ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA–HQ–OAR–2004–0309; FRL–9975–99–OAR]

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: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing amendments to the National Emission Standards for Hazardous Air Pollutants for Wet-Formed Fiberglass Mat Production to address the results of the residual risk and technology review (RTR) that the EPA is required to conduct in accordance with section 112 of the Clean Air Act (CAA). We found risks due to emissions of air toxics to be acceptable from this source category, determined that the current standards provide an ample margin of safety to protect public health, and identified no new cost-effective controls under the technology review to achieve further emissions reductions. Therefore, we are proposing no revisions to the numerical emission limits based on these analyses. However, the EPA is proposing to revise provisions pertaining to emissions during periods of startup, shutdown, and malfunction (SSM); add requirements for electronic submittal of performance test results; revise certain monitoring, recordkeeping, and reporting requirements; and make other miscellaneous technical and editorial changes. While the proposed amendments would not result in reductions in emissions of hazardous air pollutants (HAP), if finalized, they would result in improved compliance and implementation of the rule.

DATES:

Comments. Comments must be received on or before May 21, 2018. Under the Paperwork Reduction Act (PRA), comments on the information collection provisions are best assured of consideration if the Office of Management and Budget (OMB) receives a copy of your comments on or before May 7, 2018.

Public Hearing. If a public hearing is requested by April 11, 2018, then we will hold a public hearing on April 23, 2018 at the location described in the **ADDRESSES** section. The last day to pre-register in advance to speak at the public hearing will be April 19, 2018.

ADDRESSES: *Comments.* Submit your comments, identified by Docket ID No. EPA–HQ–OAR–2004–0309, at *http://www.regulations.gov.* Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from *Regulations.gov*. (See **SUPPLEMENTARY INFORMATION** for detail about how EPA treats submitted comments.) *Regulations.gov* is our preferred method of receiving comments. However, other submission methods are accepted. To ship or send mail via the United States Postal Service, use the following address: U.S. Environmental Protection Agency, EPA Docket Center, Docket ID No. EPA–HQ–OAR–2004–0309, Mail Code 28221T, 1200 Pennsylvania Avenue NW, Washington, DC 20460. Use the following Docket Center address if you are using express mail, commercial delivery, hand delivery or courier: EPA Docket Center, EPA William Jefferson Clinton (WJC) West Building, Room 3334, 1301 Constitution Avenue NW, Washington, DC 20004. Delivery verification signatures will be available only during regular business hours.

Public Hearing. If a public hearing is requested, it will be held at EPA Headquarters, EPA WJC East Building, 1201 Constitution Avenue NW, Washington, DC 20004. If a public hearing is requested, then we will provide details about the public hearing on our website at: *https://www.epa.gov/stationary-sources-air-pollution/wet-formed-fiberglass-mat-production-national-emission-standards.* The EPA does not intend to publish another document in the **Federal Register** announcing any updates on the request for a public hearing. Please contact Virginia Hunt at (919) 541–0832 or by email at *hunt.virginia@epa.gov* to request a public hearing, to register to speak at the public hearing, or to inquire as to whether a public hearing will be held. See **SUPPLEMENTARY INFORMATION** for instructions on registering and attending a public hearing.

FOR FURTHER INFORMATION CONTACT: For questions about this proposed action, contact Mary Johnson, Sector Policies and Programs Division (Mail Code D243–01), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541–5025; fax number: (919) 541–4991; and email address: *johnson.mary@epa.gov* or Christian Fellner, Sector Policies and Programs Division (Mail Code D243–01), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541–4003; fax number: (919) 541–4991; and email address: *fellner.christian@epa.gov.*

For specific information regarding the risk modeling methodology, contact Ted Palma, Health and Environmental Impacts Division (Mail Code 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 national emissions standards for hazardous air pollutants (NESHAP) to a particular entity, contact Sara Ayres, Office of Enforcement and Compliance Assurance, U.S. Environmental Protection Agency, USEPA 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:

Public hearing. The EPA will make every effort to accommodate all speakers who arrive and register. If a hearing is held at a U.S. government facility, individuals planning to attend should be prepared to show a current, valid state- or federal-approved picture identification to the security staff in order to gain access to the meeting room. An expired form of identification will not be permitted. Please note that the Real ID Act, passed by Congress in 2005, established new requirements for entering federal facilities. If your driver's license is issued by a noncompliant state, you must present an additional form of identification to enter a federal facility. Acceptable alternative forms of identification include: Federal employee badge, passports, enhanced driver's licenses, and military identification cards. Additional information on the Real ID Act is available at *https://www.dhs.gov/real-id-frequently-asked-questions.* In addition, you will need to obtain a property pass for any personal belongings you bring with you. Upon leaving the building, you will be required to return this property pass to the security desk. No large signs will be allowed in the building, cameras may only be used outside of the building and demonstrations will not be allowed on federal property for security reasons.

Docket. The EPA has established a docket for this action under Docket ID No. EPA–HQ–OAR–2004–0309. All documents in the docket are listed in the *Regulations.gov* index. Although

listed in the index, some information is not publicly available, *e.g.,* CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the internet and will be publicly available only in hard copy. Publicly available docket materials are available either electronically in *Regulations.gov* or in hard copy at the EPA Docket Center, Room 3334, EPA WJC West Building, 1301 Constitution Avenue NW, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the EPA Docket Center is (202) 566–1742.

Instructions. Direct your comments to Docket ID No. EPA–HQ–OAR–2004–0309. The EPA's policy is that all comments received will be included in the public docket without change and may be made available online at *http://www.regulations.gov,* including any personal information provided, unless the comment includes information claimed to be CBI or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through *http://www.regulations.gov* or email. This type of information should be submitted by mail as discussed in section I.C of this preamble.

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

The *http://www.regulations.gov* website is an ''anonymous access'' system, which means the EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to the EPA without going through *http://www.regulations.gov,* your email address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the internet. If you submit an electronic comment, the EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD–ROM you submit. If the EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, the EPA may not be able to consider your comment. Electronic files should not include special characters or any form of encryption and be free of any defects or viruses. For additional information about the EPA's public docket, visit the EPA Docket Center homepage at *http://www.epa.gov/dockets.*

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

AEGL acute exposure guideline level
AERMOD air dispersion model used by the HEM–3 model
ARMA Asphalt Roofing Manufacturers Association
ATSDR Agency for Toxic Substances and Disease Registry
BACT best available control technology
BBDR biologically based dose response
CAA Clean Air Act
CalEPA California EPA
CBI Confidential Business Information
CDX Central Data Exchange
CEDRI Compliance and Emissions Data Reporting Interface
CFR Code of Federal Regulations
CIIT Chemical Industry Institute of Toxicology
ECHO Enforcement and Compliance History Online
EPA Environmental Protection Agency
ERPG Emergency Response Planning Guideline
ERT Electronic Reporting Tool
HAP hazardous air pollutant(s)
HCl hydrochloric acid
HEM–3 Human Exposure Model, Version 1.1.0
HF hydrogen fluoride
HI hazard index
HQ hazard quotient
IBR incorporation by reference
ICR information collection request
IRIS Integrated Risk Information System
kg/Mg kilograms per megagram
km kilometer
LAER lowest achievable emission rate
lb/ton pounds per ton
MACT maximum achievable control technology
mg/m^3 milligrams per cubic meter
MIR maximum individual risk
NAICS North American Industry Classification System
NAS National Academy of Sciences
NATA National Air Toxics Assessment
NEI National Emissions Inventory
NESHAP national emission standards for hazardous air pollutants
NRDC Natural Resources Defense Council
NSR New Source Review
NTTAA National Technology Transfer and Advancement Act
OAQPS Office of Air Quality Planning and Standards
OMB Office of Management and Budget
PB–HAP hazardous air pollutants known to be persistent and bio-accumulative in the environment
PRA Paperwork Reduction Act
QA quality assurance
RACT reasonably available control technology
RBLC RACT/BACT/LAER Clearinghouse
REL reference exposure level
RFA Regulatory Flexibility Act
RfC reference concentration
RTR residual risk and technology review
SAB Science Advisory Board
SSM startup, shutdown, and malfunction
TOSHI target organ-specific hazard index
tpy tons per year
UF uncertainty factor
μg/m^3 microgram per cubic meter
UMRA Unfunded Mandates Reform Act
URE unit risk estimate
VCS voluntary consensus standards

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

I. General Information

A. Does this action apply to me?

Table 1 of this preamble lists the NESHAP and the associated regulated industrial source category that is the subject of this proposal. Table 1 is not intended to be exhaustive, but rather provides a guide for readers regarding the entities that this proposed action is likely to affect. The proposed standards, once promulgated, will be directly applicable to the affected sources. Federal, state, local, and tribal government entities would not be affected by this proposed action. The Wet-Formed Fiberglass Mat Production source category was added to the list of categories of major sources of HAP published under section 112(c) of the CAA in an action that concurrently promulgated NESHAP for the Wet-Formed Fiberglass Mat Production source category (67 FR 17824, April 11, 2002). As defined in that action, in wet-formed fiberglass mat production, glass fibers are bonded with an organic resin. The mat is formed as the resin is dried and cured in heated ovens.

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

Source category	NESHAP	NAICS code [1]
Wet-Formed Fiberglass Mat Production	Wet-Formed Fiberglass Mat Production	327212

[1] North American Industry Classification System.

