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40 CFR Part 63

National Emission Standards for Hazardous Air Pollutants: Generic Maximum Achievable Control Technology Standards; and Manufacture of Amino/Phenolic Resins; Final Rule

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

[EPA-HQ-OAR-2012-0133; FRL-9916-90-OAR]

RIN 2060-AR49

**National Emission Standards for Hazardous Air Pollutants: Generic Maximum Achievable Control Technology Standards; and Manufacture of Amino/Phenolic Resins****AGENCY:** Environmental Protection Agency.**ACTION:** Final rule.

**SUMMARY:** This action finalizes the residual risk and technology review (RTR) conducted for the Acrylic and Modacrylic Fibers Production, Amino/Phenolic Resins Production and Polycarbonate Production source categories regulated under national emission standards for hazardous air pollutants (NESHAP). In addition, we are taking final action addressing emissions during periods of startup, shutdown and malfunction, and are adding standards for previously unregulated hazardous air pollutant (HAP) emissions sources for certain emission points. These changes include revisions made in response to comments received on the proposed rule. These final amendments also include clarifying provisions pertaining to open-ended valves and lines, adding monitoring requirements for pressure relief devices and adding requirements for electronic reporting of performance test results, as proposed. We estimate that these final amendments will reduce HAP emissions from these three source categories by a combined 137 tons per year.

**DATES:** This final action is effective on October 8, 2014.

**ADDRESSES:** The Environmental Protection Agency (EPA) has established a docket for this rulemaking under Docket ID No. EPA-HQ-OAR-2012-0133. All documents in the docket are listed in the <http://www.regulations.gov> Web site. Although listed in the index, 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 form. Publicly available docket materials are available either electronically through <http://www.regulations.gov> or in hard copy at the EPA Docket Center, WJC

West Building, Room Number 3334, 1301 Constitution Ave. NW., Washington, DC. The Public Reading Room hours of operation are 8:30 a.m. to 4:30 p.m. Eastern Standard Time (EST), Monday through Friday. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the Air and Radiation Docket and Information Center is (202) 566-1742.

**FOR FURTHER INFORMATION CONTACT:** For questions about this final action, contact Mr. Nick Parsons, Sector Policies and Programs Division (E143-01), Office of Air Quality Planning and Standards (OAQPS), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (734) 214-4479; fax number: (734) 214-4053; and email address: [parsons.nick@epa.gov](mailto:parsons.nick@epa.gov). For specific information regarding the risk modeling methodology, contact Mr. Mark Morris, Health and Environmental Impacts Division (C539-02), OAQPS, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541-5416; fax number: (919) 541-0840; and email address: [morris.mark@epa.gov](mailto:morris.mark@epa.gov). For information about the applicability of these three NESHAP to a particular entity, contact Ms. Tavera Culpepper, Office of Enforcement and Compliance Assurance (OECA), U.S. Environmental Protection Agency, Washington, DC 20004; telephone number: (202) 564-0902; and email address: [culpepper.tavera@epa.gov](mailto:culpepper.tavera@epa.gov).

**SUPPLEMENTARY INFORMATION:**

*Acronyms and Abbreviations.* The following acronyms and abbreviations are used in this document.

AEGL acute exposure guideline levels  
 AMF Acrylic and Modacrylic Fibers Production  
 APPU amino/phenolic resin process unit  
 APR Amino/Phenolic Resins Production  
 CAA Clean Air Act  
 CBI Confidential Business Information  
 CDX Central Data Exchange  
 CEDRI Compliance and Emissions Data Reporting Interface  
 CFR Code of Federal Regulations  
 EJ environmental justice  
 EPA Environmental Protection Agency  
 ERT Electronic Reporting Tool  
 FR **Federal Register**  
 gal gallon  
 HAP hazardous air pollutants  
 HI hazard index  
 HON National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry  
 HQ hazard quotient  
 ICR Information Collection Request  
 kg kilogram  
 LDAR leak detection and repair

MACT maximum achievable control technology  
 Mg megagram  
 MIR maximum individual risk  
 MTVP maximum true vapor pressure  
 NAICS North American Industry Classification System  
 NEI National Emissions Inventory  
 NESHAP National Emission Standards for Hazardous Air Pollutants  
 NTTAA National Technology Transfer and Advancement Act  
 OAQPS Office of Air Quality Planning and Standards  
 OECA Office of Enforcement and Compliance Assurance  
 OMB Office of Management and Budget  
 PC Polycarbonate Production  
 ppm parts per million  
 PRD pressure relief device  
 psia pounds per square inch absolute  
 REL reference exposure level  
 RFA Regulatory Flexibility Act  
 RTR residual risk and technology review  
 SBA Small Business Administration  
 SSM startup, shutdown and malfunction  
 TOSHI target organ-specific hazard index  
 tpy tons per year  
 TTN Technology Transfer Network  
 UMRA Unfunded Mandates Reform Act  
 VCS voluntary consensus standards  
 VOC volatile organic compounds  
 WWW World Wide Web

*Background Information.* On January 9, 2014, the EPA proposed revisions to the Acrylic and Modacrylic Fibers Production, Amino/Phenolic Resins Production and Polycarbonate Production NESHAP based on our RTR. In this action, we are finalizing decisions and revisions for the rules. We summarize some of the comments we timely received regarding the proposed rule and provide our responses in this preamble. A summary of the public comments on the proposal not presented in the preamble and the EPA's responses to those comments is available in Docket ID No. EPA-HQ-OAR-2012-0133. A "track changes" version of the regulatory language that incorporates the changes in this action is available in the docket.

*Organization of This Document.* We provide the following outline to assist in locating information in the preamble.

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**I. General Information**

*A. Does this action apply to me?*

*Regulated Entities.* Categories and entities potentially regulated by this action are shown in Table 1 of this preamble.

**TABLE 1—NESHAP AND INDUSTRIAL SOURCE CATEGORIES AFFECTED BY THIS FINAL ACTION**

NESHAP and Source Category		NAICS <sup>a</sup> Code
Generic Maximum Achievable Control Technology Standards ..	Acrylic and Modacrylic Fibers Production .....	325220 (325222)
	Polycarbonate Production .....	325211 (325211)
Amino/Phenolic Resins Production .....	.....	325211 (325211)

<sup>a</sup> North American Industry Classification System 2012 (2007 in parenthesis)

Table 1 of this preamble is not intended to be exhaustive, but rather to provide a guide for readers regarding entities likely to be affected by the final action for the source categories listed. To determine whether your facility is affected, you should examine the applicability criteria in the appropriate NESHAP. If you have any questions regarding the applicability of any aspect of these NESHAP, please contact the appropriate person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section of this preamble.

*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 final action will also be available through the EPA’s Technology Transfer Network (TTN) Web site, a forum for information and technology exchange in various areas of air pollution control. Following signature by the EPA Administrator, we will post a copy of the final action at: <http://www.epa.gov/ttn/atw/gmact/gmactpg.html> and [\[ttn/atw/amino/aminopg.html\]\(http://www.epa.gov/ttn/atw/amino/aminopg.html\).](http://www.epa.gov/</a></p>
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Following publication in the **Federal Register**, the EPA will post the **Federal Register** version of the final action and key technical documents at these same Web sites.

Additional information is available on the RTR Web site at <http://www.epa.gov/ttn/atw/rtr/rtrpg.html>. This information includes an overview of the RTR program, links to project Web sites for the RTR source categories and detailed emissions and other data we used as inputs to the risk assessments.

*C. Judicial Review*

Under Clean Air Act (CAA) section 307(b)(1), judicial review of this final action is available only by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit by December 8, 2014. Under CAA section 307(b)(2), the requirements established by this final rule may not be challenged separately in any civil or criminal proceedings brought by the EPA to enforce the requirements.

Section 307(d)(7)(B) of the CAA further provides that “[o]nly an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review.” This section also provides a mechanism for the EPA to reconsider the rule “[i]f the person raising an objection can demonstrate to the EPA that it was impracticable to raise such objection within [the period for public comment] or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule.” Any person seeking to make such a demonstration should submit a Petition for Reconsideration to the Office of the Administrator, U.S. EPA, Room 3000, WJC Building, 1200 Pennsylvania Ave. NW., Washington, DC 20460, with a copy to both the person(s) listed in the preceding **FOR FURTHER INFORMATION CONTACT** section, and the Associate General Counsel for

the Air and Radiation Law Office, Office of General Counsel (Mail Code 2344A), U.S. EPA, 1200 Pennsylvania Ave. NW., Washington, DC 20460.

## II. Background

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

Section 112 of the CAA establishes a two-stage regulatory process to address emissions of HAP from stationary sources. In the first stage, we must identify categories of sources emitting one or more of the HAP listed in CAA section 112(b) and then promulgate technology-based NESHAP for those sources. "Major sources" are those that emit, or have the potential to emit, any single HAP at a rate of 10 tons per year (tpy) or more, or 25 tpy or more of any combination of HAP. For major sources, these standards are commonly referred to as maximum achievable control technology (MACT) standards and must reflect the maximum degree of emission reductions of HAP achievable (after considering cost, energy requirements, and non-air quality health and environmental impacts). In developing MACT standards, CAA section 112(d)(2) directs the EPA to consider the application of measures, processes, methods, systems or techniques that reduce the volume of or eliminate HAP emissions through process changes, substitution of materials or other modifications; enclose systems or processes to eliminate emissions; collect, capture or treat HAP when released from a process, stack, storage or fugitive emissions point; and/or are design, equipment, work practice or operational standards.

For these MACT standards, the statute specifies certain minimum stringency requirements, which are referred to as MACT floor requirements and may not be based on cost considerations. See CAA section 112(d)(3). For new sources, the MACT floor cannot be less stringent than the emission control achieved in practice by the best-controlled similar source. The MACT standards for existing sources can be less stringent than floors for new sources, but they cannot be less stringent than the average emission limitation achieved by the best-performing 12 percent of existing sources in the category or subcategory (or the best-performing five sources for categories or subcategories with fewer than 30 sources). In developing MACT standards, we must also consider control options that are more stringent than the floor, under CAA section 112(d)(2). We may establish standards more stringent than the floor, based on the consideration of the cost of

achieving the emissions reductions, any non-air quality health and environmental impacts, and energy requirements.

In the second stage of the regulatory process, the CAA requires the EPA to undertake two different analyses, which we refer to as the technology review and the residual risk review. Under the technology review, we must review the technology-based standards and revise them "as necessary (taking into account developments in practices, processes, and control technologies)" no less frequently than every 8 years, pursuant to CAA section 112(d)(6). Under the residual risk review, we must evaluate the risk to public health remaining after application of the technology-based standards and revise the standards, if necessary, to provide an ample margin of safety to protect public health or to prevent, taking into consideration costs, energy, safety and other relevant factors, an adverse environmental effect. The residual risk review is required within 8 years after promulgation of the technology-based standards, pursuant to CAA section 112(f). In conducting the residual risk review, if the EPA determines that the current standards provide an ample margin of safety to protect public health, it is not necessary to revise the MACT standards pursuant to CAA section 112(f).<sup>1</sup> For more information on the statutory authority for this rule, see 79 FR 1676 (January 9, 2014).

### B. Acrylic and Modacrylic Fibers Production (AMF)

1. What is the AMF source category and how do the MACT standards promulgated on June 29, 1999, regulate its HAP emissions?

The EPA promulgated the AMF MACT standards on June 29, 1999 (64 FR 34854). The standards are codified at 40 CFR part 63, subpart YY. The AMF industry consists of facilities that produce acrylic and modacrylic fibers, which are manufactured fibers in which the fiber-forming substance is a long-chain synthetic polymer containing acrylonitrile units. The source category covered by this NESHAP currently includes one facility. Sources of HAP emissions from the production of AMF include: (1) Storage vessels used to store acrylonitrile monomer and comonomers; (2) process vents on reactors,

vessels and storage vessels used for acrylic polymerization, monomer recovery, fiber spinning and solvent recovery operations; (3) fugitive emissions from AMF spinning lines; (4) wastewater treatment systems; and (5) equipment leaks.

2. What changes did we propose for the AMF source category in our January 9, 2014, proposal?

On January 9, 2014, the EPA published a proposed rule in the **Federal Register** for the AMF MACT standards, 40 CFR part 63, subpart YY, that took into consideration the RTR analyses. In the proposed rule, we proposed:

- Revisions to address certain emission sources not previously regulated under the standards.
- Revisions to the leak detection and repair (LDAR) program requirements.
- Revisions to requirements related to emissions during periods of startup, shutdown and malfunction (SSM).
- Revisions to requirements related to performance test electronic reporting.
- Revisions to the provisions regarding open-ended lines.
- Revisions to the requirements related to pressure relief devices (PRDs) that release HAP emissions to the atmosphere instead of routing them to a control device, process, fuel gas system or drain system.

### C. Amino/Phenolic Resins Production (APR)

1. What is the APR source category and how do the MACT standards promulgated on January 20, 2000, regulate its HAP emissions?

The EPA promulgated the APR MACT standards on January 20, 2000 (65 FR 3276). The standards are codified at 40 CFR part 63, subpart OOO. The APR industry consists of facilities that manufacture amino resins or phenolic resins. The source category covered by this NESHAP currently includes 19 facilities. Sources of HAP emissions from the production of APR include: (1) Reactor batch process vents; (2) non-reactor batch process vents; (3) continuous process vents; (4) equipment leaks; (5) wastewater; (6) storage vessels; and (7) heat exchangers.

2. What changes did we propose for the APR source category in our January 9, 2014, proposal?

On January 9, 2014, the EPA published a proposed rule in the **Federal Register** for the APR MACT standards, 40 CFR part 63, subpart OOO, that took into consideration the RTR analyses. In the proposed rule, we proposed:

<sup>1</sup> The U.S. Court of Appeals has affirmed this approach of implementing CAA section 112(f)(2)(A): *NRDC v. EPA*, 529 F.3d 1077, 1083 (D.C. Cir. 2008) ("If EPA determines that the existing technology-based standards provide an 'ample margin of safety,' then the Agency is free to readopt those standards during the residual risk rulemaking.")

- Revisions to address certain emission sources not previously regulated under the standards.
- Revisions to the storage vessel and continuous process vent standards.
- Revisions to requirements related to emissions during periods of SSM.
- Revisions to requirements related to performance test electronic reporting.
- Revisions to the provisions regarding open-ended lines.
- Revisions to the requirements related to PRDs that release HAP emissions to the atmosphere rather than routing them to a control device, process, fuel gas system or drain system.

#### D. Polycarbonate Production

1. What is the PC source category and how do the MACT standards promulgated on June 29, 1999, regulate its HAP emissions?

The EPA promulgated the PC MACT standards on June 29, 1999 (64 FR 34854). The standards are codified at 40 CFR part 63, subpart YY. The PC industry consists of facilities that produce polycarbonates, a process that involves a polymerization reaction using either a solution or suspension process in either a batch or continuous mode. All production of polycarbonates in the United States is currently based on the polymerization reaction of bisphenols with phosgene in the presence of catalysts, solvents (mainly methylene chloride) and other additives. The source category covered by this NESHAP currently includes four facilities. Sources of HAP emissions from the production of PC include: (1) Storage vessels used to store methylene chloride and other organic solvents; (2) process vents on polymerization, polymer solution purification and solvent recovery equipment; (3) wastewater treatment systems; and (4) equipment leaks.

2. What changes did we propose for the PC source category in our January 9, 2014, proposal?

On January 9, 2014, the EPA published a proposed rule in the **Federal Register** for the PC MACT standards, 40 CFR part 63, subpart YY, that took into consideration the RTR analyses. In the proposed rule, we proposed:

- Revisions to the LDAR program requirements.
- Revisions to requirements related to emissions during periods of SSM.
- Revisions to requirements related to performance test electronic reporting.
- Revisions to the provisions regarding open-ended lines.
- Revisions to the requirements related to PRDs that release HAP

emissions to the atmosphere rather than routing them to a control device, process, fuel gas system or drain system.

#### III. What is included in this final rule?

This action finalizes the EPA's determinations pursuant to the RTR provisions of CAA section 112 for the AMF, APR and PC source categories and amends the AMF, APR and PC MACT standards based on those determinations. This action also finalizes other changes to the NESHAP such as setting emission standards to address certain emission sources not previously regulated; eliminating the exemption for periods of SSM, so that the emission standards in each rule apply at all times; requiring electronic reporting of performance test results; clarifying the provisions regarding open-ended lines by adding a definition for what constitutes a "sealed" open-ended line; requiring monitoring of PRDs in organic HAP service that release to the atmosphere rather than routing emissions to a control device, process, fuel gas system or drain system; and providing that releases of HAP emissions to the atmosphere from such PRDs are prohibited.

##### A. Acrylic and Modacrylic Fibers Production

1. What are the final rule amendments based on the risk review for the AMF source category?

For the AMF source category, we have determined that the current MACT standards reduce risk to an acceptable level, provide an ample margin of safety to protect public health, and prevent adverse environmental effects. Therefore, as we proposed, it is not necessary to revise the MACT standards pursuant to CAA section 112(f).

2. What are the final rule amendments based on the technology review for the AMF source category?

We have determined that there have been developments in practices, processes and control technologies that warrant revisions to the MACT standard for this source category. Therefore, to satisfy the requirements of CAA section 112(d)(6) and as we proposed, we are revising the MACT standards to require facilities to comply with the LDAR requirements of 40 CFR part 63, subpart UU, rather than subpart TT, with the exception of connectors in gas and vapor service and in light liquid service. We are retaining the option for facilities to comply with either subpart TT or subpart UU for these components. For storage vessels, process vents, spinning line fugitive emissions and wastewater,

we have determined that, as we proposed, there are no viable developments in HAP emission reduction practices, processes or control technologies to apply, considering the technical feasibility, estimated costs, energy implications, non-air environmental impacts and emission reductions of the options identified.

3. What are the final rule amendments pursuant to sections 112(d)(2) & (3) for the AMF source category?

Pursuant to CAA sections 112(d)(2) and (3) and as we proposed, we are establishing standards for previously unregulated HAP emissions from spinning lines that use a spin dope produced from a solution polymerization process at existing facilities. The standard being finalized is an emission limit of 20 kilograms (kg) of organic HAP per megagram (Mg) (40 pounds (lb) of organic HAP per ton) of acrylic and modacrylic fiber produced, which represents the MACT floor level of control.

##### B. Amino/Phenolic Resins Production

1. What are the final rule amendments based on the risk review for the APR source category?

For the APR source category, we have determined that the current MACT standards reduce risk to an acceptable level, provide an ample margin of safety to protect public health and prevent adverse environmental effects. Therefore, as we proposed, it is not necessary to revise the MACT standards pursuant to CAA section 112(f).

2. What are the final rule amendments based on the technology review for the APR source category?

We have determined that there have been developments in practices, processes and control technologies that warrant revisions to the MACT standard for this source category. Therefore, to satisfy the requirements of CAA section 112(d)(6), we are revising the applicability of the APR new source MACT standards as we proposed to include smaller capacity storage vessels and/or storage vessels containing liquids with lower vapor pressures. Emissions reduction of 95 percent is now required for storage vessels of capacities greater than or equal to 20,000 gallons (gal), but less than 40,000 gal if the maximum true vapor pressure (MTVP) is 1.9 pounds per square inch absolute (psia) or greater, and for storage vessels of capacities greater than or equal to 40,000 gal, but less than 90,000 gal if the MTVP is 0.75 psia or greater. Control is also still required for storage

vessels of 90,000 gal or greater, if the MTVP is 0.15 psia or greater, as was previously required for storage vessels at new sources in the APR source category. For equipment leaks, continuous process vents, batch process vents, wastewater and heat exchange systems, we have determined that, as we proposed, there are no viable developments in HAP emission reduction practices, processes or control technologies to apply to the emission sources in these source categories, considering the technical feasibility, estimated costs, energy implications, non-air environmental impacts and emission reductions of the options identified.

3. What are the final rule amendments pursuant to sections 112(d)(2) & (3) for the APR source category?

Pursuant to CAA sections 112(d)(2) and (3), we are establishing standards for previously unregulated HAP emissions from storage vessels and continuous process vents at existing facilities. For storage vessels, the standard being finalized is the same as what we proposed and requires 95 percent emissions reduction for storage vessels of capacities greater than or equal to 20,000 gal, but less than 40,000 gal if the MTVP is 1.9 psia or greater, for storage vessels of capacities greater than or equal to 40,000 gal, but less than 90,000 gal if the MTVP is 0.75 psia or greater, and for storage vessels of 90,000 gal or greater, if the MTVP is 0.15 psia or greater, which represents a beyond-the-floor level of control. For continuous process vents, the standard being finalized establishes an emission limit of 0.95 kg of organic HAP per Mg (1.9 lb organic HAP per ton) of resin produced, which represents the MACT floor level of control. However, the calculation of the MACT floor has been revised since proposal.

### C. Polycarbonate Production

1. What are the final rule amendments based on the risk review for the PC source category?

For the PC source category, we have determined that the current MACT standards reduce risk to an acceptable level, provide an ample margin of safety to protect public health and prevent adverse environmental effects. Therefore, as we proposed, it is not necessary to revise the MACT standards pursuant to CAA section 112(f).

2. What are the final rule amendments based on the technology review for the PC source category?

We have determined that there have been developments in practices, processes and control technologies that warrant revisions to the MACT standard for this source category. Therefore, to satisfy the requirements of CAA section 112(d)(6) and as we proposed, we are revising the MACT standards to require facilities to comply with the LDAR requirements of 40 CFR part 63, subpart UU, rather than subpart TT, with the exception of connectors in gas and vapor service and in light liquid service. We are retaining the option for facilities to comply with either subpart TT or subpart UU for these components. For storage vessels, process vents and wastewater treatment systems, we have determined that, as we proposed, there are no viable developments in HAP emission reduction practices, processes or control technologies to apply to the emission sources in these source categories, considering the technical feasibility, estimated costs, energy implications, non-air environmental impacts and emission reductions of the options identified.

### D. What are the final rule amendments for all three source categories addressing emissions during periods of startup, shutdown and malfunction?

In its 2008 decision in *Sierra Club v. EPA*, 551 F.3d 1019 (D.C. Cir. 2008), *cert. denied*, 130 S. Ct. 1735 (U.S. 2010), the United States Court of Appeals for the District of Columbia Circuit 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, emission standards or limitations must be continuous in nature and that the SSM exemption violates the CAA's requirement that some section 112 standards apply continuously.

We have eliminated the SSM exemption in these rules. Consistent with *Sierra Club v. EPA*, the standards in these rules apply at all times. We are also finalizing several revisions to 40 CFR part 63, subpart YY and Table 1 to subpart OOO (the General Provisions applicability table), as is explained in more detail below. For example, we have eliminated the incorporation of the General Provisions' requirement that sources develop an SSM plan. We have also eliminated and revised certain NESHAP recordkeeping and reporting that is related to the eliminated SSM

exemption, as described in detail in the proposed rule and summarized again here.

