

The Acting EPA Administrator, Andrew R. Wheeler, signed the following notice on 12/20/2018, and EPA is submitting it for publication in the *Federal Register* (FR). While we have taken steps to ensure the accuracy of this Internet version of the rule, it is not the official version of the rule for purposes of compliance. Please refer to the official version in a forthcoming FR publication, which will appear on the Government Printing Office's govinfo website (<https://www.govinfo.gov/app/collection/fr>) and on Regulations.gov (<https://www.regulations.gov>) in Docket No. EPA-HQ-OAR-2004-0309. Once the official version of this document is published in the FR, this version will be removed from the Internet and replaced with a link to the official version.

6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA-HQ-OAR-2004-0309; FRL-XXXX-X]

RIN 2060-AT47

National Emission Standards for Hazardous Air Pollutants: Wet-Formed Fiberglass Mat Production Residual Risk and Technology Review

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action finalizes the residual risk and technology review (RTR) conducted for the Wet-Formed Fiberglass Mat Production source category regulated under national emission standards for hazardous air pollutants (NESHAP). In addition, we are taking final action addressing startup, shutdown, and malfunction (SSM), electronic reporting, and clarification of rule provisions. These final amendments address emissions during periods of SSM; add electronic reporting; revise certain monitoring, recordkeeping, and reporting requirements; and include other miscellaneous technical and editorial changes. These final amendments will result in improved compliance and implementation of the rule.

DATES: This final rule is effective on **[insert date of publication in the Federal Register]**.

The incorporation by reference (IBR) of certain publications listed in the rule is approved by the Director of the Federal Register as of **[insert date of publication in the Federal Register]**.

ADDRESSES: The Environmental Protection Agency (EPA) has established a docket for this action under Docket ID No. EPA-HQ-OAR-2004-0309. All documents in the docket are listed

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on the <https://www.regulations.gov> website. Although listed, some information is not publicly available, *e.g.*, confidential business information 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 <https://www.regulations.gov>, or in hard copy at the EPA Docket Center, EPA WJC West Building, Room 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 Docket Center is (202) 566-1742.

FOR FURTHER INFORMATION CONTACT: For questions about this final action, contact Susan Fairchild, Sector Policies and Programs Division (D243-01), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541-5167; fax number: (919) 541-4991; and email address: fairchild.susan@epa.gov. For specific information regarding the risk modeling methodology, contact Ted Palma, Health and Environmental Impacts Division (C539-02), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541-5470; fax number: (919) 541-0840; and email address: palma.ted@epa.gov. For information about the applicability of the NESHAP to a particular entity, contact Sara Ayres, Office of Enforcement and Compliance Assurance, U.S. Environmental Protection Agency, U.S. EPA Region 5 (Mail Code E-19J), 77 West Jackson Boulevard, Chicago, Illinois 60604; telephone number: (312) 353-6266; and email address: ayres.sara@epa.gov.

SUPPLEMENTARY INFORMATION:

Preamble acronyms and abbreviations. We use multiple acronyms and terms in this preamble. While this list may not be exhaustive, to ease the reading of this preamble and for reference purposes, the EPA defines the following terms and acronyms here:

CAA	Clean Air Act
CDX	Central Data Exchange
CEDRI	Compliance and Emissions Data Reporting Interface
CFR	Code of Federal Regulations
EPA	Environmental Protection Agency
ERT	Electronic Reporting Tool
HAP	hazardous air pollutant(s)
HI	hazard index
HQ	hazard quotient
IBR	incorporation by reference
ICR	information collection request
km	kilometer
MACT	maximum achievable control technology
MIR	maximum individual risk
NAICS	North American Industry Classification System
NESHAP	national emission standards for hazardous air pollutants
NRDC	Natural Resources Defense Council
NTTAA	National Technology Transfer and Advancement Act
OMB	Office of Management and Budget
OSHA	Office of Safety and Health Administration
PRA	Paperwork Reduction Act
REL	reference exposure level
RFA	Regulatory Flexibility Act
RTR	residual risk and technology review
SDS	safety data sheet
SSM	startup, shutdown, and malfunction
the Court	United States Court of Appeals for the District of Columbia Circuit
TOSHI	target organ-specific hazard index
tpy	tons per year
UMRA	Unfunded Mandates Reform Act
VCS	voluntary consensus standards

Background information. On April 6, 2018, the EPA proposed revisions to the Wet-Formed Fiberglass Mat Production NESHAP based on our RTR (83 FR 14997). In this action, we are finalizing decisions and revisions for the rule. We summarize some of the more significant comments we timely received regarding the proposed rule and provide our responses in this preamble. A summary of all other public comments on the proposal and the EPA's responses to those comments is available in "Summary of Public Comments and Responses for Wet-Formed Fiberglass Mat Production Risk and Technology Review," Docket ID No. EPA-HQ-OAR-2004-0309. A "track changes" version of the regulatory language that incorporates the changes in this action is available in the docket.

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

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- K. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
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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 Code ¹
Wet-Formed Fiberglass Mat Production	327212

¹ North American Industry Classification System.

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 category 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 this 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 on the Internet. Following signature by the EPA Administrator, the EPA will post a copy of this final action at: <https://www.epa.gov/stationary-sources-air-pollution/wet-formed-fiberglass-mat-production-national-emission-standards>. Following publication in the **Federal Register**, the EPA will post the **Federal Register** version and key technical documents at this same website.

Additional information is available on the RTR website at <https://www3.epa.gov/ttn/atw/rrisk/rtrpg.html>. This information includes an overview of the RTR program, links to project websites for the RTR source categories, and detailed emissions and other data we used as inputs to the risk assessments.

C. Judicial Review and Administrative Reconsideration

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 (the Court) by **[insert date 60 days after date of publication in the Federal Register]**. 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 only 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 if the person raising an objection can demonstrate to the Administrator 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, EPA WJC South 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 hazardous air pollutants (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, including, but not limited to those 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; are design, equipment, work practice, or operational standards; or any combination of the above.

For these MACT standards, the statute specifies certain minimum stringency requirements, which are referred to as MACT floor requirements, and which may not be based on cost considerations. See CAA section 112(d)(3); *National Lime Ass'n v. EPA*, 233 F.3d 625, 640 (D.C. Cir. 2000). 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).¹ For more information on the statutory authority for this rule, see 83 FR 14984, April 6, 2018.

B. What is the Wet-Formed Fiberglass Mat Production source category and how does the NESHAP regulate HAP emissions from the source category?

The EPA promulgated the Wet-Formed Fiberglass Mat Production NESHAP on April 11, 2002 (67 FR 17824). The standards are codified at 40 CFR part 63, subpart HHHH. The Wet-

¹ The Court 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.”).

Formed Fiberglass Mat Production industry consists of facilities that use formaldehyde-based resins to bond glass fibers together to make wet-formed fiberglass mat, which can be used as a substrate for multiple roofing products, as reinforcement for various plastic, cement, and gypsum products, and in miscellaneous specialty products. Methanol is also present in some, but not all, resins used to produce wet-formed fiberglass mat. In a typical wet-formed fiberglass mat production line, glass fibers are mixed with water and emulsifiers in large mixing vats to form a slurry of fibers and water. The glass fiber slurry is then pumped to a mat forming machine, where it is dispensed in a uniform curtain over a moving screen belt. The mat is then carried beneath a binder saturator, where binder solution is uniformly applied onto the surface of the mat. This resin-binder application process includes the screen passing over a vacuum, which draws away the excess binder solution for recycling. The mat of fibers and binder then passes into drying and curing ovens that use heated air to remove excess moisture and harden (*i.e.*, cure) the binder. Upon exiting the ovens, the mat is cooled, trimmed, wound, and packaged to product specifications. The primary HAP emitted during production of wet-formed fiberglass mat is formaldehyde, which is classified as a probable human carcinogen; and methanol, which is not classified as a carcinogen. The source category covered by this MACT standard currently includes seven facilities.

The affected source is each wet-formed fiberglass mat drying and curing oven. The NESHAP regulates emissions of HAP through emission standards for formaldehyde, which is also used as a surrogate for total HAP emissions. Facilities subject to the NESHAP must meet either a mass emission limit or percentage reduction requirement for each drying and curing oven. The emission standards are the same for new and existing drying and curing ovens. The emission limits for the exhaust from new and existing drying and curing ovens are: (1) A

maximum formaldehyde emission rate of 0.03 kilograms per megagram of wet-formed fiberglass mat produced (0.05 pounds per ton of wet-formed fiberglass mat produced) or (2) a minimum of 96-percent destruction efficiency of formaldehyde. Thermal oxidizers are used by facilities subject to the NESHAP to control their drying and curing oven exhausts.

C. What changes did we propose for the Wet-Formed Fiberglass Mat Production source category in our April 6, 2018, proposal?

On April 6, 2018, the EPA published a proposed rule in the **Federal Register** for the Wet-Formed Fiberglass Mat Production NESHAP, that took into consideration the RTR analyses (83 FR 14997, April 6, 2018). Based on the residual risk analysis, we proposed that risks from the source category are acceptable, that the NESHAP provides an ample margin of safety to protect public health, and that a more stringent standard is not necessary to prevent an adverse environmental effect. Accordingly, we did not propose revisions to the numerical emission limits based on our residual risk analysis. Based on the technology review, we proposed that there are no developments in practices, processes, and control technologies that warrant revisions to the MACT standards for this source category. Accordingly, we did not propose any changes under the technology review. In addition, we proposed amendments to the SSM provisions and revisions to monitoring, recordkeeping, and reporting requirements in the following three ways: (1) Performance test results would be submitted electronically; (2) compliance reports would be submitted semiannually when deviations from applicable standards occur; and (3) parameter monitoring would no longer be required during periods when a non-HAP binder is being used. We also proposed miscellaneous technical and editorial changes.

III. What is included in this final rule?

This action finalizes the EPA’s determinations for the Wet-Formed Fiberglass Mat Production source category pursuant to CAA sections 112(d)(6) and (f)(2). This action also finalizes other changes to the NESHAP, including amendments to the SSM provisions and a change to the proposed definition of “shutdown” to reflect comments we received on the proposal. Other changes include revisions to monitoring, recordkeeping, and reporting requirements to require electronic submittal of performance test report results; submittal of semiannual compliance reports for when deviations from applicable standards occur; and removal of parameter monitoring and performance testing requirements during periods when a non-HAP binder is being used. We are also finalizing miscellaneous technical and editorial changes that we proposed in April 2018. This action also reflects several changes to certain aspects of the April 2018 proposal that are in response to comments received during the public comment period. These changes are described in section IV of this preamble.

A. What are the final rule amendments based on the risk review for the Wet-Formed Fiberglass Mat Production source category?

This section introduces the final amendments to the Wet-Formed Fiberglass Mat Production NESHAP being promulgated pursuant to CAA section 112(f). As proposed, we are finalizing our finding that risks remaining after implementation of the existing MACT standards for this source category are acceptable. Also as proposed, we are finalizing the determination that the current NESHAP provides an ample margin of safety to protect public health. Therefore, we are not finalizing any revisions to the numerical emission limits based on these analyses conducted under CAA section 112(f).

B. What are the final rule amendments based on the technology review for the Wet-Formed Fiberglass Mat Production source category?

We determined that there are no developments in practices, processes, and control technologies that warrant revisions to the MACT standards for this source category. Therefore, we are not finalizing revisions to the MACT standards under CAA section 112(d)(6).

C. What are the final rule amendments addressing emissions during periods of startup, shutdown, and malfunction?

We are finalizing proposed amendments to the Wet-Formed Fiberglass Mat Production NESHAP to remove and revise provisions related to SSM. In its 2008 decision in *Sierra Club v. EPA*, 551 F.3d 1019 (D.C. Cir. 2008), the Court vacated portions of two provisions in the EPA's CAA section 112 regulations governing the emissions of HAP during periods of SSM. Specifically, the Court vacated the SSM exemption contained in 40 CFR 63.6(f)(1) and 40 CFR 63.6(h)(1), holding that under section 302(k) of the CAA, emissions standards or limitations must be continuous in nature and that the SSM exemption violates the CAA's requirement that some section 112 standards apply continuously.

As proposed, we have eliminated the SSM exemption, which is contained in 40 CFR 63.2986(g)(1). Consistent with *Sierra Club v. EPA*, the EPA has established standards in this rule that apply at all times. As explained at proposal, we have also revised Table 2 to 40 CFR part 63, subpart HHHH (the General Provisions applicability table) in several respects. For example, we have eliminated the incorporation of the General Provisions' requirement for a source to develop an SSM plan. We have also eliminated and revised certain recordkeeping and reporting requirements that are related to the SSM exemption as described in detail in the proposed rule and summarized again here.

In establishing the standards in this rule, the EPA has taken into account periods of startup and shutdown and, for the reasons explained in the April 2018 proposal and below, has not established alternate standards for those periods.

As explained at proposal, periods of startup, normal operations, and shutdown are all predictable and routine aspects of a source's operations. As also explained at proposal, because thermal oxidizer controls are employed during all periods that a drying and curing oven is processing binder-infused fiberglass mat, there is no need to establish separate formaldehyde standards for periods of startup and shutdown (83 FR 14998). We did, however, propose definitions of startup and shutdown for purposes of this subpart. The proposed definitions clarified that it is not the setting in and cessation of operation of the drying and curing oven (*i.e.*, affected source) that accurately define startup and shutdown, but, rather, the setting in and cessation of operation of the drying and curing of any binder-infused fiberglass mat. We also explained that it is this binder-infused fiberglass mat, not the ovens themselves, that emit HAP. Therefore, we found that it was appropriate to establish definitions for startup and shutdown based on the setting in and cessation of operation of the drying and curing oven. Further, in response to comments on our proposal, we have made minor clarifications to the definition of shutdown in the final rule in order to account for the residence time of the binder-infused fiberglass mat in the oven, and to aid facilities in establishing periods of shutdown when emissions from the drying oven cease. We have also revised definitions for startup and shutdown to consistently refer to the material being processed as "binder-infused fiberglass mat." Finally, we have added a definition of "maximum residence time" to 40 CFR 63.3004 and a formula that facilities must use to determine the maximum residence time for each production line.