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

In addition to being available in the docket, an electronic copy of this action is available on the internet. Following signature by the EPA Administrator, the EPA will post a copy of this proposed action at *https://www.epa.gov/stationary-sources-air-pollution/wet-formed-fiberglass-mat-production-national-emission-standards.* Following publication in the **Federal Register**, the EPA will post the **Federal Register** version of the proposal and key technical documents at this same website. Information on the overall RTR program is available at *https://www3.epa.gov/ttn/atw/rrisk/rtrpg.html.*

A redline version of the regulatory language that incorporates the proposed changes in this action is available in the docket for this action (Docket ID No. EPA–HQ–OAR–2004–0309).

C. What should I consider as I prepare my comments for the EPA?

Submitting CBI. Do not submit information containing CBI to the EPA through *http://www.regulations.gov* or email. Clearly mark the part or all of the information that you claim to be CBI. For CBI information on a disk or CD–ROM that you mail to the EPA, mark the outside of the disk or CD–ROM as CBI and then identify electronically within the disk or CD–ROM the specific information that is claimed as CBI. In addition to one complete version of the comments that includes information claimed as CBI, you must submit a copy of the comments that does not contain the information claimed as CBI for inclusion in the public docket. If you submit a CD–ROM or disk that does not contain CBI, mark the outside of the disk or CD–ROM clearly that it does not contain CBI. Information not marked as CBI will be included in the public docket and the EPA's electronic public docket without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 Code of Federal Regulations (CFR) part 2. Send or deliver information identified as CBI only to the following address: OAQPS Document Control Officer (C404–02), OAQPS, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, Attention Docket ID No. EPA–HQ–OAR–2004–0309.

II. Background

A. What is the statutory authority for this action?

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

In the first stage of the CAA section 112 standard setting process, the EPA promulgates technology-based standards under CAA section 112(d) for categories of sources identified as emitting one or more of the HAP listed in CAA section 112(b). Sources of HAP emissions are either major sources or area sources, and CAA section 112 establishes different requirements for major source standards and area source standards. ''Major

sources'' are those that emit or have the potential to emit 10 tons per year (tpy) or more of a single HAP or 25 tpy or more of any combination of HAP. All other sources are ''area sources.'' For major sources, CAA section 112(d) provides that the technology-based NESHAP must reflect the maximum degree of emission reductions of HAP achievable (after considering cost, energy requirements, and non-air quality health and environmental impacts). These standards are commonly referred to as MACT standards. CAA section 112(d)(3) also establishes a minimum control level for MACT standards, known as the MACT ''floor.'' The EPA must also consider control options that are more stringent than the floor. Standards more stringent than the floor are commonly referred to as beyond-the-floor standards. In certain instances, as provided in CAA section 112(h), EPA may set work practice standards where it is not feasible to prescribe or enforce a numerical emission standard. For area sources, CAA section 112(d)(5) gives the EPA discretion to set standards based on generally available control technologies or management practices (GACT standards) in lieu of MACT standards.

The second stage in standard-setting focuses on identifying and addressing any remaining (*i.e.,* ''residual'') risk according to CAA section 112(f). Section 112(f)(2) of the CAA requires the EPA to determine for source categories subject to MACT standards whether promulgation of additional standards is needed to provide an ample margin of safety to protect public health or to prevent an adverse environmental effect. Section 112(d)(5) of the CAA provides that this residual risk review is not required for categories of area sources subject to GACT standards. Section 112(f)(2)(B) of the CAA further expressly preserves the EPA's use of the two-step approach for developing standards to address any residual risk and the Agency's interpretation of ''ample margin of safety'' developed in the *National Emissions Standards for Hazardous Air Pollutants: Benzene Emissions from Maleic Anhydride Plants, Ethylbenzene/Styrene Plants, Benzene Storage Vessels, Benzene Equipment Leaks, and Coke By-Product Recovery Plants* (Benzene NESHAP) (54 FR 38044, September 14, 1989). The EPA notified Congress in the Risk Report that the Agency intended to use the Benzene NESHAP approach in making CAA section 112(f) residual risk determinations (EPA–453/R–99–001, p. ES–11). The EPA subsequently adopted this approach in its residual risk determinations and the United States Court of Appeals for the District of Columbia Circuit (the Court) upheld the EPA's interpretation that CAA section 112(f)(2) incorporates the approach established in the Benzene NESHAP. See *NRDC* v. *EPA,* 529 F.3d 1077, 1083 (DC Cir. 2008).

The approach incorporated into the CAA and used by the EPA to evaluate residual risk and to develop standards under CAA section 112(f)(2) is a two-step approach. In the first step, the EPA determines whether risks are acceptable. This determination ''considers all health information, including risk estimation uncertainty, and includes a presumptive limit on maximum individual lifetime [cancer] risk (MIR) [1] of approximately [1-in-10 thousand] [*i.e.,* 100-in-1 million].'' 54 FR 38045, September 14, 1989. If risks are unacceptable, the EPA must determine the emissions standards necessary to bring risks to an acceptable level without considering costs. In the second step of the approach, the EPA considers whether the emissions standards provide an ample margin of safety ''in consideration of all health information, including the number of persons at risk levels higher than approximately [1-in-1 million], as well as other relevant factors, including costs and economic impacts, technological feasibility, and other factors relevant to each particular decision.'' *Id.* The EPA must promulgate emission standards necessary to provide an ample margin of safety to protect public health. After conducting the ample margin of safety analysis, we consider whether a more stringent standard is necessary to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect.

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

[1] Although defined as ''maximum individual risk,'' MIR refers only to cancer risk. MIR, one metric for assessing cancer risk, is the estimated risk if an individual were exposed to the maximum level of a pollutant for a lifetime.

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

The NESHAP for the Wet-Formed Fiberglass Mat Production source category were promulgated on April 11, 2002 (67 FR 17824), in an action that also added the source category to the list of categories of major sources of HAP published under section 112(c) of the CAA and to the source category schedule for NESHAP. The NESHAP are codified at 40 CFR part 63, subpart HHHH. Wet-formed fiberglass mat is used as a substrate for multiple roofing products, as reinforcement for various plastic, cement, and gypsum products, and in miscellaneous specialty products. The fiberglass mat is made of glass fibers that have been bonded with a formaldehyde-based resin. 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 carry away 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 are formaldehyde, which is classified as a known, probable, or possible carcinogen, and methanol. We are aware of seven wet-formed fiberglass mat production facilities that are subject to the NESHAP. Five of the affected facilities have single mat lines and two of the affected facilities have two mat lines.

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 (kg/Mg) of wet-formed fiberglass mat produced (0.05 pounds per ton (lb/ton) of wet-formed fiberglass mat produced) or (2) a minimum of 96-percent destruction efficiency of formaldehyde. Thermal oxidizers or similar controls (*e.g.,* regenerative thermal oxidizer, regenerative catalytic oxidizer) are used by facilities subject to the NESHAP to control their drying and curing oven exhausts.

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

The EPA used several means to collect the information necessary to conduct the residual risk assessment and technology review for the Wet-Formed Fiberglass Mat Production source category. To confirm whether facilities identified as potentially subject to the NESHAP were in fact subject to the standards, we requested air permits and/or performance test data from various state and local agencies. After developing our final list of affected facilities, the status of each facility was confirmed in consultation with the Asphalt Roofing Manufacturers Association (ARMA) and ARMA-member companies. The EPA had discussions with the four companies that own one or more of the affected facilities regarding each facility's production process and emission sources, available emissions test data and emissions estimates, measures used to control emissions, and other aspects of facility operations. The facility-specific information from state and local agencies and companies with affected facilities provided support for this action's risk and technology reviews.

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

The EPA used multiple sources of information to support this proposed action. Before developing the final list of affected facilities described in section II.C of this preamble, the EPA's Enforcement and Compliance History Online (ECHO) database was used as a tool to identify potentially affected facilities with wet-formed fiberglass mat production operations that are subject to the NESHAP. The ECHO database provides integrated compliance and enforcement information for approximately 800,000 regulated facilities nationwide.

The 2014 National Emissions Inventory (NEI) database provided facility-specific data and MACT category data that were used to supplement the performance test data in developing the modeling file for the risk review. The NEI is a database that contains information about sources that emit criteria air pollutants, their precursors, and HAP. The database includes estimates of annual air pollutant emissions from point, nonpoint, and mobile sources in the 50 states, the District of Columbia, Puerto Rico, and the Virgin Islands. The EPA collects this information and releases an updated version of the NEI database every 3 years. The NEI includes information necessary for conducting risk modeling, including annual HAP emissions estimates from individual emission points at facilities and the related emissions release parameters.

In conducting the technology review, we examined information in the Reasonably Available Control Technology (RACT)/Best Available Control Technology (BACT)/Lowest Achievable Emission Rate (LAER) Clearinghouse (RBLC) to identify technologies in use and determine if there have been developments in practices, processes, or control technologies. The RBLC is a database that contains case-specific information of air pollution technologies that have been required to reduce the emissions of air pollutants from stationary sources. Under the EPA's New Source Review (NSR) program, if a facility is planning new construction or a modification that will increase the air emissions by a large amount, an NSR permit must be obtained. This central database promotes the sharing of information among permitting agencies and aids in case-by-case determinations for NSR permits. The EPA also reviewed other information sources to determine if there have been developments in practices, processes, or control technologies in the Wet-Formed Fiberglass Mat Production source category. We reviewed regulatory actions for emission sources similar to mat drying and curing ovens and conducted a review of literature published by industry organizations, technical journals, and government organizations.