In establishing the standards in these final rule amendments, the EPA has taken into account startup and shutdown periods and, for the reasons explained below, has not established alternate standards for these periods for the AMF, APR and PC MACT standards. Emission reductions for process vents and transfer operations are typically achieved by routing vapors to a control device such as a thermal oxidizer or carbon adsorber. It is common practice to start a control device prior to startup of the emissions source it is controlling, so the control device would be operating before emissions are routed to it. We expect control devices would be operating during startup and shutdown events in a manner consistent with normal operating periods, and that these control devices will be operated to maintain and meet the monitoring parameter operating limits set during the performance test. We do not expect startup and shutdown events to affect emissions from equipment leaks, wastewater sources (e.g., surface impoundments, oil-water separators, organic-water separators) or storage tanks. Leak detection programs associated with equipment leaks are in place to detect leaks, and, therefore, it is inconsequential whether the process is operating under normal operating conditions or is in startup or shutdown. Wastewater emissions are also not expected to be significantly affected by startup or shutdown events. Working and breathing losses from storage tanks are the same regardless of whether the process is operating under normal operating conditions or is in a startup or shutdown event.

Periods of startup, normal operations and shutdown are all predictable and routine aspects of a source's operations. However, by contrast, malfunctions are a sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner. See 40 CFR 63.2. 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. Under section 112, emission 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 section

112 that directs the EPA to consider malfunctions in determining the level “achieved” by the best performing sources when setting emission standards. As the United States Court of Appeals for the District of Columbia Circuit 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 emission standards, nothing in CAA section 112 requires the EPA to consider malfunctions as part of that analysis. A malfunction should not be treated 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.

Further, accounting for malfunctions in setting emission standards would be difficult, if not impossible, given the myriad different types of malfunctions that can occur across all sources in the source categories amended with this action, and given the difficulties associated with predicting or accounting for the frequency, degree and duration of various malfunctions that might occur. 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 offline 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 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.

In the event that a source fails to comply with the applicable CAA section 112 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 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 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, 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.

In several prior CAA section 112 rules and in the proposed rule, the EPA had included an affirmative defense to civil penalties for violations caused by malfunctions in an effort to create a system that incorporates some flexibility, recognizing that there is a tension, inherent in many types of air regulation, to ensure adequate compliance while simultaneously recognizing that despite the most diligent of efforts, emission standards may be violated under circumstances entirely beyond the control of the source. Although the EPA recognized that its case-by-case enforcement discretion provides sufficient flexibility in these circumstances, it included the affirmative defense to provide a more formalized approach and more regulatory clarity. See *Weyerhaeuser Co. v. Costle*, 590 F.2d 1011, 1057–58 (D.C. Cir. 1978) (holding that an informal case-by-case enforcement discretion approach is adequate); but see *Marathon Oil Co. v. EPA*, 564 F.2d 1253, 1272–73 (9th Cir. 1977) (requiring a more formalized approach to consideration of “upsets beyond the control of the permit holder.”). Under the EPA’s regulatory affirmative defense provisions, if a source could demonstrate in a judicial or administrative proceeding that it had met the requirements of the affirmative defense in the regulation, civil penalties would not be assessed. Recently, the United States Court of Appeals for the District of Columbia Circuit vacated an affirmative defense in one of the EPA’s CAA section 112 regulations. *NRDC v. EPA*, No. 10–1371 (D.C. Cir. April 18, 2014) 2014 U.S. App. LEXIS 7281 (vacating affirmative defense provisions in CAA section 112 rule establishing emission standards for Portland cement kilns). The court found that the EPA lacked authority to establish an affirmative defense for private civil suits and held that under the CAA, the authority to determine civil penalty amounts in such cases lies exclusively with the courts, not the EPA. Specifically, the Court found: “As the language of the statute makes clear, the courts determine, on a case-by-case basis, whether civil penalties are ‘appropriate.’” See *NRDC*, 2014 U.S. App. LEXIS 7281 at \*21 (“[U]nder this statute, deciding whether penalties are ‘appropriate’ in a given private civil suit is a job for the courts, not EPA.”).<sup>2</sup> In

<sup>2</sup> The court’s reasoning in *NRDC* focuses on civil judicial actions. The court noted that “EPA’s ability to determine whether penalties should be assessed for Clean Air Act violations extends only to

light of *NRDC*, the EPA is not including a regulatory affirmative defense provision in the final rule. As explained above, if a source is unable to comply with emission standards as a result of a malfunction, the EPA may use its case-by-case enforcement discretion to provide flexibility, as appropriate. Further, as the United States Court of Appeals for the District of Columbia Circuit recognized, in an EPA or citizen enforcement action, the court has the discretion to consider any defense raised and determine whether penalties are appropriate. *Cf. NRDC*, 2014 U.S. App. LEXIS 7281 at \*24. (Arguments that violations were caused by unavoidable technology failure can be made to the courts in future civil cases when the issue arises). The same is true for the presiding officer in EPA administrative enforcement actions.<sup>3</sup>

Refer to the explanations below and section VII of this preamble and the comment summary and response document, available in the docket for this action, for further discussion regarding SSM-related changes made to the AMF, APR and PC MACT standards.

#### 1. General Duty

For the APR MACT standards, we are revising the General Provisions applicability table (Table 1 to Subpart OOO) entry for 40 CFR 63.6(e)(1)(i) by changing the explanation in column 3. 40 CFR 63.6(e)(1)(i) describes the general duty to minimize emissions. Some of the language in that section is no longer necessary or appropriate in light of the elimination of the SSM exemption. Similarly, for the AMF and PC source categories, we are also removing this requirement at 40 CFR 63.1108(a)(5). For the AMF, APR and PC MACT standards, we are instead adding general duty regulatory text at 40 CFR 63.1108(a)(4)(ii) and 63.1400(k)(4) 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

administrative penalties, not to civil penalties imposed by a court.” *Id.*

<sup>3</sup> Although the *NRDC* case does not address the EPA’s authority to establish an affirmative defense to penalties that is available in administrative enforcement actions, the EPA is not including such an affirmative defense in the final rule. As explained above, such an affirmative defense is not necessary. Moreover, assessment of penalties for violations caused by malfunctions in administrative proceedings and judicial proceedings should be consistent. *CF. CAA* section 113(e) (requiring both the Administrator and the court to take specified criteria into account when assessing penalties).

differentiate between normal operations, startup and shutdown and malfunction events in describing the general duty. Therefore, the language the EPA is promulgating for 40 CFR 63.1108(a)(4)(ii) and 63.1400(k)(4) does not include that language from 40 CFR 63.6(e)(1).

For the APR MACT standards, we are also revising the General Provisions applicability table (Table 1 to Subpart OOO) entry for 40 CFR 63.6(e)(1)(ii) by changing the “yes” in the second column to a “no.” 40 CFR 63.6(e)(1)(ii) imposes requirements that are not necessary with the elimination of the SSM exemption or are redundant with the general duty requirement being added at 40 CFR 63.1400(k)(4).

#### 2. SSM Plan

For the APR MACT standards, we are revising the General Provisions applicability table (Table 1 to Subpart OOO) entry for 40 CFR 63.6(e)(3) by changing the “yes” in the second column to a “no.” Similarly, for the AMF and PC source categories, we are also removing this requirement at 40 CFR 63.1111(a). 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 removing 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.

#### 3. Compliance With Standards

For the APR MACT standards, we are revising the General Provisions applicability table (Table 1 to Subpart OOO) entry for 40 CFR 63.6(f)(1) by changing the “yes” in the second column 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 section 112 standard apply continuously. Consistent with *Sierra Club*, the EPA is revising standards in this rule to apply at all times.

#### 4. Performance Testing

For the APR MACT standards, we are revising the General Provisions applicability table (Table 1 to Subpart OOO) entry for 40 CFR 63.7(e)(1) by changing the “yes” in the second column to a “no.” 40 CFR 63.7(e)(1)

describes performance testing requirements. Similarly, for the AMF and PC source categories, we are also revising this requirement at 40 CFR 63.1108(b)(4)(ii). The EPA is instead adding a performance testing requirement at 40 CFR 63.1108(b)(4)(ii) and 63.1413(a)(2). The performance testing requirements we are adding 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 revised performance testing provisions do not allow performance testing during periods of startup or 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 not representative of normal operating conditions. The EPA is adding 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. 40 CFR 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 adding to this provision builds on that requirement and makes explicit the requirement to record the information.

#### 5. Monitoring

For the APR MACT standards, we are revising the General Provisions applicability table (Table 1 to Subpart OOO) entries for 40 CFR 63.8(c)(1)(i) and (iii) by changing the “yes” in the second column to a “no.” 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)).

#### 6. Recordkeeping

For the AMF, APR and PC MACT standards, the EPA is adding recordkeeping requirements during a malfunction to 40 CFR 63.1111(c)(1) and



63.1416(b). The EPA is applying the requirement 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." The EPA is also adding to 40 CFR 63.1111(c)(1) and 63.1416(b) 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 the standard for which the source failed to meet the standard 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 requiring 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.

#### 7. Reporting

For the APR MACT standards, we are revising the General Provisions applicability table (Table 1 to Subpart OOO) entry for 40 CFR 63.10(d)(5) by changing the "yes" in the second column to a "no." 40 CFR 63.10(d)(5) describes the reporting requirements for SSM. Similarly, for the AMF and PC source categories, we are also removing this requirement at 40 CFR 63.1111(b). To replace the General Provisions reporting requirement, the EPA is adding reporting requirements to 40 CFR 63.1111(c)(2) and 63.1417(g). The replacement language differs from the General Provisions requirement in that it eliminates periodic SSM reports as a stand-alone report. We are promulgating language that requires sources that fail to meet an applicable standard at any time to report the information concerning such events in the semi-annual periodic report already required under these rules. We are promulgating that the report must contain the number, date, time, duration and cause of such events (including unknown cause, if applicable), a list of the affected source 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 promulgating 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 will no longer be required. The final 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.

For the APR MACT standards, we are revising the General Provisions applicability table (Table 1 to Subpart OOO) entry for 40 CFR 63.10(d)(5)(ii) by changing the "yes" in the second column to a "no." 40 CFR 63.10(d)(5)(ii) describes an immediate report for startups, shutdown and malfunctions when a source failed to meet an applicable standard but did not follow the SSM plan. We will no longer require owners or operators to report when actions taken during a startup, shutdown or malfunction were not consistent with an SSM plan, because plans will no longer be required.

#### *E. What other changes have been made to all three NESHAP?*

##### 1. Pressure Relief Devices

PRDs are designed to remain closed during normal operation and only release as the result of unplanned and/or unpredictable events. A release from a PRD usually occurs during an over pressurization of the system. In some source configurations, emissions from PRDs are captured and routed to a control device, process, fuel gas system or drain system, and, therefore, do not result in a net increase of HAP emissions from the source than would otherwise be the case if the source met all other applicable HAP emission limits. However, emissions vented to the atmosphere by PRDs in organic HAP service contain HAP that are otherwise regulated under the MACT standards that apply to these source categories, and if such releases to the atmosphere occur there will be a net increase in source HAP emissions even if the source

otherwise complies with all other applicable HAP limits.

The original MACT standards for these source categories regulated PRDs through equipment leak provisions that applied only after the pressure release occurred. In addition, the rules followed the EPA's former practice of exempting SSM events from otherwise applicable emission standards. Consequently, the original MACT standards did not restrict emissions of organic HAP from PRDs to the atmosphere as a result of malfunction but instead treated them the same as all malfunctions through the SSM exemption provision.

In *Sierra Club v. EPA*, 551 F.3d 1019 (D.C. Cir. 2008), the court determined that the SSM exemption violated the CAA. See section III.D of this preamble for additional discussion. To ensure these NESHAP are consistent with that decision, the final rule revisions remove the malfunction exemptions in each of the MACT standards and provide that emissions of organic HAP may not be discharged to the atmosphere from PRDs in organic HAP service. The prohibition does not apply to PRD releases of HAP that are captured and routed to a control device, process, fuel gas system or drain system.

To ensure compliance with this amendment, we are also requiring that sources subject to these three MACT standards monitor PRDs in organic HAP service that release to the atmosphere by using a device or system that is capable of identifying and recording the time and duration of each pressure release and of notifying operators immediately that a pressure release is occurring. Owners or operators are required to keep records and report any pressure release and the amount of organic HAP released to the atmosphere with the next periodic report. As with the prohibition, this monitoring requirement does not apply to PRDs for which HAP releases are captured and routed to a control device, process, fuel gas system or drain system.

Pressure release events from PRDs in organic HAP service to the atmosphere have the potential to emit large quantities of uncontrolled and unmeasured HAP. Where a pressure release occurs, it is important to identify and mitigate it as quickly as possible. As defined in the MACT standards, PRDs are valves used only to release unplanned, nonroutine discharges. A PRD discharge results from an operator error, a malfunction such as a power failure or equipment failure, or other unexpected cause that requires immediate venting of gas from process equipment in order to avoid safety hazards or equipment damage. Even so,

to the extent that there are atmospheric HAP emissions from PRDs, we are required to follow the *Sierra Club* ruling to address those emissions in these rules, and we can no longer exempt them as permitted, uncontrolled and unmeasured malfunction emissions as we did under the previous MACT standards. This concern is not present in the case of PRDs for which HAP releases are captured and routed to a control device, process, fuel gas system or drain system, since in these situations there is no additional uncontrolled and unmeasured HAP emission occurring beyond that which is already subject to control or monitoring of the process unit. We recognize that HAP releases to the atmosphere from PRDs sometimes occur in order to protect systems from failures that could endanger worker safety and the systems that the PRDs are designed to protect. In the event that a source fails to comply with the applicable CAA section 112 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 standard was, in fact, "sudden, infrequent, not reasonably preventable" and was not instead "caused in part by poor maintenance or careless operation." 40 CFR 63.1101 and 63.1402 (definition of malfunction).

If the EPA determines in a particular case that 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, 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.

Some sources are configured such that PRDs can be effectively used to address

safety issues without consequently adding HAP emissions to the atmosphere beyond those that are otherwise allowed under applicable limits. We also recognize, however, that it is not always technically possible to route emissions from all PRDs to a control device, process, fuel gas system or drain system. With respect to these PRDs that vent to the atmosphere, instead, we have provided a balanced approach designed to minimize emissions while recognizing that these events may be unavoidable even in a well-designed and maintained (if, albeit, uncontrolled with respect to PRDs) system.

For purposes of estimating the costs of the new requirement to monitor HAP releases to the atmosphere from PRDs, we assumed that operators would install electronic indicators on each PRD in organic HAP service that vents to the atmosphere (rather than to a control device, process, fuel gas system or drain system) to identify and record the time and duration of each pressure release. However, we are allowing owners or operators to use a range of methods to satisfy these requirements, including the use of a parameter monitoring system (that may already be in place) on the process system or piping that is sufficient to notify operators immediately that a release is occurring, as well as recording the time and duration of the pressure release. Based on our cost assumptions that the most expensive approach would be used, the nationwide capital cost of installing these monitors is \$37,000, \$400,000 and \$51,000 for the AMF, APR and PC source categories, respectively. The total annualized cost of installing and operating these monitors is \$5,300, \$60,000 and \$7,200 per year for the AMF, APR and PC source categories, respectively.

## 2. Open-Ended Valves and Lines

The AMF MACT standards at 40 CFR 63.1103(b)(3) and the PC MACT standards at 40 CFR 63.1103(d)(3) require an owner or operator to control emissions from equipment leaks according to the requirements of 40 CFR part 63, subpart UU. The APR MACT standards at 40 CFR 63.1410 also require that equipment leaks be controlled according to subpart UU. For open-ended valves and lines, subpart UU requires that the open end be equipped with a cap, blind flange, plug or second valve that "shall seal the open end at all times." However, neither subpart UU, nor the AMF, APR or PC MACT standards, define "seal" or explain in practical and enforceable terms what constitutes a sealed open-

ended valve or line. This has led to uncertainty on the part of the owner or operator as to whether compliance is being achieved. Inspections under the EPA's Air Toxics LDAR initiative have provided evidence that while certain open-ended lines may be equipped with a cap, blind flange, plug or second valve, they are not operating in a "sealed" manner as the EPA interprets that term.

In response to this uncertainty, we are amending 40 CFR 63.1103(b)(2) (for the AMF MACT standards), 40 CFR 63.1402(b) (for the APR MACT standards) and 40 CFR 63.1103(d)(2) (for the PC MACT standards) to clarify what is meant by "seal." This amendment clarifies that, for the purpose of complying with the requirements of 40 CFR 63.1033(b) of subpart UU, open-ended valves and lines are "sealed" by the cap, blind flange, plug or second valve when there are no detectable emissions from the open-ended valve or line at or above an instrument reading of 500 ppm.

## 3. Submission of Performance Test Data to the EPA

As stated in the preamble to the proposed rule, the EPA is taking a step to increase the ease and efficiency of data submittal and data accessibility. Specifically, the EPA is requiring owners and operators of AMF, APR and PC facilities to submit electronic copies of certain required performance test reports.

Data will be collected by direct computer-to-computer electronic transfer using EPA-provided software. This EPA-provided software is an electronic performance test report tool called the Electronic Reporting Tool (ERT). The ERT will generate an electronic report package which will be submitted to the Compliance and Emissions Data Reporting Interface (CEDRI) and then archived to the EPA's Central Data Exchange (CDX). A description and instructions for use of the ERT can be found at: <http://www.epa.gov/ttn/chief/ert/index.html> and CEDRI can be accessed through the CDX Web site: (<http://www.epa.gov/cdx>).

The requirement to submit performance test data electronically to the EPA does not create any additional performance testing and will apply only to those performance tests conducted using test methods that are supported by the ERT. A listing of the pollutants and test methods supported by the ERT is available at the ERT Web site. The EPA believes, through this approach, industry will save time in the performance test submittal process.

Additionally, this rulemaking benefits industry by reducing recordkeeping costs as the performance test reports that are submitted to the EPA using CEDRI are no longer required to be kept in hard copy.

State, local and tribal agencies may benefit from more streamlined and accurate review of performance test data that will become available to the public through WebFIRE. Additionally, performance test data will become available to the public through WebFIRE. Having such data publicly available enhances transparency and accountability. For a more thorough discussion of electronic reporting of performance tests using direct computer-to-computer electronic transfer and using EPA-provided software, see the discussion in the preamble of the proposal.

In summary, in addition to supporting regulation development, control strategy development and other air pollution control activities, having an electronic database populated with performance test data will save industry, state, local, tribal agencies and the EPA significant time, money and effort while improving the quality of emission inventories and air quality regulations.

*F. What are the effective and compliance dates of the standards for all three source categories?*

The revisions to the MACT standards being promulgated in this action are effective on October 8, 2014.

The compliance date for existing AMF, APR and PC sources to comply with the revised SSM requirements (other than PRD monitoring) is the effective date of the standard, October 8, 2014. We are finalizing these compliance dates because these requirements should be immediately implementable by the facilities upon the next occurrence of a malfunction or a performance test that is required to be submitted to the ERT. Available information suggests that the facilities should already be able to comply with the existing standards during periods of startup and shutdown.

The compliance date for AMF, APR and PC sources that commenced construction or reconstruction on or before January 9, 2014, to comply with the PRD monitoring requirements is 3 years from the effective date of the promulgated standards, October 9, 2017. This time is needed regardless of whether an owner or operator of a facility chooses to comply with the PRD monitoring provisions by installing PRD release indicator systems and alarms, employing parameter monitoring or by routing releases to a control device,

process, fuel gas system or drain system. This time period will allow facilities to research equipment and vendors, purchase, install, test and properly operate any necessary equipment by the compliance date.

The compliance date for existing AMF, APR and PC sources to comply with the operating and pressure release management requirements for PRDs, along with the other SSM-related revisions, is the effective date of the promulgated standards, October 8, 2014. We are finalizing these compliance dates because these requirements are the same as those contained in 40 CFR part 63, subpart UU, with which facilities are already complying as part of the existing MACT standards.

The compliance date for the one existing AMF source to comply with the new solution polymerization spinning line requirements is the effective date of the promulgated standards, October 8, 2014. This facility is already complying with these requirements and no additional time to come into compliance is warranted.

The compliance date for existing APR sources to comply with the new MACT standards applicable to continuous process vents and storage vessels is 3 years from the effective date of the promulgated standards, October 9, 2017. This time period will allow facilities to purchase, install and test any necessary equipment.

The compliance date for existing AMF and PC sources to comply with the revised equipment leak standards is 1 year from the effective date of the promulgated standards, October 8, 2015. Our data indicate that the one AMF facility and some of the PC facilities are currently complying with 40 CFR part 63, subpart TT requirements and will need time to purchase, install and test any necessary equipment and modify their existing LDAR programs.

New sources that commenced or commence construction or reconstruction after January 9, 2014, must comply with the all of the revised standards immediately upon the effective date of the standard, October 8, 2014, or upon startup, whichever is later.

**IV. What is the rationale for our final decisions and amendments for the AMF source category?**

For each issue, this section provides a description of what we proposed and finalized for the issue, the EPA's rationale for the final decisions and amendments and a summary of key comments and responses. For all comments not discussed in this preamble, comment summaries and the

EPA's responses can be found in the comment summary and response document available in the docket.

*A. Residual Risk Review for the AMF Source Category*

1. What did we propose pursuant to CAA section 112(f) for the AMF source category?

For the AMF source category, the results of the inhalation risk assessment indicated the maximum lifetime individual cancer risk could be up to 20-in-1 million, the estimated maximum chronic non-cancer target organ-specific hazard index (TOSHI) value was 0.1 and the estimated maximum off-facility site acute HQ value was 0.08, based on the actual emissions level and the AEGL-1 value for acrylonitrile. The total estimated national cancer incidence from the one AMF facility based on actual emission levels was 0.006 excess cancer cases per year or one case in every 170 years. The EPA proposed that no amendments were needed for this source category based on the risk review under CAA section 112(f). See 79 FR 1697-1700 (January 9, 2014).

2. How did the risk review change for the AMF source category?

For the AMF source category, the risk review has not changed since proposal.

3. What key comments did we receive on the risk review, and what are our responses?

For the AMF source category, the comments received on the proposed risk review were generally supportive. A summary of these comments and our responses can be found in the comment summary and response document available in the docket for this action (EPA-HQ-OAR-2012-0133).

4. What is the rationale for our final approach for the risk review?

The results of the risk assessment for the AMF source category did not change from proposal and, therefore, they did not affect our determinations regarding risk acceptability and ample margin of safety. The full results of the risk assessment for the AMF source category can be found in the risk assessment documentation available in the docket for this action (EPA-HQ-OAR-2012-0133).

Uncertainty and the potential for bias are inherent in all risk assessments, including those performed for the source categories addressed in this final rule. Although uncertainty exists, we believe that our approach, which used conservative tools and assumptions, ensures that our decisions are health-protective. A discussion of the

uncertainties in the emissions datasets, dispersion modeling, inhalation exposure estimates and dose-response relationships is provided in the preamble to the proposed rule. See 79 FR 1684 (January 9, 2014).

In accordance with the approach established in the Benzene NESHAP, the EPA weighed all health risk measures and information considered in the risk acceptability determination, along with additional factors relating to the appropriate level of control, including the costs and economic impacts of emissions controls, technological feasibility, uncertainties and other relevant factors in making our risk acceptability and ample margin of safety determination. Considering all of these factors, the EPA has determined that the risks from the AMF source category are acceptable and that the current MACT standards in 40 CFR part 63, subpart YY for the AMF source category provide an ample margin of safety to protect public health.