This reflects the Agency's response to comments received on our proposal that indicated shutdown would end when the maximum residence time has elapsed after binder-infused fiberglass mat is no longer entering the oven. Typically, residence times are of short duration for wet-formed fiberglass mat lines, and are on the order of less than 10 seconds to less than 1 minute. The maximum residence time is the longest time that a particular point on the fiberglass mat could remain in the drying and curing oven, and is based on the length of the drying and curing oven and the slowest line speed normally operated on the line, excluding periods of ramping up to speed during startup. Air pollution controls continue to operate through shutdown, and all emissions from the ovens continue to be routed to the air pollution control equipment until shutdown is completed.

With regard to malfunctions, the EPA did not propose separate standards for periods of malfunction. At proposal, we explained our interpretation of CAA section 112 as not requiring emissions that occur during periods of malfunction to be factored into development of CAA section 112 standards. We noted that this reading has been upheld as reasonable by the Court in *U.S. Sugar Corp. v. EPA*, 830 F.3d 579, 606-610 (2016). The EPA further explained that, "although no statutory language compels EPA to set standards for malfunctions, EPA has the discretion to do so where feasible. EPA will consider whether circumstances warrant setting standards for a particular type of malfunction and, if so, whether the EPA has sufficient information to identify the relevant best performing sources and establish a standard for such malfunctions" (83 FR 14999).

The EPA is not finalizing separate standards for periods of malfunction. While we requested comment for work practice standards during periods of malfunction, and received

some information in support of such standards, we did not receive sufficient information on which to base a malfunction standard.

As further explained at proposal, “[i]n the event that a source fails to comply with the applicable CAA section 112(d) standards as a result of a malfunction event, the EPA would determine an appropriate response based on, among other things, the good faith efforts of the source to minimize emissions during malfunction periods, including preventive and corrective actions, as well as root cause analyses to ascertain and rectify excess emissions. The EPA would also consider whether the source’s failure to comply with the CAA section 112(d) standard was, in fact, sudden, infrequent, not reasonably preventable and was not instead caused in part by poor maintenance or careless operation. 40 CFR 63.2 (definition of malfunction). If the EPA determines in a particular case that an enforcement action against a source for violation of an emission standard is warranted, the source can raise any and all defenses in that enforcement action and the Federal District Court will determine what, if any, relief is appropriate. The same is true for citizen enforcement actions. Similarly, the presiding officer in an administrative proceeding can consider any defense raised and determine whether administrative penalties are appropriate” (83 FR 14999).

The following aspects for the SSM provisions are being finalized as proposed, with minor corrections and clarifications.

1. 40 CFR 63.2986 General Duty

As discussed at proposal, we are revising the General Provisions table (Table 2 to 40 CFR part 63, subpart HHHH) entry for 40 CFR 63.6(e)(1)(i) by changing the “yes” in column 3 to a “no.” At proposal, we explained that 40 CFR 63.6(e)(1)(i) describes the general duty to minimize emissions and contains language that we consider no longer necessary or appropriate

in light of the elimination of the SSM exemption. We proposed adding general duty regulatory text at 40 CFR 63.2986(g) that reflects the general duty to minimize emissions while eliminating the reference to periods covered by an SSM exemption. We further explained that the current language in 40 CFR 63.6(e)(1)(i) characterizes what the general duty entails during periods of SSM, and that with the elimination of the SSM exemption, there would be no need to differentiate between normal operations, startup and shutdown, and malfunction events in describing the general duty. Therefore, the language the EPA proposed for 40 CFR 63.2986(g) did not include that language from 40 CFR 63.6(e)(1). These revisions are being finalized as proposed, with the exception of minor grammatical corrections and clarifications.

Consistent with our proposal, we are also revising the General Provisions table (Table 2 to 40 CFR part 63, subpart HHHH) entry for 40 CFR 63.6(e)(1)(ii) by changing the “yes” in column 3 to a “no.” As explained at proposal, 40 CFR 63.6(e)(1)(ii) imposes requirements that are either not necessary with the elimination of the SSM exemption or are redundant with the general duty requirement being added at 40 CFR 63.2986.

2. SSM Plan

Consistent with our proposal, we are revising the General Provisions table (Table 2 to 40 CFR part 63, subpart HHHH) entry for 40 CFR 63.6(e)(3) by changing the “yes” in column 3 to a “no.” Generally, these paragraphs require development of an SSM plan and specify recordkeeping and reporting requirements related to the SSM plan. As noted at proposal, the EPA is removing the SSM exemption. Therefore, affected units will be subject to an emission standard during such events. We believe that 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

Consistent with our proposal, we are revising the General Provisions table (Table 2 to 40 CFR part 63, subpart HHHH) entry for 40 CFR 63.6(f)(1) by changing the “yes” in column 3 to a “no.” As explained at proposal, the current language of 40 CFR 63.6(f)(1) exempts sources from non-opacity standards during periods of SSM. As discussed above, the Court in *Sierra Club* vacated the exemptions contained in this provision and held that the CAA requires that some CAA section 112 standards apply continuously. Consistent with *Sierra Club*, the EPA is revising standards in this rule to apply at all times. This change means that sources would no longer be exempt from nonopacity standards during periods of SSM.

4. 40 CFR 63.2992 Performance Testing

Consistent with our proposal, we are revising the General Provisions table (Table 2 to 40 CFR part 63, subpart HHHH) entry for 40 CFR 63.7(e)(1) by changing the “yes” in column 3 to a “no.” As explained at proposal, 40 CFR 63.7(e)(1) describes performance testing requirements and, in order to reflect the removal of the SSM exemption, the EPA proposed adding performance testing requirements at 40 CFR 63.2992(e). The revised regulatory text does not include the language in 40 CFR 63.7(e)(1) that restates the SSM exemption and language that precluded startup and shutdown periods from being considered “representative” for purposes of performance testing and the revised performance testing provisions exclude periods of startup and shutdown. Similar to 40 CFR 63.7(e)(1), the revisions to 40 CFR 63.2992(e) specify that performance tests conducted under this subpart should not be conducted during malfunctions; as noted at proposal, conditions during malfunctions are often not representative of normal operating conditions. We also proposed adding language that would require the owner or operator to record both the process information that is necessary to document operating

conditions during performance testing and an explanation to support that such conditions represent normal operation. We explained that 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. We further explained that the regulatory text the EPA is adding to this provision builds on that requirement and makes explicit the requirement to record the information. These revisions are being finalized as proposed, with the exception of minor grammatical corrections and clarifications.

5. Monitoring

Consistent with our proposal, we are revising the General Provisions table (Table 2 to 40 CFR part 63, subpart HHHH) entry for 40 CFR 63.8(c)(1)(i) and (iii) by changing the “yes” in column 3 to a “no.” As explained at proposal, 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)).

Consistent with our proposal, we are revising the General Provisions table (Table 2 to 40 CFR part 63, subpart HHHH) entry for 40 CFR 63.8(d)(3) by changing the “yes” in column 3 to a “no.” At proposal, we had explained that the final sentence in 40 CFR 63.8(d)(3) refers to the General Provisions’ SSM plan requirement that is no longer applicable. The EPA also proposed adding text in 40 CFR 63.2994(a)(2) that is identical to 40 CFR 63.8(d)(3) except that the final sentence would be replaced with the following sentence: “You should include the program of corrective action in the plan required under § 63.8(d)(2).”

6. 40 CFR 63.2998 Recordkeeping

Consistent with our proposal, we are revising the General Provisions table (Table 2 to 40 CFR part 63, subpart HHHH) entry for 40 CFR 63.10(b)(2)(i) by changing the “yes” in column 3 to a “no.” As explained at proposal, 40 CFR 63.10(b)(2)(i) describes the recordkeeping requirements during startup and shutdown. These recordkeeping provisions are no longer necessary with the removal of the SSM exemption, and, instead, the EPA is extending the requirements for recordkeeping and reporting under normal operations to startup and shutdown. As also previously explained in response to comments, we have revised the definition of shutdown in order to account for the residence time of the binder-infused fiberglass mat in the oven to help sources establish periods of shutdown and to determine when HAP emissions from ovens would cease. In the absence of special provisions applicable to startup and shutdown, such as a startup and shutdown plan, additional recordkeeping for startup and shutdown periods is now limited to records used to establish the maximum residence time that any binder-infused fiberglass mat would remain in the drying and curing oven and to determine the time of shutdown. As discussed in section III.C of this preamble, shutdown ends when the maximum residence time has elapsed after binder infused fiberglass mat is no longer entering the oven. The maximum residence time must be determined for each production line. Typically, residence times are very short for wet-formed fiberglass mat lines, on the order of less than 10 seconds to less than 1 minute. Therefore, we are also requiring facilities to maintain records showing how the maximum residence time was derived for each line.

Consistent with our proposal, we are also revising the General Provisions table (Table 2 40 CFR part 63, subpart HHHH) entry for 40 CFR 63.10(b)(2)(ii) by changing the “yes” in column 3 to a “no.” At proposal, we explained that 40 CFR 63.10(b)(2)(ii) describes the recordkeeping requirements during a malfunction and we proposed adding the same

requirements to 40 CFR 63.2998(g). We noted, however, that the proposed regulatory text differs from the General Provisions given that 40 CFR 63.10(b)(2)(ii) requires the creation and retention of a record of the occurrence and duration of each malfunction of process, air pollution control, and monitoring equipment. Instead, we proposed recordkeeping requirements for any failure to meet an applicable standard and also proposed requiring that the source record the date, time, and duration of the failure rather than an “occurrence.” The EPA also proposed adding to 40 CFR 63.2998(g) a requirement that sources keep records that include a list of the affected source or equipment and actions taken to minimize emissions, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions. We also provided examples of such methods, which included product-loss calculations, mass-balance calculations, measurements when available, or engineering judgment based on known process parameters. The EPA further proposed requiring sources to keep records of information related to any failure to meet applicable standards in order 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 documents how the source met the general duty requirement to minimize emissions when the source failed to meet an applicable standard.

Consistent with our proposal, we are revising the General Provisions table (Table 2 to 40 CFR part 63, subpart HHHH) entry for 40 CFR 63.10(b)(2)(iv) by changing the “yes” in column 3 to a “no.” As explained at proposal, when applicable, this provision requires sources to record actions taken during SSM events when actions were inconsistent with their SSM plan. This requirement is no longer appropriate because SSM plans will no longer be required. We further explained that the requirement previously applicable under 40 CFR 63.10(b)(2)(iv)(B) to record

actions to minimize emissions and record corrective actions would now be applicable by reference to 40 CFR 63.2988(g).

Consistent with our proposal, we are revising the General Provisions table (Table 2 to 40 CFR part 63, subpart HHHH) entry for 40 CFR 63.10(b)(2)(v) by changing the “yes” in column 3 to a “no.” As explained at proposal, when applicable, this provision requires sources to record actions taken during SSM events to show that actions taken were consistent with their SSM plan. As further explained, the requirement is no longer appropriate because SSM plans will no longer be required.

Consistent with our proposal, we are revising the General Provisions table (Table 2 to 40 CFR part 63, subpart HHHH) entry for 40 CFR 63.10(c)(15) by changing the “yes” in column 3 to a “no.” As explained at proposal, with the elimination of the SSM exemption, 40 CFR 63.10(c)(15), which allows an owner or operator to either use the affected source’s SSM plan or keep records to satisfy the recordkeeping requirements of the SSM plan, specified in 40 CFR 63.6(e), and the requirements of 40 CFR 63.10(c)(10) through (12), is now superfluous. Consistent with our proposal, the EPA is eliminating this requirement because SSM plans are no longer required.

7. 40 CFR 63.3000 Reporting

Consistent with our proposal, we are revising the General Provisions table (Table 2 to 40 CFR part 63, subpart HHHH) entry for 40 CFR 63.10(d)(5) by changing the “yes” in column 3 to a “no.” As explained at proposal, 40 CFR 63.10(d)(5) describes the reporting requirements for startups, shutdowns, and malfunctions. To replace the General Provisions reporting requirement, the EPA proposed adding reporting requirements to 40 CFR 63.3000(c). We explained that the replacement language differs from the General Provisions requirement in that it eliminates

periodic SSM reports as a stand-alone report. Subject to the correction described below, we are promulgating language requiring sources that fail to meet an applicable standard at any time to report the relevant information concerning such events in a compliance report. Compliance reporting on a quarterly basis is currently required under the existing NESHAP. We are changing this reporting period from a quarterly (four times a year) to a semiannual (twice a year) basis, as discussed further below. We are also correcting an error that occurred at publication of the proposed rule where the published rule text inadvertently included the same proposed revisions for both 40 CFR 63.3000(c)(5) and (6), and did not read as explained in the proposal (83 FR 15000). These provisions specify the content requirements for semiannual compliance reports before and after the compliance date for this final rule. We did not receive any comments on the proposed language for these provisions. We are correcting 40 CFR 63.3000(c)(5) by including the correct language, which specifies that the content requirements of semiannual compliance reports prior to the compliance date for this final rule would include the existing rule requirements. We are also correcting 40 CFR 63.3000(c)(6) to indicate that after the compliance date for this rule, the report must contain the number, date, time, duration, and the cause of such events (including whether the cause is unknown, if applicable), a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions. As previously explained, examples of such methods include product-loss calculations, mass-balance calculations, direct measurements, or engineering judgment based on known process parameters. It also includes calculations for maximum residence time to reflect revisions being made in the final rule in response to comments on the proposed definition of shutdown. 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 requirement to minimize emissions during a failure to meet an applicable standard.

As also proposed, we will no longer require owners or operators to determine whether actions taken to correct a malfunction are consistent with an SSM plan, because, as previously discussed, such plans are no longer required. The final amendments, therefore, specify in 40 CFR 63.3000(d) that the SSM reports (required by 40 CFR 63.10(d)(5)) are no longer required after the compliance dates for this rule. Malfunction events will be reported in otherwise required reports having similar format and submittal requirements, so these reporting specifications are unnecessary and are being removed.