III. Analytical Procedures

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

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

As discussed in section II.A of this preamble and in the Benzene NESHAP, in evaluating and developing standards under CAA section 112(f)(2), we apply a two-step approach to determine whether or not risks are acceptable and to determine if the standards provide an ample margin of safety to protect public health. As explained in the Benzene NESHAP, ''the first step judgment on acceptability cannot be reduced to any single factor'' and, thus, ''[t]he Administrator believes that the acceptability of risk under section 112 is best judged on the basis of a broad set of health risk measures and information.'' 54 FR 38046, September 14, 1989. Similarly, with regard to the ample margin of safety determination, ''the Agency again considers all of the health risk and other health information considered in the first step. Beyond that information, additional factors relating to the appropriate level of control will also be considered, including cost and economic impacts of controls, technological feasibility, uncertainties, and any other relevant factors.'' *Id.*

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

''[t]he policy chosen by the Administrator permits consideration of multiple measures of health risk. Not only can the MIR figure be considered, but also incidence, the presence of non-cancer health effects, and the uncertainties of the risk estimates. In this way, the effect on the most exposed individuals can be reviewed as well as the impact on the general public. These factors can then be weighed in each individual case. This approach complies with the *Vinyl Chloride* mandate that the Administrator ascertain an acceptable level of risk to the public by employing his expertise to assess

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

available data. It also complies with the Congressional intent behind the CAA, which did not exclude the use of any particular measure of public health risk from the EPA's consideration with respect to CAA section 112 regulations, and thereby implicitly permits consideration of any and all measures of health risk which the Administrator, in his judgment, believes are appropriate to determining what will 'protect the public health'.''

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

The EPA notes that it has not considered certain health information to date in making residual risk determinations. At this time, we do not attempt to quantify those HAP risks that may be associated with emissions from other facilities that do not include the source category under review, mobile source emissions, natural source emissions, persistent environmental pollution, or atmospheric transformation in the vicinity of the sources in the category.

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

In response to the SAB recommendations, the EPA is incorporating cumulative risk analyses into its RTR risk assessments, including those reflected in this proposal. The Agency is (1) conducting facility-wide assessments, which include source category emission points, as well as other emission points within the facilities; (2) combining exposures from multiple sources in the same category that could affect the same individuals; and (3) for some persistent and bioaccumulative pollutants, analyzing the ingestion route of exposure. In addition, the RTR risk assessments have always considered aggregate cancer risk from all carcinogens and aggregate noncancer HI from all noncarcinogens affecting the same target organ system.

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

[3] The EPA's responses to this and all other key recommendations of the SAB's advisory on RTR risk assessment methodologies (which is available at: *http://yosemite.epa.gov/sab/sabproduct.nsf/4AB3966E263D943A8525771F00668381/$File/EPA-SAB-10-007-unsigned.pdf*) are outlined in a memorandum to this rulemaking docket from David Guinnup titled *EPA's Actions in Response to the Key Recommendations of the SAB Review of RTR Risk Assessment Methodologies.*

B. How do we perform the technology review?

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

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

In addition to reviewing the practices, processes, and control technologies that were considered at the time we originally developed (or last updated) the NESHAP, we review a variety of data sources in our investigation of potential practices, processes, or controls to consider. Among the sources we reviewed were the NESHAP for various industries that were promulgated since the MACT standards being reviewed in this action. We reviewed the regulatory requirements and/or technical analyses associated with these regulatory actions to identify any practices, processes, and control technologies considered in these efforts

that could be applied to emission sources in the Wet-Formed Fiberglass Mat Production source category, specifically drying and curing ovens, as well as the costs, non-air impacts, and energy implications associated with the use of these technologies. Additionally, during discussions with affected facilities, we asked about developments in practices, processes, or control technology. Finally, we reviewed information from other sources, such as state and/or local permitting agency databases and industry-supported databases.

C. How did we estimate post-MACT risks posed by the source category?

The EPA conducted a risk assessment that provides estimates of the MIR for cancer posed by the HAP emissions from each source in the source category, the HI for chronic exposures to HAP with the potential to cause noncancer health effects, and the HQ for acute exposures to HAP with the potential to cause noncancer health effects. The assessment also provides estimates of the distribution of cancer risks within the exposed populations, cancer incidence, and an evaluation of the potential for adverse environmental effects. The seven sections that follow this paragraph describe how we estimated emissions and conducted the risk assessment. The docket for this action contains the following document which provides more information on the risk assessment inputs and models: *Residual Risk Assessment for the Wet-Formed Fiberglass Mat Production Source Category in Support of the February 2018 Risk and Technology Review Proposed Rule.* The methods used to assess risks (as described in the seven primary steps below) are consistent with those peer-reviewed by a panel of the EPA's Science Advisory Board (SAB) in 2009 and described in their peer review report issued in 2010;[4] they are also consistent with the key recommendations contained in that report.

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

Data for nine wet-formed fiberglass mat production lines at seven facilities were used to create the RTR emissions dataset as described in sections II.C and II.D of this preamble. The emission sources included in the RTR emissions dataset include drying and curing ovens, which are the primary HAP emission sources at wet-formed fiberglass mat production facilities and currently regulated by the NESHAP. The RTR emissions dataset also includes emissions from the binder application vacuum exhaust which is the emission release point for the resin-binder application process. As stated in section II.B of this preamble, the primary HAP emitted are formaldehyde and methanol.

Actual emissions estimates for drying and curing oven exhaust and binder application vacuum exhaust at the seven affected facilities were based on stack test data, NEI data, and engineering estimates. For drying and curing oven exhaust, actual formaldehyde emissions were based on emissions data from the most recent stack test. For the facilities using binders containing methanol in addition to formaldehyde, actual methanol emissions from the drying and curing oven exhaust were estimated by adjusting each drying and curing oven's actual formaldehyde emissions estimate based on the ratio of methanol to formaldehyde emissions reported to the 2014 NEI for each oven. For binder application vacuum exhaust, actual formaldehyde emissions and actual methanol emissions at facilities using binders containing methanol were based on stack test emissions data in the limited instances where available. Where formaldehyde data were unavailable, actual formaldehyde emissions were estimated using a factor based on data from one affected facility that tested both the uncontrolled emissions from the drying and curing oven and the emissions from the binder application vacuum exhaust. Where methanol data were unavailable, actual methanol emissions from the binder application vacuum exhaust were estimated by adjusting the actual formaldehyde emissions estimate for the binder application vacuum exhaust based on the ratio of methanol to formaldehyde emissions reported to the 2014 NEI for the oven associated with each binder application process.

For each emission release point (*i.e.,* drying and curing oven exhaust and binder application vacuum exhaust), emissions release characteristic data such as emission release height, diameter, temperature, velocity, flow rate, and locational latitude/longitude coordinates were identified. For drying and curing ovens, the emission release point is an exhaust stack. For the resin-binder application process, the emission release point is the location of the binder application vacuum exhaust, which is most commonly routed to one or more roof vents. With one exception, the binder application vacuum exhaust release points were modeled as stacks. The one process that exhausts to a louvered sidewall was modeled as a fugitive release. Parameters for the emission release points were primarily obtained from performance tests, the 2014 NEI database, air permits, and information collected in consultation with each facility. Default parameter values based on MACT source category 2014 NEI information were used for the binder application vacuum exhaust when site-specific information was not available.

The EPA conducted a quality assurance (QA) check of source locations, emission release characteristics, and annual emissions estimates. In addition, each company had the opportunity to review the information regarding their sources and provide updated source data. The revisions we received and incorporated into the modeling file regarded emission release point details (*e.g.,* number of emission release points, release height and diameter, latitude/longitude coordinates).

Additional details on the data and methods used to develop actual emissions estimates for the risk modeling, including EPA's QA review, are provided in the memorandum, *Wet-Formed Fiberglass: Residual Risk Modeling File Documentation* (*Modeling File Documentation Memo*), which is available in the docket for this action.

2. How did we estimate MACT-allowable emissions?

The available emissions data in the RTR emissions dataset include estimates of the mass of HAP emitted during a specified annual time period. These ''actual'' emission levels are often lower than the emission levels allowed under the requirements of the current MACT standards. The emissions level allowed to be emitted under the MACT standards is referred to as the ''MACT-allowable'' emissions level. We discussed the use of both MACT-allowable and actual emissions in the final Coke Oven Batteries RTR (70 FR 19998–19999, April 15, 2005) and in the proposed and final Hazardous Organic NESHAP RTRs (71 FR 34428, June 14, 2006, and 71 FR 76609, December 21, 2006, respectively). In those actions, we noted that assessing the risks at the MACT-allowable level is inherently reasonable since these risks reflect the maximum level facilities could emit and still comply with national emission standards. We also explained that it is reasonable to consider actual emissions, where such data are available, in both

[4] U.S. EPA SAB. *Risk and Technology Review (RTR) Risk Assessment Methodologies: For Review by the EPA's Science Advisory Board with Case Studies—MACT I Petroleum Refining Sources and Portland Cement Manufacturing,* May 2010.

steps of the risk analysis, in accordance with the Benzene NESHAP approach. (54 FR 38044, September 14, 1989.)

MACT-allowable emissions estimates were based on the level of control required by the Wet-formed Fiberglass Mat Production NESHAP. For drying and curing ovens, 40 CFR part 63, subpart HHHH requires a 96-percent destruction efficiency for formaldehyde. The MACT-allowable formaldehyde emissions for drying and curing oven exhaust were calculated based on the actual formaldehyde emissions levels adjusted to reflect 96 percent control, which is the minimum percent destruction efficiency for formaldehyde allowed under the NESHAP. MACT-allowable methanol emissions from drying and curing oven exhaust were estimated by adjusting each drying and curing oven's MACT-allowable formaldehyde emissions estimate based on the ratio of methanol to formaldehyde emissions reported to the 2014 NEI for each oven. For binder application vacuum exhaust, which has no control requirements under the NESHAP, the MACT-allowable formaldehyde and methanol emissions were assumed equal to the actual emissions estimates with the exception of one facility where the binder application vacuum exhaust is combined with the drying and curing oven exhaust. The *Modeling File Documentation Memo,* available in the docket for this action, contains additional information on the development of estimated MACT-allowable emissions for the risk modeling.