#### *B. Technology Review for the AMF Source Category*

1. What did we propose pursuant to CAA section 112(d)(6) for the AMF source category?

For the AMF source category, the EPA proposed to eliminate the less stringent of two currently available options for complying with LDAR program requirements, while retaining the more stringent compliance requirement. The AMF MACT standards previously required compliance with either subpart TT or subpart UU of 40 CFR part 63 to control emissions from equipment leaks. As part of the technology review for the AMF source category, we proposed to require facilities to comply with subpart UU rather than subpart TT, with the exception of connectors in gas and vapor service and in light liquid service. We proposed to retain the option to comply with either subpart TT or subpart UU for those components. See 79 FR 1700–1701.

2. How did the technology review change for the AMF source category?

For the AMF source category, the technology review has not changed since proposal.

3. What key comments did we receive on the technology review, and what are our responses?

For the AMF source category, the comments received on the proposed technology review were generally supportive. A summary of these comments and our responses can be found in the comment summary and

response document available in the docket for this action (EPA–HQ–OAR–2012–0133).

4. What is the rationale for our final approach for the technology review?

The results of the technology review for the AMF source category did not change from proposal. Therefore the EPA is requiring AMF facilities to comply with 40 CFR part 63, subpart UU rather than 40 CFR part 63, subpart TT, with the exception of connectors in gas and vapor service and in light liquid service. Facilities continue to have the option to comply with either subpart TT or subpart UU for those components.

#### *C. Sections 112(d)(2) & (3) Amendments for the AMF Source Category*

1. What did we propose pursuant to sections 112(d)(2) & (3) for the AMF source category?

For the AMF source category, the EPA identified the absence of an emissions limit for spinning lines that use a spin dope produced from a solution polymerization process at existing AMF facilities. Pursuant to CAA sections 112(d)(2) and (3), we proposed to establish an emissions limit of 20 kg organic HAP-Mg (40 lb organic HAP-ton) of acrylic and modacrylic fiber produced for this emission point, which represented the MACT floor emissions limit. See 79 FR 1697.

2. How do the final amendments pursuant to sections 112(d)(2) & (3) differ from the proposal for the AMF source category?

For the AMF source category, the emissions limit for spinning lines that use a spin dope produced from a solution polymerization process at existing AMF facilities has not changed since proposal.

3. What key comments did we receive on the amendments proposed pursuant to sections 112(d)(2) & (3) for the AMF source category, and what are our responses?

For the AMF source category, the comments received on the proposed emissions limit for spinning lines that use a spin dope produced from a solution polymerization process at existing AMF facilities were generally supportive. A summary of these comments and our responses can be found in the comment summary and response document available in the docket for this action (EPA–HQ–OAR–2012–0133).

4. What is the rationale for our final approach for the final amendments pursuant to sections 112(d)(2) & (3) for the AMF source category?

The analysis of the emissions limit for spinning lines that use a spin dope produced from a solution polymerization process at existing AMF facilities did not change from proposal. Therefore, the EPA is establishing an emissions limit at the MACT floor for this emission point: 20 kg organic HAP-Mg (40 lb organic HAP-ton) of acrylic and modacrylic fiber produced.

#### **V. What is the rationale for our final decisions and amendments for the APR source category?**

For each issue, this section provides a description of what we proposed and finalized for the issue, the EPA's rationale for the final decisions and amendments and a summary of key comments and responses. For all comments not discussed in this preamble, comment summaries and the EPA's responses can be found in the comment summary and response document available in the docket.

##### *A. Residual Risk Review for the APR Source Category*

1. What did we propose pursuant to CAA section 112(f) for the APR source category?

For the APR source category, the results of the inhalation risk assessment indicated the maximum lifetime individual cancer risk could be up to 9-in-1 million, the estimated maximum chronic non-cancer TOSHI value was 0.2 and the estimated maximum off-facility site acute hazard quotient (HQ) value was 10, based on the actual emissions level and the reference exposure level (REL) value for formaldehyde. The total estimated national cancer incidence from APR facilities based on actual emission levels was 0.001 excess cancer cases per year or one case in every 1,000 years. The EPA proposed that no amendments were needed for this source category based on the risk review under CAA section 112(f). See 79 FR 1703–1706.

2. How did the risk review change for the APR source category?

For the APR source category, we received information indicating that an additional facility should have been included in the risk assessment for this source category. Using information submitted by this facility, we revised the risk assessment for this source category. The MIR increased from 9- to 20-in-1 million, the annual cancer incidence increased from 0.001 to 0.002

cases per year, the maximum chronic non-cancer TOSHI value increased from 0.2 to 0.4, and the maximum off-site

acute HQ value stayed the same at 10, based on the REL value for formaldehyde. Table 2 provides an

overall summary of the revised inhalation risk assessment results for the APR source category.

TABLE 2—APR INHALATION RISK ASSESSMENT RESULTS

Number of facilities <sup>1</sup>	Maximum individual cancer risk (in 1 million) <sup>2</sup>		Population at risk $\geq$ 1-in-1 million	Annual cancer incidence (cases per year)	Maximum chronic non-cancer TOSHI <sup>3</sup>		Maximum off-site acute non-cancer HQ <sup>4</sup>
	Actual emissions level	Allowable emissions level			Actual emissions level	Allowable emissions level	
19	20	20	15,000	0.002	0.4	0.4	HQ <sub>REL</sub> = 10 formaldehyde. HQ <sub>AEG1-1</sub> = 0.6 formaldehyde.

<sup>1</sup> Number of facilities evaluated in the risk analysis.

<sup>2</sup> Maximum individual excess lifetime cancer risk.

<sup>3</sup> Maximum TOSHI. The target organ with the highest TOSHI for the APR source category is the respiratory system.

<sup>4</sup> The maximum estimated acute exposure concentration was divided by available short-term threshold values to develop an array of HQ values. HQ values shown use the lowest available acute threshold value, which in most cases is the REL. When HQ values exceed 1, we also show HQ values using the next lowest available acute dose-response value.

3. What key comments did we receive on the risk review, and what are our responses?

For the APR source category, the comments received on the proposed risk review were generally supportive. A summary of these comments and our responses can be found in the comment summary and response document available in the docket for this action (EPA-HQ-OAR-2012-0133).

4. What is the rationale for our final approach for the risk review?

The results of the revised risk assessment did not significantly change the maximum risk levels to the most exposed individual for this source category and did not affect our determinations regarding risk acceptability and ample margin of safety. The full results of the revised risk assessment for this source category can be found in the risk assessment documentation available in the docket for this action (EPA-HQ-OAR-2012-0133).

Uncertainty and the potential for bias are inherent in all risk assessments, including those performed for the source categories addressed in this final rule. Although uncertainty exists, we believe that our approach, which used conservative tools and assumptions, ensures that our decisions are health-protective. A discussion of the uncertainties in the emissions datasets, dispersion modeling, inhalation exposure estimates and dose-response relationships is provided in the preamble to the proposed rule. See 79 FR 1684.

In accordance with the approach established in the Benzene NESHAP, the EPA weighed all health risk measures and information considered in the risk acceptability determination,

along with additional factors relating to the appropriate level of control, including the costs and economic impacts of emissions controls, technological feasibility, uncertainties and other relevant factors in making our risk acceptability and ample margin of safety determination. Considering all of these factors, the EPA has determined that the risks from the APR source category are acceptable and that the current MACT standards in 40 CFR part 63, subpart OOO for the APR source category provide an ample margin of safety to protect public health.

#### B. Technology Review for the APR Source Category

1. What did we propose pursuant to CAA section 112(d)(6) for the APR source category?

For the APR source category, the EPA proposed to change the thresholds at which emission controls are required for storage vessels at new sources to be consistent with other storage vessel standards already required for the chemical industry regulated by the Hazardous Organic NESHAP for Synthetic Organic Chemical Manufacturing Industry (HON). We proposed to revise the applicability of the APR new source MACT standards to include smaller capacity storage vessels and/or storage vessels containing liquids with lower vapor pressures. An emissions reduction of 95 percent was proposed for storage vessels of capacities greater than or equal to 20,000 gal, but less than 40,000 gal if the MTVP is 1.9 psia or greater, and for storage vessels of capacities greater than or equal to 40,000 gal, but less than 90,000 gal if the MTVP is 0.75 psia or greater. Control was proposed to still be required for storage vessels of 90,000 gal or greater, if the MTVP is 0.15 psia or

greater, as was previously required for storage vessels at new sources in the APR source category. See 79 FR 1706–1707.

2. How did the technology review change for the APR source category?

For the APR source category, the technology review has not changed since proposal.

3. What key comments did we receive on the technology review, and what are our responses?

For the APR source category, the comments received on the proposed technology review were generally supportive. A summary of these comments and our responses can be found in the comment summary and response document available in the docket for this action (EPA-HQ-OAR-2012-0133).

4. What is the rationale for our final approach for the technology review?

The results of the technology review for the APR source category did not change from proposal. Therefore the EPA is changing the thresholds at which emission controls are required for storage vessels at new sources to be consistent with other storage vessel standards already required for the chemical industry regulated by the HON. An emissions reduction of 95 percent is now required for storage vessels of capacities greater than or equal to 20,000 gal, but less than 40,000 gal if the MTVP is 1.9 psia or greater, and for storage vessels of capacities greater than or equal to 40,000 gal, but less than 90,000 gal if the MTVP is 0.75 psia or greater. Control is still required for storage vessels of 90,000 gal or greater, if the MTVP is 0.15 psia or greater, as was previously required for

storage vessels at new sources in the APR source category.

*C. Sections 112(d)(2) & (3) Amendments for the APR Source Category*

1. What did we propose pursuant to sections 112(d)(2) & (3) for the APR source category?

For the APR source category, the EPA identified the absence of an emissions limit for storage vessels and continuous process vents at existing APR facilities. Pursuant to CAA sections 112(d)(2) and (3), for storage vessels, we proposed thresholds at which emission controls are required consistent with other storage vessel standards already required for the chemical industry regulated by the HON. An emissions reduction of 95 percent was proposed for storage vessels of capacities greater than or equal to 20,000 gal, but less than 40,000 gal if the MTVP is 1.9 psia or greater, for storage vessels of capacities greater than or equal to 40,000 gal, but less than 90,000 gal if the MTVP is 0.75 psia or greater, and for storage vessels of 90,000 gal or greater if the MTVP is 0.15 psia or greater. This represented a beyond-the-floor level of control for storage vessels at existing facilities.

Pursuant to CAA sections 112(d)(2) and (3), for continuous process vents, we proposed that existing facilities reduce organic HAP emissions either by 85 percent or to a concentration of 20 parts per million by volume (ppmv), when using a combustion control device, or to a concentration of 50 ppmv when using a non-combustion control device. This represented the MACT floor level of control for continuous process vents at existing facilities. See 79 FR 1701–1703.

2. How did the final amendments pursuant to sections 112(d)(2) & (3) differ from the proposal for the APR source category?

For the APR source category, the emissions limit for storage vessels at existing APR facilities has not changed since proposal. However, the emissions limit for continuous process vents at existing APR facilities has been revised to establish an emission limit of 0.95 kg organic HAP/Mg (1.9 lb organic HAP/ton) of resin produced for continuous process vents.

3. What key comments did we receive on the amendments proposed pursuant to sections 112(d)(2) & (3) for the APR source category, and what are our responses?

The following is a summary of the significant comments received on the proposed APR emissions limits and our

responses to these comments. The complete list of the comments received and our responses to those comments can be found in the comment summary and response document available in the docket for this action (EPA–HQ–OAR–2012–0133).

*Comment:* One commenter states that when the EPA developed subpart OOO, the EPA declined to require controls for spray dryer continuous process vents for existing sources based on only one of three facilities with these process vents having emissions controls. The commenter notes the EPA concluded the MACT floor and existing source standard was no control, and control was only required for continuous process vents at new sources. The commenter notes that the EPA is now proposing standards for existing continuous process vents and states that the RTR process does not allow for the EPA to reconsider aspects of previously issued MACT standards unrelated to “development in practices, processes and control technologies.” The commenter states that the EPA can’t merely change its mind about what standards are required to comply with CAA section 112(d)(2) and (3), nor is it obligated to recalculate a MACT floor based on subsequent performance.

*Response:* The EPA disagrees that we lack the authority to revise improperly set MACT floors. In *Medical Waste Institute v. EPA*, 645 F. 3d 420, 425–27 (D.C. Cir. 2011), the United States Court of Appeals for the District of Columbia Circuit held that the EPA may permissibly amend improper MACT determinations, including amendments to improperly promulgated floor determinations, using its authority under section 112(d)(2) and (3). The “no control” floor for HAP emitted from continuous process vents at existing APR sources is not proper. *National Lime*, 233 F. 3d at 633–34; see also *Medical Waste Institute*, 645 F. 3d at 426 (resetting MACT floor, based on post-compliance data, permissible when the originally-established floor was improperly established, and permissibility of the EPA’s action does not turn on whether the prior standard was remanded or vacated). Similarly, the United States Court of Appeals for the District of Columbia Circuit Court’s December 9, 2011, decision in *Portland Cement Ass’n v. EPA* (D.C. Cir. No. 10–1358) confirms that the EPA is not constrained by CAA section 112(d)(6), and it may reassess its standards more often, including revising existing floors if need be. A full discussion of our consideration of this issue and basis for determining that the MACT floor was improperly set is contained the

preamble to the proposed rule at 79 FR 1703 (January 9, 2014).

*Comment:* One commenter states that based on its knowledge of the industry, Georgia Pacific and Tembec are the only companies that currently manufacture APR and operate APR spray dryer continuous process vents, but it appears that the original MACT floor determination and the proposed provisions did not include two other Georgia Pacific facilities with continuous process vents. The commenter believes the EPA should revise its MACT floor analyses to include these facilities. The commenter further requests that if the EPA regulates emissions from spray dryer continuous process vents, that it establish an uncontrolled production-based emission limit. The commenter also requests that in establishing this limit, the EPA allow the calculation of uncontrolled production-based emissions rates that are based on the last 5 years of production, which would account for variability in the drying of multiple resin types.

*Response:* The EPA has reviewed the new data submitted by the commenter and used these data to determine the revised MACT floor for continuous process vents at existing sources. In reviewing the data, the EPA determined that a production-based emission limit of 0.95 kg organic HAP/Mg (1.9 lb organic HAP/ton) of resin produced was appropriate, as discussed in section IV.C.4.b of this preamble. In setting this limit, the EPA used emissions data from the previous 5 years submitted by all four affected facilities, which incorporates sufficient variability in the drying of multiple resin types. For further details on how the MACT floor was recalculated, see the technical memorandum titled, *MACT Floor and Beyond-the-Floor for Existing Unregulated Emission Sources in the Amino and Phenolic Resins Production Source Category*, available in the docket for this action.

4. What is the rationale for our final approach for the final amendments pursuant to sections 112(d)(2) & (3) for the APR source category?

a. Storage Vessels

The analysis of the emissions limit for storage vessels at existing APR facilities has not changed since proposal. Therefore, the EPA is establishing an emissions limit for storage vessels consistent with other storage vessel standards already required for the chemical industry regulated by the HON. An emissions reduction of 95 percent is required for storage vessels of

capacities greater than or equal to 20,000 gal, but less than 40,000 gal if the MTVP is 1.9 psia or greater, for storage vessels of capacities greater than or equal to 40,000 gal, but less than 90,000 gal if the MTVP is 0.75 psia or greater, and for storage vessels of 90,000 gal or greater if the MTVP is 0.15 psia or greater.

**b. Continuous Process Vents**

The analysis of the emissions limit for continuous process vents at existing APR facilities has been revised to reflect new data submitted by industry during the comment period. As part of their comments, Georgia Pacific identified two additional facilities as having continuous process vents, bringing the total to four facilities in the APR source category that have continuous process vents (Tembec in Toledo, OH, and Georgia Pacific facilities in Crossett, AR, Taylorsville, MS, and Conway, NC). All but one of the continuous process vents at these facilities come from dryers on the amino/phenolic resin process unit (APPU). Based on historical emissions and production information submitted by these facilities, we have determined that the MACT floor for continuous process vents is an emission limit of

0.95 kg organic HAP/Mg (1.9 lb organic HAP/ton) of resin produced. For further details on how the MACT floor was calculated for continuous process vents, see the technical memorandum titled, *MACT Floor and Beyond-the-Floor for Existing Unregulated Emission Sources in the Amino and Phenolic Resins Production Source Category*, available in the docket for this action.

As part of our beyond-the-floor analysis, we considered control options more stringent than the MACT floor and identified one such option. For the beyond-the-floor option, we evaluated the impact of requiring a 98-percent emissions reduction, assuming that a regenerative thermal oxidizer would be used to achieve this increased level of control.

Table 3 presents the impacts for the MACT floor and the beyond-the-floor option considered. As seen in Table 3, the MACT floor level of control is expected to reduce HAP emissions by approximately 135 tpy and have a cost effectiveness of \$6,400/ton of HAP removed. For the beyond-the-floor option, we estimated the capital costs to be approximately \$9 million, and the total annualized costs are estimated to be approximately \$3 million. The

estimated HAP emissions reduction is approximately 181 tpy, and the incremental cost effectiveness between the MACT floor and the beyond-the-floor option is approximately \$74,000/ton.

For further details on the assumptions and methodologies used in this analysis, see the technical memorandum titled, *National Impacts Associated with the Final NESHAP for Existing Amino and Phenolic Resins Continuous Process Vents*, available in the docket for this action.

While, as discussed in section V.A above, the continuous process vent control options are not needed to support the EPA's finding under CAA section 112(f) that the APR MACT standards already protect public health with an ample margin of safety, and while we do not factor quantified risk reductions into CAA section 112(d)(2) beyond-the-floor analyses, for informational purposes we note that the beyond-the-floor option for continuous process vents would not reduce the MIR or the maximum chronic non-cancer TOSHI for the source category because neither the MIR nor the non-cancer TOSHI is caused by emissions from continuous process vents.

**TABLE 3—NATIONWIDE EMISSIONS REDUCTION AND COST IMPACTS OF CONTROL OPTIONS FOR CONTINUOUS PROCESS VENTS AT EXISTING APR FACILITIES**

Regulatory options	HAP emissions reduction (tpy)	Capital cost (million \$)	Annual cost (\$/yr)	Cost effectiveness (\$/ton HAP removed)	Incremental cost effectiveness (\$/ton HAP removed)
Baseline (MACT floor) .....	135	3.6 million .....	860,000 .....	6,400	.....
Beyond-the-floor .....	181	8.8 million .....	3.1 million .....	17,000	74,000

Based on this analysis, we do not believe the costs of the beyond-the-floor option are reasonable, given the level of HAP emissions reduction that would be achieved with this control option. Therefore, we are revising the APR MACT standards to require the MACT floor level of control for continuous process vents at existing APR sources.

**VI. What is the rationale for our final decisions and amendments for the PC source category?**

For each issue, this section provides a description of what we proposed and finalized for the issue, the EPA's rationale for the final decisions and amendments and a summary of key comments and responses. For all comments not discussed in this preamble, comment summaries and the EPA's responses can be found in the comment summary and response document available in the docket.

**A. Residual Risk Review for the PC Source Category**

1. What did we propose pursuant to CAA section 112(f) for the PC source category?

For the PC source category, the results of the inhalation risk assessment indicated the maximum lifetime individual cancer risk could be up to 0.3-in-1 million, the estimated maximum chronic non-cancer TOSHI value was 0.04 and the estimated maximum off-facility site acute HQ value was 2, based on the actual emissions level and the REL value for triethylamine. The total estimated national cancer incidence from PC facilities based on actual emission levels is 0.00008 excess cancer cases per year or one case in every 13,000 years. The EPA proposed that no amendments were needed for this source category

based on the risk review under CAA section 112(f). See 79 FR 1707–1709.

2. How did the risk review change for the PC source category?

For the PC source category, the risk review has not changed since proposal.

3. What key comments did we receive on the risk review, and what are our responses?

For the PC source category, the comments received on the proposed risk review were generally supportive. A summary of these comments and our responses can be found in the comment summary and response document available in the docket for this action (EPA-HQ-OAR-2012-0133).

4. What is the rationale for our final approach for the risk review?

The results of the risk assessment for the PC source category did not change

from proposal and therefore they did not affect our determinations regarding risk acceptability and ample margin of safety. The full results of the risk assessment for the PC source category can be found in the risk assessment documentation available in the docket for this action (EPA-HQ-OAR-2012-0133).

Uncertainty and the potential for bias are inherent in all risk assessments, including those performed for the source categories addressed in this final rule. Although uncertainty exists, we believe that our approach, which used conservative tools and assumptions, ensures that our decisions are health-protective. A discussion of the uncertainties in the emissions datasets, dispersion modeling, inhalation exposure estimates and dose-response relationships is provided in the preamble to the proposed rule. See 79 FR 1684.

In accordance with the approach established in the Benzene NESHAP, the EPA weighed all health risk measures and information considered in the risk acceptability determination, along with additional factors relating to the appropriate level of control, including the costs and economic impacts of emissions controls, technological feasibility, uncertainties and other relevant factors in making our risk acceptability and ample margin of safety determination. Considering all of these factors, the EPA has determined that the risks from the PC source category are acceptable and that the current MACT standards in 40 CFR part 63, subpart YY for the PC source category provide an ample margin of safety to protect public health.

#### *B. Technology Review for the PC Source Category*

1. What did we propose pursuant to CAA section 112(d)(6) for the PC source category?

For the PC source category, the EPA proposed to eliminate the less stringent of two currently available options for complying with LDAR program requirements—while retaining the more stringent compliance requirement. The PC MACT standards previously required compliance with either subpart TT or subpart UU of 40 CFR part 63 to control emissions from equipment leaks. As part of the technology review for the PC source category, we proposed to require facilities to comply with subpart UU rather than subpart TT, with the exception of connectors in gas and vapor service and in light liquid service. We proposed to retain the option to comply with either subpart TT or

subpart UU for those components. See 79 FR 1709–1710.

2. How did the technology review change for the PC source category?

For the PC source category, the technology review has not changed since proposal.

3. What key comments did we receive on the technology review, and what are our responses?

For the PC source category, the comments received on the proposed technology review were generally supportive. A summary of these comments and our responses can be found in the comment summary and response document available in the docket for this action (EPA-HQ-OAR-2012-0133).

4. What is the rationale for our final approach for the technology review?

The results of the technology review for the PC source category did not change from proposal. Therefore the EPA is requiring PC facilities to comply with 40 CFR part 63, subpart UU rather than 40 CFR part 63, subpart TT, with the exception of connectors in gas and vapor service and in light liquid service. Facilities continue to have the option to comply with either subpart TT or subpart UU for those components.

#### **VII. What is the rationale for our final decisions and amendments that apply to all three source categories?**

For each issue, this section provides a description of what we proposed and finalized for the issue, the EPA's rationale for the final decisions and amendments and a summary of key comments and responses. For all comments not discussed in this preamble, comment summaries and the EPA's responses can be found in the comment summary and response document available in the docket.

##### *A. Startup, Shutdown and Malfunction*

1. What did we propose for SSM?

We proposed to eliminate the SSM exemption from all three source categories and that the existing or revised standards would apply at all times. We took into account startup and shutdown periods and did not propose alternate standards for those periods because facilities in these source categories did not indicate that they would be unable to comply with the standards during these times and our assessment of the control technology used confirms that the standards can be met during periods of startup and shutdown. We also proposed to add provisions for an affirmative defense to

civil penalties for violations of emission standards in these rules that are caused by malfunctions. See 79 FR 1710–1713.