8. Definitions

We are promulgating definitions of “Startup,” “Shutdown,” and “Maximum residence time” in 40 CFR 63.3004. The current rule relies on the 40 CFR part 63, subpart A, definitions of startup and shutdown, which are based on the setting in operation, and cessation of operation, of the affected source (*i.e.*, drying and curing oven). As previously explained in the proposal (83 FR 15001) and in this section, the formaldehyde standards could only be exceeded during periods that fiberglass mat is being dried and cured in the oven. As also previously explained, because the EPA is requiring standards in this rule to apply at all times, we are promulgating definitions of startup and shutdown based on these periods to clarify that it is the commencing of operation and cessation of operation of the drying and curing of binder-infused fiberglass mat, plus the maximum residence time of that mat in the oven, that defines shutdown for purposes of 40 CFR part 63, subpart HHHH. We are finalizing a definition indicating that shutdown occurs when binder-infused fiberglass mat ceases to enter the oven, in addition to the maximum residence

time that fiberglass mat remains in the oven, as determined for each production line. According to comments we received at proposal, once the maximum residence time has elapsed, the mat is cured and dried, and is not emitting any organic HAP; there are no emissions at this point. We have also added a definition for “maximum residence time” and a formula for how the residence time must be determined for each production line (*i.e.*, each drying and curing oven). We have described these changes in section III.C of this preamble, and made minor clarifications to definitions of both startup and shutdown in response to comments on our proposal, as described in section IV.C of this preamble.

For the reasons described in the preamble to the proposed rule, we are also finalizing the proposed definition of “Deviation” in 40 CFR 63.3004 to remove language that differentiates between normal operations, startup and shutdown, and malfunction events. We received no comments on the proposed changes. The final rule also corrects a publication error in the proposed rule. The proposed rule, as published, incorrectly included two different definitions of “Deviation.” The final rule provides definitions of “Deviation” both prior to and after the compliance dates for this final rule. Specifically, prior to the compliance dates for this rule, “deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source: (1) Fails to meet any requirement or obligation established by this subpart, including, but not limited to, any emission limit, operating limit, or work practice standard; (2) fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or (3) fails to meet any emission limit, or operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.”

After the compliance dates for this rule, “deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source: (1) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limit, operating limit, or work practice standard or (2) fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit.”

D. What other changes have been made to the NESHAP?

The EPA is promulgating revisions to monitoring, recordkeeping, and reporting requirements for this NESHAP in the following three ways: (1) Performance test results would be submitted electronically; (2) compliance reports would be submitted semiannually when deviations from applicable standards occur; and (3) parametric monitoring would no longer be required during periods when a non-HAP binder is being used. These provisions are being finalized as proposed, with minor corrections and clarifications.

Additionally, we proposed to reduce parametric monitoring and recording for facilities using non-HAP binders and solicited comment on exempting performance testing for such facilities. Consistent with our proposal, we are adopting the parametric monitoring exemption for facilities using non-HAP binders, as discussed in section III.D.2 of this preamble). Based on a review of comments received, we are also finalizing an exemption from performance testing requirements for drying and curing ovens that are subject to a federally enforceable permit requiring the use of only non-HAP binders, which is discussed in section III.D.3 of this preamble. We are also finalizing several clarifying revisions to the rule, such as requirements for submittal of performance test data, which is discussed in section III.F of this preamble. The requirements for submittal of semiannual compliance reports, parametric monitoring

requirements for facilities using non-HAP binders, exemption of performance testing requirements for facilities that are limited to the use of only non-HAP binders, and technical and editorial clarifications are discussed below in this section.

1. Frequency of Compliance Reports

The EPA is revising 40 CFR 63.3000(c) to require that compliance reports be submitted on a semiannual basis in all instances, with minor changes from proposal. Reporting on a semiannual basis will adequately provide a check on the operation and maintenance of process, control, and monitoring equipment and identify any problems with complying with rule requirements. The final rule specifies when facilities must begin transitioning from quarterly to semiannual reporting for deviations.

2. Parametric Monitoring and Recording During Use of Binder Containing No HAP

The EPA is promulgating the provision that during periods when the binder formulation being used to produce mat does not contain any HAP (*i.e.*, formaldehyde or any other HAP listed under section 112(b) of the CAA), owners and operators will not be required to monitor or record any of the parameters listed in Table 1 to 40 CFR part 63, subpart HHHH, including control device parameters. For each of these periods, we are requiring that owners and operators record the dates and times that production of mat using a non-HAP binder began and ended. To clearly identify these periods when the binder formulation being used to produce mat does not contain any HAP, we are promulgating revisions to 40 CFR 63.2984, 63.2996, and 63.2998 and Table 1 to 40 CFR part 63, subpart HHHH, and also promulgating a definition of “Non-HAP binder” in 40 CFR 63.3004. As discussed in section IV.D of this preamble, we have revised the definition of “Non-HAP binder” from proposal to clarify that non-HAP binder must meet the Office of Safety and Health Administration (OSHA) Hazard Communication Standard’s criteria

for disclosing composition or ingredients in Section 3 of the safety data sheet (SDS), except when the manufacturer has withheld identifying information of the chemical. The affected source may not rely on a SDS for a non-HAP binder where the manufacturer withholds the specific chemical identity, including the chemical name, other specific identification of a hazardous chemical, or the exact percentage (concentration) of the substance in a mixture from Section 3 of the SDS. In addition, the affected source may not withhold this information when making the case that a binder used is a non-HAP binder. See section IV.D of this preamble for additional information.

3. Exemption of Performance Testing for Facilities Subject to Federally Enforceable Permit Requirements

At proposal, the EPA solicited comment on the exemption from performance testing requirements for drying and curing ovens that are subject to a federally enforceable permit requiring the use of only non-HAP binders (83 FR 15005). The EPA received supportive comments for this exemption. Thus, we are promulgating revisions to 40 CFR 63.2991 to provide that drying and curing ovens using exclusively non-HAP binders and that are subject to a federally enforceable permit limit for such non-HAP binders are not required to conduct periodic performance tests. This revision will reduce burden for owners and operators that have switched to using only non-HAP binders without any increase in HAP emissions. Owners and operators of drying and curing ovens that do not have a federally-enforceable permit limit and that are currently permitted to use HAP-containing binders will still be required to conduct periodic performance testing, even if they are not currently using binders that contain HAP.

4. Technical and Editorial Changes

We are finalizing several clarifying revisions to the final rule as described in Table 2 of this preamble.

Table 2. Miscellaneous Changes to 40 CFR Part 63, Subpart HHHH

Section of Subpart HHHH	Description of Change
40 CFR 63.2984	<ul style="list-style-type: none"> • Amend paragraph (a)(4) to clarify compliance with a different operating limit means the operating limit specified in paragraph (a)(1). • Amend paragraph (e) to allow use of a more recent edition of the currently referenced “Industrial Ventilation: A Manual of Recommended Practice,” American Conference of Governmental Industrial Hygienists, <i>i.e.</i>, the appropriate chapters of “<i>Industrial Ventilation: A Manual of Recommended Practice for Design</i>” (27th edition), or an alternate as approved by the Administrator. • Revise text regarding IBR in paragraph (e) by replacing the reference to 40 CFR 63.3003 with, instead, 40 CFR 63.14.
40 CFR 63.2985	<ul style="list-style-type: none"> • Amend paragraphs (a) and (b) and add new paragraph (d) to clarify the compliance dates for provisions related to these amendments.
40 CFR 63.2993	<ul style="list-style-type: none"> • Correct paragraphs (a) and (b) to update a reference. • Re-designate paragraph (c) as paragraph (e) and amend the newly designated paragraph to clarify that EPA Method 320 (40 CFR Part 63, appendix A) is an acceptable method for measuring the concentration of formaldehyde. • Add new paragraph (c) to clarify that EPA Methods 3 and 3A (40 CFR part 60, appendix A-2) are acceptable methods for measuring oxygen and carbon dioxide concentrations needed to correct formaldehyde concentration measurements to a standard basis. • Add new paragraph (d) to clarify that EPA Method 4 (40 CFR part 60, appendix A-3) is an acceptable method for measuring the moisture content of the stack gas.
40 CFR 63.2999	<ul style="list-style-type: none"> • Amend paragraph (b) to update the list of example electronic medium on which records may be kept. • Add paragraph (c) to clarify that any records that are submitted electronically via the EPA’s Compliance and

	Emissions Data Reporting Interface (CEDRI) may be maintained in electronic format.
40 CFR 63.3003	<ul style="list-style-type: none"> Remove text and reserve the section consistent with revisions to the IBR in 40 CFR 63.14.

E. What are the effective and compliance dates of the standards?

The revisions to the MACT standards being promulgated in this action are effective on **[insert date of publication in the Federal Register]**.

The compliance date for existing wet-formed fiberglass mat drying and curing ovens and drying and curing ovens constructed or reconstructed after May 26, 2000 and before April 9, 2018 is no later than 180 days after **[insert date of publication in the Federal Register]**. As we stated in the preamble to the proposed rule, we are allowing 180 days for owners and operators of such affected sources to comply with the rule, giving them time to read and understand the amended rule requirements; to install necessary hardware and software, become familiar with the process of submitting performance test results electronically through the EPA's CEDRI, test electronic submission capabilities, and reliably employ electronic reporting; to evaluate their operations to ensure that they can meet the standards during periods of startup and shutdown as defined in the rule, and make any necessary adjustments; to adjust parameter monitoring and recording systems to accommodate revisions for periods of non-HAP binder use; and to update their operation, maintenance, and monitoring (OMM) plan to reflect the revised requirements. The compliance date for wet-formed fiberglass mat curing ovens constructed or reconstructed after April 6, 2018 is at startup or **[insert date of publication in the Federal Register]**, whichever is later.

F. What are the requirements for submission of performance test data to the EPA?

The EPA is finalizing the proposed requirement for owners and operators of wet-formed fiberglass mat production facilities to submit electronic copies of certain required performance test reports through EPA's Central Data Exchange (CDX) using the CEDRI. The final rule requires that performance test reports be submitted using the Electronic Reporting Tool (ERT). We are finalizing these requirements as proposed, with minor clarifications for the written notification of delayed reporting, as discussed in section IV.E of this preamble.

IV. What is the rationale for our final decisions and amendments for the Wet-Formed Fiberglass Mat Production source category?

For each issue, this section describes what we proposed and what we are finalizing for each 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 Wet-Formed Fiberglass Mat Production Source Category

1. What did we propose pursuant to CAA section 112(f) for the Wet-Formed Fiberglass Mat Production source category?

Pursuant to CAA section 112(f), we conducted a risk review and presented the results for the review, along with our proposed decisions regarding risk acceptability and ample margin of safety, in the April 6, 2018, proposed rule for the Wet-Formed Fiberglass Mat Production source category (83 FR 14984). The results of the risk assessment are presented briefly in Table 3 of this preamble and in more detail in the residual risk document titled *Residual Risk Assessment for the Wet-Formed Fiberglass Mat Production Source Category in Support of the November 2018 Risk and Technology Review Final Rule*, which is in the docket for this action.

Table 3. Wet-Formed Fiberglass Mat Production Inhalation Risk Assessment Results in The April 2018 Proposal

Number of Facilities ¹	Maximum Individual Cancer Risk (in 1 million) ²		Estimated Population at Increased Risk of Cancer \geq 1-in-1 Million		Estimated Annual Cancer Incidence (cases per year)		Maximum Chronic Non-cancer TOSHI ³		Maximum Screening Acute Non-cancer HQ ⁴
	Based on Actual Emissions Level ²	Based on Allowable Emissions Level	Based on Actual Emissions Level ²	Based on Allowable Emissions Level	Based on Actual Emissions Level ²	Based on Allowable Emissions Level	Based on Actual Emissions Level	Based on Allowable Emissions Level	Based on Actual Emissions Level
7	0.8	1	0	60	0.0003	0.0009	0.006	0.009	HQ _{REL} = 0.6 (formaldehyde)

¹ Number of facilities evaluated in the risk analysis.

² Maximum individual excess lifetime cancer risk due to HAP emissions from the source category.

³ Maximum target organ specific hazard index (TOSHI) value. The target organ with the highest TOSHI for the Wet-Formed Fiberglass Mat Production source category is the respiratory target organ.

⁴ The maximum estimated acute exposure concentration was divided by available short-term threshold values to develop an array of hazard quotient (HQ) values. HQ values shown use the lowest available acute threshold value, which in most cases is the reference exposure level (REL). When an HQ exceeds 1, we also show the HQ using the next lowest available acute dose-response value.

The results of the chronic inhalation cancer risk assessment, based on actual emissions, show the cancer maximum individual risk (MIR) posed by the seven facilities is less than 1-in-1 million, with formaldehyde as the major contributor to the risk. The total estimated cancer incidence from this source category is 0.0003 excess cancer cases per year, or one excess case every 3,000 years. There were no cancer risks above 1-in-1 million from HAP emitted from the seven facilities in this source category. The maximum chronic noncancer hazard index (HI) value for the source category could be up to 0.006 (respiratory) driven by emissions of formaldehyde. No one is exposed to TOSHI levels above 1.

We also evaluated the cancer risk at the maximum emissions allowed by the MACT standard, or “MACT-allowable emissions.” Risk results from the inhalation risk assessment using the MACT-allowable emissions indicate that the cancer MIR could be as high as 1-in-1 million with formaldehyde emissions driving the risks, and that the maximum chronic noncancer TOSHI value could be as high as 0.009 at the MACT-allowable emissions level with formaldehyde emissions driving the TOSHI. The total estimated cancer incidence from this

source category considering allowable emissions is expected to be about 0.0009 excess cancer cases per year or one excess case every 1,000 years. Based on MACT-allowable emission rates, there were no cancer risks above 1-in-1 million.

Table 3 of this preamble indicates that for the Wet-Formed Fiberglass Mat Production source category, the maximum hazard quotient (HQ) is 0.6, driven by formaldehyde. We conducted a screening analysis of the worst-case acute HQ for every HAP that has an acute dose-response value (formaldehyde and methanol). Based on actual emissions, the highest screening acute HQ value was 0.6 (based on the acute reference exposure level (REL) for formaldehyde). The results showed that no HQ values exceeded 1. Because none of the screening HQ were greater than 1, further refinement of the estimates was not warranted.