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

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

a. Dispersion Modeling

The air dispersion model, AERMOD, used by the HEM–3 model, is one of the EPA's preferred models for assessing air pollutant concentrations from industrial facilities.[5] To perform the dispersion modeling and to develop the preliminary risk estimates, HEM–3 draws on three data libraries. The first is a library of meteorological data, which is used for dispersion calculations. This library includes 1 year (2016) of hourly surface and upper air observations from 824 meteorological stations, selected to provide coverage of the United States and Puerto Rico. A second library of United States Census Bureau census block[6] internal point locations and populations provides the basis of human exposure calculations (U.S. Census, 2010). In addition, for each census block, the census library includes the elevation and controlling hill height, which are also used in dispersion calculations. A third library of pollutant-specific dose-response values is used to estimate health risks. These dose-response values are the latest values recommended by the EPA for HAP. They are available at *https://www.epa.gov/fera/dose-response-assessment-assessing-health-risks-associated-exposure-hazardous-air-pollutants* and are discussed in more detail later in this section.

b. Risk From Chronic Exposure to HAP That May Cause Cancer

In developing the risk assessment for chronic exposures, we used the estimated annual average ambient air concentrations of each HAP emitted by each source for which we have emissions data in the source category. The air concentrations at each nearby census block centroid were used as a surrogate for the chronic inhalation exposure concentration for all the people who reside in that census block. We calculated the MIR for each facility as the cancer risk associated with a continuous lifetime (24 hours per day, 7 days per week, 52 weeks per year, for a 70-year period) exposure to the maximum concentration at the centroid of inhabited census blocks. Individual cancer risks were calculated by multiplying the estimated lifetime exposure to the ambient concentration of each HAP (in micrograms per cubic meter ($\mu g/m^3$)) by its unit risk estimate (URE). The URE is an upper bound estimate of an individual's probability of contracting cancer over a lifetime of exposure to a concentration of 1 microgram of the pollutant per cubic meter of air. For residual risk assessments, we generally use UREs from the EPA's Integrated Risk Information System (IRIS). For carcinogenic pollutants without IRIS values, we look to other reputable sources of cancer dose-response values, often using California EPA (CalEPA) UREs, where available. In cases where new, scientifically credible dose-response values have been developed in a manner consistent with the EPA guidelines and have undergone a peer review process similar to that used by the EPA, we may use such dose-response values in place of, or in addition to, other values, if appropriate.

In 2004, the EPA determined that the Chemical Industry Institute of Toxicology (CIIT) cancer dose-response value for formaldehyde ($5.5 \times 10–9$ per milligrams per cubic meter (mg/m^3)) was based on better science than the 1991 IRIS dose-response value ($1.3 \times 10–5$ per mg/m^3), and we switched from using the IRIS value to the CIIT value in risk assessments supporting regulatory actions. Based on subsequent published research, however, the EPA changed its determination regarding the CIIT model, and, in 2010, the EPA returned to using the 1991 IRIS value. The National Academy of Sciences (NAS) completed its review of the EPA's draft assessment in April of 2011 (*http://www.nap.edu/catalog.php?recordid=13142*), and the EPA has been working on revising the formaldehyde assessment. The EPA will follow the NAS Report recommendations and will present results obtained by implementing the biologically based dose response (BBDR) model for formaldehyde. The EPA will compare these estimates with those currently presented in the External Review draft of the assessment and will discuss their strengths and weaknesses. As recommended by the NAS committee, appropriate sensitivity and uncertainty analyses will be an integral component of implementing the BBDR model. The draft IRIS assessment will be revised in response to the NAS peer review and public comments and the final assessment will be posted on the IRIS database. In the interim, we will present findings using the 1991 IRIS value as a primary estimate and may also consider other information as the science evolves. To estimate incremental individual lifetime cancer risks associated with emissions from the facilities in the source category, EPA summed the risks for each of the

[5] U.S. EPA. Revision to the *Guideline on Air Quality Models: Adoption of a Preferred General Purpose (Flat and Complex Terrain) Dispersion Model and Other Revisions* (70 FR 68218, November 9, 2005).

[6] A census block is the smallest geographic area for which census statistics are tabulated.

carcinogenic HAP[7] emitted by the modeled sources. Cancer incidence and the distribution of individual cancer risks for the population within 50 km of the sources were also estimated for the source category by summing individual risks. A distance of 50 km is consistent with both the analysis supporting the 1989 Benzene NESHAP (54 FR 38044, September 14, 1989) and the limitations of Gaussian dispersion models, including AERMOD.

c. Risk From Chronic Exposure to HAP That May Cause Health Effects Other Than Cancer

To assess the risk of noncancer health effects from chronic exposure to HAP, we calculate either an HQ or a target organ-specific hazard index (TOSHI). We calculate an HQ when a single noncancer HAP is emitted. Where more than one noncancer HAP is emitted, we sum the HQ for each of the HAP that affects a common TOSHI. The HQ is the estimated exposure divided by the chronic noncancer dose-response value, which is a value selected from one of several sources. The preferred chronic noncancer dose-response value is the EPA RfC (*https://iaspub.epa.gov/sor_internet/registry/termreg/searchandretrieve/glossariesandkeywordlists/search.do?details=&vocabName=IRIS%20Glossary*), defined as ''an estimate (with uncertainty spanning perhaps an order of magnitude) of a continuous inhalation exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime.'' In cases where an RfC from the EPA's IRIS database is not available or where the EPA determines that using a value other than the RfC is appropriate, the chronic noncancer dose-response value can be a value from the following prioritized sources, which define their dose-response values similarly to EPA: (1) The Agency for Toxic Substances and Disease Registry (ATSDR) Minimum Risk Level (*http://www.atsdr.cdc.gov/mrls/index.asp*); (2) the CalEPA Chronic Reference Exposure Level (REL) (*http://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0*); or (3), as noted above, a scientifically credible dose-response value that has been developed in a manner consistent with the EPA guidelines and has undergone a peer review process similar to that used by the EPA.

d. Risk From Acute Exposure to HAP That May Cause Health Effects Other Than Cancer

For each HAP for which appropriate acute inhalation dose-response values are available, the EPA also assesses the potential health risks due to acute exposure. For these assessments, the EPA makes conservative assumptions about emission rates, meteorology, and exposure location. We use the peak hourly emission rate,[8] worst-case dispersion conditions, and, in accordance with our mandate under section 112 of the CAA, the point of highest off-site exposure to assess the potential risk to the maximally exposed individual.

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

An acute REL is defined as ''the concentration level at or below which no adverse health effects are anticipated for a specified exposure duration.''[9] Acute RELs are based on the most sensitive, relevant, adverse health effect reported in the peer-reviewed medical and toxicological literature. They are designed to protect the most sensitive individuals in the population through the inclusion of margins of safety. Because margins of safety are incorporated to address data gaps and uncertainties, exceeding the REL does not automatically indicate an adverse health impact. AEGLs represent threshold exposure limits for the general public and are applicable to emergency exposures ranging from 10 minutes to 8 hours.[10] They are guideline levels for ''once-in-a-lifetime, short-term exposures to airborne concentrations of acutely toxic, high-priority chemicals.'' *Id.* at 21. The AEGL–1 is specifically defined as ''the airborne concentration (expressed as ppm (parts per million) or mg/m^3 (milligrams per cubic meter)) of a substance above which it is predicted that the general population, including susceptible individuals, could experience notable discomfort, irritation, or certain asymptomatic nonsensory effects. However, the effects are not disabling and are transient and reversible upon cessation of exposure.'' Airborne concentrations below AEGL–1 represent exposure levels that can produce mild and progressively increasing but transient and nondisabling odor, taste, and sensory irritation or certain asymptomatic, nonsensory effects.'' *Id.* AEGL–2 are defined as ''the airborne concentration (expressed as parts per million or milligrams per cubic meter) of a substance above which it is predicted that the general population, including susceptible individuals, could experience irreversible or other serious, long-lasting adverse health effects or an impaired ability to escape.'' *Id.*

[7] EPA classifies carcinogens as: Carcinogenic to humans, likely to be carcinogenic to humans, and suggestive evidence of carcinogenic potential. These classifications also coincide with the terms ''known carcinogen, probable carcinogen, and possible carcinogen,'' respectively, which are the terms advocated in the EPA's *Guidelines for Carcinogen Risk Assessment,* published in 1986 (51 FR 33992, September 24, 1986). In August 2000, the document, *Supplemental Guidance for Conducting Health Risk Assessment of Chemical Mixtures* (EPA/630/R–00/002) was published as a supplement to the 1986 document. Copies of both documents can be obtained from *https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=20533&CFID=70315376&CFTOKEN=71597944.* Summing the risks of these individual compounds to obtain the cumulative cancer risks is an approach that was recommended by the EPA's SAB in their 2002 peer review of the EPA's National Air Toxics Assessment (NATA) titled *NATA—Evaluating the National-scale Air Toxics Assessment 1996 Data—an SAB Advisory,* available at *http://yosemite.epa.gov/sab/sabproduct.nsf/214C6E915BB04E14852570CA007A682C/$File/ecadv02001.pdf.*

[8] In the absence of hourly emission data, we develop estimates of maximum hourly emission rates by multiplying the average actual annual emissions rates by a default factor (usually 10) to account for variability. This is documented in *Residual Risk Assessment for the Wet-Formed Fiberglass Mat Production Source Category in Support of the February 2018 Risk and Technology Review Proposed Rule* and in Appendix 5 of the report: *Analysis of Data on Short-term Emission Rates Relative to Long-term Emission Rates.* Both are available in the docket for this rulemaking.

