject to the 95 percent organic HAP emission reduction requirement	<ul> <li>i. not allow vents from the building ventilation system, or local or portable fans to blow directly on or across the wet-out area(s),</li> <li>ii. not permit point suction of ambient air in the wet-out area(s) unless that air is directed to a control device,</li> <li>iii. use devices such as deflectors, baffles, and curtains when practical to reduce air flow velocity across the wet-out area(s),</li> <li>iv. direct any compressed air exhausts away from resin and wet-out area(s),</li> </ul>
	v. convey resin collected from drip-off pans or other devices to reservoirs, tanks, or sumps via covered troughs, pipes, or other covered conveyance that shields the resin from the ambient air, vi. cover all reservoirs, tanks, sumps, or HAP- containing materials storage vessels except when they are being charged or filled, and vii. cover or shield from ambient air resin delivery systems to the wet-out area(s) from reservoirs, tanks, or sumps where practical.

<sup>1</sup>Containers of 5 gallons or less may be open when active mixing is taking place, or during periods when they are in process (i.e., they are actively being used to apply resin). For polymer casting mixing operations, containers with a surface area of 500 square inches or less may be open while active mixing is taking place.

16. Table 14 of Subpart WWWW is amended to read as follows:

# Table 14 to Subpart WWWW of Part 63—Requirements for Reports

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As required in §63.5910(a), (b), (g), and (h), you must submit reports on the schedule shown in

the following table:

You must submit a(n)	The report must contain	You must submit the report
report	reporting period if there were no deviations from any	Semiannually according to the requirements in §63.5910(b).
	from any emission limitation (emission limit, operating limit, or work practice standard) during the reporting period. If	Semiannually according to the requirements in §63.5910(b).

17. Table 15 of Subpart WWWW is amended to read as follows:

# Table 15 to Subpart WWWW of Part 63—Applicability of General Provisions (Subpart A)

## to Subpart WWWW of Part 63

As specified in §63.5925, the parts of the General Provisions which apply to you are shown in

the following table:

The general provisions reference	That addresses	And applies to subpart WWWW of part 63 .	Subject to the following additional information
reference	I hat addresses	• •	auditional information
§63.1(a)(1)	General applicability of the general provisions		Additional terms defined in subpart WWWW of part 63,

			when overlap between subparts A and WWWW of part 63 of this part, subpart WWWW of part 63 takes precedence.
§63.1(a)(2) through (4)	General applicability of the general provisions	Yes	
§63.1(a)(5)	Reserved	No	
§63.1(a)(6)	General applicability of the general provisions	Yes	
§63.1(a)(7) through (9)	Reserved	No	
§63.1(a)(10) through (14)	General applicability of the general provisions	Yes	
§63.1(b)(1)	Initial applicability determination	Yes	Subpart WWWW of part 63 clarifies the applicability in §§63.5780 and 63.5785.
§63.1(b)(2)	Reserved	No.	
§63.1(b)(3)	Record of the applicability determination	Yes	
§63.1(c)(1)	Applicability of this part after a relevant standard has been set under this part	Yes	Subpart WWWW of part 63 clarifies the applicability of each paragraph of subpart A to sources subject to subpart WWWW of part 63.
§63.1(c)(2)	Title V operating permit requirement	Yes	All major affected sources are required to obtain a title V operating permit. Area sources are not subject to subpart WWWW of part 63.
§63.1(c)(3) and (4)	Reserved	No	
§63.1(c)(5)	Notification requirements for an area source that increases HAP emissions to major source levels	Yes	
§63.1(d)	Reserved	No	

§63.1(e)	Applicability of permit program before a relevant standard has been set under this part	Yes	
§63.2	Definitions	Yes	Subpart WWWW of part 63 defines terms in §63.5935. When overlap between subparts A and WWWW of part 63 occurs, you must comply with the subpart WWWW of part 63 definitions, which take precedence over the subpart A definitions.
§63.3	Units and abbreviations	Yes	Other units and abbreviations used in subpart WWWW of part 63 are defined in subpart WWWW of part 63.
§63.4	Prohibited activities and circumvention	Yes	§63.4(a)(3) through (5) is reserved and does not apply.
§63.5(a)(1) and (2)	Applicability of construction and reconstruction	Yes	Existing facilities do not become reconstructed under subpart WWWW of part 63.
§63.5(b)(1)	Relevant standards for new sources upon construction	Yes	Existing facilities do not become reconstructed under subpart WWWW of part 63.
§63.5(b)(2)	Reserved	No	
§63.5(b)(3)	New construction/reconstruction	Yes	Existing facilities do not become reconstructed under subpart WWWW of part 63.
§63.5(b)(4)	Construction/reconstruction notification	Yes	Existing facilities do not become reconstructed under subpart WWWW of part 63.
§63.5(b)(5)	Reserved	No	
§63.5(b)(6)	Equipment addition or process change	Yes	Existing facilities do not become reconstructed under subpart WWWW of part 63.
§63.5(c)	Reserved	No	