An assessment of risk from facility-wide emissions was performed to provide context for the source category risks. The results of the facility-wide (both MACT and non-MACT sources, *i.e.*, sources at the facility that are not included in the Wet-Formed Fiberglass source category) assessment indicate that four of the seven facilities included in the analysis have a facility-wide cancer MIR greater than 1-in-1 million. The maximum facility-wide cancer MIR is 6-in-1 million, mainly driven by formaldehyde emissions from non-MACT sources. The total estimated cancer incidence from the seven facilities is 0.001 excess cancer cases per year, or one excess case every 1,000 years. Approximately 13,000 people were estimated to have cancer risks above 1-in-1 million from exposure to HAP emitted from both MACT and non-MACT sources of the seven facilities in this source category. The maximum facility-wide TOSHI for the source category is estimated to be less than 1 (at a respiratory HI of 0.5), mainly driven by emissions of acrylic acid and formaldehyde from sources at the facility that were not included in the Wet-Formed Fiberglass Production source category (non-MACT sources).

To examine the potential for any environmental justice issues that might be associated with the source category, we performed a demographic analysis, which is an assessment of risks to individual demographic groups of the populations living within 5 kilometers (km) and also at populations living within 50 km of the facilities, and we found that no one is exposed to a cancer risk at or above 1-in-1 million, or to a chronic noncancer TOSHI greater than 1. The methodology and the results of the demographic analysis are presented in a technical report titled, *Risk and Technology Review Analysis of Demographic Factors for Populations Living Near Wet-Formed Fiberglass Mat Production*, which is available in the docket for this action.

We weighed all health risk factors in our risk acceptability determination, and we proposed that the residual risks from this source category are acceptable. We then considered whether the NESHAP provides an ample margin of safety to protect public health, and whether more stringent standards were necessary to prevent an adverse environmental effect, by taking into consideration costs, energy, safety, and other relevant factors. In determining whether the standards provide an ample margin of safety to protect public health, we examined the same risk factors that we investigated for our acceptability determination and also considered the costs, technological feasibility, and other relevant factors related to emissions control options that might reduce risk associated with emissions from the source category. We proposed that the 2002 Wet-Formed Fiberglass Mat Production NESHAP requirements provide an ample margin of safety to protect public health. Based on the results of our environmental risk screening assessment, we also proposed that more stringent standards are not necessary to prevent an adverse environmental effect.

2. How did the risk review change for the Wet-Formed Fiberglass Mat Production source category?

Since proposal, neither the risk assessment nor our determinations regarding risk acceptability, ample margin of safety, or adverse environmental effects have changed.

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

We received comments in support of and against the proposed risk review and our determination that no revisions were warranted under CAA section 112(f)(2). Comments that were not supportive of the risk review were considered at length. After review of these comments, we determined that no changes needed to be made to the underlying risk assessment methodology. The comments and our specific responses can be found in the document titled “Summary of Public Comments and Responses for Wet-Formed Fiberglass Mat Production Risk and Technology Review,” which is available in the docket for this action.

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

We evaluated all of the comments on the EPA’s risk review and determined that no changes to the review are needed. For the reasons explained in the proposed rule, we proposed that the risks from the Wet-Formed Fiberglass Mat Production source category are acceptable, and the current standards provide an ample margin of safety to protect public health and prevent an adverse environmental effect. Therefore, pursuant to CAA section 112(f)(2), we are finalizing our risk review as proposed.

B. Technology Review for the Wet-Formed Fiberglass Mat Production Source Category

1. What did we propose pursuant to CAA section 112(d)(6) for the Wet-Formed Fiberglass Mat Production source category?

Pursuant to CAA section 112(d)(6), we conducted a technology review, which focused on identifying and evaluating developments in practices, processes, and control technologies for control of formaldehyde emissions from drying and curing ovens at wet-formed fiberglass mat

production facilities. No cost-effective developments in practices, processes, or control technologies were identified in our technology review to warrant revisions to the standards. More information concerning our technology review is in the memorandum titled, *Section 112(d)(6) Technology Review for Wet-Formed Fiberglass Mat Production*, which is in the docket for this action, and in the preamble to the proposed rule (83 FR 14984).

2. How did the technology review change for the Wet-Formed Fiberglass Mat Production 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?

We received comments in support of the proposed determination from the technology review that no revisions were warranted under CAA section 112(d)(6). We also received one comment that asserted that cost effectiveness should not be a consideration when examining standards under CAA section 112(d)(6). We evaluated the comments and determined that no changes regarding our determination were needed. These comments and our specific responses can be found in the comment summary and response document titled “Summary of Public Comments and Responses for Wet-Formed Fiberglass Mat Production Risk and Technology Review,” which is available in the docket for this action.

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

We evaluated all of the comments on the EPA’s technology review and determined that no changes to the review are needed. For the reasons explained in the proposed rule, we determined that no cost-effective developments in practices, processes, or control technologies were identified in our technology review to warrant revisions to the standards. More information concerning our technology review, and how we evaluate cost effectiveness, can be found in the

memorandum titled *Section 112(d)(6) Technology Review for Wet-Formed Fiberglass Mat Production*, which is in the docket for this action, and in the preamble to the proposed rule (83 FR 14984). Therefore, pursuant to CAA section 112(d)(6), we are finalizing our technology review as proposed.

C. Startup, Shutdown, and Malfunction for the Wet-Formed Fiberglass Mat Production Source Category

1. What did we propose for the Wet-Formed Fiberglass Mat Production source category?

We proposed removing and revising provisions related to SSM that are not consistent with the requirement that standards apply at all times. More information concerning our proposal on SSM can be found in the proposed rule (83 FR 14984).

2. How did the SSM provisions change for the Wet-Formed Fiberglass Mat Production source category?

Since proposal, the SSM provisions have not changed, with the following exceptions. We have corrected a publication error in the proposed regulatory text for 40 CFR 63.3000(c)(5), as discussed in section III.C.7 of this preamble. We have also clarified the proposed definitions for “startup” and “shutdown” in the final rule to address a comment received that requested use of consistent terminology to refer to the material being processed, and for periods of shutdown, by associating it with the maximum residence time required for the curing and drying of mat in an oven and specifying the formula for calculation of maximum residence time. We have revised the definitions of “Shutdown” and “Startup” as follows:

“*Shutdown* after **[insert date of publication in the Federal Register]** for affected sources that commence construction or reconstruction after April 6, 2018, and after **[insert date 180 days after date of publication in the Federal Register]** for all other affected sources,

means the cessation of operation of the drying and curing of any binder-infused fiberglass mat for any purpose. Shutdown ends when the maximum residence time has elapsed after binder-infused fiberglass mat ceases to enter the drying and curing oven.”

“*Startup* after **[insert date of publication in the Federal Register]** for affected sources that commence construction or reconstruction after April 6, 2018, and after **[insert date 180 days after date of publication in the Federal Register]** for all other affected sources, means the setting in operation of the drying and curing of binder-infused fiberglass mat for any purpose. Startup begins when binder-infused fiberglass mat enters the oven to be dried and cured for the first time or after a shutdown event.”

We have also added a definition for “maximum residence time,” which reflects the longest duration that binder-infused fiberglass mat would remain in the drying and curing oven and is determined based on the length of the drying and curing oven and the slowest line speed for the normal operation of an oven. The definition specifies a formula for the calculation of the maximum residence time as shown below:

“*Maximum residence time* is the longest time, during normal operation and excluding periods of ramping up to speed during startup, that a particular point on the fiberglass mat remains in the drying and curing oven. It is determined for each line by the equation:

$$T = L/S$$

Where:

T is the residence time, in seconds;

L is the length of the drying and curing oven, in feet; and

S is the slowest line speed normally operated on the line, excluding periods of ramping up to speed during startup, in feet per second.”

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

Comment: Although we did not propose standards for periods of malfunction, one commenter initially proposed that the Agency should promulgate work practice standards for malfunction events to address HAP emissions from binder-infused fiberglass mat that would remain in the oven during such events. In follow-up discussions of the potential implementation of the requested work practice standard with the EPA, the commenter requested that the EPA instead consider modifying the definition of “shutdown.”² The commenter asserted that the proposed definition of “shutdown” could be construed such that a shutdown period may continue for a period long after binder-infused fiberglass mat has dried and emissions of organic HAP have ceased. According to the commenter, this would result in the potential for “indefinite deviations.” As an example, the commenter provided that a power failure could result in the prevention of mat leaving the oven even after the mat was cured and dried. The commenter further explained that wet-formed fiberglass mat lines operate at high speeds with relatively short residence times in the drying and curing oven (ranging from less than 10 seconds to less than 1 minute), during which the mat is completely dried and cured. Air pollution control devices are operated during shutdown, and all emissions from the curing and drying ovens are routed to these devices. The commenter requested that the EPA amend the final definition of “shutdown” to clarify that shutdown ends after mat ceases to enter the oven and following the elapse of the residence time. The requested amendments would account for the time period until the mat is completely cured and emissions from the binder-infused fiberglass mat are no longer occurring. The commenter also recommended that the EPA consider a definition for “maximum residence

² See letter from Reed B. Hitchcock, Asphalt Roofers Manufacturing Association to Susan Fairchild (EPA), “Re: Risk and Technology Review, Wet-Formed Fiberglass Mat Production, 40 CFR Part 63, Subpart HHHH; Docket No. EPA-HQ-OAR-2004-0309; Proposed Modification to Definition of Shutdown,” September 21, 2018, in the docket for this action.

time” to clarify how facilities could calculate the maximum residence time for each drying and curing oven. The commenter also requested that the EPA revise the proposed definitions of “startup” and “shutdown” to use consistent terminology to refer to the material being processed. The commenter specifically requested that the EPA’s proposed definition of “shutdown” be revised to replace the phrase “any resin infused binder” at the end of the definition with “any binder-infused fiberglass mat.”

Response: We are finalizing the commenter’s suggestions for clarification of the definitions of “startup” and “shutdown,” and the requested definition for “maximum residence time.” The EPA also agrees with commenters that the initially requested work practice standards are not appropriate for wet-formed fiberglass mat production operations, and consistent with proposal, is not finalizing any standards for malfunctions. We concur with the commenter’s assessment that the binder-infused fiberglass mat entering the oven is cured over a relatively quick period (that may range from less than 10 seconds to less than 1 minute) and that this period of time (the “residence time”) should be taken into account when determining the cessation of the operation period; for shutdown to complete, the binder infused fiberglass mat must enter and remain in the oven for the duration of the maximum residence time. When the maximum residence time is completed, no further emissions of HAP occur as a result of the wet-formed fiberglass mat manufacturing process. We are finalizing these suggested changes accordingly. We are finalizing provisions that the maximum residence time should be established as the longest time period (in seconds), during normal operation, that a particular point on the fiberglass mat remains in the oven, as determined by the length of the drying and curing oven (in feet), and the slowest line speed during normal operation (in feet per second), excluding periods of ramping up to speed during startup. This maximum residence time may then be used to

determine the time of shutdown. See sections III.C and IV.C.2 of this preamble for additional information on the final definitions for “startup,” “shutdown,” and “maximum residence time” and determining the maximum residence time. We have also revised 40 CFR 63.2998 to include a requirement that facilities must maintain records that show how the maximum residence time was derived for each production line.

Additional comments on the SSM provisions and our specific responses to those comments can be found in the document titled *Summary of Public Comments and Responses for Wet-Formed Fiberglass Mat Production Risk and Technology Review*, which is available in the docket for this action.

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

We evaluated all of the comments on the EPA’s proposed amendments to the SSM provisions. For the reasons explained in the proposed rule (83 FR 14984) and in section III.C of this preamble, we determined that these amendments remove and revise provisions related to SSM that are not consistent with the requirement that the standards apply at all times. Therefore, we are finalizing the amendments to remove and revise provisions related to SSM, as proposed, with the exception of clarifications to the definitions to “startup” and “shutdown,” and the addition of a final definition for “maximum residence time,” as discussed in this section.

D. Other Revisions to Monitoring, Performance Testing, and Reporting Requirements for the Wet-Formed Fiberglass Mat Production Source Category

1. What did we propose for the Wet-Formed Fiberglass Mat Production source category?

We proposed several revisions to the rule’s monitoring, recordkeeping, and reporting requirements, including revisions to the frequency of submittal of compliance reports, revisions

to remove the requirement for parametric monitoring for drying and curing ovens where only a non-HAP binder is used, and technical and editorial revisions.

We proposed to revise the frequency of submittal of compliance reports when deviations from applicable standards occur. Currently, 40 CFR 63.3000(c) requires owners and operators of wet-formed fiberglass mat production facilities to submit compliance reports on a semiannual basis unless there are deviations from emission limits or operating limits. In those instances, the rule required that compliance reports be submitted on a quarterly basis. We proposed to revise 40 CFR 63.3000(c) to require that compliance reports be submitted on a semiannual basis in all instances.

We proposed revisions to 40 CFR 63.2984, 63.2996, and 63.2998 to revise requirements for owners and operators to monitor and record the parameters listed in Table 1 to 40 CFR part 63, subpart HHHH during periods when a non-HAP binder is being used. We proposed that during periods when the binder formulation being used to produce mat does not contain any HAP (*i.e.*, formaldehyde or any other HAP listed under section 112(b) of the CAA), in lieu of monitoring or recording the parameters listed in Table 1 to 40 CFR part 63, subpart HHHH, owners and operators would be required to record the dates and times that production of mat using a non-HAP binder began and ended. We proposed harmonizing revisions to Table 1 to 40 CFR part 63, subpart HHHH and a definition of “Non-HAP binder” to be added to 40 CFR 63.3004 to clearly identify periods when the binder formulation being used to produce mat does not contain any HAP. We also solicited comments on revising 40 CFR 63.2991 to exempt performance testing requirements for drying and curing ovens that are subject to a federally enforceable permit requiring the use of only non-HAP binders.

We proposed several technical and editorial revisions to 40 CFR 63.2984, 63.2993, and 63.2999. We also removed and reserved 40 CFR 63.3003. The proposed revisions included clarifying references, updates to acceptable reference methods that we are incorporating by reference, updates to clarify the format of records, and revisions for consistency with updates to the IBR in 40 CFR 63.14.