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

[10] NAS, 2001. *Standing Operating Procedures for Developing Acute Exposure Levels for Hazardous Chemicals,* page 2. Available at *https://www.epa.gov/sites/production/files/2015-09/documents/sop_final_standing_operating_procedures_2001.pdf.* Note that the National Advisory Committee/AEGL Committee ended in October 2011, but the AEGL program continues to operate at the EPA and works with the National Academies to publish final AEGLs, (*https://www.epa.gov/aegl*).

ERPGs are developed for emergency planning and are intended as health-based guideline concentrations for single exposures to chemicals.'' [11] *Id.* at 1. The ERPG–1 is defined as ''the maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to 1 hour without experiencing other than mild transient adverse health effects or without perceiving a clearly defined, objectionable odor.'' *Id.* at 2. Similarly, the ERPG–2 is defined as ''the maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to one hour without experiencing or developing irreversible or other serious health effects or symptoms which could impair an individual's ability to take protective action.'' *Id.* at 1.

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

For this source category, hourly emissions data were used to estimate maximum hourly emissions. In general, emissions used to assess the potential health risks due to acute exposure were estimated using the same approach used to develop actual emissions estimates described in section III.C.1 of this preamble, except that emissions used to estimate acute exposure were based on maximum hourly emission rates reported during stack tests. For drying and curing oven exhaust, formaldehyde emissions were based on maximum hourly emissions data, considering all test runs from available stack tests. For the facilities using binders containing methanol, methanol emissions from the drying and curing oven exhaust were estimated by adjusting each drying and curing oven's formaldehyde emissions estimate based on the ratio of methanol to formaldehyde emissions reported to the 2014 NEI for each oven. For binder application vacuum exhaust, formaldehyde emissions and methanol emissions at facilities using binders containing methanol were based on maximum hourly emissions data from stack tests in the limited instances where available. Where formaldehyde data were unavailable, formaldehyde emissions were estimated using a factor based on one facility's uncontrolled emissions from its drying and curing oven and emissions from its binder application vacuum exhaust. Where methanol data were unavailable, methanol emissions were estimated by adjusting the formaldehyde emissions estimate for the binder application vacuum exhaust based on the ratio of methanol to formaldehyde emissions reported to the 2014 NEI for the oven associated with each binder application vacuum exhaust.

A further discussion of the development of emissions used to estimate acute exposure for the risk modeling can be found in the risk document, *Residual Risk Assessment for the Wet-Formed Fiberglass Mat Production Source Category in Support of the February 2018 Risk and Technology Review Proposed Rule,* which is available in the docket for this action.

In our acute inhalation screening risk assessment, acute impacts are deemed negligible for HAP where acute HQs are less than or equal to 1 (even under the conservative assumptions of the screening assessment), and no further analysis is performed for these HAP. In cases where an acute HQ from the screening step is greater than 1, we consider additional site-specific data to develop a more refined estimate of the potential for acute impacts of concern.

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

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

For the Wet-Formed Fiberglass Mat Production source category, we did not identify emissions of any PB–HAP. Because we did not identify PB–HAP emissions, no further evaluation of multipathway risk was conducted for this source category.

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

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

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

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

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

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

[11] *ERPGS Procedures and Responsibilities.* March 2014. American Industrial Hygiene Association. Available at: *https://www.aiha.org/get-involved/AIHAGuidelineFoundation/EmergencyResponsePlanningGuidelines/Documents/ERPG%20Committee%20Standard%20Operating%20Procedures%20%20-%20March%2014%20Revision%20%28Updated%2010-2-2014%29.pdf.*

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

For further information on how the environmental risk screening assessment was conducted, including a discussion of the risk metrics used, how the environmental HAP were identified, and how the ecological benchmarks were selected, see Appendix 9 of the *Residual Risk Assessment for the Wet-Formed Fiberglass Mat Production Source Category in Support of the Risk and Technology Review February 2018 Proposed Rule,* which is available in the docket for this action.

b. Environmental Risk Screening Methodology

For the environmental risk screening assessment, the EPA first determined whether any facilities in the Wet-Formed Fiberglass Mat Production source category emitted any of the environmental HAP. For the Wet-Formed Fiberglass Mat Production source category, we did not identify emissions of any of the seven environmental HAP included in the screen. Because we did not identify environmental HAP emissions, no further evaluation of environmental risk was conducted.

6. How did we conduct facility-wide assessments?

To put the source category risks in context, we typically examine the risks from the entire ''facility,'' where the facility includes all HAP-emitting operations within a contiguous area and under common control. In other words, we examine the HAP emissions not only from the source category emission points of interest, but also emissions of HAP from all other emission sources at the facility for which we have data.

For this source category, we conducted the facility-wide assessment using a dataset that the EPA compiled from the 2014 NEI. We used the NEI data for the facility and did not adjust any category or ''non-category'' data. Therefore, there could be differences in the dataset from that used for the source category assessments described in this preamble. We analyzed risks due to the inhalation of HAP that are emitted ''facility-wide'' for the populations residing within 50 km of each facility, consistent with the methods used for the source category analysis described above. For these facility-wide risk analyses, we made a reasonable attempt to identify the source category risks, and these risks were compared to the facility-wide risks to determine the portion of facility-wide risks that could be attributed to the source category addressed in this proposal. We also specifically examined the facility that was associated with the highest estimate of risk and determined the percentage of that risk attributable to the source category of interest. The *Residual Risk Assessment for the Wet-Formed Fiberglass Mat Production Source Category in Support of the Risk and Technology Review February 2018 Proposed Rule,* available through the docket for this action, provides the methodology and results of the facility-wide analyses, including all facility-wide risks and the percentage of source category contribution to facility-wide risks.

7. How did we consider uncertainties in risk assessment?

Uncertainty and the potential for bias are inherent in all risk assessments, including those performed for this proposal. Although uncertainty exists, we believe that our approach, which used conservative tools and assumptions, ensures that our decisions are health and environmentally protective. A brief discussion of the uncertainties in the RTR emissions dataset, dispersion modeling, inhalation exposure estimates, and dose-response relationships follows below. Also included are those uncertainties specific to our acute screening assessments, multipathway screening assessments, and our environmental risk screening assessments. A more thorough discussion of these uncertainties is included in the *Residual Risk Assessment for the Wet-Formed Fiberglass Mat Production Source Category in Support of the Risk and Technology Review February 2018 Proposed Rule,* which is available in the docket for this action. If a multipathway site-specific assessment was performed for this source category, a full discussion of the uncertainties associated with that assessment can be found in Appendix 11 of that document, *Site-Specific Human Health Multipathway Residual Risk Assessment Report.*

a. Uncertainties in the RTR Emissions Dataset

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

b. Uncertainties in Dispersion Modeling

We recognize there is uncertainty in ambient concentration estimates associated with any model, including the EPA's recommended regulatory dispersion model, AERMOD. In using a model to estimate ambient pollutant concentrations, the user chooses certain options to apply. For RTR assessments, we select some model options that have the potential to overestimate ambient air concentrations (*e.g.,* not including plume depletion or pollutant transformation). We select other model options that have the potential to underestimate ambient impacts (*e.g.,* not including building downwash). Other options that we select have the potential to either under- or overestimate ambient levels (*e.g.,* meteorology and receptor locations). On balance, considering the directional nature of the uncertainties commonly present in ambient concentrations estimated by dispersion models, the approach we apply in the RTR assessments should yield unbiased estimates of ambient HAP concentrations. We also note that the selection of meteorology dataset location could have an impact on the risk estimates. As we continue to update and expand our library of meteorological station data used in our risk assessments, we expect to reduce this variability.

c. Uncertainties in Inhalation Exposure Assessment

Although every effort is made to identify all of the relevant facilities and emission points, as well as to develop accurate estimates of the annual emission rates for all relevant HAP, the uncertainties in our emission inventory likely dominate the uncertainties in the exposure assessment. Some uncertainties in our exposure assessment include human mobility, using the centroid of each census block, assuming lifetime exposure, and assuming only outdoor exposures. For

most of these factors, there is neither an under nor overestimate when looking at the maximum individual risks or the incidence, but the shape of the distribution of risks may be affected. With respect to outdoor exposures, actual exposures may not be as high if people spend time indoors, especially for very reactive pollutants or larger particles. For all factors, we reduce uncertainty when possible. For example, with respect to census-block centroids, we analyze large blocks using aerial imagery and adjust locations of the block centroids to better represent the population in the blocks. We also add additional receptor locations where the population of a block is not well represented by a single location.

d. Uncertainties in Dose-Response Relationships

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

Cancer UREs used in our risk assessments are those that have been developed to generally provide an upper bound estimate of risk. That is, they represent a ''plausible upper limit to the true value of a quantity'' (although this is usually not a true statistical confidence limit).[12] In some circumstances, the true risk could be as low as zero; however, in other circumstances the risk could be greater.[13] Chronic noncancer RfC and reference dose (RfD) values represent chronic exposure levels that are intended to be health-protective levels. To derive dose-response values that are intended to be ''without appreciable risk,'' the methodology relies upon an uncertainty factor (UF) approach (U.S. EPA, 1993 and 1994) which considers uncertainty, variability, and gaps in the available data. The UFs are applied to derive dose-response values that are intended to protect against appreciable risk of deleterious effects.