2. How did the SSM provisions change?

For the SSM provisions, we are still removing the SSM exemption and requiring that the existing standards apply at all times. In addition, we have added language to the AMF and PC MACT standards to clarify that excused excursions are not allowed. However, we are not finalizing the proposed affirmative defense provisions.

3. What key comments did we receive on the SSM provisions, and what are our responses?

The following is a summary of the significant comments received on the proposed SSM provisions and our responses to these comments. The complete list of the comments received and our responses to those comments can be found in the comment summary and response document available in the docket for this action (EPA-HQ-OAR-2012-0133).

*Comment:* Several commenters state that the proposal to eliminate the SSM provisions in the proposed subparts is not based on an accurate reading of the decision of the DC Circuit in *Sierra Club v. EPA*, 551 F.3d 1019 (D.C. Cir. 2008). The commenters state that the EPA's proposal for the standards to apply at all times is not consistent with *Sierra Club v. EPA*, as the court did not hold that the EPA is prohibited from setting separate standards for periods of SSM that are different than the emission limits during normal operations but held that the standards for those periods must be developed according to the section 112(d) MACT process and must be proven to be achievable under section 112(d). The commenters add that there is ample precedent for the EPA applying a different standard during SSM events, and such a standard could include a design, equipment, work practice, or operational standard under section 112(h).

One of the commenters notes that the definitions of "emission limitation" and "emission standard" have included provisions to limit "quantity, rate, or concentration of emissions of air pollutants on a continuous basis" since 1977, and since that time the EPA has not required sources to meet NSPS emission limits under CAA section 111 established for normal operations during SSM events. The commenter adds that Congress enacted the "continuous basis" language in section 302(k) knowing the EPA's emission standards under section 111 exempted SSM periods, and there is nothing in the



legislative history of the 1977 or 1990 amendments to the CAA that suggests Congress intended to overturn that practice. The commenter noted that case law has affirmed the appropriateness of including special SSM provisions in standards issued under section 111.

Response: The EPA does not claim that the *Sierra Club* case or the CAA constrains its authority to prescribe different standards for periods of startup or shutdown or for periods of malfunction. However, as explained in the preamble to the proposed and final rules, the EPA has determined that CAA section 112 does not require that emissions that occur during periods of malfunction be factored into development of section 112 standards. The EPA's rationale for this view is explained in detail in the preamble as well.

At proposal, we explained that the DC Court had recently vacated the SSM exemption contained in 40 CFR 63.6(f)(1) and 63.6(h)(1) that are part of the CAA section 112 General Provisions. *Sierra Club v. EPA*, 551 F.3d 1019 (D.C. Cir. 2008) cert. denied, 130 S. Ct 1735 (2010). We further explained that, when incorporated into section 112(d) regulations for specific source categories, these two provisions exempt sources from the requirement to comply with otherwise applicable MACT standards during periods of SSM. We also explained that because these source categories rely on the General Provisions for SSM provisions, we were proposing to set standards that apply at all times, including during malfunctions. The EPA does not claim that the *Sierra Club* case constrains its authority to prescribe unique standards for SSM periods. Rather, the EPA's view is that this decision calls into question the legality of source category-specific SSM exemptions in rules promulgated pursuant to section 112.

Further, in *Medical Waste Institute v. EPA*, 645 F. 3d 420, 425–27 (D.C. Cir. 2011), the DC Circuit Court held that the EPA may permissibly amend improper MACT determinations, including amendments to improperly promulgated floor determinations, using its authority under section 112(d)(2) and (3). The absence of standards for HAP emitted during SSM is not proper. *National Lime*, 233 F. 3d at 633–34; see also *Medical Waste Institute*, 645 F. 3d at 426 (resetting MACT floor, based on post-compliance data, permissible when the originally-established floor was improperly established, and permissibility of the EPA's action does not turn on whether the prior standard was remanded or vacated). Similarly, the DC Circuit Court's December 9,

2011, decision in *Portland Cement Ass'n v. EPA* (D.C. Cir. No. 10–1358) confirms that the EPA is not constrained by CAA section 112(d)(6), and it may reassess its standards more often, including revising existing floors if need be. The commenters are, thus, incorrect that CAA section 112(d)(6) provides the exclusive authority to address standards that apply during SSM events. Here, the EPA adopted no MACT standard at all for HAP emitted during SSM, an approach soundly rejected by the DC Circuit Court in *National Lime*, 233 F. 3d at 633–34. Consequently, we have revised the standards so the emission limits of the rule apply at all times, including during periods of SSM. We believe this approach reasonably accommodates the requirements of the CAA and the Court's reasoning in *Sierra Club*.

The EPA disagrees with commenters' suggestion that the existence of an SSM exemption in rules implementing CAA section 111 in 1977 when Congress enacted the "continuous basis" language in the definition of "emission standard" is evidence that Congress approved of that regulatory SSM exemption. Commenters fail to cite legislative history or any other evidence supporting that Congress was aware or approved of that exemption and the *Sierra Club* decision makes clear that such exemptions are inconsistent with the Clean Air Act.

*Comment:* One commenter states that the EPA has not justified adding new "general duty" language to the standards and should delete the new provisions. The commenter also states that the EPA lacks the authority to replace the previous reference to the General Provisions with somewhat different language in the individual subparts because these changes are not being proposed under 112(d)(6) or 112(f).

*Response:* The EPA disagrees that it lacks the authority to make the changes proposed. We have eliminated the SSM exemptions in these three NESHAP, consistent with *Sierra Club v. EPA*. As noted previously, the EPA relies on the CAA and *Sierra Club* for the elimination of the SSM exemption. The EPA is not limited to adopting such changes by CAA sections 112(d)(6) or (f)(2), but retains ongoing authority to revise its prior adopted section 112(d)(2) and (3)-based standards whenever the agency identifies a flaw in such standards that renders them insufficient to meet the requirements of section 112(d)(2). See *Medical Waste Institute v. EPA*. The EPA explained in the proposal that we were adding language to this regulation to replace General Provision

requirements that reference vacated SSM provisions (77 FR 1288, 1299, 1302). The General Provisions "general duty" language that was previously referenced by these NESHAP includes language that is no longer necessary or appropriate in light of the elimination of the SSM exemption, so the EPA has modified the general duty requirements that were contained in 40 CFR 63.6(e) and placed them, modified, in 40 CFR 63.1108(a)(4)(ii) and 63.1400(k)(4). The revised general duty requirement language 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 promulgating does not include that language from 40 CFR 63.6(e)(1).

*Comment:* One commenter states that the past history of the SSM exemption and compliance problems for these source categories demonstrates a need for strong and more frequent monitoring, testing, and reporting requirements and enforcement provisions. The commenter declares that the EPA must implement enforcement provisions that prevent and remedy emission spikes, malfunctions, and other violations in a way that will be enforceable by citizens in the Title V permits for these source categories. The commenter further states that the EPA should review the proposed monitoring requirements and ensure they are stringent enough to enable easy assessment of whether a facility is in full compliance with the standards within a short period of time of any violation.

*Response:* We believe that the removal of the SSM exemption will reduce compliance problems that may have been associated with the exemption and excess emission spikes, as facilities have an incentive to avoid the related violations and penalties, without the need to institute more frequent monitoring, testing, and reporting requirements. We further believe that the monitoring requirements included in these rules are sufficient to ensure compliance with the standards regardless of whether or when a violation occurs. Under the provisions of 40 CFR 63.15, the public can request access to reports submitted to the regulatory agency whenever they choose, with the exception of information protected through 40 CFR

part 2 (e.g., confidential business information). In addition, as discussed in section 4 below, we are promulgating requirements for electronic reporting of emissions test data that will improve public access to emissions information.

*Comment:* One commenter states that additional requirements are needed for times of malfunctions, including requirements for automatic shut-off of malfunctioning equipment, requirements to assign responsibility to the plant manager or high-up staff member which allows only that person to restart the equipment, and requirements that corrective actions be taken immediately. The commenter also states that for a facility that has had one or more malfunction, exceedance, or other violation in the prior month, the facility must obtain written authorization from the EPA to restart the equipment, and the EPA should only authorize the restart after making a public determination that the facility has instituted the corrective measures the EPA requires. The commenter further asserts that for a facility with 4 or more exceedances or malfunctions in the same quarter, the EPA must require automatic shutdown of the operation for a period of time to conduct and publish a full investigation and ensure correction of the problem(s).

*Response:* We disagree with the commenter that the suggested additional requirements regarding malfunctions are necessary. The EPA believes that the monitoring requirements of the final rule are sufficient to ensure compliance with the emission standards, and that it is not necessary to prescribe when or who may restart equipment that has malfunctioned. With respect to the commenter's suggested reporting requirements, the reporting requirements in the final rules already require malfunction reporting. Any such reports submitted to the EPA are publicly available subject to the requirements of CAA section 114(c).

#### 4. What is the rationale for our final approach for SSM?

The EPA has determined not to finalize the proposed regulatory affirmative defense provisions due to a recent ruling by the United States Court of Appeals for the District of Columbia Circuit, which vacated an affirmative defense in one of the EPA's Section 112(d) regulations. *NRDC v. EPA*, No. 10-1371 (D.C. Cir. April 18, 2014) 2014 U.S. App. LEXIS 7281 (vacating affirmative defense provisions in Section 112(d) rule establishing emission standards for Portland cement kilns). For further discussion of the EPA's decision to not include the

affirmative defense provisions in the final rule, see section III.D of this preamble.

The EPA has also clarified in the AMF and PC MACT standards that the excused excursion provisions referenced in 40 CFR part 63, subpart SS do not apply. An excursion occurs when the value for a monitored parameter falls outside the established range for that parameter. The provisions of subpart SS allow for each control device or recovery device to have one excursion for each semiannual period excused. The excused excursions were originally put in place to account for unanticipated operating parameter fluctuations. In keeping with the *Sierra Club* decision that emission standards or limitations must be continuous in nature, we have removed the provisions that would allow for one violation of the operating conditions for each control or recovery device to be excused each reporting period.

#### B. Pressure Relief Devices

##### 1. What did we propose for PRDs?

For all three source categories, we proposed that a pressure release of HAP emissions from a PRD in organic HAP service, unless routed to a control device or process, would be a violation. We also proposed to require that sources monitor PRDs in organic HAP service using a device or system that is capable of identifying and recording the time and duration of each pressure release and of notifying operators that a release has occurred, unless routed to a control device, process, fuel gas system or drain system. See 79 FR 1713-1714.

##### 2. How did the PRD requirements change?

We have clarified that a pressure release of HAP emissions to the atmosphere from a PRD in organic HAP service is prohibited, unless the PRD is designed and operated to route all pressure releases to a control device, process, fuel gas system or drain system. We also made other minor technical corrections, such as clarifying that the delay of repair provisions for PRDs after pressure releases still apply, and exempting PRDs that route to a fuel gas system or drain system from the PRD monitoring requirements and pressure release prohibition, similar to the provisions previously contained in subpart UU.

##### 3. What key comments did we receive on the PRD requirements, and what are our responses?

The following is a summary of the significant comments received on the

proposed PRD requirements and our responses to these comments. The complete list of the comments received and our responses to those comments can be found in the comment summary and response document available in the docket for this action (EPA-HQ-OAR-2012-0133).

*Comment:* Several commenters urge the EPA to withdraw the proposed amendment that states PRD releases are violations of the standards. At a minimum, one commenter states that the word "prohibited" should be used rather than "violation." Another commenter suggests this be rephrased to "potential malfunction" rather than "violation." Several commenters state that at most, considering *Sierra Club v. EPA*, the EPA should establish work practices or emissions limits for PRDs. Several other commenters state that emissions from PRD release events should not be viewed differently than normal process emissions and that PRD releases should only be prohibited if they result in emissions that exceed the relevant standards in the rule. Another commenter adds that the provisions that claim releases are violations are inconsistent with CAA section 112(r)(7), which allows for the promulgation of release prevention, detection and correction requirements and with Occupational Safety and Health Administration (OSHA) requirements for PRDs in its Process Safety Management regulations.

*Response:* The EPA partially agrees with the commenter and has revised the final PRD provisions to state that emissions of organic HAP from PRDs to the atmosphere are "prohibited," rather than being a "violation." We disagree, however, with the commenters that the PRD provisions should be withdrawn or weakened in some way. While several commenters have suggested replacing the PRD release prohibition with a work practice standard, it is the EPA's position that separate standards for periods of malfunction are not appropriate in light of the 2008 *Sierra Club* ruling. In order for our treatment of malfunction-caused emission releases to the atmosphere from PRDs to conform with the reasoning of the court's ruling, the final rule states that HAP emission releases to the atmosphere from PRDs in organic HAP service are prohibited. In any case, no commenters have provided emissions performance information regarding organic HAP releases to the atmosphere from PRDs that would enable us to conduct MACT floor and beyond-floor determinations, even if we believed it was appropriate to do so and set new standards for these devices, whether numeric or work-practice.

Similarly, no commenters have provided us with information regarding the costs of requiring the use of control devices or other means of emissions limitation for these devices, in lieu of a prohibition of their releasing HAP to the atmosphere.

*Comment:* Several commenters state that there is no applicable emission limit for PRD releases that would make a pressure release a violation. One commenter states that PRD releases are specifically excluded from the process vent definition in the GMACT, and the equipment leak LDAR limit of 500 ppm that applies when a pressure release is not occurring. Similarly, another commenter states that the EPA implies that process vent standards apply to PRDs but does not provide an explanation or justification for this implication. The commenter states that the EPA has not demonstrated that emissions from PRDs were characterized or considered when the process vent standards for the subject rules were adopted. Another commenter states that since there is no applicable emission limit for PRD pressure releases, the CAA does not authorize the proposed PRD monitoring requirements. The commenter states that the CAA only allows for monitoring to demonstrate compliance with an emission limit and does not authorize monitoring for malfunctions. For PRDs in liquid service, the commenter states that there is an emission limit for PRDs during normal operation in 40 CFR 63.1029 of subpart UU, and the excess emission criterion in the malfunction definition could be met if the work practice requirements of that section were not met. The commenter states that a rulemaking is required to replace the work practice with a prohibition or emission limit, and the EPA would need to show the proper CAA authority and the required analyses for the change.

*Response:* The final rule language no longer states that a pressure release from a PRD is a violation, but rather that such organic HAP releases to the atmosphere are prohibited. The amendments being finalized for PRD releases do not impose new emission standards for which a MACT analysis is required by the CAA. Instead, they prohibit releases to the atmosphere from PRDs in organic HAP service that are no longer appropriate following the 2008 *Sierra Club v. EPA* ruling, and impose additional monitoring requirements to address potential releases. The prohibition and monitoring requirements do not apply to PRD release emissions that are captured and routed to a control device, process, fuel gas system or drain system, since such emissions are not released to

the atmosphere. As stated in the preamble to the proposed rule, pressure releases from PRDs in organic HAP service occur as a result of malfunctions, and so with the removal of the SSM exemption, these releases to the atmosphere may no longer be permitted.

The commenters are correct in that there already exists an equipment leak standard for PRDs after a pressure release event, but there previously existed no provision that prevented a facility from having such a pressure release to the atmosphere, nor was there a provision in place addressing these malfunction-related periods other than immediately after a pressure release event. The commenter is correct that there was previously no applicable emission limit in place for malfunction-caused emissions to the atmosphere from PRDs. As stated above, however, this does not allow the EPA to permit such malfunction emissions to remain unaddressed by the final rules. We also disagree with the commenter that the EPA is not authorized to monitor for emissions caused by such malfunctions, as there is nothing in the CAA that prohibits the agency from doing so. The EPA's authority under CAA section 114(a)(1) to require monitoring of emissions is not limited to the purpose of determining whether such emissions meet numeric emissions limits or work-practice standards.

*Comment:* Several commenters state that the EPA added the PRD requirements without regard to the CAA section 112 MACT development process and without providing the legal justification, adequate record basis or technical justification. One commenter added that they did not believe that the EPA has a legal obligation nor the discretion to promulgate the proposed PRD provisions because the PRD monitoring and reporting requirements were not derived from the technology reviews, in response to any residual risks detected, or the United States Court of Appeals for the District of Columbia Circuit's invalidation of the SSM provisions in the 40 CFR part 63 General Provisions. The commenters suggest that these revisions should be evaluated as part of the technology review, and the EPA should analyze the technical feasibility, potential emissions reductions and cost effectiveness of the revisions. Two commenters argue that the EPA provided no data to support the claim that a large number of releases occur and may emit large quantities of HAP, or to support the contention that releases are not being identified. Another commenter states that its PRD management system indicates releases

from ruptured disks are not frequent and occur for a short period of time, and that the EPA's concern about venting to the atmosphere is unwarranted. Another commenter states that the EPA fails to provide any factual data to back up its assertion that HAP releases to the atmosphere from PRDs in these MACT source categories pose a significant potential environmental harm. The commenter notes that the EPA concluded there is no residual environmental risk from these MACT categories, and that PRDs play an important role in the safety and health of facility employees and surrounding communities.

*Response:* Under CAA section 112(d)(2), the EPA must promulgate technology-based standards that reflect the maximum degree of emission reductions of HAP achievable (after considering cost, energy requirements, and non-air quality health and environmental impacts), and such standards must contain compliance assurance provisions to make sure that they are practically enforceable. Nothing in the CAA or its legislative history suggests that the EPA is prohibited from reviewing and revising MACT standards and their compliance assurance provisions, except as part of the CAA section 112(d)(6) or CAA section 112(f) reviews or an action taken in response to a ruling by a court. The amendments being finalized for PRD releases do not impose new emission standards for which a MACT analysis is required by the CAA. Instead, they prohibit previously allowed malfunction-related releases to the atmosphere from PRDs in organic HAP service that are no longer appropriate following the 2008 *Sierra Club v. EPA* ruling, and impose additional monitoring requirements to address potential releases.

As noted in a report prepared by the South Coast Air Quality Management District (SCAQMD), releases from PRDs occur randomly and the emissions can only be approximated. Based on their analysis of refinery PRD reports of PRD releases from nine facilities in their district, there were eight PRD releases from 2003 to 2006 that were estimated to release greater than 2,000 lbs of emissions to the atmosphere, and eight PRD releases from 2003 to 2006 that were estimated to release between 500 and 2,000 lbs of emissions to the atmosphere.<sup>4</sup> The SCAQMD analysis

<sup>4</sup> See "Final Staff Report for Proposed Amended Rule 1173—Control of Volatile Organic Compound Leaks and Releases from Components at Petroleum Facilities and Chemical Plants." Planning, Rule

focuses on volatile organic compound (VOC) emissions (which would also include organic HAP emissions). Additionally, the Texas Commission on Environmental Quality Emission Event Reporting Database is populated with Emission Event Reports from both the refinery and chemical sectors where the reason for the report was due to a PRD release.<sup>5</sup> These final amendments simply prohibit HAP emissions to the atmosphere and require that these devices now be monitored to indicate when these releases occur and be reported, so that HAP emissions that may potentially occur from releases can be mitigated as soon as possible. Additionally, the final rule requirement to report PRD releases to the atmosphere ensures that these releases will be reported nationally and not just in some states.

An agency generally remains free to revise previously promulgated rules to correct newly identified problems, even in the absence of a remand from a court. *United Gas Improvement Co. v. Callery Props, Inc.*, 382 U.S. 223, 229 (1966). In light of, and consistent with, the 2008 *Sierra Club v. EPA* ruling, the EPA is eliminating the SSM exemption in the AMF, APR and PC MACT standards and requiring that the standards in these rules apply at all times, including during periods of SSM. In addition, in order for our treatment of malfunction-caused emission releases to the atmosphere from PRDs to conform with the reasoning of the Court's ruling, the final rule states that HAP emission releases to the atmosphere from PRDs in organic HAP service are prohibited. To prohibit these malfunction-caused releases, it is not necessary for us to set an emission standard that is based on a MACT floor or beyond-the-floor analysis; indeed, the EPA has consistently explained that we are not required to take malfunctions into account in setting standards or to devise standards that apply specifically to malfunction-caused emissions, such as PRD releases that cause HAP emissions only during malfunctions.

The final rule includes detection and pressure release management requirements that can be used by facilities to mitigate emissions during pressure release events from PRDs while allowing owners or operators flexibility based on their current equipment and operations. The final rule requires that sources monitor PRDs that release to the atmosphere using a system that is

capable of identifying and recording the time and duration of each pressure release and of immediately notifying operators that a release is occurring.

#### 4. What is the rationale for our final approach for the PRD requirements?

In the proposal, we proposed to eliminate the SSM exemption from the standards. As part of removing this exemption, we stated that under the proposed revised rule releases to the atmosphere from PRDs would constitute violations of the revised rule. However, although we proposed revised regulatory text to add PRD monitoring requirements and eliminate the SSM exemptions from the rules, we omitted a proposed regulatory provision that would have given effect to the proposed intended prohibition of such PRD releases to the atmosphere. In order to give effect to the proposed prohibition, which we are finalizing in this action, we are adding express regulatory language in the final rule revisions that clarifies our intent that pressure releases from PRDs in organic HAP service to the atmosphere are prohibited. This is a necessary additional revision to give full effect to our elimination of the general exemption for malfunctions, in light of the Court's reasoning in *Sierra Club*, and is similar to revisions that we have made in other rules in which the SSM exemption has been eliminated (see, e.g., NESHAP for Polyvinyl Chloride and Copolymers Production (77 FR 22848, April 17, 2012); and NESHAP: Group IV Polymers and Resins, Pesticide Active Ingredient Production, and Polyether Polyols Production (79 FR 17340, March 27, 2014)). This prohibition does not, however, apply to PRD releases of HAP that are captured and routed to a control device, process, fuel gas system or drain system, since in these situations there is no additional uncontrolled and unmeasured HAP emission occurring beyond that which is already subject to control or monitoring of the process unit. For additional discussion on our rationale for this approach, see section III.E.1 of this preamble.

#### C. Open-Ended Valves and Lines

##### 1. What did we propose for open-ended valves and lines?

For all three source categories, we proposed to add a definition of "seal," which clarified that, for the purpose of complying with the requirements of 40 CFR 63.1033(b) of subpart UU, open-ended valves and lines are "sealed" by the cap, blind flange, plug or second valve when there are no detectable emissions from the open-ended valve or

line at or above an instrument reading of 500 ppm. See 79 FR 1715.

##### 2. How did the definition of "seal" change?

For the definition of "seal", we have added provisions that clarify that the revised definition does not take effect until the effective date of the final rule.

##### 3. What key comments did we receive on the definition of "seal", and what are our responses?

The following is a summary of the significant comments received on the proposed definition of "seal" and our responses to these comments. The complete list of the comments received and our responses to those comments can be found in the comment summary and response document available in the docket for this action (EPA-HQ-OAR-2012-0133).

*Comment:* Several commenters believe the EPA must show that imposing a new emissions limits for open-ended lines is justified according to the criteria of CAA section 112(d)(6), including the technical feasibility, potential emission reductions and cost effectiveness. One commenter adds that the proposed open-ended lines change fails to satisfy the obligation under CAA section 307(d)(3) to present a summary of the legal basis, factual data and analysis methods on which the proposal is based. Similarly, two other commenters state that the EPA failed to provide new data or rationale showing that the definition of "seal" is needed for compliance assurance or to relieve regulatory uncertainty, relying only on enforcement inspections referenced in the 2007 40 CFR part 60, subpart VV rulemaking in which monitoring open-ended lines was determined not to be the best demonstrated technology. Another commenter states that such a change must be supported by a CAA authorization and a record that complies with the CAA, Administrative Procedures Act (APA), Paperwork Reduction Act (PRA) and Regulatory Flexibility Act (RFA) requirements.