2. How did the revisions and corrections to monitoring, performance testing, and reporting requirements change for the Wet-Formed Fiberglass Mat Production source category?

Consistent with our proposal, we are revising the frequency of submittal of compliance reports when deviations from applicable standards occur from quarterly to semiannually. We are, however, promulgating these revisions with minor changes such as clarifying 40 CFR 63.3000(c)(1) to indicate the date when the transition to semiannual reporting should begin. We are also correcting a typographical error in the proposed introductory sentence of 40 CFR 63.3000(c)(6).

We are revising 40 CFR 63.2984, 63.2996, 63.2998, 63.3004 (definition of “Non-HAP binder”), and Table 1 to 40 CFR part 63, subpart HHHH to revise requirements for owners and operators to monitor and record the parameters listed in Table 1 to 40 CFR part 63, subpart HHHH during periods when a non-HAP binder is being used, with minor revisions. We are revising Table 1 to 40 CFR part 63, subpart HHHH to apply footnote “4” to line 1 (“Thermal oxidizer temperature”) and to line 2 (“Other process or control device parameters in your OMM plan”). Finally, we have revised the definition of “Non-HAP binder” from proposal to clarify that the binder must meet the OSHA Hazard Communication Standard, at 29 CFR 1910.1200(b), criteria for disclosing composition or ingredients in Section 3 of SDSs, except when identifying information is withheld. In such cases, an affected source may not rely on an SDS for a non-HAP

binder where the manufacturer has withheld the specific chemical identity, including the chemical name, other specific identification of a hazardous chemical, or the exact percentage (concentration) of the substance in a mixture from Section 3 of the SDS. Additionally, an affected source may not withhold this information when making the case that a binder used is a non-HAP binder.

Since proposal, the technical and editorial revisions to 40 CFR 63.2984, 63.2993, 63.2999, and 63.3003 have not changed. We are, however, making minor revisions such as grammatical corrections or clarifications. For example, we are finalizing minor grammatical edits (such as converting passive voice to active voice) and clarifications that do not change the substantive content of the existing text. These changes are not based on comments on the proposed rule, but rather include minor edits to 40 CFR 63.2987(a), 63.2989(a), 63.2991(a), 63.2992(e), 63.2994(a)(2), 63.2996(a), 63.2997(a) and (b), 63.2998(c) and (g), 63.2999(c), and 63.3000(e) through (g). Based on comments to the proposed rule, we have also identified and implemented several additional technical and editorial revisions, as discussed in section IV.D.3 of this preamble.

3. What key comments did we receive on the proposed revisions to monitoring, performance testing, and reporting requirements for the Wet-Formed Fiberglass Mat Production source category, and what are our responses?

a. Frequency of Compliance Reporting

Comment: One commenter supported reducing the reporting frequency from quarterly to semiannually. This commenter requested that the EPA clarify 40 CFR 63.3000(c)(1) to indicate when the transition to semiannual reporting should begin. The commenter also noted that the EPA should correct a typographical error in the introductory paragraph of 40 CFR 63.3000(c)(6)

from “paragraphs (c)(5)(i) through (ix) of this section” to “paragraphs (c)(6)(i) through (ix) of this section.”

Response: We have clarified 40 CFR 63.3000(c)(1) by adding the sentence that reads “If you deviate from the emission limits in 40 CFR 63.2983 or the operating limits in 40 CFR 63.2984 in the quarter prior to **[insert date of publication in the Federal Register]**, you must include this information in the report for the first full semiannual reporting period following **[insert date of publication in the Federal Register]**.” We also acknowledge the commenter’s suggested correction to the introductory sentence of 40 CFR 63.3000(c)(6) and have revised this text as recommended.

b. Requirements for Facilities Using Non-HAP Binders

Comment: One commenter supported the proposed changes reducing unnecessary regulatory burdens when non-HAP binders are in use. This commenter supported the EPA’s proposal to exempt drying and curing ovens that are subject to a federally enforceable permit requiring the use of only non-HAP binders from performance testing requirements. The commenter suggested that the EPA could limit the scope of 40 CFR 63.2981(a) to exclude such (non-HAP) ovens from applicability under this section of the rule. The commenter also stated that the EPA should revise Table 1 to 40 CFR part 63, subpart HHHH to apply footnote “d” to line 1 (“Thermal oxidizer temperature”) and to line 2 (“Other process or control device parameters in your OMM plan”) in order to make effective the EPA’s intent not to require monitoring or recordkeeping for periods when binders containing no HAP were in use.

Response: We acknowledge the commenter’s support for the exemption from performance testing requirements for drying and curing ovens that are subject to a federally enforceable permit requiring the use of only non-HAP binders. We did not receive any

comments objecting to this change and are finalizing changes to the 40 CFR 63.2991 introductory text to exclude drying and curing ovens using exclusively non-HAP binders. The EPA is not accepting the suggested text changes to 40 CFR 63.2981(a) recommended by the commenter because facilities that use exclusively non-HAP binders may still be subject to 40 CFR part 63, subpart HHHH if they are collocated with a major source. However, such facilities would not be required to conduct performance testing and would only be subject to recordkeeping and reporting requirements. We also acknowledge the commenter's suggested revisions to Table 1 to 40 CFR part 63, subpart HHHH and we have made these edits, including minor clarifications to footnote "d" (new footnote "4") in the final rule.

Comment: One commenter requested that the EPA revise the new definition of the term "non-HAP binder" to refer to the SDS, the term used in the current OSHA Hazard Communication Standard, 29 CFR 1910.1200(b). This same commenter further requested that the EPA tie the definition of non-HAP binder to the OSHA Hazard Communication Standard's criteria for disclosing composition or ingredients in Section 3 of SDSs.

Response: We acknowledge the commenter's suggested revisions and have clarified the definition of "Non-HAP binder" as provided by the commenter. We have further revised this definition to clarify that the affected source may not rely on the SDS for a non-HAP binder where the manufacturer has withheld the specific chemical identity, including the chemical name, other specific identification of a hazardous chemical, or the exact percentage (concentration) of the substance in a mixture from Section 3 of the SDS, or withheld this information, when making the case that a binder used is a non-HAP binder. The definition of "*Non-HAP binder*" has been revised as follows:

“*Non-HAP binder* means a binder formulation that does not contain any substance that is required to be listed in Section 3 of a safety data sheet (SDS) pursuant to 29 CFR 1910.1200(g) and that is a HAP as defined in section 112(b) of the Clean Air Act. In designating a non-HAP binder under this subpart, you may not rely on the SDS for a binder where the manufacturer has withheld the specific chemical identity, including the chemical name, other specific identification of a hazardous chemical, or the exact percentage (concentration) of the substance in a mixture from Section 3 of the SDS. You may not withhold this information when making the case that the binder is a non-HAP binder for the purposes of section 63.2996.”

c. Miscellaneous Corrections or Clarifications Recommended by Commenters

Comment: One commenter requested that the EPA revise 40 CFR 63.2985 (a) and (b) to specify when the compliance dates for the SSM requirements, the electronic reporting requirements, and all other requirements take effect.

Response: The EPA agrees with the commenter and has clarified 40 CFR 63.2985 of the final rule to specify when the compliance dates for new provisions apply. Specific compliance dates for individual provisions are included in 40 CFR 63.2986, 63.2998, 63.3000, 40 CFR 63.3004, and Table 2 to 40 CFR part 63, subpart HHHH. In general, we are providing for 180 days for existing sources to comply with the revised rule requirements. We are also finalizing proposed changes to 40 CFR 63.2985(d) that require new or reconstructed drying and curing ovens that commenced operation between the date of the proposal and the date of the final rule to comply on the effective date of the final rule or startup (whichever is later).

Comment: One commenter suggested that the EPA remove the definition of “binder application vacuum exhaust” from 40 CFR 63.3004, as this term is not used in the standard as proposed.

Response: The EPA agrees with the commenter that the definition for “binder application vacuum exhaust” is no longer relevant for the subpart and has removed the definition from the final rule.

Comment: One commenter requested that the EPA revise Table 2 to 40 CFR part 63, subpart HHHH to clarify that only 40 CFR 63.14(b)(2) and (3) apply to subpart HHHH, rather than all of 40 CFR 63.14.

Response: The EPA agrees with the commenter’s recommended revision to Table 2 to 40 CFR part 63, subpart HHHH and has revised the table entry for “§ 63.14” accordingly.

Additional comments on the revisions to the monitoring, recordkeeping, and reporting provisions and our specific responses to those comments can be found in the comment summary and response document titled *Summary of Public Comments and Responses for Wet-Formed Fiberglass Mat Production Risk and Technology Review*, which is available in the docket for this action.

4. What is the rationale for our final approach for the revisions to monitoring, performance testing, and reporting requirements?

We evaluated all of the comments on the EPA’s proposed amendments to the monitoring, recordkeeping, and reporting provisions for this subpart, and the proposed technical and editorial corrections. These comments were generally supportive, and requested only minor clarifications and corrections to the proposed text. We are finalizing these amendments as proposed, with the exception of the minor changes discussed in this section.

Additionally, we solicited comments on revising 40 CFR 63.2991 to exempt drying and curing ovens that are subject to a federally enforceable permit requiring the use of only non-HAP binders from performance testing requirements. We received only supportive comments on this

potential change. We are, therefore, promulgating changes to the 40 CFR 63.2991 introductory text to exclude drying and curing ovens using exclusively non-HAP binders from meeting the requirements of this section. Facilities that use a combination of HAP and non-HAP binders would continue to be required to conduct performance tests as currently required under the subpart.

E. Requirements for Submission of Performance Tests for the Wet-Formed Fiberglass Mat Production Source Category

1. What did we propose for the Wet-Formed Fiberglass Mat Production source category?

We proposed amendments that would require owners and operators of wet-formed fiberglass mat drying and curing ovens to submit electronic copies of certain required performance test reports. More information concerning these proposed revisions is in the preamble to the proposed rule (83 FR 14984).

2. How did the requirements for submission of performance tests change for the Wet-Formed Fiberglass Mat Production source category?

Since proposal, the requirement for owners and operators of wet-formed fiberglass mat drying and curing ovens to submit electronic copies of certain required performance test reports has not changed. The EPA is requiring owners and operators of wet-formed fiberglass mat production facilities to submit electronic copies of certain required performance test reports through the EPA's CDX using CEDRI. The final rule requires that performance test results be submitted using the ERT.

The electronic submittal of the reports addressed in this rulemaking will increase the usefulness of the data contained in those reports; is in keeping with current trends in data availability and transparency; will further assist in the protection of public health and the

environment; will improve compliance by facilitating the ability of regulated facilities to demonstrate compliance with requirements, and by facilitating the ability of delegated state, local, tribal, and territorial air agencies and the EPA to assess and determine compliance; and will ultimately reduce burden on regulated facilities, delegated air agencies, and the EPA.

Electronic reporting also eliminates paper-based, manual processes; thereby saving time and resources, simplifying data entry, eliminating redundancies, minimizing data reporting errors; and providing data quickly and accurately to the affected facilities, air agencies, the EPA and the public. For a more thorough discussion of electronic reporting, see the memorandum titled *Electronic Reporting Requirements for New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) Rules*, which is available in Docket ID No. EPA-HQ-OAR-2004-0309.

3. What key comments did we receive on submission of performance tests, and what are our responses?

We received comments in support of and against the proposed requirement for owners and operators to submit electronic copies of performance test reports. Generally, the comments that were not supportive of the proposed requirements to submit performance tests electronically expressed concern that the requirements could require duplicative or burdensome reporting, or expressed concerns regarding delayed reporting requirements for sources to take in cases of events that may cause a delay in reporting. After review of these comments, we determined that no changes are necessary. The comments and our specific responses can be found in the document titled *Summary of Public Comments and Responses for Wet-Formed Fiberglass Mat Production Risk and Technology Review*, which is available in the docket for this action.

A commenter requested that the EPA clarify the written notification of delayed reporting requirement in the proposed amendment to 40 CFR 63.3000(f). In response to this request, the EPA has revised the language in 40 CFR 63.3000(f) to state that an owner or operator must provide information on the date(s) and time(s) either CDX or CEDRI is unavailable when a user attempts to gain access in the 5 business days prior to the submission deadline.

4. What is the rationale for our final approach for submission of performance tests?

We evaluated all of the comments on the EPA's proposed amendments requiring owners and operators of wet-formed fiberglass mat drying and curing ovens to submit electronic copies of certain required performance test reports. For the reasons explained in the proposed rule, we determined that these amendments increase the ease and efficiency of data submittal and improve data accessibility. More information concerning the proposed requirement for owners and operators of wet-formed fiberglass mat drying and curing ovens to submit electronic copies of certain required performance test reports is in the preamble to the proposed rule (83 FR 14984) and the document, *Summary of Public Comments and Responses for Wet-Formed Fiberglass Mat Production Risk and Technology Review*, which is available in the docket for this action. Therefore, we are finalizing our approach for submission of performance tests, as proposed.

V. Summary of Cost, Environmental, and Economic Impacts and Additional Analyses Conducted

A. What are the affected facilities?

The EPA estimates that there are seven wet-formed fiberglass mat production facilities that are subject to the Wet-Formed Fiberglass Mat Production NESHAP and would be affected by these final amendments. The basis of our estimate of affected facilities is provided in the

memorandum titled *Wet-Formed Fiberglass: Residual Risk Modeling File Documentation*, which is available in the docket for this action. We are not currently aware of any planned or potential new or reconstructed wet-formed fiberglass mat production facilities.

B. What are the air quality impacts?

The EPA estimates that annual HAP emissions from the seven wet-formed fiberglass mat production facilities that are subject to the NESHAP are approximately 23 tpy. Because we are not finalizing revisions to the emission limits, we do not anticipate any air quality impacts as a result of the final rule's amendments.