§63.5(d)(1)	General application for approval of construction or reconstruction	Yes	Existing facilities do not become reconstructed under subpart WWWW of part 63.
§63.5(d)(2)	Application for approval of construction	Yes	
§63.5(d)(3)	Application for approval of reconstruction	No	
§63.5(d)(4)	Additional information	Yes	
§63.5(e)(1) through (5)	Approval of construction or reconstruction	Yes	
§63.5(f)(1) and (2)	Approval of construction or reconstruction based on prior State preconstruction review	Yes	
§63.6(a)(1)	Applicability of compliance with standards and maintenance requirements	Yes	
§63.6(a)(2)	Applicability of area sources that increase HAP emissions to become major sources	Yes	
§63.6(b)(1) through (5)	Compliance dates for new and reconstructed sources	Yes	Subpart WWWW of part 63 clarifies compliance dates in §63.5800.
§63.6(b)(6)	Reserved	No	
§63.6(b)(7)	Compliance dates for new operations or equipment that cause an area source to become a major source	Yes	New operations at an existing facility are not subject to new source standards.
§63.6(c)(1) and (2)	Compliance dates for existing sources	Yes	Subpart WWWW of part 63 clarifies compliance dates in §63.5800.
§63.6(c)(3) and (4)	Reserved	No	
§63.6(c)(5)	Compliance dates for existing area sources that become major	Yes	Subpart WWWW of part 63 clarifies compliance dates in §63.5800.
§63.6(d)	Reserved	No	
§63.6(e)(1)	Operation & maintenance requirements	Yes	Except portions of §63.6(e)(1)(i) and (ii)

			specific to conditions during startup, shutdown, or malfunction.
§63.6(e)(3)	Startup, shutdown, and malfunction plan and recordkeeping	No	
§63.6(f)(1)	Compliance except during periods of startup, shutdown, and malfunction	No	Subpart WWWW of part 63 requires compliance at all times.
§63.6(f)(2) and (3)	Methods for determining compliance	Yes	
§63.6(g)(1) through (3)	Alternative standard	Yes	
§63.6(h)	Opacity and visible emission Standards	No	Subpart WWWW of part 63 does not contain opacity or visible emission standards.
§63.6(i)(1) through (14)	Compliance extensions	Yes	
§63.6(i)(15)	Reserved	No	
§63.6(i)(16)	Compliance extensions	Yes	
§63.6(j)	Presidential compliance exemption	Yes	
§63.7(a)(1)	Applicability of performance testing requirements	Yes	
§63.7(a)(2)	Performance test dates	No	Subpart WWWW of part 63 initial compliance requirements are in §63.5840.
§63.7(a)(3)	CAA Section 114 authority	Yes	
§63.7(b)(1)	Notification of performance test	Yes	
§63.7(b)(2)	Notification rescheduled performance test	Yes	
§63.7(c)	Quality assurance program, including test plan	Yes	Except that the test plan must be submitted with the notification of the performance test.
§63.7(d)	Performance testing facilities	Yes	
§63.7(e)	Conditions for conducting performance tests	Yes	Performance test requirements are contained

			in §63.5850. Additional requirements for conducting performance tests for continuous lamination/casting are included in §63.5870. Conditions specific to operations during periods of startup, shutdown, and malfunction in §63.7(e)(1) do not apply.
§63.7(f)	Use of alternative test method	Yes	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes	
§63.7(h)	Waiver of performance tests	Yes	
§63.8(a)(1) and (2)	Applicability of monitoring requirements	Yes	
§63.8(a)(3)	Reserved	No	
§63.8(a)(4)	Monitoring requirements when using flares	Yes	
§63.8(b)(1)	Conduct of monitoring exceptions	Yes	
\$63.8(b)(2) and (3)	Multiple effluents and multiple monitoring systems	Yes	
§63.8(c)(1)	Compliance with CMS operation and maintenance requirements	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit. Except references to SSM
			plans in §63.8(c)(1)(i) and §63.8(c)(1)(iii).
§63.8(c)(2) and (3)	Monitoring system installation	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.8(c)(4)	CMS requirements	Yes	This section applies if you elect to use a CMS to

			demonstrate continuous compliance with an emission limit.
§63.8(c)(5)	Continuous Opacity Monitoring System (COMS) minimum procedures	No	Subpart WWWW of part 63 does not contain opacity standards.
§63.8(c)(6) through (8)	CMS calibration and periods CMS is out of control	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.8(d)(1)-(2)	CMS quality control program, including test plan and all previous versions	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.8(d)(3)	CMS quality control program, including test plan and all previous versions	Yes	Except references to SSM plans in §63.8(d)(3).
§63.8(e)(1)	Performance evaluation of CMS	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.8(e)(2)	Notification of performance evaluation	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.8(e)(3) and (4)	CMS requirements/alternatives	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.8(e)(5)(i)	Reporting performance evaluation results	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.