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

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

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

e. Uncertainties in Acute Inhalation Screening Assessments

In addition to the uncertainties highlighted above, there are several factors specific to the acute exposure assessment that the EPA conducts as part of the risk review under section 112 of the CAA. The accuracy of an acute inhalation exposure assessment depends on the simultaneous occurrence of independent factors that may vary greatly, such as hourly emissions rates, meteorology, and the presence of humans at the location of the maximum concentration. In the acute screening assessment that we conduct under the RTR program, we assume that peak emissions from the source category and worst-case meteorological conditions co-occur, thus, resulting in maximum ambient concentrations. These two events are unlikely to occur at the same time, making these assumptions conservative. We then include the additional assumption that a person is located at this point during this same time period. For this source category, these assumptions would tend to be worst-case actual exposures as it is unlikely that a person would be located at the point of maximum exposure during the time when peak emissions and worst-case meteorological conditions occur simultaneously.

IV. Analytical Results and Proposed Decisions

A. What are the results of the risk assessment and analyses?

1. Inhalation Risk Assessment Results

The results of the chronic inhalation cancer risk assessment, based on actual emissions, show the cancer 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 in every 3,000 years. No people were estimated to have cancer risks above 1-in-1 million from HAP emitted from the seven facilities in this source category. The maximum chronic noncancer 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.

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

[12] IRIS glossary (*https://ofmpub.epa.gov/sor_internet/registry/termreg/searchandretrieve/glossariesandkeywordlists/search.do?details=&glossaryName=IRIS%20Glossary*).

[13] An exception to this is the URE for benzene, which is considered to cover a range of values, each end of which is considered to be equally plausible, and which is based on maximum likelihood estimates.

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 1 excess case in every 1,000 years. Based on allowable emission rates, no people were estimated to have cancer risks above 1-in-1 million.

2. Acute Risk Results

Worst-case acute HQs were calculated 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 REL for formaldehyde). Since none of the screening HQ were greater than 1, further refinement of the estimates was not warranted.

3. Multipathway Risk Screening Results

No PB–HAP were emitted from this source category; therefore, a multipathway assessment was not warranted.

4. Environmental Risk Screening Results

We did not identify any PB–HAP or acid gas emissions from this source category. We are unaware of any adverse environmental effect caused by emissions of HAP that are emitted by the source category. Therefore, we do not expect an adverse environmental effect as a result of HAP emissions from this source category.

5. Facility-Wide Risk Results

The results of the facility-wide (both MACT and non-MACT sources) 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 in 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 non-MACT sources.

6. What demographic groups might benefit from this regulation?

To examine the potential for any environmental justice issues that might be associated with the source category, we performed a demographic analysis, which is an assessment of risks to individual demographic groups of the populations living within 5 km and within 50 km of the facilities. In the analysis, we evaluated the distribution of HAP-related cancer and noncancer risks from the Wet-Formed Fiberglass Mat Production source category across different demographic groups within the populations living near facilities.[14]

Results of the demographic analysis indicate that, for two of the 11 demographic groups, African American and people living below the poverty level, the percentage of the population living within 5 km of facilities in the source category is greater than the corresponding national percentage for the same demographic groups. When examining the risk levels of those exposed to source category emissions from the wet-formed fiberglass mat production facilities, we find that no one is exposed to a cancer risk at or above 1-in-1 million or to a chronic noncancer TOSHI greater than 1.

The methodology and the results of the demographic analysis are presented in a technical report, *Risk and Technology Review Analysis of Demographic Factors for Populations Living Near Wet-Formed Fiberglass Mat Production,* which is available in the docket for this action.

B. What are our proposed decisions regarding risk acceptability, ample margin of safety, and adverse environmental effects?

1. Risk Acceptability

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

In this proposal, the EPA estimated risks based on actual and allowable emissions from the Wet-Formed Fiberglass Mat Production source category. As discussed above, we consider our analysis of risk from allowable emissions to be conservative and, as such, to represent an upper bound estimate of risk from emissions allowed under the NESHAP for the source category.

The inhalation cancer risk to the individual most exposed to emissions from sources in the Wet-Formed Fiberglass Mat Production source category is less than 1-in-1 million, based on actual emissions. The estimated incidence of cancer due to inhalation exposure is 0.0003 excess cancer cases per year, or 1 case in 3,000 years, based on actual emissions. For allowable emissions, we estimate that the inhalation cancer risk to the individual most exposed to emissions from sources in this source category is 1-in-1 million. The estimated incidence of cancer due to inhalation exposure is 0.0009 excess cancer cases per year, or one case in every 1,000 years, based on allowable emissions.

The Agency estimates that the maximum chronic noncancer TOSHI from inhalation exposure is 0.006 due to actual emissions and 0.009 due to allowable emissions. The screening assessment of worst-case acute inhalation impacts from worst-case 1-hour emissions indicates that no HAP exceed an acute HQ of 1.

Since no PB–HAP are emitted by this source category, a multipathway risk assessment was not warranted.

In determining whether risk is acceptable, the EPA considered all available health information and risk estimation uncertainty, as described above. The results indicate that both the actual and allowable inhalation cancer risks to the individual most exposed are less than or equal to 1-in-1 million, well below the presumptive limit of acceptability of 100-in-1 million. The maximum chronic noncancer TOSHI due to inhalation exposures is less than 1 for actual and allowable emissions. Finally, the evaluation of acute noncancer risks was conservative and showed that acute risks are below a level of concern. Further, since no PB–HAP are emitted, no multipathway risks are expected as a result of HAP emissions from this source category.

Taking into account this information, the EPA proposes that the risk remaining after implementation of the of the existing MACT standards for the Wet-Formed Fiberglass Mat Production source category is acceptable.

2. Ample Margin of Safety

Under the ample margin of safety analysis, we evaluated the cost and feasibility of available control

[14] Demographic groups included in the analysis are: White, African American, Native American, other races and multiracial, Hispanic or Latino, children 17 years of age and under, adults 18 to 64 years of age, adults 65 years of age and over, adults without a high school diploma, people living below the poverty level, and linguistically isolated people.

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

Our risk analysis indicated the risks from the source category are low for both cancer and noncancer health effects, and, therefore, any risk reductions, from further available control options would result in minimal health benefits. Moreover, as noted in our discussion of the technology review in section IV.C of this preamble, no additional measures were identified for reducing HAP emissions from affected sources in the Wet-Formed Fiberglass Mat Production source category. Thus, we are proposing that the 2002 Wet-Formed Fiberglass Mat Production NESHAP requirements provide an ample margin of safety to protect public health.

3. Adverse Environmental Effects

We did not identify emissions of any of the seven environmental HAP included in our environmental risk screening, and we are unaware of any adverse environmental effects caused by HAP emitted by the Wet-Formed Fiberglass Mat Production source category. Therefore, we do not expect adverse environmental effects as a result of HAP emissions from this source category and we are proposing that it is not necessary to set a more stringent standard to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect.

C. What are the results and proposed decisions based on our technology review?

As described in section III.B of this preamble, our technology review focused on identifying developments in practices, processes, and control technologies for control of formaldehyde emissions from drying and curing ovens at wet-formed fiberglass mat production facilities. In conducting the technology review, we reviewed various informational sources regarding the emissions from drying and curing ovens. The review included a search of the RBLC database and reviews of air permits for wet-formed fiberglass mat production facilities, regulatory actions for emission sources similar to mat drying and curing ovens, and a review of relevant literature. We reviewed these data sources for information on practices, processes, and control technologies that were not considered during the development of the Wet-Formed Fiberglass Mat Production NESHAP. We also looked for information on improvements in practices, processes, and control technologies that have occurred since development of the Wet-Formed Fiberglass Mat Production NEHSAP.

After reviewing information from the aforementioned sources, we did not identify any developments in practices, processes, or control technologies to reduce formaldehyde emissions from the drying and curing ovens used at wet-formed fiberglass mat production facilities. We considered the following four control technologies and processes in our review: carbon absorbers, biofilters, thermal oxidizers, and low-HAP or no-HAP binder formulations. Due to the characteristics of the drying and curing oven exhaust, we concluded that neither carbon adsorbers or biofilters are technically feasible control options. Further, while advancements have been made with low and no-HAP binder formulations, they are not broadly available for the various types of wet-formed fiberglass produced. For example, some wet-formed fiberglass products are used in roofing applications, and mats that are produced with low or no-HAP binders tend to sag, shrink, or become distorted when they come into contact with hot asphalt used in roofing applications. Therefore, we concluded the use of low or no-HAP binder formulations is not a technically feasible process change. We considered improvements in thermal oxidizers given they were identified as technically feasible for reducing HAP emission from drying and curing ovens in the 2002 rulemaking and because all facilities currently subject to 40 CFR part 63, subpart HHHH use thermal oxidizers to reduce formaldehyde emissions. We did not identify any improvements in performance of thermal oxidizers at existing facilities that consistently demonstrated greater reduction in formaldehyde emissions than is currently required by the NESHAP. Furthermore, a more stringent standard could have the perverse environmental impact of increasing HAP emissions. As owner/operators move towards use of lower HAP binders, HAP emissions are reduced. However, due to the relatively dilute HAP emissions in the exhaust gases, it becomes more difficult to maintain high percent reductions in emissions. A more stringent standard would likely require the refurbishment or replacement of existing thermal oxidizers and could slow the development and adoption of the lower HAP binders. Finally, there are cost considerations that militate against setting more stringent standards for formaldehyde under CAA section 112(d(6). For example, any new facility that becomes subject to 40 CFR part 63, subpart HHHH would likely be a rebuilt line at an existing location and would likely use the existing thermal oxidizer rather than installing a new thermal oxidizer. A more stringent standard could instead require the replacement of the existing thermal oxidizer, resulting in a large capital expenditure for minor HAP reductions.