C. What are the cost impacts?

The seven wet-formed fiberglass mat production facilities that would be subject to the final amendments would incur minimal net costs to meet revised recordkeeping and reporting requirements, some estimated to have costs and some estimated to have cost savings. Nationwide annual net costs associated with the final requirements are estimated to be \$200 per year in each of the 3 years following promulgation of amendments. This estimated total annual cost is comprised of estimated annual costs of about \$1,390, which are offset by the estimated annual cost savings of about \$1,190. The EPA believes that the seven wet-formed fiberglass mat production facilities which are known to be subject to the NESHAP can meet the final requirements without incurring additional capital or operational costs. Therefore, the only costs associated with the final amendments are related to recordkeeping and reporting labor costs. For further information on the requirements being finalized, see sections III and IV of this preamble. For further information on the costs and cost savings associated with the final requirements, see the memorandum titled *Cost Impacts of Wet-Formed Fiberglass Mat Production Risk and Technology Review (Final Rule)*, and the document, *Supporting Statement for NESHAP for Wet-*

Formed Fiberglass Mat Production (Final Rule), which are both available in the docket for this action.

D. What are the economic impacts?

As noted above, the nationwide annual costs associated with the final requirements are estimated to be approximately \$200 per year in each of the 3 years following promulgation of the amendments. The present value of the total cost over these 3 years is approximately \$550 in 2016 dollars under a 3-percent discount rate, and \$510 in 2016 dollars under a 7-percent discount rate. These costs are not expected to result in business closures, significant price increases, or substantial profit loss.

For further information on the economic impacts associated with the requirements being promulgated, see the memorandum titled *Final Economic Impact Analysis for the Risk and Technology Review: Wet-Formed Fiberglass Mat Production Source Category*, which is available in the docket for this action.

E. What are the benefits?

Although the EPA does not anticipate reductions in HAP emissions as a result of the final amendments, we believe that the action, if finalized, would result in improvements to the rule. Specifically, the final amendment requiring electronic submittal of performance test results will increase the usefulness of the data, is in keeping with current trends of data availability, will further assist in the protection of public health and the environment, and will ultimately result in less burden on the regulated community. In addition, the final amendments reducing parameter monitoring and recording and performance testing requirements when non-HAP binder is being used to produce mat will reduce burden for regulated facilities during such periods, while

continuing to protect public health and the environment. See section IV.D of this preamble for more information.

F. What analysis of environmental justice did we conduct?

As discussed in the preamble to the proposed rule, to examine the potential for any environmental justice issues that might be associated with the source category, we performed a demographic analysis, which is an assessment of risks to individual demographic groups of the populations living within 5 km and within 50 km of the facilities. In the analysis, we evaluated the distribution of HAP-related cancer and noncancer risks from the Wet-Formed Fiberglass Mat Production source category across different demographic groups within the populations living near facilities. The results of this analysis indicated that this action does not have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, and/or indigenous peoples.

The documentation for this decision is contained in section IV.A of the preamble to the proposed rule and the technical report titled *Risk and Technology Review Analysis of Demographic Factors for Populations Living Near Wet-Formed Fiberglass Mat Production*, which is available in the docket for this action.

G. What analysis of children's environmental health did we conduct?

This action's health and risk assessments are contained in sections IV.A and B of this preamble and further documented in the risk report titled *Residual Risk Assessment for the Wet-Formed Fiberglass Mat Production Source Category in Support of the November 2018 Risk and Technology Review Final Rule*, which is available in the docket for this action.

VI. Statutory and Executive Order Reviews

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

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

This action is not a significant regulatory action and was, therefore, not submitted to the Office of Management and Budget (OMB) for review.

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

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

C. Paperwork Reduction Act (PRA)

The information collection activities in this final rule have been submitted for approval to OMB under the PRA. The information collection request (ICR) document that the EPA prepared has been assigned EPA ICR number 1964.09. You can find a copy of the ICR in the docket for this rule, and it is briefly summarized here. The information collection requirements are not enforceable until OMB approves them.

We are finalizing changes to the recordkeeping and reporting requirements associated with 40 CFR part 63, subpart HHHH, in the form of eliminating the SSM plan and reporting requirements; requiring electronic submittal of performance test reports; reducing the frequency of compliance reports to a semiannual basis when there are deviations from applicable standards; and reducing the parameter monitoring and recording, and performance testing requirements during use of binder containing no HAP. We also included a review of the amended rule by affected facilities in the updated ICR for this final rule. In addition, the number of facilities

subject to the standards changed. The number of respondents was reduced from 14 to 7 based on consultation with industry representatives and state/local agencies.

Respondents/affected entities: The respondents to the recordkeeping and reporting requirements are owners or operators of facilities that produce wet-formed fiberglass mat subject to 40 CFR part 63, subpart HHHH.

Respondent's obligation to respond: Mandatory (40 CFR part 63, subpart HHHH).

Estimated number of respondents: Seven.

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

Total estimated burden: The annual recordkeeping and reporting burden for responding facilities to comply with all of the requirements in the NESHAP, averaged over the 3 years of this ICR, is estimated to be 1,470 hours (per year). Of these, 3 hours (per year) is the incremental burden to comply with the final rule amendments. Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: The annual recordkeeping and reporting cost for responding facilities to comply with all of the requirements in the NESHAP, averaged over the 3 years of this ICR, is estimated to be \$95,500 (per year), including \$0 annualized capital or operation and maintenance costs. Of the total, \$200 (per year) is the incremental cost to comply with the amendments to the rule.

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 OMB approves this ICR, the Agency will announce that approval in the **Federal Register** and publish

a technical amendment to 40 CFR part 9 to display the OMB control number for the approved information collection activities contained in this final rule.

D. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This action will not impose any requirements on small entities. There are no small entities affected in this regulated industry. See the document titled *Final Economic Impact Analysis for the Risk and Technology Review: Wet-Formed Fiberglass Mat Production Source Category*, which is available in the docket for this action.

E. Unfunded Mandates Reform Act (UMRA)

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

F. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

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

This action does not have tribal implications as specified in Executive Order 13175. None of the seven wet-formed fiberglass mat production facilities that have been identified as being affected by this action are owned or operated by tribal governments or located within tribal lands. Thus, Executive Order 13175 does not apply to this action.

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

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. This action's health and risk assessments are contained in sections III.A and B and sections IV.A and B of this preamble, and further documented in the risk report titled, *Residual Risk Assessment for the Wet-Formed Fiberglass Mat Production Source Category in Support of the November 2018 Risk and Technology Review Final Rule*, which is available in the docket for this action.

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

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

J. National Technology Transfer and Advancement Act (NTTAA) and 1 CFR Part 51

This action involves technical standards. The EPA has decided to use EPA Methods 1, 2, 3, 3A, 4, 316, 318, and 320 of 40 CFR part 60, appendix A. Methods 1, 2, 3, 3A, and 4 of 40 CFR part 60, appendix A are used to determine the gas flow rate which is used with the concentration of formaldehyde to calculate the mass emission rate. While the EPA identified 11 voluntary consensus standards (VCS) as being potentially applicable as alternatives to EPA Methods 1, 2, 3, 3A, and 4 of 40 CFR part 60, the Agency is not using them. The use of these VCS would be impractical because of their lack of equivalency, documentation, validation data, and/or other important technical and policy considerations.

Methods 316, 318, and 320 of 40 CFR part 60, appendix A are used to determine the formaldehyde concentrations before and after the control device (*e.g.*, thermal oxidizer). The EPA conducted a search to identify potentially applicable VCS. However, the Agency identified no such standards, and none were brought to its attention in comments. Therefore, the EPA has decided to use Methods 316, 318, and 320 of 40 CFR part 60, appendix A.

Results of the search are documented in the memorandum titled, Voluntary Consensus Standard Results for National Emission Standards for Hazardous Air Pollutants for Wet-Formed Fiberglass Mat Production, which is available in the docket for this action. Additional information can be found at <https://www.epa.gov/emc/emc-promulgated-test-methods>.

The EPA is also promulgating revisions to 40 CFR 63.2984 to allow use of a more recent edition of the currently referenced “Industrial Ventilation: A Manual of Recommended Practice,” American Conference of Governmental Industrial Hygienists, *i.e.*, the appropriate chapters of “Industrial Ventilation: A Manual of Recommended Practice for Design” (27th edition), and revising the text regarding the existing IBR (chapters 3 and 5 of “Industrial Ventilation: A Manual of Recommended Practice” (23rd Edition)) by updating the reference to 40 CFR 63.14. These methods provide guidance on the capture and conveyance of formaldehyde emissions from each drying and curing oven to the thermal oxidizer. Owners and operators of wet-formed fiberglass mat production facilities may continue to use the existing reference (23rd edition), or the updated method (27th edition) may be obtained from American Conference of Governmental Industrial Hygienists (ACGIH), Customer Service Department, 1330 Kemper Meadow Drive, Cincinnati, Ohio 45240, telephone number (513) 742-2020. In addition, owners and operators may inspect a copy at U.S. EPA Library, 109 TW Alexander Drive, Research Triangle Park, North Carolina 27711, phone (919) 541-0094.

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

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

The documentation for this decision is contained in section IV.A of this preamble and the technical report titled *Risk and Technology Review Analysis of Demographic Factors for Populations Living Near Wet-Formed Fiberglass Mat Production*, which is available in the docket for this action.

L. Congressional Review Act (CRA)

This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a “major rule” as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 63

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

Dated:

Andrew R. Wheeler,
Acting Administrator.

For the reasons set out in the preamble, title 40, chapter I, part 63 of the Code of Federal Regulations is amended as follows:

PART 63—[AMENDED]

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

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

Subpart A—[Amended]

2. Section 63.14 is amended by revising paragraphs (b)(2) and (3) to read as follows:

§ 63.14 Incorporations by reference.

* * * * *

(b) * * *

(2) Industrial Ventilation: A Manual of Recommended Practice, 23rd Edition, 1998, Chapter 3, “Local Exhaust Hoods” and Chapter 5, “Exhaust System Design Procedure.” IBR approved for §§63.1503, 63.1506(c), 63.1512(e), Table 2 to Subpart RRR, Table 3 to Subpart RRR, and Appendix A to Subpart RRR, and § 63.2984(e).

(3) Industrial Ventilation: A Manual of Recommended Practice for Design, 27th Edition, 2010. IBR approved for §§63.1503, 63.1506(c), 63.1512(e), Table 2 to subpart RRR, Table 3 to subpart RRR, and Appendix A to subpart RRR, and § 63.2984(e).

* * * * *

Subpart HHHH—National Emission Standards for Hazardous Air Pollutants for Wet-Formed Fiberglass Mat Production

3. Section 63.2984 is amended by revising paragraphs (a)(1), (a)(4), (b), and (e) to read as follows:

§ 63.2984 What operating limits must I meet?

(a) * * *

(1) You must operate the thermal oxidizer so that the average operating temperature in any 3-hour block period does not fall below the temperature established during your performance test and specified in your OMM plan, except during periods when using a non-HAP binder.

* * * * *

(4) If you use an add-on control device other than a thermal oxidizer or wish to monitor an alternative parameter and comply with a different operating limit than the limit specified in paragraph (a)(1) of this section, you must obtain approval for the alternative monitoring under §63.8(f). You must include the approved alternative monitoring and operating limits in the OMM plan specified in §63.2987.

(b) When during a period of normal operation, you detect that an operating parameter deviates from the limit or range established in paragraph (a) of this section, you must initiate corrective actions within 1 hour according to the provisions of your OMM plan. The corrective actions must be completed in an expeditious manner as specified in the OMM plan.

* * * * *

(e) If you use a thermal oxidizer or other control device to achieve the emission limits in §63.2983, you must capture and convey the formaldehyde emissions from each drying and curing oven according to the procedures in Chapters 3 and 5 of “Industrial Ventilation: A Manual of Recommended Practice” (23rd Edition) or the appropriate chapters of “Industrial Ventilation: A Manual of Recommended Practice for Design” (27th Edition) (both are incorporated by reference, see § 63.14). In addition, you may use an alternate as approved by the Administrator.

4. Section 63.2985 is amended by revising paragraphs (a), (b), and paragraph (c) introductory text and adding new paragraph (d) to read as follows:

§ 63.2985 When do I have to comply with these standards?

(a) Existing drying and curing ovens must be in compliance with this subpart no later than April 11, 2005, except as otherwise specified in this section, and §§ 63.2986, 63.2998, 63.3000, 63.3004, and Table 2 to this subpart.

(b) Drying and curing ovens constructed or reconstructed after May 26, 2000 and before April 9, 2018 must be in compliance with this subpart at startup or by April 11, 2002, whichever is later, except as otherwise specified in this section and §§ 63.2986, 63.2998, 63.3000, 63.3004, and Table 2 to this subpart.

(c) If your facility is an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the following apply:

* * * * *

(d) Drying and curing ovens constructed or reconstructed after April 6, 2018 must be in compliance with this subpart at startup or by **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, whichever is later.

* * * * *

5. Section 63.2986 is amended by revising paragraph (g) to read as follows:

§ 63.2986 How do I comply with the standards?

* * * * *

(g) You must comply with the requirements in paragraphs (g)(1) through (3) of this section.

(1) Before **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, existing drying and curing ovens and drying and curing ovens constructed or reconstructed after May 26, 2000 and before April 7, 2018 must be in compliance with the emission limits in § 63.2983 and the operating limits in § 63.2984 at all times, except during periods of startup, shutdown, or malfunction. After **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, affected sources must be in compliance with the emission limits in § 63.2983 and the operating limits in § 63.2984 at all times, including periods of startup, shutdown, or malfunction. Affected sources that commence construction or reconstruction after April 6, 2018, must comply with all requirements of the subpart, no later than the effective date of the final rule or upon startup, whichever is later.

(2) Before **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, existing drying and curing ovens and drying and curing ovens constructed or reconstructed after May 26, 2000 and before April 9, 2018 must always operate and maintain any affected source, including air pollution control equipment and monitoring equipment, according to the provisions in § 63.6(e)(1). After **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, for such affected sources, and after **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]** for affected sources that commence construction or reconstruction after April 6, 2018, at all times, you 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 you to make any further efforts to reduce emissions if you are in compliance with the emissions limits required by this subpart. The Administrator will base the determination

of whether a source is operating in compliance with operation and maintenance requirements 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.

(3) Before **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, for each existing source and for each new or reconstructed source for which construction commenced after May 26, 2000 and before April 9, 2018, you must maintain your written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3). The startup, shutdown, and malfunction plan must address the startup, shutdown, and corrective actions taken for malfunctioning process and air pollution control equipment. A startup, shutdown, and malfunction plan is not required for such affected sources after **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. No startup, shutdown, or malfunction plan is required for any affected source that commences construction or reconstruction after April 6, 2018.