§63.8(e)(5)(ii)	Results of COMS performance evaluation	No	Subpart WWWW of part 63 does not contain opacity standards.
§63.8(f)(1) through (3)	Use of an alternative monitoring method	Yes	
§63.8(f)(4)	Request to use an alternative monitoring method	Yes	
§63.8(f)(5)	Approval of request to use an alternative monitoring method	Yes	
§63.8(f)(6)	Request for alternative to relative accuracy test and associated records	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.8(g)(1) through (5)	Data reduction	Yes	
§63.9(a)(1) through (4)	Notification requirements and general information	Yes	
§63.9(b)(1)	Initial notification applicability	Yes	
§63.9(b)(2)	Notification for affected source with initial startup before effective date of standard	Yes	
§63.9(b)(3)	Reserved	No	
§63.9(b)(4)(i)	Notification for a new or reconstructed major affected source with initial startup after effective date for which an application for approval of construction or reconstruction is required	Yes	
§63.9(b)(4)(ii) through (iv)	Reserved	No	
§63.9(b)(4)(v)	Notification for a new or reconstructed major affected source with initial startup after effective date for which an application for approval of construction or reconstruction is required	Yes	Existing facilities do not become reconstructed under subpart WWWW of part 63.

§63.9(b)(5)	Notification that you are subject to this subpart for new or reconstructed affected source with initial startup after effective date and for which an application for approval of construction or reconstruction is not required	Yes	Existing facilities do not become reconstructed under subpart WWWW of part 63.
§63.9(c)	Request for compliance extension	Yes	
§63.9(d)	Notification of special compliance requirements for new source	Yes	
§63.9(e)	Notification of performance test	Yes	
§63.9(f)	Notification of opacity and visible emissions observations	No	Subpart WWWW of part 63 does not contain opacity or visible emission standards.
§63.9(g)(1)	Additional notification requirements for sources using CMS	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.9(g)(2)	Notification of compliance with opacity emission standard	No	Subpart WWWW of part 63 does not contain opacity emission standards.
§63.9(g)(3)	Notification that criterion to continue use of alternative to relative accuracy testing has been exceeded	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.9(h)(1) through (3)	Notification of compliance status	Yes	
§63.9(h)(4)	Reserved	No	
§63.9(h)(5) and (6)	Notification of compliance status	Yes	
§63.9(i)	Adjustment of submittal deadlines	Yes	
§63.9(j)	Change in information provided	Yes	
§63.10(a)	Applicability of recordkeeping and reporting	Yes	
§63.10(b)(1)	Records retention	Yes	

§63.10(b)(2)(i) through (v)	Records related to startup, shutdown, and malfunction	No	
§63.10(b)(2)(vi) through (xi)	CMS records, data on performance tests, CMS performance evaluations, measurements necessary to determine conditions of performance tests, and performance evaluations	Yes	
§63.10(b)(2)(xii)	Record of waiver of recordkeeping and reporting	Yes	
§63.10(b)(2)(xiii)	Record for alternative to the relative accuracy test	Yes	
§63.10(b)(2)(xiv)	Records supporting initial notification and notification of compliance status	Yes	
§63.10(b)(3)	Records for applicability determinations	Yes	
§63.10(c)(1)	CMS records	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.10(c)(2) through (4)	Reserved	No	
§63.10(c)(5) through (8)	CMS records	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.10(c)(9)	Reserved	No	
§63.10(c)(10) through (14)	CMS records	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
§63.10(c)(15)	CMS records	No	
§63.10(d)(1)	General reporting requirements	Yes	
§63.10(d)(2)	Report of performance test results	Yes	

§63.10(d)(3)	Reporting results of opacity or visible emission observations	No	Subpart WWWW of part 63 does not contain opacity or visible emission standards.
§63.10(d)(4)	Progress reports as part of extension of compliance	Yes	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	No	
§63.10(e)(1) through (3)	Additional reporting requirements for CMS	Yes	This section applies if you have an add-on control device and elect to use a CEM to demonstrate continuous compliance with an emission limit.
§63.10(e)(4)	Reporting COMS data	No	Subpart WWWW of part 63 does not contain opacity standards.
§63.10(f)	Waiver for recordkeeping or reporting	Yes	
§63.11	Control device requirements	Yes	Only applies if you elect to use a flare as a control device.
§63.12	State authority and delegations	Yes	
§63.13	Addresses of State air pollution control agencies and EPA Regional Offices	Yes	
§63.14	Incorporations by reference	Yes	
§63.15	Availability of information and confidentiality	Yes	