In contrast, another commenter states that the EPA's proposed definition for a "seal" is actually a new loophole that would exempt leaks from open-ended valves or lines below 500 ppm from the standards. The commenter contends this definition is another type of exemption similar to the SSM exemption the United States Court of Appeals for the District of Columbia Circuit found unlawful, and the EPA should not finalize the definition as proposed.

*Response:* The EPA disagrees with the commenters that we are imposing a new emissions limit for open-ended lines. As

Development and Area Sources, South Coast Air Quality Management District. May 15, 2007.

<sup>5</sup> See <http://www11.tceq.texas.gov/oce/eer/index.cfm>.

stated in the preamble for the proposed rule, the definition of “seal” was intended to clarify an existing requirement that open-ended lines be sealed with no detectable emissions (500 ppm above background). This is consistent with how OECA has interpreted the term “seal” during their inspections and is not, as asserted by the commenters, a new requirement. By creating a formal definition for “seal,” the EPA is removing any ambiguity regarding what constitutes a “sealed” open-ended line.

The EPA also disagrees with the commenter that adding a definition of “seal” creates a new loophole for open-ended lines. As discussed in the preamble to the proposed rule and elsewhere in this preamble, this revision clarifies an existing requirement that open-ended lines be sealed with no detectable emissions, which is defined to be 500 ppm.

*Comment:* One commenter states that by claiming that the new definition of “seal” is only a clarification of the current requirements, this would make the interpretation applicable retroactively. The commenter claims this would affect not only the industries addressed in the current rulemaking, but all industries subject to subpart UU and any similar open-ended lines equipment leak requirements, including 40 CFR part 60, subparts VV, VVa, GGG, GGGa, and 40 CFR part 63, subparts H and TT. This commenter and another commenter state that such a change must be made in the individual equipment leak rules and only apply prospectively.

*Response:* The EPA disagrees that the definition of “seal” proposed in the AMF, APR and PC MACT standards would affect all industries subject to subpart UU and other similar equipment leak requirements. The proposed definition of “seal” was clear that it only applied to facilities subject to the AMF, APR and PC MACT standards who are complying with the LDAR provisions of subpart UU. It is incorrect to assert that this would imply that any other rules referencing subpart UU (or similar LDAR provisions) would also be affected by this clarification. However, to address concerns from the commenters on retroactive compliance, we have added in the final rules that the clarification of the definition of “seal” does not apply until the effective date of the final rules, and therefore will not apply retroactively.

4. What is the rationale for our final approach for the definition of “seal”?

In the proposal, we proposed a definition of “seal” that clarified what

constituted a sealed open-ended line. However, we did not include an effective date for this revised definition. In order to address concerns about potential retroactive compliance issues, we have added language to the final definition that clarifies that the definition of “seal” does not take effect until the effective date of the final rule.

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

#### A. What are the affected sources?

We anticipate that each facility in these three source categories will be affected by these final amendments. We estimate there is one existing facility subject to the AMF MACT standards, 19 existing facilities subject to the APR MACT standards and four existing facilities subject to the PC MACT standards. We do not know of any new facilities that are expected to be constructed in the foreseeable future in any of these source categories. Therefore, our impact analysis is focused on the existing sources affected by the revised MACT standards for these three source categories.

#### B. What are the air quality impacts?

##### 1. AMF Source Category

For equipment leaks, we are eliminating the option of complying with 40 CFR part 63, subpart TT and requiring facilities to comply with only 40 CFR part 63, subpart UU, except for connectors in gas and vapor service and in light liquid service. We are retaining the option to comply with subpart TT or subpart UU for these components. We estimate the HAP emission reductions for the one facility in the AMF source category to be 0.2 tpy.

We are finalizing an emission rate for spinning lines that use spin dope produced from a solution polymerization process equal to the MACT floor for this facility, which will not result in any quantifiable emission reductions.

For the revisions to the MACT standards regarding SSM, including monitoring of PRDs in organic HAP service, we expect that these changes will result in fewer emissions during these periods or less frequent periods of startup, shutdown or malfunction, but these possible emission reductions are difficult to quantify and are not included in our assessment of air quality impacts.

Therefore, the total HAP emission reductions for the final standards for the AMF source category are 0.2 tpy.

##### 2. APR Source Category

Four facilities in the APR source category have uncontrolled continuous process vents. We are finalizing standards that establish an emission limit of 0.95 kg organic HAP/Mg (1.9 lb organic HAP/ton) of resin produced, which represents the MACT floor level of control. The estimated HAP emission reductions for these four facilities are 135 tpy.

We are establishing emission standards for storage vessels at existing facilities. However, our data indicate that all storage vessels subject to the final standards are already in compliance, and no quantifiable emission reductions are expected.

For the revisions to the MACT standards regarding SSM, including monitoring of PRDs in organic HAP service, we expect that these changes will result in fewer emissions during these periods or less frequent periods of startup, shutdown or malfunction, but these possible emission reductions are difficult to quantify and are not included in our assessment of air quality impacts.

Therefore, the total HAP emission reductions for the final standards for the APR source category are 135 tpy.

##### 3. PC Source Category

For equipment leaks, we are eliminating the option of complying with 40 CFR part 63, subpart TT and requiring facilities to comply with only 40 CFR part 63, subpart UU, except for connectors in gas and vapor service and in light liquid service. We are retaining the option to comply with subpart TT or subpart UU for these components. We estimate the HAP emission reductions for the four facilities in the PC source category to be 2.1 tpy.

For the revisions to the MACT standards regarding SSM, including installation and operation of monitors on PRDs, we expect that these changes will result in fewer emissions during these periods or less frequent periods of startup, shutdown or malfunction, but these possible emission reductions are difficult to quantify and are not included in our assessment of air quality impacts.

Therefore, the total HAP emission reductions for the final standards for the PC source category are 2.1 tpy.

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

Though the cost savings cannot be monetized, consistent with Executive Order 13563, “Improving Regulation and Regulatory Review,” issued on January 18, 2011, the electronic reporting requirements being finalized

in this action for performance test reports are expected to reduce the burden for the AMF, APR and PC facilities in the future by cutting back on the recordkeeping costs and the costs that would be associated with fewer or less-substantial data collection requests (due to performance test information being readily available on the EPA's WebFIRE database). Although the use of electric reporting may reduce the recordkeeping and reporting burden for facilities in the future, facilities will still incur annualized costs, on net, due to these final amendments.

#### 1. AMF Source Category

For equipment leaks, we are eliminating the option of complying with 40 CFR part 63, subpart TT and requiring facilities to comply with only 40 CFR part 63, subpart UU, except for connectors in gas and vapor service and in light liquid service. We are retaining the option to comply with subpart TT or subpart UU for these components. We estimate the capital costs for the one facility in the AMF source category to be \$1,400 and the annualized costs to be \$220.

We are finalizing an emission rate for spinning lines that use spin dope produced from a solution polymerization process equal to the MACT floor for this facility. Thus, we do not expect any quantifiable capital or annual costs for the final standard.

For the requirement to install and operate monitors on PRDs, we estimate the capital costs to be \$37,000 and the annualized costs to be \$5,300.

Therefore, the total capital costs for the AMF source category are approximately \$38,000, and the total annualized costs are approximately \$6,000.

#### 2. APR Source Category

Four facilities in the APR source category have uncontrolled continuous process vents. We are finalizing standards that establish an emission limit of 0.95 kg organic HAP/Mg (1.9 lb organic HAP/ton) of resin produced for continuous process vents. The estimated capital costs for these four facilities are \$3.6 million and the annualized costs are \$860,000.

We are establishing emission standards for storage vessels at existing facilities. However, our data indicate that all storage vessels subject to the final standards are already in compliance, and no capital or annual costs are expected.

For the requirement to install and operate monitors on PRDs, we estimate the capital costs to be \$400,000 and the annualized costs to be \$60,000.

Therefore, the total capital costs for the APR source category are approximately \$4.0 million, and the total annualized costs are approximately \$920,000.

#### 3. PC Source Category

For equipment leaks, we are eliminating the option of complying with 40 CFR part 63, subpart TT and requiring facilities to comply with only 40 CFR part 63, subpart UU, except for connectors in gas and vapor service and in light liquid service. We are retaining the option to comply with subpart TT or subpart UU for these components. We estimated the capital costs to be \$16,000 and the annualized costs to be \$2,200.

For the requirement to install and operate monitors on PRDs, we estimate the capital costs to be \$51,000 and the annualized costs to be \$7,200.

Therefore, the total capital costs for the PC source category are approximately \$67,000, and the total annualized costs are approximately \$9,400.

#### D. What are the economic impacts?

We estimate that there will be no more than a 0.5 percent price change and a similar reduction in output associated with the final amendments. This is based on the costs of the rules and responsiveness of producers and consumers based on supply and demand elasticities for the industries affected by this final rule. The impacts to affected firms will be low because the annual compliance costs are quite small when compared to the annual revenues for the affected parent firms (much less than 1 percent for each). The impacts to affected consumers should also be quite small. Thus, there will not be any significant impacts on affected firms and their consumers as a result of this final rule.

#### E. What are the benefits?

Because this rulemaking is not likely to have an annual effect on the economy of \$100 million or more, we have not conducted a regulatory impact analysis or a benefits analysis. However, the estimated reductions in HAP emissions that will be achieved by this final rule will provide benefits to public health. The final standards will result in significant reductions in the actual and allowable emissions of HAP and will reduce the actual and potential cancer risks and non-cancer health effects due to emissions of HAP from these source categories. Regarding SSM and PRDs, these changes will result in fewer emissions during SSM periods and PRD releases or less frequent SSM periods or PRD releases. However, the emission

reductions, while tangible, are difficult to quantify and are not included in our assessment of health benefits. We have not quantified the monetary benefits associated with these reductions.

#### F. What demographic groups might benefit from this regulation?

##### 1. AMF Source Category

To examine the potential for any environmental justice (EJ) issues that might be associated with the AMF source category, we performed a demographic analysis of the population close to the one AMF facility. In this analysis, we evaluated the distribution of HAP-related cancer and non-cancer risks from the AMF source category across different social, demographic and economic groups within the populations living near facilities identified as having the highest risks. The results of the risk assessment for the AMF source category have not changed since proposal, and we did not conduct a new demographics analysis. Therefore the results of our original demographics analysis have not changed since proposal. The full results of the demographic analysis are summarized in the preamble to the proposed rule (79 FR 1699), and the methodology and the results of the demographic analyses are included in a technical report, *Analysis of Socio-Economic Factors for Populations Living Near Acrylic and Modacrylic Fiber Facilities*, available in the docket for this action.

##### 2. APR Source Category

To gain a better understanding of the source categories and near-source populations, prior to proposal, the EPA conducted a proximity analysis of the facilities in the APR source category to identify any overrepresentation of minority, low income or indigenous populations. As part of the risk modeling effort conducted after proposal to include the additional APR facility, to examine the potential for any EJ issues that might be associated with the APR source category, we performed a demographic analysis of the population close to the 19 APR facilities. In this analysis, we evaluated the distribution of HAP-related cancer and non-cancer risks from the APR source category across different social, demographic and economic groups within the populations living near facilities identified as having the highest risks. The methodology and the results of the demographic analyses are included in a technical report, *Analysis of Socio-Economic Factors for Populations Living Near Polymers and Resins III Facilities*, available in the

docket for this action. The results of the demographic analysis are summarized in Table 4 below. These results, for

various demographic groups, are based on the estimated risks from actual

emissions levels for the population living within 50 km of the facilities.

TABLE 4—APR DEMOGRAPHIC RISK ANALYSIS RESULTS

	Nationwide	Population with cancer risk at or above 1-in-1 million	Population with chronic hazard index above 1
Total Population .....	312,861,256	14,857	0
Race by Percent			
White .....	72%	23%	0%
All Other Races .....	28%	77%	0%
Race by Percent			
White .....	72%	23%	0%
African American .....	13%	71%	0%
Native American .....	1.1%	1.7%	0%
Other and Multiracial .....	14%	4%	0%
Ethnicity by Percent			
Hispanic .....	17%	3%	0%
Non-Hispanic .....	83%	97%	0%
Income by Percent			
Below Poverty Level .....	14%	27%	0%
Above Poverty Level .....	86%	73%	0%
Education by Percent			
Over 25 and without High School Diploma .....	15%	21%	0%
Over 25 and with a High School Diploma .....	85%	79%	0%

The results of the APR source category demographic analysis indicate that emissions from the APR source category expose approximately 15,000 people to a cancer risk at or above 1-in-1 million and zero people to a chronic non-cancer TOSHI greater than 1. The specific demographic results indicate that the percentage of the population potentially impacted by APR emissions is significantly greater than its corresponding national percentage for the minority population (77 percent for the source category compared to 28 percent nationwide) and for the African American population (71 percent for the source category compared to 13 percent nationwide). Furthermore, the population below the poverty level that is potentially impacted by APR emissions is twice its corresponding national percentage (27 percent for the source category compared to 14 percent nationwide). Other demographic groups with source category percentages greater than the corresponding national percentage include the population over 25 without a high school diploma (21 percent compared to 15 percent), the Native American population (1.7

percent compared to 1.1 percent), and the population younger than 18 years old (27 percent compared to 24 percent). All other demographic categories potentially impacted by APR emissions are less than or equal to the corresponding national percentage. However, as noted previously, risks from this source category were found to be acceptable for all populations. Additionally, the final changes to the APR MACT standards increase the level of environmental protection for all affected populations by reducing emissions from continuous process vents, reducing emissions during periods of SSM and having less frequent releases of organic HAP to the atmosphere from PRDs.

### 3. PC Source Category

To determine whether or not to conduct a demographics analysis, we look at a combination of factors including the MIR, non-cancer TOSHI, population around the facilities in the source category, and other relevant factors. For the PC source category, our analyses showed that actual emissions from the PC source category result in no individuals being exposed to cancer risk

greater than 1-in-1 million or a noncancer TOSHI greater than 1. Therefore, we did not conduct an assessment of risks to individual demographic groups for this rulemaking. However, we did conduct a proximity analysis, which identifies any overrepresentation of minority, low income or indigenous populations near facilities in the source category. The results of the risk assessment for the PC source category have not changed since proposal and we did not conduct a new proximity analysis. The results of this analysis are presented in the section of this preamble entitled “Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.”

## IX. Statutory and Executive Order Reviews

*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” under the terms of Executive Order 12866 (58 FR 51735,

October 4, 1993) and is therefore not subject to review under Executive Orders 12866 and 13563 (76 FR 3821, January 21, 2011).

#### B. Paperwork Reduction Act

The information collection requirements in the final rule have been submitted for approval to OMB under the PRA, 44 U.S.C. 3501, *et seq.* The information collection requirements are not enforceable until OMB approves them. The information requirements in this rulemaking are based on the notification, recordkeeping and reporting requirements in the NESHAP General Provisions (40 CFR part 63, subpart A), which are mandatory for all operators subject to national emission standards. These recordkeeping and reporting requirements are specifically authorized by CAA section 114 (42 U.S.C. 7414). All information submitted to the EPA pursuant to the recordkeeping and reporting requirements for which a claim of confidentiality is made is safeguarded according to agency policies set forth in 40 CFR part 2, subpart B.

The OMB previously approved the information collection requirements contained in the existing regulations being amended with this final rule (i.e., 40 CFR part 63, subparts YY and OOO) under the provisions of the PRA, 44 U.S.C. 3501, *et seq.* The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9. Burden is defined at 5 CFR 1320.3(b).

#### 1. Acrylic and Modacrylic Fibers Production

The information collection request (ICR) document prepared by the EPA for the amendments to the AMF MACT standards we are promulgating today has been assigned EPA ICR number 1871.08. Burden changes associated with these final amendments result from new recordkeeping and reporting requirements associated with requirements for spinning lines that use spin dope produced from a solution polymerization process and the PRD monitoring requirements for all facilities subject to the AMF MACT standards.

We estimate one regulated facility is currently subject to the AMF requirements in 40 CFR part 63, subpart YY. The annual monitoring, reporting and recordkeeping burden for this collection (averaged over the first 3 years after the effective date of the standards) for these amendments to subpart YY is estimated to be 82 labor hours at a cost of \$4,500 per year. There is no estimated change in annual burden to the federal government for these amendments.

#### 2. Amino/Phenolic Resins Production

The ICR document prepared by the EPA for the amendments to the APR MACT standards we are promulgating today has been assigned EPA ICR number 1869.09. Burden changes associated with these final amendments result from new recordkeeping and reporting requirements associated with the PRD monitoring requirements for all facilities subject to the APR MACT standards. In addition, we estimate that 3 regulated facilities will be subject to recordkeeping, reporting and monitoring requirements associated with the new requirements that apply to continuous process vents at existing APR facilities.

We estimate 19 regulated facilities are currently subject to 40 CFR part 63, subpart OOO. The annual monitoring, reporting and recordkeeping burden for this collection (averaged over the first 3 years after the effective date of the standards) for these amendments to subpart OOO is estimated to be 1,243 labor hours at a cost of \$69,500 per year. There is no estimated change in annual burden to the federal government for these amendments.

#### 3. Polycarbonate Production

The ICR document prepared by the EPA for the amendments to the PC MACT standards we are promulgating today has been assigned EPA ICR number 1871.08. Burden changes associated with these final amendments result from new recordkeeping and reporting requirements associated with the PRD monitoring requirements for all facilities subject to the MACT standards.

We estimate four regulated facilities are currently subject to the PC requirements in 40 CFR part 63, subpart YY. The annual monitoring, reporting and recordkeeping burden for this collection (averaged over the first 3 years after the effective date of the standards) for these amendments to subpart YY is estimated to be 216 labor hours at a cost of \$12,000 per year. There is no estimated change in annual burden to the federal government for these amendments.

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. When these ICR are approved by OMB, the agency will publish a technical amendment to 40 CFR part 9 in the **Federal Register** to display the OMB control numbers for the approved

information collection requirements contained in this final rule.

#### C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the RFA or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations and small governmental jurisdictions.

For purposes of assessing the impacts of this final rule on small entities, small entity is defined as: (1) A small business as defined by the Small Business Administration's (SBA) regulations at 13 CFR 121.201; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise that is independently owned and operated and is not dominant in its field. According to the SBA small business standards definitions, for the APR source category, which has the NAICS code of 325211 (i.e., Plastics Material and Resin Manufacturing), the SBA small business size standard is 750 employees. For the PC source category, which has the NAICS code of 325211 (i.e., Plastics Material and Resin Manufacturing), the SBA small business size standard is 750 employees. For the AMF source category, which has the NAICS code of 325222 (i.e., Noncellulosic Organic Fiber Manufacturing), the SBA small business size standard is 1,000 employees.

After considering the economic impacts of this final rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. There are no affected small businesses in the APR, AMF and PC source categories. All of the companies affected by this rule are generally large integrated corporations that are not considered to be small entities per the definitions provided in this section.

Although this final rule will not have a significant economic impact on a substantial number of small entities, the EPA nonetheless has tried to reduce the impact of this rule on small entities that could potentially be impacted by this rule in the future. The final requirements for PRD monitoring provide facilities with greater flexibility based on their current equipment and operations.



#### *D. Unfunded Mandates Reform Act*

This rule does not contain a federal mandate that may result in expenditures of \$100 million or more for state, local or tribal governments, in the aggregate, or the private sector in any one year. The total annualized cost of this rule is estimated to be no more than \$1,050,000 in any one year. Thus, this rule is not subject to the requirements of sections 202 or 205 of the Unfunded Mandates Reform Act (UMRA).

This rule is also not subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments. The rule contains no requirements that apply to such governments nor does it impose obligations upon them.

#### *E. Executive Order 13132: Federalism*

This final rule 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, as specified in Executive Order 13132. None of the affected facilities are owned or operated by state governments, and the requirements discussed in this document will not supersede state regulations that are more stringent. Thus, Executive Order 13132 does not apply to this action.

#### *F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments*

This action does not have tribal implications, as specified in Executive Order 13175 (65 FR 67249, November 9, 2000). It will not have substantial direct effect on tribal governments, on the relationship between the federal government and Indian tribes or on the distribution of power and responsibilities between the federal government and Indian tribes, as specified in Executive Order 13175. Thus, Executive Order 13175 does not apply to this action. Although Executive Order 13175 does not apply to this action, the EPA solicited comments on this action from tribal officials, but received none.

#### *G. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks*

This action is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997) 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 increases the level of environmental protection for all affected populations and would not cause increases in emissions or emissions-related health risks. The EPA's risk assessments (included in the docket for this final rule) demonstrate that the existing regulations are associated with an acceptable level of risk and provide an ample margin of safety to protect public health and prevent adverse environmental effects.

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

This action is not subject to Executive Order 13211, (66 FR 28355, May 22, 2001), because it is not a significant regulatory action under Executive Order 12866.

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

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Public Law 104-113, 12(d) (15 U.S.C. 272 note) directs the EPA to use voluntary consensus standards (VCS) in its regulatory activities, unless to do so would be inconsistent with applicable law or otherwise impractical. VCS are technical standards (e.g., materials specifications, test methods, sampling procedures and business practices) that are developed or adopted by VCS bodies. NTTAA directs the EPA to provide Congress, through OMB, explanations when the agency decides not to use available and applicable VCS.

This action does not involve new technical standards. Therefore, the EPA did not consider the use of any VCS.

#### *J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations*

Executive Order 12898 (59 FR 7629, February 16, 1994) establishes federal executive policy on environmental justice. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies and activities on minority populations and low-income populations in the United States.

The EPA has determined that this final rule will not have disproportionately high and adverse

human health or environmental effects on minority, low income or indigenous populations because it increases the level of environmental protection for all affected populations without having any disproportionately high and adverse human health or environmental effects on any population, including any minority, low income or indigenous populations. The EPA has determined that the current health risks posed by emissions from these source categories are acceptable and provide an ample margin of safety to protect public health and prevent adverse environmental effects.

To gain a better understanding of the source categories and near source populations, the EPA conducted a proximity analysis of the facilities in the AMF, APR and PC source categories to identify any overrepresentation of minority, low income or indigenous populations. This analysis only gives some indication of the prevalence of sub-populations that may be exposed to air pollution from the sources; it does not identify the demographic characteristics of the most highly affected individuals or communities, nor does it quantify the level of risk faced by those individuals or communities. The complete proximity analysis results and the details concerning their development are presented in the memorandum titled, *Environmental Justice Review: Amino/Phenolic Resins, Acrylic and Modacrylic Fibers Production, and Polycarbonate Production*, available in the docket for this action. For the AMF and APR source categories, we also performed demographic analyses of the populations close to AMF and APR facilities. In these analyses, we evaluated the distribution of HAP-related cancer and non-cancer risks from the AMF and APR source categories across different social, demographic and economic groups within the populations living near facilities identified as having the highest risks. The complete demographic analyses results and the details concerning their development are presented in the technical reports titled, *Analysis of Socio-Economic Factors for Populations Living Near Acrylic and Modacrylic Fiber Facilities and Analysis of Socio-Economic Factors for Populations Living Near Polymers and Resins III Facilities*, available in the docket for this action.