6. Section 63.2987 is amended by revising paragraph (a) introductory text and paragraph (d) to read as follows:

§ 63.2987 What must my operation, maintenance, and monitoring (OMM) plan include?

(a) You must prescribe the monitoring that will be performed to ensure compliance with these emission limitations. Table 1 to this subpart lists the minimum monitoring requirements.

Your plan must specify the items listed in paragraphs (a)(1) through (3) of this section:

* * * * *

(d) Your plan must specify the recordkeeping procedures to document compliance with the emissions and operating limits. Table 1 to this subpart establishes the minimum recordkeeping requirements.

7. Section 63.2989 is amended by revising paragraph (a) introductory text to read as follows:

§ 63.2989 How do I change my OMM plan?

* * * * *

(a) To revise the ranges or levels established for your operating limits in §63.2984, you must meet the requirements in paragraphs (a)(1) and (2) of this section:

* * * * *

8. Section 63.2991 is amended by revising the introductory text and paragraph (a) to read as follows:

§ 63.2991 When must I conduct performance tests?

Except for drying and curing ovens subject to a federally enforceable permit that requires the exclusive use of non-HAP binders, you must conduct a performance test for each drying and curing oven subject to this subpart according to the provisions in paragraphs (a) through (c) of this section:

(a) *Initially.* You must conduct a performance test to demonstrate initial compliance and to establish operating parameter limits and ranges to be used to demonstrate continuous compliance with the emission standards no later than 180 days after the applicable compliance date specified in § 63.2985.

* * * * *

9. Section 63.2992 is amended by revising paragraphs (b), (d), and (e) to read as follows:

§ 63.2992 How do I conduct a performance test?

* * * * *

(b) You must conduct the performance test according to the requirements in §63.7(a) through (d), (e)(2) through (4), and (f) through (h).

* * * * *

(d) During the performance test, you must monitor and record the operating parameters that you will use to demonstrate continuous compliance after the test. These parameters are listed in Table 1 to this subpart.

(e) You must conduct performance tests under conditions that are representative of the performance of the affected source. Representative conditions exclude periods of startup and shutdown. You may not conduct performance tests during periods of malfunction. You must record the process information that is necessary to document operating conditions during the test and record an explanation to support that such conditions represent normal operation. Upon request, you must make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

* * * * *

10. Section 63.2993 is revised to read as follow:

- a. Revising paragraphs (a) and (b);
- b. Redesignating paragraphs (c) through (e) as paragraphs (e) through (g);
- c. Adding new paragraphs (c) and (d); and
- d. Revising new redesignated paragraphs (e) through (g).

The revisions and additions read as follows:

§ 63.2993 What test methods must I use in conducting performance tests?

(a) Use EPA Method 1 (40 CFR part 60, appendix A-1) for selecting the sampling port location and the number of sampling ports.

(b) Use EPA Method 2 (40 CFR part 60, appendix A-1) for measuring the volumetric flow rate of the stack gas.

(c) Use EPA Method 3 or 3A (40 CFR part 60, appendix A-2) for measuring oxygen and carbon dioxide concentrations needed to correct formaldehyde concentration measurements to a standard basis.

(d) Use EPA Method 4 (40 CFR part 60, appendix A-3) for measuring the moisture content of the stack gas.

(e) Use EPA Method 316, 318, or 320 (40 CFR part 63, appendix A) for measuring the concentration of formaldehyde.

(f) Use the method contained in appendix A to this subpart or the resin purchase specification and the vendor specification sheet for each resin lot for determining the free-formaldehyde content in the urea-formaldehyde resin.

(g) Use the method in appendix B to this subpart for determining product loss-on-ignition.

11. Section 63.2994 is amended by revising paragraph (a) to read as follows:

§ 63.2994 How do I verify the performance of monitoring equipment?

(a) Before conducting the performance test, you must take the steps listed in paragraphs (a)(1) through (3) of this section:

(1) Install and calibrate all process equipment, control devices, and monitoring equipment.

(2) Develop and implement a continuous parameter monitoring system (CPMS) quality control program that includes written procedures for CPMS according to § 63.8(d)(1) and (2). You must keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of this subpart, to be made available for inspection, upon request, by the Administrator. If you revise the performance evaluation plan, you must keep previous (*i.e.*, superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan. You should include the program of corrective action in the plan required under §63.8(d)(2).

(3) Conduct a performance evaluation of the CPMS according to §63.8(e) which specifies the general requirements and requirements for notifications, the site-specific performance evaluation plan, conduct of the performance evaluation, and reporting of performance evaluation results.

* * * * *

12. Section 63.2996 is amended to read as follows:

§ 63.2996 What must I monitor?

(a) You must monitor the parameters listed in Table 1 to this subpart and any other parameters specified in your OMM plan. You must monitor the parameters, at a minimum, at the corresponding frequencies listed in Table 1 to this subpart, except as specified in paragraph (b) of this section.

(b) During periods when using a non-HAP binder, you are not required to monitor the parameters in Table 1 to this subpart.

13. Section 63.2997 is amended to revise paragraph (a) introductory text and paragraph

(b) to read as follows:

§ 63.2997 What are the requirements for monitoring devices?

(a) If you control formaldehyde emissions using a thermal oxidizer, you must meet the requirements in paragraphs (a)(1) and (2) of this section:

* * * * *

(b) If you use process modifications or a control device other than a thermal oxidizer to control formaldehyde emissions, you must install, calibrate, maintain, and operate devices to monitor the parameters established in your OMM plan at the frequency established in the plan.

14. Section 63.2998 is amended by:

- a. Revising the introductory text, paragraphs (a) and (c), paragraph (e) introductory text, and paragraph (f);
- b. Redesignating paragraph (g) as paragraph (h);
- c. Adding new paragraphs (g) and (i).

The revisions and additions read as follows:

§ 63.2998 What records must I maintain?

You must maintain records according to the procedures of § 63.10. You must maintain the records listed in paragraphs (a) through (i) of this section.

(a) All records required by § 63.10, where applicable. Table 2 of this subpart presents the applicable requirements of the general provisions.

* * * * *

(c) During periods when the binder formulation being applied contains HAP, records of values of monitored parameters listed in Table 1 to this subpart to show continuous compliance with each operating limit specified in Table 1 to this subpart. If you do not monitor the

parameters in Table 1 to this subpart during periods when using non-HAP binder, you must record the dates and times that production of mat using non-HAP binder began and ended.

* * * * *

(e) Before **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, for existing drying and curing ovens and drying and curing ovens constructed or reconstructed after May 26, 2000 and before April 7, 2018, if an operating parameter deviation occurs, you must record:

* * * * *

(f) Before **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, for existing drying and curing ovens and drying and curing ovens constructed or reconstructed after May 26, 2000 and before April 7, 2018, keep all records specified in § 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction. Records specified in § 63.6(e)(3)(iii) through (v) are not required to be kept after **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]** for existing or new drying and curing ovens.

(g) After **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]** for affected sources that commence construction or reconstruction after April 6, 2018, and after **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]** for all other affected sources, in the event that an affected source fails to meet an applicable standard, including deviations from an emission limit in § 63.2983 or an operating limit in § 63.2984, you must record the number of failures and, for each failure, you must:

- (1) Record the date, time, and duration of the failure;
- (2) Describe the cause of the failure;

(3) 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; and

(4) Record actions taken to minimize emissions in accordance with § 63.2986(g)(2) and any corrective actions taken to return the affected unit to its normal or usual manner of operation and/or to return the operating parameter to the limit or to within the range specified in the OMM plan, and the dates and times at which corrective actions were initiated and completed.

* * * * *

(i) Records showing how the maximum residence time was derived.

15. Section 63.2999 is amended by revising paragraphs (b) and (c) to read as follows:

§ 63.2999 In what form and for how long must I maintain records?

* * * * *

(b) Your records must be readily available and in a form so they can be easily inspected and reviewed. You can keep the records on paper or an alternative medium, such as microfilm, computer, computer disks, compact disk, digital versatile disk, flash drive, other commonly used electronic storage medium, magnetic tape, or on microfiche.

(c) You may maintain any records that you submitted electronically via the EPA's Compliance and Emissions Data Reporting Interface (CEDRI) in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an onsite compliance evaluation.

16. Section 63.3000 is amended by:

- a. Revising paragraph (c) introductory text, (c)(1), (c)(4), (c)(5) introductory text, (c)(5)(viii), and (c)(5)(ix);
- b. Adding paragraph (c)(6);
- c. Redesignating paragraph (d) as paragraph (e) and revising newly redesignated paragraph (e);
- e. Redesignating paragraph (e) as paragraph (d) and revising newly redesignated paragraph (d);
- f. Adding paragraphs (f) and (g).

The revisions and additions read as follows:

§ 63.3000 What notifications and reports must I submit?

* * * * *

(c) *Semiannual compliance reports.* You must submit semiannual compliance reports according to the requirements of paragraphs (c)(1) through (6) of this section.

(1) *Dates for submitting reports.* Unless the Administrator has agreed to a different schedule for submitting reports under §63.10(a), you must deliver or postmark each semiannual compliance report no later than 30 days following the end of each semiannual reporting period. The first semiannual reporting period begins on the compliance date for your affected source and ends on June 30 or December 31, whichever date immediately follows your compliance date. Each subsequent semiannual reporting period for which you must submit a semiannual compliance report begins on July 1 or January 1 and ends 6 calendar months later. Before **[INSERT DATE AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, as required by § 63.10(e)(3), you must begin submitting quarterly compliance reports if you deviate from the emission limits in § 63.2983 or the operating limits in § 63.2984. After **[INSERT**

DATE OF PUBLICATION IN THE FEDERAL REGISTER], you are not required to submit quarterly compliance reports. If you deviate from the emission limits in §63.2983 or the operating limits in §63.2984 in the quarter prior to **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you must include this information in the report for the first full semiannual reporting period following **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

* * * * *

(4) *No deviations.* If there were no instances where an affected source failed to meet an applicable standard, including no deviations from the emission limit in § 63.2983 or the operating limits in § 63.2984, the semiannual compliance report must include a statement to that effect. If there were no periods during which the continuous parameter monitoring systems were out-of-control as specified in § 63.8(c)(7), the semiannual compliance report must include a statement to that effect.

(5) *Deviations.* Before **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, for existing drying and curing ovens and drying and curing ovens constructed or reconstructed after May 26, 2000 and before April 7, 2018, if there was a deviation from the emission limit in § 63.2983 or an operating limit in § 63.2984, the semiannual compliance report must contain the information in paragraphs (c)(5)(i) through (ix) of this section:

* * * * *

(viii) A brief description of the associated process units.

(ix) A brief description of the associated continuous parameter monitoring system.

(6) *Deviations*. For affected sources that commence construction or reconstruction after April 6, 2018, after **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, and after **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]** for all other affected sources, if there was an instance where an affected source failed to meet an applicable standard, including a deviation from the emission limit in § 63.2983 or an operating limit in § 63.2984, the semiannual compliance report must record the number of failures and contain the information in paragraphs (c)(6)(i) through (ix) of this section:

(i) The date, time, and duration of each failure.

(ii) The date and time that each continuous parameter monitoring system was inoperative, except for zero (low-level) and high-level checks.

(iii) The date, time, and duration that each continuous parameter monitoring system was out-of-control, including the information in § 63.8(c)(8).

(iv) 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.

(v) The date and time that corrective actions were taken, a description of the cause of the failure (including unknown cause, if applicable), and a description of the corrective actions taken.

(vi) A summary of the total duration of each failure during the semiannual reporting period and the total duration as a percent of the total source operating time during that semiannual reporting period.

(vii) A breakdown of the total duration of the failures during the semiannual reporting period into those that were due to control equipment problems, process problems, other known causes, and other unknown causes.

(viii) A brief description of the associated process units.

(ix) A brief description of the associated continuous parameter monitoring system.

(d) *Startup, shutdown, malfunction reports.* Before **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, for existing drying and curing ovens and drying and curing ovens constructed or reconstructed after May 26, 2000 and before April 7, 2018, if you have a startup, shutdown, or malfunction during the semiannual reporting period, you must submit the reports specified § 63.10(d)(5). No startup, shutdown, or malfunction plan is required for any affected source that commences construction or reconstruction after April 6, 2018.

(e) *Performance test results.* You must submit results of each performance test (as defined in § 63.2) required by this subpart no later than 60 days after completing the test as specified in § 63.10(d)(2). You must include the values measured during the performance test for the parameters listed in Table 1 of this subpart and the operating limits or ranges that you will include in your OMM plan. For the thermal oxidizer temperature, you must include 15-minute averages and the average for the three 1-hour test runs. For affected sources that commence construction or reconstruction after April 6, 2018, beginning **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, and beginning no later than **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]** for all other affected sources, you must submit the results following the procedures specified in paragraphs (e)(1) through (3) of this section.

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

(2) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test, you must submit the results of the performance test to the Administrator at the appropriate address listed in § 63.13, unless the Administrator agrees to or specifies an alternate reporting method.

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

(f) If you are required to electronically submit a report through the CEDRI in the EPA's CDX, you may assert a claim of EPA outage for failure to timely comply with the reporting

requirement. To assert a claim of EPA system outage, you must meet the requirements outlined in paragraphs (f)(1) through (7) of this section.

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

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

(3) The outage may be planned or unplanned.

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

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

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

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

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

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

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

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

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

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

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

(3) You must provide to the Administrator:

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

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

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

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

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

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

17. Section 63.3001 is amended to read as follows:

§ 63.3001 What sections of the general provisions apply to me?

You must comply with the requirements of the general provisions of 40 CFR part 63, subpart A, as specified in Table 2 of this subpart.

Section 63.3003 is removed and reserved.

Section 63.3004 is amended by:

- a. Revising the definition for “Deviation”.
- b. Adding definitions for “Maximum residence time”, “Non-HAP binder”, “Startup”, and “Shutdown” in alphabetical order; and
- c. Removing the definition for “Binder application vacuum exhaust”.