Based on the technology review, we determined that there are no cost-effective developments in practices, processes, and control technologies that warrant revisions to the MACT standards for this source category. Therefore, we are not proposing revisions to 40 CFR part 63, subpart HHHH under CAA section 112(d)(6). Additional details of our technology review can be found in the memorandum, *Section 112(d)(6) Technology Review for Wet-Formed Fiberglass Mat Production,* which is available in the docket for this action. We solicit comment on our proposed decision.

D. What other actions are we proposing?

In addition to the proposed actions described above, the EPA is proposing additional revisions. We are proposing revisions to the SSM provisions of the MACT rule in order to ensure that they are consistent with the Court decision in *Sierra Club* v. *EPA,* 551 F. 3d 1019 (D.C. Cir. 2008), which vacated two provisions that exempted sources from the requirement to comply with otherwise applicable CAA section 112(d) emission standards during periods of SSM. We also are proposing various other changes to monitoring, recordkeeping, and reporting requirements and miscellaneous technical and editorial changes to the regulatory text. Our analyses and proposed changes related to these issues are discussed below.

1. Startup, Shutdown, and Malfunction Requirements

In its 2008 decision in *Sierra Club* v. *EPA,* 551 F.3d 1019 (D.C. Cir. 2008), the

Court vacated portions of two provisions in the EPA's CAA section 112 regulations governing the emissions of HAP during periods of SSM. Specifically, the Court vacated the SSM exemption contained in 40 CFR 63.6(f)(1) and 40 CFR 63.6(h)(1), holding that under section 302(k) of the CAA, emissions standards or limitations must be continuous in nature and that the SSM exemption violates the CAA's requirement that some CAA section 112 standards apply continuously.

We are proposing the elimination of the SSM exemption in this rule which appears at 40 CFR 63.2986(g)(1). Consistent with *Sierra Club* v. *EPA,* we are proposing standards in this rule that apply at all times. We are also proposing several revisions to Table 2 to 40 CFR part 63, subpart HHHH (the General Provisions Applicability Table) as is explained in more detail below. For example, we are proposing to eliminate the incorporation of the General Provisions' requirement that the source develop an SSM plan. We also are proposing to eliminate and revise certain recordkeeping and reporting requirements related to the SSM exemption as further described below.

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

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

Periods of startup, normal operations, and shutdown are all predictable and routine aspects of a source's operations. Owners and operators of all seven wet-formed fiberglass mat production facilities employ thermal oxidizer controls to limit emissions from drying and curing ovens. Ovens along with their thermal oxidizer controls begin operating and reach designated operational temperatures prior to fiberglass mat first entering the oven and remain operating at those temperatures at least until mat is no longer being dried and cured in the oven. Because thermal oxidizer controls are employed during all periods that the drying and curing oven is processing fiberglass mat, there is no need to establish separate formaldehyde standards for periods of startup and shutdown. We do, however, find it necessary to propose establishing definitions of startup and shutdown for purposes of 40 CFR part 63, subpart HHHH. The proposed definitions are needed to clarify that it is not the setting in operation of, 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 operation of, and cessation of operation of, the drying and curing of wet-formed fiberglass mat. The formaldehyde standards can only be met during periods that fiberglass mat is being dried and cured in the oven. Therefore, it is appropriate to define startup and shutdown on such periods.

Malfunctions, in contrast, are neither predictable nor routine. Instead, they are, by definition, sudden, infrequent and not reasonably preventable failures of emissions control, process or monitoring equipment. (40 CFR 63.2) (Definition of malfunction). The EPA interprets CAA section 112 as not requiring emissions that occur during periods of malfunction to be factored into development of CAA section 112 standards and this reading has been upheld as reasonable by the Court in *U.S. Sugar Corp.* v. *EPA,* 830 F.3d 579, 606–610 (2016). Under CAA section 112, emissions standards for new sources must be no less stringent than the level ''achieved'' by the best controlled similar source and for existing sources generally must be no less stringent than the average emission limitation ''achieved'' by the best performing 12 percent of sources in the category. There is nothing in CAA section 112 that directs the Agency to consider malfunctions in determining the level ''achieved'' by the best performing sources when setting emission standards. As the Court has recognized, the phrase ''average emissions limitation achieved by the best performing 12 percent of'' sources ''says nothing about how the performance of the best units is to be calculated.'' *Nat'l Ass'n of Clean Water Agencies* v. *EPA,* 734 F.3d 1115, 1141 (D.C. Cir. 2013). While the EPA accounts for variability in setting emissions standards, nothing in CAA section 112 requires the Agency to consider malfunctions as part of that analysis. The EPA is not required to treat a malfunction in the same manner as the type of variation in performance that occurs during routine operations of a source. A malfunction is a failure of the source to perform in a ''normal or usual manner'' and no statutory language compels the EPA to consider such events in setting CAA section 112 standards.

As the Court recognized in *U.S. Sugar Corp,* accounting for malfunctions in setting standards would be difficult, if not impossible, given the myriad different types of malfunctions that can occur across all sources in the category and given the difficulties associated with predicting or accounting for the frequency, degree, and duration of various malfunctions that might occur. *Id.* at 608 (''the EPA would have to conceive of a standard that could apply equally to the wide range of possible boiler malfunctions, ranging from an explosion to minor mechanical defects. Any possible standard is likely to be hopelessly generic to govern such a wide array of circumstances.'') As such, the performance of units that are malfunctioning is not ''reasonably'' foreseeable. See, *e.g., Sierra Club* v. *EPA,* 167 F.3d 658, 662 (D.C. Cir. 1999) (''The EPA typically has wide latitude in determining the extent of data-gathering necessary to solve a problem. We generally defer to an agency's decision to proceed on the basis of imperfect scientific information, rather than to 'invest the resources to conduct the perfect study.' '') See also, *Weyerhaeuser v. Costle,* 590 F.2d 1011, 1058 (D.C. Cir. 1978) (''In the nature of things, no general limit, individual permit, or even any upset provision can anticipate all upset situations. After a certain point, the transgression of regulatory limits caused by 'uncontrollable acts of third parties,' such as strikes, sabotage, operator intoxication or insanity, and a variety of other eventualities, must be a matter for the administrative exercise of case-by-case enforcement discretion, not for specification in advance by regulation.''). In addition, emissions during a malfunction event can be significantly higher than emissions at any other time of source operation. For example, if an air pollution control device with 99-percent removal goes off-line as a result of a malfunction (as might happen if, for example, the bags in a baghouse catch fire) and the emission unit is a steady state type unit that would take days to shut down, the source would go from 99-percent control to zero control until the control device was repaired. The source's emissions during the malfunction would be 100 times higher than during normal operations. As such, the emissions over a 4-day malfunction period would exceed the annual emissions of the source during normal operations. As this example illustrates, accounting for malfunctions could lead to standards that are not reflective of (and significantly less stringent than) levels that are achieved by a well-performing non-malfunctioning source. It is reasonable to interpret CAA section 112 to avoid such a result. The EPA's

approach to malfunctions is consistent with CAA section 112 and is a reasonable interpretation of the statute.

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

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

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

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

a. 40 CFR 63.2986 General Duty

We are proposing to revise 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.'' Section 63.6(e)(1)(i) describes the general duty to minimize emissions. Some of the language in that section is no longer necessary or appropriate in light of the elimination of the SSM exemption. We are proposing instead to add 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. The current language in 40 CFR 63.6(e)(1)(i) characterizes what the general duty entails during periods of SSM. With the elimination of the SSM exemption, there is no need to differentiate between normal operations, startup and shutdown, and malfunction events in describing the general duty. Therefore, the language the EPA is proposing for 40 CFR 63.2986(g) does not include that language from 40 CFR 63.6(e)(1).

We are also proposing to revise 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.'' Section 63.6(e)(1)(ii) imposes requirements that are not necessary with the elimination of the SSM exemption or are redundant with the general duty requirement being added at 40 CFR 63.2986.

b. SSM Plan

We are proposing to revise 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 SSM recordkeeping and reporting requirements related to the SSM plan. As noted, the EPA is proposing to remove the SSM exemptions. Therefore, affected units will be subject to an emission standard during such events. The applicability of a standard during such events will ensure that sources have ample incentive to plan for and achieve compliance and, thus, the SSM plan requirements are no longer necessary.

c. Compliance With Standards

We are proposing to revise 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.'' The current language of 40 CFR 63.6(f)(1) exempts sources from non-opacity standards during periods of SSM. As discussed above, the Court in *Sierra Club* vacated the exemptions contained in this provision and held that the CAA requires that some CAA section 112 standards apply continuously. Consistent with *Sierra Club,* the EPA is proposing to revise standards in this rule to apply at all times.

d. 40 CFR 63.2992 Performance Testing

We are proposing to revise 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.'' Section 63.7(e)(1) describes performance testing requirements. The EPA is instead proposing to add a performance testing requirement at 40 CFR 63.2992(e). The performance testing requirements we are proposing to add differ from the General Provisions performance testing provisions in several respects. The regulatory text does not include the language in 40 CFR 63.7(e)(1) that restated the SSM exemption and language that precluded startup and shutdown periods from being considered ''representative'' for purposes of performance testing. The proposed performance testing provisions exclude periods of startup and shutdown. As in 40 CFR 63.7(e)(1), performance tests conducted under this subpart should not be conducted during malfunctions because conditions during malfunctions are often not representative of normal operating conditions. The EPA is proposing to add language that requires the owner or operator to record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Section 63.7(e) requires that the owner or operator make available to the Administrator such records ''as may be necessary to determine the condition of the performance test'' available to the Administrator upon request, but does not specifically require the information to be recorded. The regulatory text the EPA is proposing to add to this provision builds on that requirement and makes explicit the requirement to record the information.

e. Monitoring

We are proposing to revise 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.'' The cross-references to the general duty and SSM plan requirements in those subparagraphs are not necessary in light of other requirements of 40 CFR 63.8 that require good air pollution control practices (40 CFR 63.8(c)(1)) and that set out the requirements of a quality control program for monitoring equipment (40 CFR 63.8(d)).