#### *K. Congressional Review Act*

The Congressional Review Act, U.S.C. 801, *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides

that, before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. The EPA will submit a report containing this final rule and other required information to the United States Senate, the United States House of Representatives and the Comptroller General of the United States prior to publication of the final rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a “major rule” as defined by 5 U.S.C. 804(2). The final rule will be effective on October 8, 2014.

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

Environmental protection, Administrative practice and procedures, Air pollution control, Hazardous substances, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: September 16, 2014.

**Gina McCarthy,**  
Administrator.

For the reasons stated in the preamble, the Environmental Protection Agency (EPA) is amending Title 40, chapter I, of the Code of Federal Regulations (CFR) as follows:

**PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES**

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

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

**Subpart YY—National Emission Standards for Hazardous Air Pollutants for Source Categories: Generic Maximum Achievable Control Technology Standards**

■ 2. Section 63.1100 is amended by revising the last sentence of paragraph (d) introductory text to read as follows:

**§ 63.1100 Applicability.**

(d) \* \* \* Paragraphs (d)(3), (4), and (5) of this section discuss compliance for those process units operated as flexible operation units.

■ 3. Section 63.1101 is amended by adding in alphabetical order the terms “Pressure release” and “Pressure relief device or valve” to read as follows:

**§ 63.1101 Definitions.**

*Pressure release* means the emission of materials resulting from the system pressure being greater than the set pressure of the pressure relief device. This release can be one release or a series of releases over a short time period.

*Pressure relief device or valve* means a safety device used to prevent operating pressures from exceeding the maximum allowable working pressure of the process equipment. A common pressure relief device is a spring-loaded pressure relief valve. Devices that are actuated either by a pressure of less than or equal to 2.5 pounds per square inch gauge or by a vacuum are not pressure relief devices.

■ 4. Section 63.1102 is amended by revising the first sentence of paragraph (a) introductory text and adding paragraph (b) to read as follows:

**§ 63.1102 Compliance schedule.**

(a) \* \* \* Affected sources, as defined in § 63.1103(a)(1)(i) for acetyl resins production, § 63.1103(b)(1)(i) for acrylic and modacrylic fiber production, § 63.1103(c)(1)(i) for hydrogen fluoride production, § 63.1103(d)(1)(i) for polycarbonate production, § 63.1103(e)(1)(i) for ethylene production, § 63.1103(f)(1)(i) for carbon black production, § 63.1103(g)(1)(i) for cyanide chemicals manufacturing, or § 63.1103(h)(1)(i) for spandex production shall comply with the appropriate provisions of this subpart and the subparts referenced by this subpart according to the schedule in paragraphs (a)(1) or (2) of this section, as appropriate, except as provided in paragraph (b) of this section.

(b) All acrylic and modacrylic fiber production affected sources and polycarbonate production affected sources that commenced construction or reconstruction on or before January 9, 2014, shall be in compliance with the pressure relief device monitoring requirements of § 63.1107(e)(3) upon initial startup or October 9, 2017, whichever is later, and the equipment leaks requirements of 40 CFR part 63, subpart UU upon initial startup or October 8, 2015, whichever is later. New acrylic and modacrylic fiber production affected sources and polycarbonate production affected sources that commence construction or reconstruction after January 9, 2014, shall be in compliance with the pressure relief device monitoring requirements of § 63.1107(e)(3) upon initial startup or by October 8, 2014, whichever is later.

- 5. Section 63.1103 is amended by:
  - a. Revising paragraph (b)(1)(ii);
  - b. In paragraph (b)(2), adding in alphabetical order the terms “In organic hazardous air pollutant or in organic HAP service” and “Seal”;
  - c. In paragraph (b)(3)(i), in Table 2, revising entries 1, 2, 3, 4, 5, 6, and 7 and adding entry 11;
  - d. Revising the second sentence of paragraph (b)(3)(ii);
  - e. In paragraph (b)(3)(ii), revising Table 3;
  - f. Revising paragraph (b)(5);
  - g. Revising paragraph (d)(1)(ii);
  - h. In paragraph (d)(2), adding in alphabetical order the terms “In organic hazardous air pollutant or in organic HAP service” and “Seal”; and
  - i. In paragraph (d)(3), in Table 5, revising entries 4, 5, 6, 7, 8, and 9, and adding entries 10 and 11, and in Table 6, revising entries 4 and 5 and adding entries 6 and 7.

The revisions and additions read as follows:

**§ 63.1103 Source category-specific applicability, definitions, and requirements.**

- (b) \* \* \*
  - (1) \* \* \*
    - (i) *Compliance schedule.* The compliance schedule, for affected sources as defined in paragraph (b)(1)(i) of this section, is specified in § 63.1102.
    - (2) *Definitions.*

*In organic hazardous air pollutant or in organic HAP service* means, for acrylic and modacrylic fiber production affected sources, that a piece of equipment either contains or contracts a fluid (liquid or gas) that is at least 10 percent by weight of total organic HAP as determined according to the provisions of § 63.180(d). The provisions of § 63.180(d) also specify how to determine that a piece of equipment is not in organic HAP service.

*Seal* means, for acrylic and modacrylic fiber production affected sources complying with the requirements of § 63.1033(b) or § 63.167(a) on or after October 8, 2014, that instrument monitoring of the open-ended valve or line conducted according to the method specified in § 63.1023(b) and, as applicable, § 63.1023(c), or § 63.180(b) and, as applicable, § 63.180(c), indicates no readings of 500 parts per million or greater.

- (3) \* \* \*
  - (i) \* \* \*

**TABLE 2 TO § 63.1103(b)(3)(i)—WHAT ARE MY REQUIREMENTS IF I OWN OR OPERATE AN ACRYLIC AND MODACRYLIC FIBER PRODUCTION EXISTING OR NEW AFFECTED SOURCE AND AM COMPLYING WITH PARAGRAPH (b)(3)(i) OF THIS SECTION?**

If you own or operate . . .	And if . . .	Then you must . . .
1. A storage vessel .....	The stored material contains organic HAP.	a. Reduce emissions of organic HAP by 98 weight-percent by venting emissions through a closed vent system to any combination of control device meeting the requirements of subpart SS of this part, as specified in § 63.982(a)(1) (storage vessel requirements), or 95 weight-percent or greater by venting through a closed vent system to a recovery device meeting the requirements of subpart SS, § 63.993 (recovery device requirements); or b. Comply with the requirements of subpart WW of this part.
2. A process vent from continuous unit operations (halogenated).	The vent steam has a mass emission rate of halogen atoms contained in organic compounds ≥0.45 kilograms per hour, <sup>a</sup> and an organic HAP concentration ≥50 parts per million by volume <sup>b</sup> and an average flow rate ≥0.005 cubic meters per minute.	a. Reduce emissions of organic HAP or TOC as specified for non-halogenated process vents from continuous unit operations (other than by using a flare) by venting emissions through a closed vent system to a halogen reduction device meeting the requirements of subpart SS of this part, § 63.994 (halogen reduction devices requirements) that reduces hydrogen halides and halogens by 99 weight-percent or to less than 0.45 kilograms per year, whichever is less stringent; or b. Reduce the process vent halogen atom mass emission rate to less than 0.45 kilograms per hour by venting emissions through a closed vent system to a halogen reduction device meeting the requirements of subpart SS of this part, § 63.994 (halogen reduction devices requirements) and then complying with the requirements specified for process vents from continuous unit operations (non-halogenated).
3. A process vent from continuous unit operations (nonhalogenated).	The vent steam has a mass emission rate of halogen atoms contained in organic compounds <0.45 kilograms per hour, <sup>a</sup> and an organic HAP concentration ≥50 parts per million by volume <sup>b</sup> and an average flow rate ≥0.005 cubic meters per minute.	a. Reduce emissions of organic HAP by using a flare meeting the requirements of subpart SS of this part, § 63.987 (flare requirements); or b. Reduce emissions of organic HAP by 98 weight-percent, or reduce TOC to a concentration of 20 parts per million by volume, whichever is less stringent, by venting emissions through a closed vent system to any combination of control devices meeting the requirements of subpart SS of this part, as specified in § 63.982(a)(2) (process vent requirements).
4. A fiber spinning line that is a new or reconstructed source.	The lines use a spin dope produced from either a suspension polymerization process or solution polymerization process.	a. Reduce organic HAP emissions by 85 weight-percent or more. (For example, you may enclose the spinning and washing areas of the spinning line (as specified in paragraph (b)(4) of this section) and vent through a closed vent system and use any combination of control devices meeting the requirements of subpart SS of this part, as specified in § 63.982(a).); or b. Reduce organic HAP emissions from the spinning line to less than or equal to 0.25 kilograms of organic HAP per megagram (0.5 pounds of organic HAP per ton) of acrylic and modacrylic fiber produced; or c. Reduce the organic HAP concentration of the spin dope to less than 100 ppmw.
5. A fiber spinning line that is an existing source.	The spinning line uses a spin dope produced from a solution polymerization process.	Reduce organic HAP emissions from the spinning line to less than or equal to 20 kilograms of organic HAP per megagram (40 pounds of organic HAP per ton) of acrylic and modacrylic fiber produced.
6. A fiber spinning line that is an existing source.	The spinning line uses a spin dope produced from a suspension polymerization process.	a. Reduce the organic HAP concentration of the spin dope to less than 100 ppmw; <sup>b</sup> or b. Reduce organic HAP emissions from the spinning line to less than or equal to 0.25 kilograms of organic HAP per megagram of acrylic and modacrylic fiber produced.
7. Equipment as defined under § 63.1101 (with the differences for pressure relief devices described in item 11 below).	It contains or contacts ≥10 weight-percent organic HAP, <sup>c</sup> and operates ≥300 hours per year.	a. Comply with either § 63.1008 or § 63.1027 for connectors in gas and vapor service and in light liquid service, and comply with the requirements of subpart UU of this part, except § 63.1030, for all other applicable equipment; or b. Comply with the requirements in subpart H of this part, except § 63.165, as provided by the regulatory overlap provisions in § 63.1100(g)(4)(ii).
* * * * *	* * * * *	* * * * *
11. Pressure relief devices .....	The pressure relief device is in organic HAP service.	Comply with § 63.1107(e).

\* \* \* \* \* (ii) \* \* \* The owner or operator must determine the facility organic HAP emission rate using the procedures specified in paragraph (b)(5) of this section. \* \* \*

TABLE 3 TO § 63.1103(b)(3)(ii)—WHAT ARE MY REQUIREMENTS IF I OWN OR OPERATE AN ACRYLIC AND MODACRYLIC FIBER PRODUCTION EXISTING OR NEW AFFECTED SOURCE AND AM COMPLYING WITH PARAGRAPH (b)(3)(ii) OF THIS SECTION?

If you own or operate . . .	Then you must control total organic HAP emissions from the affected source by . . .
1. An acrylic and modacrylic fibers production affected source and your facility is an existing source.	Meeting all of following requirements: a. Reduce total organic HAP emissions from all affected storage vessels, process vents, wastewater streams associated with the acrylic and modacrylic fibers production process unit as defined in paragraph (b)(2) of this section, and fiber spinning lines operated in your acrylic and modacrylic fibers production facility to less than or equal to 0.5 kilograms (kg) of organic HAP per megagram (Mg) of fiber produced. b. Determine the facility organic HAP emission rate in accordance with the requirements specified in paragraph (b)(5) of this section.
2. An acrylic and modacrylic fibers production affected source and your facility is a new source.	Meeting all of following requirements: a. Reduce total organic HAP emissions from all affected storage vessels, process vents, wastewater streams associated with the acrylic and modacrylic fibers production process unit as defined in paragraph (b)(2) of this section, and fiber spinning lines operated in your acrylic and modacrylic fibers production facility to less than or equal to 0.25 kilograms (kg) of organic HAP per megagram (Mg) of fiber produced. b. Determine the facility organic HAP emission rate in accordance with the requirements specified in paragraph (b)(5) of this section.
3. Equipment as defined under § 63.1101 and it contains or contacts > 10 weight-percent organic HAP, <sup>a</sup> and operates > 300 hours per year (with the differences for pressure relief devices described in item 4 below).	a. Comply with either § 63.1008 or § 63.1027 for connectors in gas and vapor service and in light liquid service, and comply with subpart UU of this part, except § 63.1030, for all other applicable equipment; or b. Comply with the requirements in subpart H of this part, except § 63.165, as provided by the regulatory overlap provisions in § 63.1100(g)(4)(ii).
4. A pressure relief device in organic HAP service.	Complying with § 63.1107(e).

\* \* \* \* \*

(5) *Facility organic HAP emission rate determination.* For an owner or operator electing to comply with paragraph (b)(3)(ii) of this section, the facility organic HAP emission rate must be determined using the requirements specified in paragraphs (b)(5)(i) through (iii) of this section.

(i) The owner or operator must prepare an initial determination of the facility organic HAP emission rate.

(ii) Whenever changes to the acrylic or modacrylic fiber production operations at the facility could potentially cause the facility organic HAP emission rate to exceed the applicable limit of kilogram of organic HAP per Megagram of fiber produced, the owner or operator must prepare a

new determination of the facility organic HAP emission rate.  
 (iii) For each determination, the owner or operator must prepare and maintain at the facility site sufficient process data, emissions data, and any other documentation necessary to support the facility organic HAP emission rate calculation.

\* \* \* \* \*

(d) \* \* \*  
 (1) \* \* \*

(ii) *Compliance schedule.* The compliance schedule, for affected sources as defined in paragraph (d)(1)(i) of this section, is specified in § 63.1102.

(2) *Definitions.*  
*In organic hazardous air pollutant or in organic HAP service* means, for polycarbonate production affected sources, that a piece of equipment either contains or contracts a fluid (liquid or

gas) that is at least 5 percent by weight of total organic HAP as determined according to the provisions of § 63.180(d). The provisions of § 63.180(d) also specify how to determine that a piece of equipment is not in organic HAP service.

\* \* \* \* \*

*Seal* means, for polycarbonate production affected sources complying with the requirements of § 63.1033(b) or § 63.167(a) or after October 8, 2014, that instrument monitoring of the open-ended valve or line conducted according to the method specified in § 63.1023(b) and, as applicable, § 63.1023(c), or § 63.180(b) and, as applicable, § 63.180(c), indicates no readings of 500 parts per million or greater.

(3) \* \* \*

TABLE 5 TO § 63.1103(d)—WHAT ARE MY REQUIREMENTS IF I OWN OR OPERATE A POLYCARBONATE PRODUCTION EXISTING AFFECTED SOURCE?

If you own or operate . . .	And if . . .	Then you must . . .
* * * * *	* * * * *	* * * * *
4. A process vent from continuous unit operations or a combined vent stream <sup>a</sup> (halogenated).	The vent stream has a TRE <sup>b,c</sup> ≤ 2.7.	a. Reduce emissions of total organic HAP by 98 weight-percent, or reduce total organic HAP to a concentration of 20 parts per million by volume, whichever is less stringent, by venting emissions through a closed vent system to any combination of control devices meeting the requirements of subpart SS of this part, as specified in § 63.982(c)(2) and (e); and then vent emissions from those control device(s) through a closed vent system to a halogen reduction device meeting the requirements of subpart SS, § 63.994, that reduces hydrogen halides and halogens by 99 weight-percent or to less than 0.45 kilograms per hour, <sup>d</sup> whichever is less stringent; or

TABLE 5 TO § 63.1103(d)—WHAT ARE MY REQUIREMENTS IF I OWN OR OPERATE A POLYCARBONATE PRODUCTION EXISTING AFFECTED SOURCE?—Continued

If you own or operate . . .	And if . . .	Then you must . . .
		b. Reduce the process vent halogen atom mass emission rate to less than 0.45 kilograms per hour by venting emissions through a closed vent system to a halogen reduction device meeting the requirements of subpart SS of this part, § 63.994; and then vent emissions from those control device(s) through a closed vent system to any combination of control devices meeting the requirements of subpart SS, as specified in § 63.982(c)(2) and (e), that reduces emissions of total organic HAP by 98 weight-percent, or reduce total organic HAP or TOC to a concentration of 20 parts per million by volume, whichever is less stringent; or c. Achieve and maintain a TRE index value greater than 2.7.
5. A process vent from continuous unit operations or a combined vent stream <sup>a</sup> (nonhalogenated).	The vent stream has a TRE <sup>b,c</sup> ≤ 2.7.	a. Reduce emissions of total organic HAP by 98 weight-percent; or reduce total organic HAP to a concentration of 20 parts per million by volume; whichever is less stringent, by venting emissions through a closed vent system to any combination of control devices meeting the requirements of subpart SS of this part, as specified in § 63.982(a)(2) (process vent requirements); or b. Achieve and maintain a TRE index value greater than 2.7.
6. A process vent from continuous unit operations or a combined vent stream <sup>a</sup> .	2.7 < TRE <sup>b,c</sup> ≤ 4.0 .....	Monitor and keep records of equipment operating parameters specified to be monitored under subpart SS of this part, §§ 63.982(e) and 63.993(c) (absorbers, condensers, carbon adsorbers and other recovery devices used as final recovery devices).
7. Equipment as defined under § 63.1101 (with the differences for pressure relief devices described in item 11 below).	The equipment contains or contacts ≥ 5 weight-percent total organic HAP, <sup>e</sup> and operates ≥ 300 hours per year.	a. Comply with either § 63.1008 or § 63.1027 for connectors in gas and vapor service and in light liquid service, and comply with the requirements of subpart UU of this part, except § 63.1030, for all other applicable equipment; or b. Comply with the requirements in subpart H of this part, except § 63.165, as provided by the regulatory overlap provisions in § 63.1100(g)(4)(ii).
8. A polycarbonate production process unit that generates process wastewater.	The process wastewater stream is a Group 1 or a Group 2 wastewater stream.	Comply with the requirements of § 63.1106(a).
9. A polycarbonate production process unit that generates maintenance wastewater.	The maintenance wastewater contains organic HAP.	Comply with the requirements of § 63.1106(b).
10. An item of equipment listed in § 63.1106(c)(1).	The item of equipment meets the criteria specified in § 63.1106(c)(1) through (3) and either (c)(4)(i) or (ii).	Comply with the requirements in Table 35 of subpart G of this part.
11. Pressure relief devices .....	The pressure relief device is in organic HAP service.	Comply with § 63.1107(e).

\* \* \* \* \*

TABLE 6 TO § 63.1103(d)—WHAT ARE MY REQUIREMENTS IF I OWN OR OPERATE A POLYCARBONATE PRODUCTION NEW AFFECTED SOURCE?

If you own or operate . . .	And if . . .	Then you must . . .
* * * * * 4. A process vent from continuous unit operations or a combined vent stream <sup>a</sup> (halogenated).	* * * * * The vent stream has a TRE <sup>b,c</sup> ≤ 9.6.	* * * * * a. Reduce emissions of total organic HAP by 98 weight-percent, or reduce total organic HAP to a concentration of 20 parts per million by volume, whichever is less stringent, by venting emissions through a closed vent system to any combination of control devices meeting the requirements of subpart SS of this part, as specified in § 63.982(c)(2) and (e); and then vent emissions from those control device(s) through a closed vent system to a halogen reduction device meeting the requirements of subpart SS, § 63.994, that reduces hydrogen halides and halogens by 99 weight-percent or to less than 0.45 kilograms per hour, <sup>d</sup> whichever is less stringent; or

TABLE 6 TO § 63.1103(d)—WHAT ARE MY REQUIREMENTS IF I OWN OR OPERATE A POLYCARBONATE PRODUCTION NEW AFFECTED SOURCE?—Continued

If you own or operate . . .	And if . . .	Then you must . . .
		b. Reduce the process vent halogen atom mass emission rate to less than 0.45 kilograms per hour by venting emissions through a closed vent system to a halogen reduction device meeting the requirements of subpart SS of this part, § 63.994; and then vent emissions from those control device(s) through a closed vent system to any combination of control devices meeting the requirements of subpart SS, as specified in § 63.982(c)(2) and (e), that reduces emissions of total organic HAP by 98 weight-percent, or reduce total organic HAP or TOC to a concentration of 20 parts per million by volume, whichever is less stringent; or c. Achieve and maintain a TRE index value greater than 9.6.
5. A process vent from continuous unit operations or a combined vent stream <sup>a</sup> (nonhalogenated).	The vent stream has a TRE <sup>b,c</sup> ≤ 9.6.	a. Reduce emissions of total organic HAP by 98 weight-percent; or reduce total organic HAP to a concentration of 20 parts per million by volume; whichever is less stringent, by venting emissions through a closed vent system to any combination of control devices meeting the requirements of subpart SS of this part, as specified in § 63.982(a)(2) (process vent requirements); or b. Achieve and maintain a TRE index value greater than 9.6.
6. Equipment as defined under § 63.1101 (with the differences for pressure relief devices described in item 6 below).	The equipment contains or contacts ≥ 5 weight-percent total organic HAP <sup>e</sup> , and operates ≥ 300 hours per year.	a. Comply with either § 63.1008 or § 63.1027 for connectors in gas and vapor service and in light liquid service, and comply with the requirements of subpart UU of this part, except § 63.1030, for all other applicable equipment; or b. Comply with the requirements in subpart H of this part, except § 63.1107, as provided by the regulatory overlap provisions in § 63.1100(g)(4)(ii).
7. Pressure relief devices . . . . .	The pressure relief device is in organic HAP service.	Comply with § 63.1107(e).

\* \* \* \* \*

■ 6. Section 63.1104 is amended by revising paragraph (c) to read as follows:

**§ 63.1104 Process vents from continuous unit operations: applicability assessment procedures and methods.**

(c) *Applicability assessment requirement.* The TOC or organic HAP concentrations, process vent volumetric flow rates, process vent heating values, process vent TOC or organic HAP emission rates, halogenated process vent determinations, process vent TRE index values, and engineering assessments for process vent control applicability assessment requirements are to be determined during maximum representative operating conditions for the process, except as provided in paragraph (d) of this section, or unless the Administrator specifies or approves alternate operating conditions. For acrylic and modacrylic fiber production affected sources and polycarbonate production affected sources, operations during periods of malfunction shall not constitute representative conditions for the purpose of an applicability test. For all other affected sources, operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of an applicability test.

\* \* \* \* \*

■ 7. Section 63.1106 is amended by revising paragraphs (a)(11) and (12), the first sentence of (a)(13) introductory text, and (c)(6) to read as follows:

**§ 63.1106 Wastewater provisions.**

\* \* \* \* \*

(a) \* \* \*

(11) Where § 63.152(b) and/or the Notification of Compliance Status is referred to in §§ 63.132 through 63.148, the Notification of Compliance Status requirements contained in § 63.1110(a)(4) shall apply, for purposes of this subpart.

(12) Where § 63.152(c) and/or the Periodic Report requirements are referred to §§ 63.132 through 63.148, the Periodic Report requirements contained in § 63.1110(a)(5) shall apply, for purposes of this subpart.

(13) When Method 18 of Appendix A to part 60 of this chapter is specified in § 63.139(c)(1)(ii), § 63.145(d)(4), or § 63.145(i)(2), either Method 18 or Method 25A may be used. \* \* \*

\* \* \* \* \*

(c) \* \* \*

(6) When Table 35 of subpart G of this part refers to 40 CFR 63.119(e)(1) or (e)(2) in the requirements for tanks, the owner or operator shall reduce emissions of total organic HAP by 95 weight-percent by venting emissions through a closed vent system to any combination of control devices meeting

the requirements in § 63.982(a)(1), for the purposes of this subpart.