The revisions and additions read as follows:

§ 63.3004 What definitions apply to this subpart?

* * * * *

Deviation, before **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

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

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

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

Deviation, after **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]** for affected sources that commence construction or reconstruction after April 6, 2018, and after **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]** for all other affected sources, means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

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

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

* * * * *

Maximum residence time means the longest time, during normal operation and excluding periods of ramping up to speed during startup, that a particular point on the fiberglass mat remains in the drying and curing oven. It is determined for each line by the equation:

$$T = L/S$$

Where:

T is the residence time, in seconds;

L is the length of the drying and curing oven, in feet; and

S is the slowest line speed normally operated on the line, excluding periods of ramping up to speed during startup, in feet per second.

Non-HAP binder means a binder formulation that does not contain any substance that is required to be listed in Section 3 of a safety data sheet (SDS) pursuant to 29 CFR § 1910.1200(g) and that is a HAP as defined in section 112(b) of the Clean Air Act. In designating a non-HAP binder under this subpart, you may not rely on the SDS for a binder where the manufacturer has withheld the specific chemical identity, including the chemical name, other specific identification of a hazardous chemical, or the exact percentage (concentration) of the substance in a mixture from Section 3 of the SDS. You may not withhold this information when making the case that the binder is a non-HAP binder for the purposes of § 63.2996.

* * * * *

Shutdown after **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]** for affected sources that commence construction or reconstruction after April 6, 2018, and after **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]** for all other affected sources, means the cessation of operation of the drying and curing of any binder-infused fiberglass mat for any purpose. Shutdown ends when the maximum residence time has elapsed after binder-infused fiberglass mat ceases to enter the drying and curing oven.

Startup after **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]** for affected sources that commence construction or reconstruction after April 6, 2018, and after **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]** for all other affected sources, means the setting in operation of the drying and curing of binder-infused fiberglass mat for any purpose. Startup begins when binder-infused fiberglass mat enters the oven to be dried and cured for the first time or after a shutdown event.

* * * * *

18. Table 1 to subpart HHHH of 40 CFR part 63 is amended to read as follows:

Table 1 to Subpart HHHH of Part 63—Minimum Requirements for Monitoring and Recordkeeping

As stated in § 63.2998(c), you must comply with the minimum requirements for monitoring and recordkeeping in the following table:

You must monitor these parameters:	At this frequency:	And record for the monitored parameter:
1. Thermal oxidizer temperature ^{1, 4}	Continuously	15-minute and 3-hour block averages.
2. Other process or control device parameters specified in your OMM plan ^{2, 4}	As specified in your OMM plan	As specified in your OMM plan.
3. Urea-formaldehyde resin solids application rate ⁴	On each operating day, calculate the average lb/h application rate for each product manufactured during that day.	The average lb/h value for each product manufactured during the day.
4. Resin free-formaldehyde content ⁴	For each lot of resin purchased	The value for each lot used during the operating day.
5. Loss-on-ignition ^{3 4}	Measured at least once per day, for each product manufactured during that day	The value for each product manufactured during the operating day.
6. UF-to-latex ratio in the binder ^{3, 4}	For each batch of binder prepared the operating day.	The value for each batch of binder prepared during the operating day.
7. Weight of the final mat product per square (lb/roofing square) ^{3, 4}	Each product manufactured during the operating day.	The value for each product manufactured during the operating day.
8. Average nonwoven wet-formed fiberglass mat production rate (roofing square/h) ^{3, 4}	For each product manufactured during the operating day.	The average value for each product manufactured during operating day.

¹ Required if a thermal oxidizer is used to control formaldehyde emissions.

² Required if process modifications or a control device other than a thermal oxidizer is used to control formaldehyde emissions.

³ These parameters must be monitored and values recorded, but no operating limits apply.

⁴ You are not required to monitor or record these parameters during periods when using a non-HAP binder. If you do not monitor these parameters during periods when using a non-HAP binder, you must record the dates and times that production of mat using the non-HAP binder began and ended.

19. Table 2 to subpart HHHH of 40 CFR part 63 is amended to read as follows:

Table 2 to Subpart HHHH of Part 63—Applicability of General Provisions (40 CFR Part 63, Subpart A) to Subpart HHHH

As stated in § 63.3001, you must comply with the applicable General Provisions requirements according to the following table:

Citation	Requirement	Applies to subpart HHHH	Explanation
§ 63.1(a)(1)-(4)	General Applicability	Yes	
§ 63.1(a)(5)		No	[Reserved].
§ 63.1(a)(6)-(8)		Yes	
§ 63.1(a)(9)		No	[Reserved].
§ 63.1(a)(10)-(14)		Yes	
§ 63.1(b)	Initial Applicability Determination	Yes	
§ 63.1(c)(1)	Applicability After Standard Established	Yes	
§ 63.1(c)(2)		Yes	Some plants may be area sources.
§ 63.1(c)(3)		No	[Reserved].
§ 63.1(c)(4)-(5)		Yes	
§ 63.1(d)		No	[Reserved].
§ 63.1(e)	Applicability of Permit Program	Yes	
§ 63.2	Definitions	Yes	Additional definitions in § 63.3004.
§ 63.3	Units and Abbreviations	Yes	
§ 63.4(a)(1)-(3)	Prohibited Activities	Yes	
§ 63.4(a)(4)		No	[Reserved].

§ 63.4(a)(5)		Yes	
§ 63.4(b)-(c)	Circumvention/Severability	Yes	
§ 63.5(a)	Construction/Reconstruction	Yes	
§ 63.5(b)(1)	Existing/Constructed/Reconstruction	Yes	
§ 63.5(b)(2)		No	[Reserved].
§ 63.5(b)(3)-(6)		Yes	
§ 63.5(c)		No	[Reserved].
§ 63.5(d)	Application for Approval of Construction/Reconstruction	Yes	
§ 63.5(e)	Approval of Construction/Reconstruction	Yes	
§ 63.5(f)	Approval of Construction/Reconstruction Based on State Review	Yes	
§ 63.6(a)	Compliance with Standards and Maintenance—Applicability	Yes	
§ 63.6(b)(1)-(5)	New and Reconstructed Sources-Dates	Yes	
§ 63.6(b)(6)		No	[Reserved].
§ 63.6(b)(7)		Yes	
§ 63.6(c)(1)-(2)	Existing Sources Dates	Yes	§ 63.2985 specifies dates.
§ 63.6(c)(3)-(4)		No	[Reserved].
§ 63.6(c)(5)		Yes	
§ 63.6(d)		No	[Reserved].
§ 63.6(e)(1)(i)	General Duty to Minimize Emissions	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before [INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION]	See § 63.2986(g) for general duty requirement.

		IN THE FEDERAL REGISTER], and No thereafter	
§ 63.6(e)(1)(ii)	Requirement to Correct Malfunctions As Soon As Possible	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before [INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], and No thereafter	
§ 63.6(e)(1)(iii)	Operation and Maintenance Requirements	Yes	§§ 63.2984 and 63.2987 specify additional requirements.
§ 63.6(e)(2)		No	[Reserved].
§ 63.6(e)(3)	SSM Plan Requirements	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before [INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], and No thereafter	
§ 63.6(f)(1)	SSM Exemption	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected	

		sources before [INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], and No thereafter	
§ 63.6(f)(2) and (3)_	Compliance with Non-Opacity Emission Standards	Yes	
§ 63.6(g)	Alternative Non-Opacity Emission Standard	Yes	EPA retains approval authority.
§ 63.6(h)	Compliance with Opacity/Visible Emissions Standards	No	Subpart HHHH does not specify opacity or visible emission standards.
§ 63.6(i)(1)-(14)	Extension of Compliance	Yes	
§ 63.6(i)(15)		No	[Reserved].
§ 63.6(i)(16)		Yes	
§ 63.6(j)	Exemption from Compliance	Yes	
§ 63.7(a)	Performance Test Requirements— Applicability and Dates	Yes	
§ 63.7(b)	Notification of Performance Test	Yes	
§ 63.7(c)	Quality Assurance Program/Test Plan	Yes	
§ 63.7(d)	Testing Facilities	Yes	
§ 63.7(e)(1)	Performance Testing	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before [INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], and	See § 63.2992(c).

		No thereafter	
§ 63.7(e)(2)-(4)	Conduct of Tests	Yes	§§ 63.2991-63.2994 specify additional requirements.
§ 63.7(f)	Alternative Test Method	Yes	EPA retains approval authority
§ 63.7(g)	Data Analysis	Yes	
§ 63.7(h)	Waiver of Tests	Yes	
§ 63.8(a)(1)-(2)	Monitoring Requirements— Applicability	Yes	
§ 63.8(a)(3)		No	[Reserved].
§ 63.8(a)(4)		Yes	
§ 63.8(b)	Conduct of Monitoring	Yes	
§ 63.8(c)(1)(i)	General Duty to Minimize Emissions and CMS Operation	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before [INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] , and No thereafter	
§ 63.8(c)(1)(ii)	Continuous Monitoring System (CMS) Operation and Maintenance.	Yes	
§ 63.8(c)(1)(iii)	Requirement to Develop SSM Plan for CMS	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before [INSERT DATE 181	

		DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], and No thereafter	
§ 63.8(c)(2)-(4)		Yes	
§ 63.8(c)(5)	Continuous Opacity Monitoring System (COMS) Procedures	No	Subpart HHHH does not specify opacity or visible emission standards
§ 63.8(c)(6)-(8)		Yes	
§ 63.8(d)(1) and (2)	Quality Control	Yes	
§ 63.8(d)(3)	Written Procedures for CMS	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before [INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], and No thereafter	See § 63.2994(a).
§ 63.8(e)	CMS Performance Evaluation	Yes	
§ 63.8(f)(1)-(5)	Alternative Monitoring Method	Yes	EPA retains approval authority
§ 63.8(f)(6)	Alternative to Relative Accuracy Test	No	Subpart HHHH does not require the use of continuous emissions monitoring systems (CEMS)
§ 63.8(g)(1)	Data Reduction	Yes	

§ 63.8(g)(2)	Data Reduction	No	Subpart HHHH does not require the use of CEMS or COMS.
§ 63.8(g)(3)-(5)	Data Reduction	Yes	
§ 63.9(a)	Notification Requirements— Applicability	Yes	
§ 63.9(b)	Initial Notifications	Yes	
§ 63.9(c)	Request for Compliance Extension	Yes	
§ 63.9(d)	New Source Notification for Special Compliance Requirements	Yes	
§ 63.9(e)	Notification of Performance Test	Yes	
§ 63.9(f)	Notification of Visible Emissions/Opacity Test	No	Subpart HHHH does not specify opacity or visible emission standards.
§ 63.9(g)(1)	Additional CMS Notifications	Yes	
§ 63.9(g)(2)-(3)		No	Subpart HHHH does not require the use of COMS or CEMS.
§ 63.9(h)(1)-(3)	Notification of Compliance Status	Yes	§63.3000(b) specifies additional requirements.
§ 63.9(h)(4)		No	[Reserved].
§ 63.9(h)(5)-(6)		Yes	
§ 63.9(i)	Adjustment of Deadlines	Yes	
§ 63.9(j)	Change in Previous Information	Yes	
§ 63.10(a)	Recordkeeping/Reporting— Applicability	Yes	
§ 63.10(b)(1)	General Recordkeeping Requirements	Yes	§ 63.2998 includes additional requirements.

§ 63.10(b)(2)(i)	Recordkeeping of Occurrence and Duration of Startups and Shutdowns	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before [INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] , and No thereafter	
§ 63.10(b)(2)(ii)	Recordkeeping of Failures to Meet a Standard	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before [INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] , and No thereafter	See § 63.2998(g) for recordkeeping requirements for an affected source that fails to meet an applicable standard.
§ 63.10(b)(2)(iii)	Maintenance Records	Yes	
§ 63.10(b)(2)(iv) and (v)	Actions Taken to Minimize Emissions During SSM	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before [INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] , and No thereafter	

§ 63.10(b)(2)(vi)	Recordkeeping for CMS Malfunctions	Yes	
§ 63.10(b)(2)(vii)-(xiv)	Other CMS Requirements	Yes	
§ 63.10(b)(3)	Recordkeeping requirement for applicability determinations	Yes	
§ 63.10(c)(1)	Additional CMS Recordkeeping	Yes	
§ 63.10(c)(2)-(4)		No	[Reserved].
§ 63.10(c)(5)-(8)		Yes	
§ 63.10(c)(9)		No	[Reserved].
§ 63.10(c)(10)-(14)		Yes	
§ 63.10(c)(15)	Use of SSM Plan	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before [INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] , and No thereafter	
§ 63.10(d)(1)	General Reporting Requirements	Yes	§ 63.3000 includes additional requirements.
§ 63.10(d)(2)	Performance Test Results	Yes	§ 63.3000 includes additional requirements
§ 63.10(d)(3)	Opacity or Visible Emissions Observations	No	Subpart HHHH does not specify opacity or visible

			emission standards.
§63.10(d)(4)	Progress Reports Under Extension of Compliance	Yes	
§ 63.10(d)(5)	SSM Reports	No, for new or reconstructed sources which commenced construction or reconstruction after April 6, 2018. Yes, for all other affected sources before [INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] , and No thereafter	See § 63.3000(c) for malfunction reporting requirements.
§ 63.10(e)(1)	Additional CMS Reports—General	No	Subpart HHHH does not require CEMS.
§ 63.10(e)(2)	Reporting results of CMS performance evaluations.	Yes	
§ 63.10(e)(3)	Excess Emission/CMS Performance Reports.	Yes	
§ 63.10(e)(4)	COMS Data Reports	No	Subpart HHHH does not specify opacity or visible emission standards.
§ 63.10(f)	Recordkeeping/Reporting Waiver	Yes	EPA retains approval authority
§ 63.11	Control Device Requirements—Applicability.	No	Facilities subject to subpart HHHH do not use flares as control devices.
§ 63.12	State Authority and Delegations	Yes	
§ 63.13	Addresses	Yes	

§ 63.14	Incorporation by Reference	Yes	See § 63.14(b)(2) and (3) for applicability requirements.
§ 63.15	Availability of Information/Confidentiality	Yes	