\* \* \* \* \*

■ 8. Section 63.1107 is amended by revising the section heading and adding paragraphs (e), (f), and (g) to read as follows:

**§ 63.1107 Equipment leaks.**

\* \* \* \* \*

(e) *Requirements for pressure relief devices.* For acrylic and modacrylic fiber production affected sources and polycarbonate production affected sources, except as specified in paragraph (e)(4) of this section, the owner or operator must comply with the requirements specified in paragraphs (e)(1) and (2) of this section for pressure relief devices in organic HAP gas or vapor service. Except as specified in paragraph (e)(4) of this section, the owner or operator of an acrylic and modacrylic fiber production affected source or polycarbonate production affected source must also comply with the requirements specified in paragraph (e)(3) of this section for all pressure relief devices in organic HAP service.

(1) *Operating requirements.* Except during a pressure release event, operate each pressure relief device in organic HAP gas or vapor service with an instrument reading of less than 500 ppm above background as described in Method 21 of 40 CFR part 60, Appendix A.

(2) *Pressure release requirements.* For pressure relief devices in organic HAP gas or vapor service, the owner or operator must comply with either paragraph (e)(2)(i) or (ii) of this section following a pressure release, as applicable.

(i) If the pressure relief device does not consist of or include a rupture disk, conduct instrument monitoring, as described in Method 21 of 40 CFR part 60, Appendix A, no later than 5 calendar days after the pressure relief device returns to organic HAP service following a pressure release to verify that the pressure relief device is operating with an instrument reading of less than 500 ppm above background, except as provided in § 63.171 or § 63.1024(d), as applicable.

(ii) If the pressure relief device consists of or includes a rupture disk, install a replacement disk as soon as practicable after a pressure release, but no later than 5 calendar days after the pressure release, except as provided in § 63.171 or § 63.1024(d), as applicable.

(3) *Pressure release management.* Except as specified in paragraph (e)(4) of this section, emissions of organic HAP to the atmosphere from pressure relief devices in organic HAP service are prohibited, and the owner or operator must comply with the requirements specified in paragraphs (e)(3)(i) and (ii) of this section for all pressure relief devices in organic HAP service.

(i) The owner or operator must equip each pressure relief device in organic HAP service with a device(s) or parameter monitoring system that is capable of:

(A) Identifying the pressure release;

(B) Recording the time and duration of each pressure release; and

(C) Notifying operators immediately that a pressure release is occurring. The device or monitoring system may be either specific to the pressure relief device itself or may be associated with the process system or piping, sufficient to indicate a pressure release to the atmosphere. Examples of these types of devices and systems include, but are not limited to, a rupture disk indicator, magnetic sensor, motion detector on the pressure relief valve stem, flow monitor, or pressure monitor.

(ii) If any pressure relief device in organic HAP service releases to atmosphere as a result of a pressure release event, the owner or operator must calculate the quantity of organic HAP released during each pressure release event and report this quantity as required in paragraph (g) of this section. Calculations may be based on data from the pressure relief device monitoring alone or in combination with process

parameter monitoring data and process knowledge.

(4) *Pressure relief devices routed to a control device, process, fuel gas system, or drain system.* If a pressure relief device in organic HAP service is designed and operated to route all HAP emissions from pressure releases through a closed vent system to a control device or to a process, fuel gas system, or drain system, the owner or operator is not required to comply with paragraphs (e)(1), (2), or (3) (if applicable) of this section for that pressure relief device. The fuel gas system or closed vent system and control device (if applicable) must meet the requirements of § 63.172 or § 63.1034, as applicable (except that the term “pressure relief devices” shall apply instead of the term “equipment leaks” in § 63.1034). The drain system (if applicable) must meet the requirements of § 63.136.

(f) *Recordkeeping requirements.* For acrylic and modacrylic fiber production affected sources and polycarbonate production affected sources, for pressure relief devices in organic HAP service, keep records of the information specified in paragraphs (f)(1) through (5) of this section, as applicable.

(1) A list of identification numbers for pressure relief devices that vent to a fuel gas system, process, drain system, or closed-vent system and control device, under the provisions in paragraph (e)(4) of this section.

(2) A list of identification numbers for pressure relief devices subject to the provisions in paragraph (e)(1) of this section.

(3) A list of identification numbers for pressure relief devices equipped with rupture disks, under the provisions in paragraph (e)(2)(ii) of this section.

(4) The dates and results of the monitoring following a pressure release for each pressure relief device subject to the provisions in paragraphs (e)(1) and (2) of this section. The results shall include:

(i) The background level measured during each compliance test.

(ii) The maximum instrument reading measured at each piece of equipment during each compliance test.

(5) For pressure relief devices in organic HAP service subject to paragraph (e)(3) of this section, keep records of each pressure release to the atmosphere, including the following information:

(i) The source, nature, and cause of the pressure release.

(ii) The date, time, and duration of the pressure release.

(iii) An estimate of the quantity of total HAP emitted during the pressure

release and the calculations used for determining this quantity.

(iv) The actions taken to prevent this pressure release.

(v) The measures adopted to prevent future such pressure releases.

(g) *Periodic reports.* For owners or operators of an acrylic and modacrylic fiber production affected source or polycarbonate production affected source subject to paragraph (e) of this section, Periodic Reports must include the information specified in paragraphs (g)(1) through (3) of this section for pressure relief devices in organic HAP service.

(1) For pressure relief devices in organic HAP service subject to paragraph (e) of this section, report confirmation that all monitoring to show compliance was conducted within the reporting period.

(2) For pressure relief devices in organic HAP gas or vapor service subject to paragraph (e)(2) of this section, report any instrument reading of 500 ppm above background or greater, more than 5 days after the relief device returns to organic HAP gas or vapor service after a pressure release.

(3) For pressure relief devices in organic HAP service subject to paragraph (e)(3) of this section, report each pressure release to the atmosphere, including the following information:

(i) The source, nature, and cause of the pressure release.

(ii) The date, time, and duration of the pressure release.

(iii) An estimate of the quantity of total HAP emitted during the pressure release and the method used for determining this quantity.

(iv) The actions taken to prevent this pressure release.

(v) The measures adopted to prevent future such pressure releases.

■ 9. Section 63.1108 is amended by:

■ a. Adding paragraph (a) introductory text;

■ b. Adding paragraph (a)(4);

■ c. Revising the first sentence of paragraph (a)(5); and

■ d. Revising paragraphs (b)(1), the first sentence of (b)(2) introductory text, and (b)(4)(ii).

The revisions and additions read as follows:

**§ 63.1108 Compliance with standards and operation and maintenance requirements.**

(a) *Requirements.* The requirements of paragraphs (a)(1), (2), and (5) of this section apply to all affected sources except acrylic and modacrylic fiber production affected sources and polycarbonate production affected sources. The requirements of paragraph (a)(4) of this section apply only to

acrylic and modacrylic fiber production affected sources and polycarbonate production affected sources. The requirements of paragraphs (a)(3), (6), and (7) of this section apply to all affected sources.

\* \* \* \* \*

(4)(i) For acrylic and modacrylic fiber production affected sources and polycarbonate production affected sources, the emission limitations and established parameter ranges of this part shall apply at all times except during periods of non-operation of the affected source (or specific portion thereof) resulting in cessation of the emissions to which this subpart applies. Equipment leak requirements shall apply at all times except during periods of non-operation of the affected source (or specific portion thereof) in which the lines are drained and depressurized resulting in cessation of the emissions to which the equipment leak requirements apply.

(ii) *General duty.* At all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(5) During startups, shutdowns, and malfunctions when the emission standards of this subpart and the subparts referenced by this subpart do not apply pursuant to paragraphs (a)(1) through (3) of this section, the owner or operator shall implement, to the extent reasonably available, measures to prevent or minimize excess emissions.

\* \* \*

\* \* \* \* \*

(b) \* \* \*

(1) *Parameter monitoring: compliance with operating conditions.* Compliance with the required operating conditions for the monitored control devices or recovery devices may be determined by, but is not limited to, the parameter monitoring data for emission points that are required to perform continuous

monitoring. For each excursion, except as provided for in paragraphs (b)(1)(i) and (ii) of this section, the owner or operator shall be deemed to have failed to have applied the control in a manner that achieves the required operating conditions.

(i) An excursion that meets the requirements of paragraph (b)(2) of this section is not a violation.

(ii) Excused excursions are not allowed for acrylic and modacrylic fiber production affected sources or polycarbonate production affected sources. For all other affected sources, an excused excursion, as described in § 63.998(b)(6)(ii), is not a violation.

(2) *Parameter monitoring: Excursions.* An excursion is not a violation in cases where continuous monitoring is required and the excursion does not count toward the number of excused excursions (as described in § 63.998(b)(6)(ii)), if the conditions of paragraphs (b)(2)(i) or (ii) of this section are met, except that the conditions of paragraph (b)(2)(i) of this section do not apply for acrylic and modacrylic fiber production affected sources and polycarbonate production affected sources. \* \* \*

\* \* \* \* \*

(4) \* \* \*  
(ii) *Performance test.* (A) The Administrator may determine compliance with emission limitations of this subpart based on, but not limited to, the results of performance tests conducted according to the procedures specified in § 63.997, unless otherwise specified in this subpart or a subpart referenced by this subpart.

(B) For acrylic and modacrylic fiber production affected sources and polycarbonate production affected sources, performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance of the affected source for the period being tested. Representative conditions exclude periods of startup and shutdown unless specified by the Administrator or an applicable subpart. The owner or operator may not conduct performance tests during periods of malfunction. The owner or operator must 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. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

\* \* \* \* \*

- 10. Section 63.1110 is amended by:
- a. Adding a sentence to the end of paragraph (a) introductory text;
- b. Revising paragraph (a)(7);
- c. Adding paragraph (a)(9);
- d. Adding a sentence to the end of paragraph (d)(1) introductory text; and
- e. Adding paragraph (d)(1)(iii).

The revisions and additions read as follows:

**§ 63.1110 Reporting requirements.**

(a) \* \* \* Each owner or operator of an acrylic and modacrylic fiber production affected source or polycarbonate production affected source subject to this subpart shall also submit the reports listed in paragraph (a)(9) of this section in addition to the reports listed in paragraphs (a)(1) through (8) of this section, as applicable.

\* \* \* \* \*

(7) Startup, Shutdown, and Malfunction Reports described in § 63.1111 (except for acrylic and modacrylic fiber production affected sources and polycarbonate production affected sources).

\* \* \* \* \*

(9) *Electronic reporting.* Within 60 days after the date of completing each performance test (as defined in § 63.2), the owner or operator must submit the results of the performance tests, including any associated fuel analyses, required by this subpart according to the methods specified in paragraphs (a)(9)(i) or (ii) of this section.

(i) For data collected using test methods supported by the EPA-provided software, the owner or operator shall submit the results of the performance test to the EPA by direct computer-to-computer electronic transfer via EPA-provided software, unless otherwise approved by the Administrator. Owners or operators, who claim that some of the information being submitted for performance tests is confidential business information (CBI), must submit a complete file using EPA-provided software that includes information claimed to be CBI on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA by direct computer-to-computer electronic transfer via EPA-provided software.

(ii) For any performance test conducted using test methods that are not compatible with the EPA-provided



software, the owner or operator shall submit the results of the performance test to the Administrator at the appropriate address listed in § 60.4.

\* \* \* \* \*

(d) \* \* \*

(1) \* \* \* For pressure relief devices subject to the requirements of § 63.1107(e)(3), the owner or operator of an acrylic and modacrylic fiber production affected source or polycarbonate production affected source shall also submit the information listed in paragraph (d)(1)(iii) of this section in a supplement to the Notification of Compliance Status within 150 days after the first applicable compliance date for pressure relief device monitoring.

\* \* \* \* \*

(iii) For pressure relief devices in organic HAP service, a description of the device or monitoring system to be implemented, including the pressure relief devices and process parameters to be monitored (if applicable), and a description of the alarms or other methods by which operators will be notified of a pressure release.

\* \* \* \* \*

- 11. Section 63.1111 is amended by:
  - a. Adding paragraphs (a) introductory text and (b) introductory text;
  - b. Removing paragraph (b)(3); and
  - c. Adding paragraph (c).

The revisions and additions read as follows:

**§ 63.1111 Startup, shutdown, and malfunction.**

(a) *Startup, shutdown, and malfunction plan.* The requirements of this paragraph (a) apply to all affected sources except for acrylic and modacrylic fiber production affected sources and polycarbonate production affected sources.

\* \* \* \* \*

(b) *Startup, shutdown, and malfunction reporting requirements.* The requirements of this paragraph (b) apply to all affected sources except for acrylic and modacrylic fiber production affected sources and polycarbonate production affected sources.

\* \* \* \* \*

(c) *Malfunction recordkeeping and reporting.* The requirements of this paragraph (c) apply only to acrylic and modacrylic fiber production affected sources and polycarbonate production affected sources.

(1) *Records of malfunctions.* The owner or operator shall keep the records specified in paragraphs (c)(1)(i) through (iii) of this section.

(i) In the event that an affected unit fails to meet an applicable standard,

record the number of failures. For each failure record the date, time, and duration of each failure.

(ii) For each failure to meet an applicable standard, record and retain 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.

(iii) Record actions taken to minimize emissions in accordance with § 63.1108(a)(4)(ii), and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

(2) *Reports of malfunctions.* If a source fails to meet an applicable standard, report such events in the Periodic Report. Report the number of failures to meet an applicable standard. For each instance, report the date, time and duration of each failure. For each failure the report must include 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.

**Subpart OOO—National Emission Standards for Hazardous Air Pollutant Emissions: Manufacture of Amino/Phenolic Resins**

- 12. Section 63.1400 is amended by revising paragraph (k) to read as follows:

**§ 63.1400 Applicability and designation of affected sources.**

\* \* \* \* \*

(k) *Applicability of this subpart.* (1) The emission limitations set forth in this subpart and the emission limitations referred to in this subpart shall apply at all times except during periods of non-operation of the affected source (or specific portion thereof) resulting in cessation of the emissions to which this subpart applies.

(2) The emission limitations set forth in 40 CFR part 63, subpart UU, as referred to in § 63.1410, shall apply at all times except during periods of non-operation of the affected source (or specific portion thereof) in which the lines are drained and depressurized resulting in cessation of the emissions to which § 63.1410 applies.

(3) The owner or operator shall not shut down items of equipment that are required or utilized for compliance with this subpart during times when emissions are being routed to such items of equipment if the shutdown would contravene requirements of this subpart applicable to such items of equipment.

(4) *General duty.* At all times, the owner or operator must operate and

maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved.

Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

- 13. Section 63.1401 is amended by revising paragraphs (a) and (b) to read as follows:

**§ 63.1401 Compliance schedule.**

(a) New affected sources that commence construction or reconstruction after December 14, 1998, shall be in compliance with this subpart (except § 63.1411(c)) upon initial start-up or January 20, 2000, whichever is later. New affected sources that commenced construction or reconstruction after December 14, 1998, but on or before January 9, 2014, shall be in compliance with the pressure relief device monitoring requirements of § 63.1411(c) by October 9, 2017. New affected sources that commence construction or reconstruction after January 9, 2014, shall be in compliance with the pressure relief device monitoring requirements of § 63.1411(c) upon initial startup or by October 8, 2014.

(b) Existing affected sources shall be in compliance with this subpart (except §§ 63.1404, 63.1405, and 63.1411(c)) no later than 3 years after January 20, 2000. Existing affected sources shall be in compliance with the storage vessel requirements of § 63.1404, the continuous process vent requirements of § 63.1405, and the pressure relief device monitoring requirements of § 63.1411(c) by October 9, 2017.

\* \* \* \* \*

- 14. Section 63.1402 is amended by:

- a. In paragraph (a):

- i. Adding in alphabetical order the term “Pressure relief device or valve (§ 63.161)”;

- ii. Removing the term “Start-up, shutdown, and malfunction plan (§ 63.101)”;

- iii. Revising the term “Inorganic hazardous air pollutant service

(§ 63.161)” to read “In organic hazardous air pollutant service (§ 63.161)”;

- b. In paragraph (b):
- i. Adding in alphabetical order the terms “Pressure release” and “Seal”; and
- ii. Revising the term “Amino/phenolic. Resin process unit (APPU)” to read “Amino/phenolic resin process unit (APPU)”.

The revisions and additions read as follows:

**§ 63.1402 Definitions.**

\* \* \* \* \*

(b) \* \* \*

\* \* \* \* \*

*Pressure release* means the emission of materials resulting from the system pressure being greater than the set pressure of the pressure relief device. This release can be one release or a series of releases over a short time period.

\* \* \* \* \*

*Seal* means, for the purpose of complying with the requirements of § 63.1033(b), that instrument monitoring of the open-ended valve or line conducted according to the method specified in § 63.1023(b) and, as applicable, § 63.1023(c), indicates no readings of 500 parts per million or greater.

\* \* \* \* \*

- 15. Section 63.1404 is amended by revising the first sentence of paragraph (a) introductory text to read as follows:

**§ 63.1404 Storage vessel provisions.**

(a) *Emission standards.* For each storage vessel located at a new or existing affected source that has a capacity of greater than or equal to 20,000 gallons, but less than 40,000 gallons, and vapor pressure of 1.9 pounds per square inch absolute (psia) or greater; has a capacity of greater than or equal to 40,000 gallons, but less than 90,000 gallons, and vapor pressure of 0.75 psia or greater; or has a capacity of 90,000 gallons or greater and vapor pressure of 0.15 psia or greater, the owner or operator shall comply with either paragraph (a)(1) or (2) of this section. \* \* \*

\* \* \* \* \*

- 16. Section 63.1405 is amended by:
  - a. Revising the first sentence of paragraph (a) introductory text;
  - b. Adding paragraph (a)(3); and
  - c. Revising the last sentence of paragraph (b).

The revisions and additions read as follows:

**§ 63.1405 Continuous process vent provisions.**

(a) *Emission standards.* For each continuous process vent with a Total Resource Effectiveness (TRE) index value, as determined following the procedures specified in § 63.1412(j), less than or equal to 1.2, the owner or operator shall comply with either paragraph (a)(1) or (2) of this section for continuous process vents located at a new affected source, and with either paragraph (a)(1) or (3) of this section for continuous process vents located at an existing affected source. \* \* \*

\* \* \* \* \*

(3) Reduce emissions to less than or equal to 0.95 kg of total organic HAP per megagram (1.9 pounds of total organic HAP per ton) of resin produced, or to a concentration of 20 ppmv when using a combustion control device or to a concentration of 50 ppmv when using a non-combustion control device, whichever is less stringent.

(b) *Alternative standard.* \* \* \* Any continuous process vents that are not vented to a control device meeting these conditions shall be controlled in accordance with the provisions of paragraphs (a)(1), (2), or (3) of this section, as appropriate.

- 17. Section 63.1410 is amended by revising the first sentence of the introductory text to read as follows:

**§ 63.1410 Equipment leak provisions.**

The owner or operator of each affected source shall comply with the requirements of 40 CFR part 63, subpart UU for all equipment, as defined under § 63.1402, that contains or contacts 5 weight-percent HAP or greater and operates 300 hours per year or more, except § 63.1030. \* \* \*

- 18. Add § 63.1411 to read as follows:

**§ 63.1411 Requirements for pressure relief devices.**

Except as specified in paragraph (d) of this section, the owner or operator must comply with the requirements specified in paragraphs (a) and (b) of this section for pressure relief devices in organic HAP gas or vapor service. Except as specified in paragraph (d) of this section, the owner or operator must also comply with the requirements specified in paragraph (c) of this section for all pressure relief devices in organic HAP service.

(a) *Operating requirements.* Except during a pressure release event, operate each pressure relief device in organic HAP gas or vapor service with an instrument reading of less than 500 ppm above background as described in Method 21 of 40 CFR part 60, Appendix A.

(b) *Pressure release requirements.* For pressure relief devices in organic HAP gas or vapor service, the owner or operator must comply with either paragraph (b)(1) or (2) of this section following a pressure release, as applicable.

(1) If the pressure relief device does not consist of or include a rupture disk, conduct instrument monitoring, as described in Method 21 of 40 CFR part 60, Appendix A, no later than 5 calendar days after the pressure relief device returns to organic HAP service following a pressure release to verify that the pressure relief device is operating with an instrument reading of less than 500 ppm above background, except as provided in § 63.1024(d).

(2) If the pressure relief device consists of or includes a rupture disk, install a replacement disk as soon as practicable after a pressure release, but no later than 5 calendar days after the pressure release, except as provided in § 63.1024(d).

(c) *Pressure release management.* Except as specified in paragraph (d) of this section, emissions of organic HAP to the atmosphere from pressure relief devices in organic HAP service are prohibited, and the owner or operator must comply with the requirements specified in paragraphs (c)(1) and (2) of this section for all pressure relief devices in organic HAP service.

(1) The owner or operator must equip each pressure relief device in organic HAP service with a device(s) or parameter monitoring system that is capable of:

- (i) Identifying the pressure release;
- (ii) Recording the time and duration of each pressure release; and
- (iii) Notifying operators immediately that a pressure release is occurring. The device or monitoring system may be either specific to the pressure relief device itself or may be associated with the process system or piping sufficient to indicate a pressure release to the atmosphere. Examples of these types of devices and systems include, but are not limited to, a rupture disk indicator, magnetic sensor, motion detector on the pressure relief valve stem, flow monitor, or pressure monitor.

(2) If any pressure relief device in organic HAP service releases to atmosphere as a result of a pressure release event, the owner or operator must calculate the quantity of organic HAP released during each pressure release event and report this quantity as required in § 63.1417(f)(13)(iii). Calculations may be based on data from the pressure relief device monitoring alone or in combination with process

parameter monitoring data and process knowledge.

(d) *Pressure relief devices routed to a control device, process, fuel gas system, or drain system.* If a pressure relief device in organic HAP service is designed and operated to route all HAP emissions from pressure releases through a closed vent system to a control device or to a process, fuel gas system, or drain system, the owner or operator is not required to comply with paragraphs (a), (b), or (c) (if applicable) of this section for that pressure relief device. The fuel gas system or closed vent system and control device (if applicable) must meet the requirements of § 63.1034, as applicable (except that the term “pressure relief devices” shall apply instead of the term “equipment leaks” in § 63.1034). The drain system (if applicable) must meet the requirements of § 63.136.

■ 19. Section 63.1412 is amended by revising the last sentence of paragraph (c) to read as follows:

**§ 63.1412 Continuous process vent applicability assessment procedures and methods.**

\* \* \* \* \*

(c) *Applicability assessment requirement.* \* \* \* Operations during periods of malfunction shall not constitute representative conditions for the purpose of an applicability test.

\* \* \* \* \*

- 20. Section 63.1413 is amended by:
- a. Revising paragraph (a)(2) introductory text;
- b. Redesignating paragraph (c)(5) as paragraph (c)(6);
- c. Adding paragraph (c)(5);
- d. Redesignating paragraph (h) as paragraph (i);
- e. Adding paragraph (h);
- f. Revising newly redesignated paragraphs (i) introductory text and (i)(4) introductory text;
- g. Revising newly redesignated paragraphs (i)(4)(i), the first sentence of (i)(4)(iii), and (i)(5) and (6).

The revisions and additions read as follows:

**§ 63.1413 Compliance demonstration procedures.**

(a) \* \* \*

(2) *Performance tests.* Performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance of the affected source for the period being tested and in accordance with the General Provisions at § 63.7(a)(1), (a)(3), (d), (e)(2), (e)(4), (g), and (h), with the exceptions specified in paragraph (a)(1) of this section. Representative

conditions exclude periods of startup and shutdown unless specified by the Administrator or an applicable subpart. The owner or operator may not conduct performance tests during periods of malfunction. The owner or operator must 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. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests. Data shall be reduced in accordance with the EPA approved methods specified in this subpart or, if other test methods are used, the data and methods shall be validated according to the protocol in Method 301 of Appendix A of this part.

\* \* \* \* \*

(c) \* \* \*  
(5) Initial and continuous compliance with the emission limit specified in § 63.1405(a)(3) shall be demonstrated following the procedures in paragraph (h) of this section.

\* \* \* \* \*

(h) *Continuous process vent compliance at existing sources.* (1) Each owner or operator complying with the mass emission limit specified in § 63.1405(a)(3) shall determine initial compliance as specified in paragraph (h)(1)(i) of this section and continuous compliance as specified in paragraph (h)(1)(ii) of this section.

(i) *Initial compliance.* Initial compliance shall be based on the average of the first 6 monthly average emission rate data points. The 6-month average shall be compared to the mass emission limit specified in § 63.1405(a)(3).

(ii) *Continuous compliance.* For the first year of compliance, continuous compliance shall be based on a cumulative average monthly emission rate calculated each month based on the available monthly emission rate data points (e.g., 7 data points after 7 months of operation, 8 data points after 8 months of operation) beginning the first month after initial compliance is demonstrated. The first continuous compliance cumulative average monthly emission rate shall be calculated using the first 7 monthly average emission rate data points. After the first year of compliance, a 12-month rolling average monthly emission rate shall be calculated each month based on the previous 12 monthly emission rate data points. Continuous compliance shall be determined by comparing the cumulative average monthly emission

rate or the 12-month rolling average monthly emission rate to the mass emission limit specified in § 63.1405(a)(3).

(2) *Procedures to determine the monthly emission rate.* (i) The monthly emission rate, kilograms of organic HAP per megagram of product, shall be determined at the end of each month using Equation 5 of this section:

$$ER = \frac{E_i}{RP_m} \quad [Eq. 5]$$

Where:

ER = Emission rate of organic HAP from continuous process vent, kg of HAP/Mg product.

E<sub>i</sub> = Emission rate of organic HAP from continuous process vent i as determined using the procedures specified in paragraph (h)(2)(ii) of this section, kg/month.

RP<sub>m</sub> = Amount of resin produced in one month as determined using the procedures specified in paragraph (h)(2)(iii) of this section, Mg/month.

(ii) The monthly emission rate of organic HAP, in kilograms per month, from an individual continuous process vent (E<sub>i</sub>) shall be determined. Once organic HAP emissions have been estimated, as specified in paragraph (h)(2)(ii)(A) of this section for uncontrolled continuous process vents or paragraphs (h)(2)(ii)(A) and (B) of this section for continuous process vents vented to a control device or control technology, the owner or operator may use the estimated organic HAP emissions (E<sub>i</sub>) until the estimated organic HAP emissions are no longer representative due to a process change or other reason known to the owner or operator. If organic HAP emissions (E<sub>i</sub>) are determined to no longer be representative, the owner or operator shall redetermine organic HAP emissions for the continuous process vent following the procedures in paragraph (h)(2)(ii)(A) of this section for uncontrolled continuous process vents or paragraphs (h)(2)(ii)(A) and (B) of this section for continuous process vents vented to a control device or control technology.

(A) For continuous process vents estimated through engineering assessment, as described in § 63.1414(d)(10), to emit less than 10 tons per year of uncontrolled organic HAP emissions, the owner or operator may use the emissions determined using engineering assessment in Equation 5 of this section or may determine organic HAP emissions using the procedures specified in paragraph (a)(1)(i) of this section. For continuous process vents estimated through engineering assessment, as described in

§ 63.1414(d)(10), to emit 10 tons per year or greater of uncontrolled organic HAP emissions, uncontrolled organic HAP emissions shall be estimated following the procedures specified in paragraph (a)(1)(i) of this section.

(B) For continuous process vents vented to a control device or control technology, controlled organic HAP emissions shall be determined as follows:

(1) Uncontrolled organic HAP emissions shall be determined following the procedures in paragraph (h)(2)(ii)(A) of this section.

(2) Control device or control technology efficiency shall be determined using the procedures in paragraph (a)(1)(i) of this section for large control devices or the procedures in paragraph (a)(1)(ii) of this section for small control devices.

(3) Controlled organic HAP emissions shall be determined by applying the control device or control technology efficiency, determined in paragraph (h)(2)(ii)(B)(2) of this section, to the uncontrolled organic HAP emissions, determined in paragraph (h)(2)(ii)(B)(1) of this section.

(iii) The rate of resin produced,  $RP_M$  (Mg/month), shall be determined based on production records certified by the owner or operator to represent actual production for the month. A sample of the records selected by the owner or operator for this purpose shall be provided to the Administrator in the Precompliance Report as required by § 63.1417(d).

(i) *Deviations.* Paragraphs (i)(1) through (4) of this section describe deviations from the emission limits, the operating limits, the work practice standards, and the emission standard, respectively. Paragraph (i)(5) of this section describes situations that are not deviations. Paragraph (i)(6) of this section describes periods that are excluded from compliance determinations.

\* \* \* \* \*

(4) *Deviation from the emission standard.* If monitoring data are insufficient, as described in paragraphs (i)(4)(i) through (iii) of this section, there has been a deviation from the emission standard.

(i) The period of control device or control technology operation is 4 hours or greater in an operating day, and monitoring data are insufficient to constitute a valid hour of data, as defined in paragraph (i)(4)(iii) of this section, for at least 75 percent of the operating hours;

\* \* \* \* \*

(iii) Monitoring data are insufficient to constitute a valid hour of data, as

used in paragraphs (i)(4)(i) and (ii) of this section, if measured values are unavailable for any of the 15-minute periods within the hour. \* \* \*

(5) *Situations that are not deviations.* If any of the situations listed in paragraphs (i)(5)(i) or (ii) of this section occur, such situations shall not be considered to be deviations.

(i) Monitoring data cannot be collected during monitoring device calibration check or monitoring device malfunction; or

(ii) Monitoring data are not collected during periods of nonoperation of the affected source or portion thereof (resulting in cessation of the emissions to which the monitoring applies).

(6) *Periods not considered to be part of the period of control or recovery device operation.* The periods listed in paragraphs (i)(6)(i) and (ii) of this section are not considered to be part of the period of control or recovery device operation for purposes of determining averages or periods of control device or control technology operation.

(i) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments; or

(ii) Periods of nonoperation of the affected source (or portion thereof), resulting in cessation of the emissions to which the monitoring applies.

■ 21. Section 63.1414 is amended by adding paragraph (d)(10) to read as follows:

**§ 63.1414 Test methods and emission estimation equations.**

\* \* \* \* \*

(d) \* \* \*

(10) For continuous process vent emissions determined by engineering assessment, the engineering assessment includes, but is not limited to, the examples provided in § 63.1412(k)(3).

■ 22. Section 63.1415 is amended by revising the second sentence of paragraph (b)(1)(ii)(C) to read as follows:

**§ 63.1415 Monitoring requirements.**

\* \* \* \* \*

(b) \* \* \*

(1) \* \* \*

(ii) \* \* \*

(C) \* \* \* The plan shall require determination of gas stream flow by a method which will at least provide a value for either a representative or the highest gas stream flow anticipated in the scrubber during representative operating conditions other than malfunctions. \* \* \*

\* \* \* \* \*

■ 23. Section 63.1416 is amended by:

■ a. Revising paragraphs (b), (c)(4), (d)(3)(iv)(B), and (e)(3)(iv)(B);

■ b. Adding paragraphs (f)(5), (f)(6), and (g)(5);

■ c. Revising the first sentence of paragraph (h)(1)(i);

■ d. Revising paragraph (h)(1)(ii);

■ e. Revising the first sentence of paragraph (h)(1)(iii);

■ f. Revising the last sentence of paragraph (h)(2)(iii); and

■ g. Revising paragraph (h)(2)(iv).

The revisions and additions read as follows:

**§ 63.1416 Recordkeeping requirements.**

\* \* \* \* \*

(b) *Malfunction records.* Records shall be kept as specified in paragraphs (b)(1) through (3) of this section.

(1) In the event that an affected unit fails to meet an applicable standard, record the number of failures. For each failure record the date, time, and duration of each failure.

(2) For each failure to meet an applicable standard, record and retain 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.

(3) Record actions taken to minimize emissions in accordance with § 63.1420(h)(4), and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

(c) \* \* \*

(4) Monitoring data recorded during periods identified in paragraphs (c)(4)(i) and (ii) of this section shall not be included in any average computed under this subpart. Records shall be kept of the times and durations of all such periods and any other periods during process or control device or recovery device or control technology operation when monitors are not operating:

(i) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments; and

(ii) Periods of non-operation of the affected source (or portion thereof) resulting in cessation of the emissions to which the monitoring applies.

\* \* \* \* \*

(d) \* \* \*

(3) \* \* \*

(iv) \* \* \*

(B) If there is a deviation from the mass emission limit, as specified in § 63.1413(i), the individual monthly emission rate data points making up the cumulative average monthly emission rate or the 12-month rolling average monthly emission rate, as appropriate.

\* \* \* \* \*

- (e) \* \* \*  
 (3) \* \* \*  
 (iv) \* \* \*

(B) If there is a deviation from the emission limit, as specified in § 63.1413(i)(1), the individual monthly emission rate data points making up the rolling average monthly emission rate or the 12-month rolling average monthly emission rate, as appropriate.

\* \* \* \* \*

- (f) \* \* \*

(5) If a continuous process vent is seeking to demonstrate compliance with the mass emission limit specified in § 63.1405(a)(3), keep records specified in paragraphs (f)(5)(i) and (ii) of this section.

(i) The results of the initial compliance demonstration specified in § 63.1413(h)(1)(i).

(ii) The monthly organic HAP emissions from the continuous process vent determined as specified in § 63.1413(h)(2).

(6) When using a flare to comply with § 63.1405(a), keep the records specified in paragraphs (f)(6)(i) through (f)(6)(iii) of this section.

(i) The flare design (i.e., steam-assisted, air-assisted or non-assisted);

(ii) All visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the compliance determination required by § 63.1413(g); and

(iii) Periods when all pilot flames were absent during the compliance determination required by § 63.1413(g).

- (g) \* \* \*

(5) For pressure relief devices in organic HAP service, keep records of the information specified in paragraphs (g)(5)(i) through (v) of this section, as applicable.

(i) A list of identification numbers for pressure relief devices that vent to a fuel gas system, process, drain system, or closed-vent system and control device, under the provisions in § 63.1411(d).

(ii) A list of identification numbers for pressure relief devices subject to the provisions in § 63.1411(a).

(iii) A list of identification numbers for pressure relief devices equipped with rupture disks, under the provisions in § 63.1411(b)(2).

(iv) The dates and results of the monitoring following a pressure release for each pressure relief device subject to the provisions in § 63.1411(a) and (b). The results shall include:

(A) The background level measured during each compliance test.

(B) The maximum instrument reading measured at each piece of equipment during each compliance test.

(v) For pressure relief devices in organic HAP service subject to § 63.1411(c), keep records of each pressure release to the atmosphere, including the following information:

(A) The source, nature, and cause of the pressure release.

(B) The date, time, and duration of the pressure release.

(C) An estimate of the quantity of total HAP emitted during the pressure release and the calculations used for determining this quantity.

(D) The actions taken to prevent this pressure release.

(E) The measures adopted to prevent future such pressure releases.

- (h) \* \* \*

- (1) \* \* \*

(i) The monitoring system is capable of detecting unrealistic or impossible data during periods of operation (e.g., a temperature reading of  $-200\text{ }^{\circ}\text{C}$  on a boiler) and will alert the operator by alarm or other means. \* \* \*

(ii) The monitoring system generates, updated at least hourly throughout each operating day, a running average of the parameter values that have been obtained during that operating day or block, and the capability to observe this running average is readily available on-site to the Administrator during the operating day. The owner or operator shall record the occurrence of any period meeting the criteria in paragraphs (h)(1)(ii)(A) and (B) of this section. All instances in an operating day or block constitute a single occurrence:

(A) The running average is above the maximum or below the minimum established limits; and

(B) The running average is based on at least six 1-hour average values.

(iii) The monitoring system is capable of detecting unchanging data during periods of operation, except in circumstances where the presence of unchanging data is the expected operating condition based on past experience (e.g., pH in some scrubbers) and will alert the operator by alarm or other means. \* \* \*

\* \* \* \* \*

- (2) \* \* \*

(iii) \* \* \* For any calendar week, if compliance with paragraphs (h)(1)(i) through (iv) of this section does not result in retention of a record of at least one occurrence or measured parameter value, the owner or operator shall record and retain at least one value during a period of operation.

(iv) For purposes of paragraph (h)(2) of this section, a deviation means that the daily average, batch cycle daily average, or block average value of

monitoring data for a parameter is greater than the maximum, or less than the minimum established value.

■ 24. Section 63.1417 is amended by:

■ a. Revising the first sentence of paragraph (d);

■ b. Revising paragraphs (d)(8), (d)(9), and (d)(11)(ii);

■ d. Revising paragraph (e) introductory text;

■ e. Adding paragraph (e)(10);

■ f. Revising the first sentence of paragraph (f)(1);

■ g. Revising paragraphs (f)(3)(i) and (ii) and (f)(5) introductory text;

■ h. Adding paragraph (f)(13);

■ i. Revising paragraph (g);

■ j. Revising paragraphs (h) introductory text and the first sentence of (h)(7) introductory text;

■ k. Adding paragraph (h)(8); and

■ l. Revising paragraph (k)(3)(i)(F).

The revisions and additions read as follows:

**§ 63.1417 Reporting requirements.**

\* \* \* \* \*

(d) *Precompliance Report.* Owners or operators of affected sources requesting an extension for compliance; requesting approval to use alternative monitoring parameters, alternative continuous monitoring and recordkeeping, or alternative controls; requesting approval to use engineering assessment to estimate organic HAP emissions from a batch emissions episode as described in § 63.1414(d)(6)(i)(C); wishing to establish parameter monitoring levels according to the procedures contained in § 63.1413(a)(4)(ii); establishing parameter monitoring levels based on a design evaluation as specified in § 63.1413(a)(3); or following the procedures in § 63.1413(e)(2); or following the procedures in § 63.1413(h)(2), shall submit a Precompliance Report according to the schedule described in paragraph (d)(1) of this section. \* \* \*

\* \* \* \* \*

(8) If an owner or operator is complying with the mass emission limit specified in § 63.1405(a)(3), the sample of production records specified in § 63.1413(h)(2) shall be submitted in the Precompliance Report.

(9) If an owner or operator is complying with the mass emission limit specified in § 63.1406(a)(1)(iii) or (a)(2)(iii), § 63.1407(b)(2), or § 63.1408(b)(2), the sample of production records specified in § 63.1413(e)(2) shall be submitted in the Precompliance Report.

\* \* \* \* \*

- (11) \* \* \*

(ii) Supplements to the Precompliance Report may be submitted to request

approval to use alternative monitoring parameters, as specified in paragraph (j) of this section; to use alternative continuous monitoring and recordkeeping, as specified in paragraph (k) of this section; to use alternative controls, as specified in paragraph (d)(5) of this section; to use engineering assessment to estimate organic HAP emissions from a batch emissions episode, as specified in paragraph (d)(6) of this section; or to establish parameter monitoring levels according to the procedures contained in § 63.1413(a)(4)(ii) or (a)(3), as specified in paragraph (d)(7) of this section.

(e) *Notification of Compliance Status.* For existing and new affected sources, a Notification of Compliance Status shall be submitted within 150 days after the compliance dates specified in § 63.1401. For equipment leaks, the Notification of Compliance Status shall contain the information specified in 40 CFR part 63, subpart UU. For storage vessels, continuous process vents, batch process vents, and aggregate batch vent streams, the Notification of Compliance Status shall contain the information listed in paragraphs (e)(1) through (9) of this section. For pressure relief devices subject to the requirements of § 63.1411(c), the owner or operator shall also submit the information listed in paragraph (e)(10) of this section in a supplement to the Notification of Compliance Status within 150 days after the first applicable compliance date for pressure relief device monitoring.

(10) For pressure relief devices in organic HAP service, a description of the device or monitoring system to be implemented, including the pressure relief devices and process parameters to be monitored (if applicable), and a description of the alarms or other methods by which operators will be notified of a pressure release.

(f) \* \* \*  
 (1) Except as specified in paragraph (f)(12) of this section, a report containing the information in paragraph (f)(2) of this section or containing the information in paragraphs (f)(3) through (11) and (13) of this section, as appropriate, shall be submitted semiannually no later than 60 days after the end of each 180 day period. \* \* \*

(3) \* \* \*  
 (i) All information specified in 40 CFR part 63, subpart WW and subpart SS for storage vessels; 40 CFR part 63, subpart SS for continuous process vents required to comply with subpart SS; § 63.1416(d)(3)(ii) for batch process

vents; and § 63.1416(e) for aggregate batch vent stream.

(ii) The daily average values, batch cycle daily average values, or block average values of monitored parameters for deviations, as specified in § 63.1413(i), of operating parameters. In addition, the periods and duration of periods when monitoring data were not collected shall be specified.

(5) If there is a deviation from the mass emission limit specified in § 63.1405(a)(3), § 63.1406(a)(1)(iii) or (a)(2)(iii), § 63.1407(b)(2), or § 63.1408(b)(2), the following information, as appropriate, shall be included:

(13) For pressure relief devices, Periodic Reports must include the information specified in paragraphs (f)(13)(i) through (iii) of this section.

(i) For pressure relief devices in organic HAP service subject to § 63.1411, report confirmation that all monitoring to show compliance was conducted within the reporting period.

(ii) For pressure relief devices in organic HAP gas or vapor service subject to § 63.1411(b), report any instrument reading of 500 ppm above background or greater, more than 5 days after the relief device returns to organic HAP gas or vapor service after a pressure release.

(iii) For pressure relief devices in organic HAP service subject to § 63.1411(c), report each pressure release to the atmosphere, including the following information:

(A) The source, nature, and cause of the pressure release.  
 (B) The date, time, and duration of the pressure release.

(C) An estimate of the quantity of total HAP emitted during the pressure release and the method used for determining this quantity.

(D) The actions taken to prevent this pressure release.  
 (E) The measures adopted to prevent future such pressure releases.

(g) *Reports of Malfunctions.* If a source fails to meet an applicable standard, report such events in the Periodic Report. Report the number of failures to meet an applicable standard. For each instance, report the date, time and duration of each failure. For each failure the report must include 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.

(h) *Other reports.* Other reports shall be submitted as specified in paragraphs (h)(1) through (8) of this section.

(7) Whenever a continuous process vent becomes subject to control requirements under § 63.1405(a), as a result of a process change, the owner or operator shall submit a report within 60 days after the performance test or applicability assessment, whichever is sooner. \* \* \*

(8) *Electronic reporting.* Within 60 days after the date of completing each performance test (as defined in § 63.2), the owner or operator must submit the results of the performance tests, including any associated fuel analyses, required by this subpart according to the methods specified in paragraphs (h)(8)(i) or (ii) of this section.

(i) For data collected using test methods supported by the EPA-provided software, the owner or operator shall submit the results of the performance test to the EPA by direct computer-to-computer electronic transfer via EPA-provided software, unless otherwise approved by the Administrator. Owners or operators, who claim that some of the information being submitted for performance tests is confidential business information (CBI), must submit a complete file using EPA-provided software that includes information claimed to be CBI on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA by direct computer-to-computer electronic transfer via EPA-provided software.

(ii) For any performance test conducted using test methods that are not compatible with the EPA-provided software, the owner or operator shall submit the results of the performance test to the Administrator at the appropriate address listed in § 60.4.

(k) \* \* \*  
 (3) \* \* \*  
 (i) \* \* \*  
 (F) If the daily average is not a deviation, as defined in § 63.1413(i), from the operating parameter, the data for that operating day may be converted to hourly average values, and the four or more individual records for each hour in the operating day may be discarded.

- 25. Table 1 to Subpart OOO is amended by:
- a. Removing entries 63.1(a)(6)–63.1(a)(8) and 63.1(a)(9);

- b. Adding entries 63.1(a)(6) and 63.1(a)(7)–63.1(a)(9);
  - c. Revising entries 63.1(c)(4), 63.6(e), 63.6(e)(1)(i), and 63.6(e)(1)(ii);
  - d. Adding entry 63.6(e)(3);
  - e. Removing entries 63.6(e)(3)(i), 63.6(e)(3)(i)(A), 63.6(e)(3)(i)(B), 63.6(e)(3)(i)(C), 63.6(e)(3)(ii), 63.6(e)(3)(iii), 63.6(e)(3)(iv), 63.6(e)(3)(v), 63.6(e)(3)(vi), 63.6(e)(3)(vii), 63.6(e)(3)(vii)(A), 63.6(e)(3)(vii)(B), 63.6(e)(3)(vii)(C), 63.6(e)(3)(viii), and 63.6(e)(3)(ix);
  - f. Revising entries 63.6(f)(1), 63.7(e)(1), 63.8(c)(1)(i), 63.8(c)(1)(ii), 63.8(c)(1)(iii), and 63.10(d)(5); and
  - g. Removing footnote a.
- The revisions and additions read as follows:

TABLE 1 TO SUBPART OOO OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART OOO AFFECTED SOURCES

Reference	Applies to subpart OOO	Explanation
	* * * * *	
63.1(a)(6) .....	Yes .....	
63.1(a)(7)–63.1(a)(9) .....	No .....	[Reserved].
	* * * * *	
63.1(c)(4) .....	No .....	[Reserved].
	* * * * *	
63.6(e) .....	Yes .....	Except as otherwise specified in this table.
63.6(e)(1)(i) .....	No .....	See § 63.1400(k)(4) for general duty requirement.
63.6(e)(1)(ii) .....	No .....	
	* * * * *	
63.6(e)(3) .....	No .....	
63.6(f)(1) .....	No .....	
	* * * * *	
63.7(e)(1) .....	No .....	See § 63.1413(a)(2).
	* * * * *	
63.8(c)(1)(i) .....	No .....	
63.8(c)(1)(ii) .....	No .....	
63.8(c)(1)(iii) .....	No .....	
	* * * * *	
63.10(d)(5) .....	No .....	See § 63.1417(g) for malfunction reporting requirements.
	* * * * *	

- 26. Table 5 to Subpart OOO is amended by removing entry 63.1417(g) and adding entry 63.1417(h)(8) to read as follows:

TABLE 5 TO SUBPART OOO OF PART 63—REPORTS REQUIRED BY THIS SUBPART

Reference	Description of report	Due date
	* * * * *	
63.1417(h)(8) .....	Electronic reporting .....	Within 60 days after completing performance test.

\* \* \* \* \*