We are proposing to revise 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.'' The final sentence in 40 CFR 63.8(d)(3) refers to the General Provisions' SSM plan requirement which is no longer applicable. The EPA is proposing to add to the rule at 40 CFR 63.2994(a)(2) text that is identical to 40 CFR 63.8(d)(3) except that the final sentence is replaced with the following sentence: ''The program of corrective action should be included in the plan required under § 63.8(d)(2).''

f. 40 CFR 63.2998 Recordkeeping

We are proposing to revise 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.'' Section 63.10(b)(2)(i) describes the recordkeeping requirements during startup and shutdown. These recording provisions are no longer necessary because the EPA is proposing that recordkeeping and reporting applicable to normal operations will apply to startup and shutdown. In the absence of special provisions applicable to startup and shutdown, such as a startup and shutdown plan, there is no reason to retain additional recordkeeping for startup and shutdown periods.

We are proposing to revise the General Provisions table (Table 2 to 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.'' Section 63.10(b)(2)(ii) describes the recordkeeping requirements during a malfunction. The EPA is proposing to add such requirements to 40 CFR 63.2998(e). The regulatory text we are proposing to add differs from the General Provisions it is replacing in that the General Provisions requires the creation and retention of a record of the occurrence and duration of each malfunction of process, air pollution control, and monitoring equipment. The EPA is proposing that this requirement apply to any failure to meet an applicable standard and is requiring that the source record the date, time, and duration of the failure rather than the ''occurrence.'' The EPA is also proposing to add to 40 CFR 63.2998(e) 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. Examples of such methods would include product-loss calculations, mass balance calculations, measurements when available, or engineering judgment based on known process parameters. The EPA is proposing to require that sources keep records of this information to ensure that there is adequate information to allow the EPA to determine the severity of any failure to meet a standard, and to provide data that may document how the source met the general duty to minimize emissions when the source has failed to meet an applicable standard.

We are proposing to revise 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.'' When applicable, the provision requires sources to record actions taken during SSM events when actions were inconsistent with their SSM plan. The requirement is no longer appropriate because SSM plans will no longer be required. The requirement previously applicable under 40 CFR 63.10(b)(2)(iv)(B) to record actions to minimize emissions and record corrective actions is now applicable by reference to 40 CFR 63.2988(e).

We are proposing to revise 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.'' When applicable, the provision requires sources to record actions taken during SSM events to show that actions taken were consistent with their SSM plan. The requirement is no longer appropriate because SSM plans will no longer be required.

We are proposing to revise 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.'' The EPA is proposing that 40 CFR 63.10(c)(15) no longer apply. When applicable, the provision allows an owner or operator to use the affected source's SSM plan or records kept to satisfy the recordkeeping requirements of the SSM plan, specified in 40 CFR 63.6(e), to also satisfy the requirements of 40 CFR 63.10(c)(10) through (12). The EPA is proposing to eliminate this requirement because SSM plans would no longer be required, and, therefore, 40 CFR 63.10(c)(15) no longer serves any useful purpose for affected units.

g. 40 CFR 63.3000 Reporting

We are proposing to revise 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.'' Section 63.10(d)(5) describes the reporting requirements for startups, shutdowns, and malfunctions. To replace the General Provisions reporting requirement, the EPA is proposing to add reporting requirements to 40 CFR 63.3000(c). The replacement language differs from the General Provisions requirement in that it eliminates periodic SSM reports as a stand-alone report. We are proposing language that requires sources that fail to meet an applicable standard at any time to report the information concerning such events in a compliance report already required under this rule on a semiannual basis. We are proposing that the report must contain the number, date, time, duration, and the cause of such events (including unknown cause, if applicable), a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.

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

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

The proposed amendments also eliminate the cross reference to 40 CFR 63.10(d)(5)(ii). Section 63.10(d)(5)(ii)

describes an immediate report for startups, shutdowns, and malfunctions when a source failed to meet an applicable standard, but did not follow the SSM plan. We will no longer require owners and operators to report when actions taken during a startup, shutdown, or malfunction were not consistent with an SSM plan, because plans would no longer be required.

h. Definitions

We are proposing that definitions of ''Startup'' and ''Shutdown'' be added to 40 CFR 63.3004. The current rule relies on the 40 CFR part 63, subpart A, definitions of these terms which are based on the setting in operation of, and cessation of operation of, the affected source (*i.e.,* drying and curing oven). As previously explained in this section, the formaldehyde standards can only be met during periods that fiberglass mat is being dried and cured in the oven. Because we are proposing that standards in this rule apply at all times, we find it appropriate to propose definitions of startup and shutdown based on these periods to clarify that it is the setting in operation of, and cessation of operation of, the drying and curing of wet-formed fiberglass mat that define startup and shutdown for purposes of 40 CFR part 63, subpart HHHH. The new definition of ''Startup'' being proposed reads: ''*Startup* means the setting in operation of the drying and curing of wet-formed fiberglass mat for any purpose. Startup begins when resin infused fiberglass mat enters the oven to be dried and cured for the first time or after a shutdown event.'' The new definition of ''Shutdown'' being proposed reads: ''*Shutdown* means the cessation of operation of the drying and curing of wet-formed fiberglass mat for any purpose. Shutdown ends when fiberglass mat is no longer being dried or cured in the oven and the oven no longer contains any resin infused binder.''

We are proposing that the definition of ''Deviation'' in 40 CFR 63.3004 be revised to remove language that differentiates between normal operations, startup and shutdown, and malfunction events. The current definition of ''Deviation'' is ''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, or 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.'' The revised definition of ''Deviation'' being proposed which eliminates the third criteria reads: ''*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.''

2. Monitoring, Recordkeeping, and Reporting Requirements

The EPA proposes to revise the rule's monitoring, recordkeeping, and reporting requirements in 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.

a. Electronic Reporting

40 CFR part 63, subpart HHHH does not currently require electronic reporting. Through this action, the EPA is proposing that owners and operators of wet-formed fiberglass mat production facilities subject to 40 CFR part 63, subpart HHHH, submit electronic copies of required performance test reports through the EPA's Central Data Exchange (CDX) using the Compliance and Emissions Data Reporting Interface (CEDRI). The EPA believes that the electronic submittal of the reports addressed in this proposed rulemaking will increase the usefulness of the data contained in those reports, is in keeping with current trends in data availability, will further assist in the protection of public health and the environment, and will ultimately result in less burden on the regulated community. Under current requirements, paper test reports are often stored in filing cabinets or boxes, which make the reports more difficult to obtain and use for data analysis and sharing. Electronic storage of such reports would make data more accessible for review, analyses, and sharing. 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 affected facilities, air agencies, the EPA, and the public.

In 2011, in response to Executive Order 13563, the EPA developed a plan [15] to periodically review its regulations to determine if they should be modified, streamlined, expanded, or repealed in an effort to make regulations more effective and less burdensome. The plan includes replacing outdated paper reporting with electronic reporting. In keeping with this plan and the White House's Digital Government Strategy,[16] in 2013 the EPA issued an agency-wide policy specifying that new regulations will require reports to be electronic to the maximum extent possible.[17] By proposing electronic submission of performance test reports for 40 CFR part 63, subpart HHHH facilities, the EPA is taking steps to implement this policy.

The EPA website that stores the submitted electronic data, WebFIRE, is easily accessible to everyone and provides a user-friendly interface that any stakeholder can access. By making data readily available, electronic reporting increases the amount of data that can be used for many purposes. One example is the development of emissions factors. An emissions factor is a representative value that attempts to relate the quantity of a pollutant released to the atmosphere with an activity associated with the release of that pollutant (*e.g.,* kg of particulate emitted per Mg of coal burned). Such factors facilitate the estimation of emissions from various sources of air pollution and are an important tool in developing emissions inventories, which in turn are the basis for numerous efforts, including trends analysis, regional and local scale air quality modeling, regulatory impact assessments, and human exposure modeling. Emissions factors are also widely used in regulatory applicability

[15] EPA's *Improving Our Regulations: Final Plan for Periodic Retrospective Reviews of Existing Regulations,* August 2011. Available at: *https://www.regulations.gov, Document ID No. EPA–HQ–OA–2011–0156–0154.*

[16] *Digital Government: Building a 21st Century Platform to Better Serve the American People,* May 2012. Available at: *https://obamawhitehouse.archives.gov/sites/default/files/omb/egov/digital-government/digital-government.html.*

[17] *E-Reporting Policy Statement for EPA Regulations,* September 2013. Available at: *https://www.epa.gov/sites/production/files/2016-03/documents/epa-ereporting-policy-statement-2013-09-30.pdf.*

determinations and in permitting decisions.

The EPA has received feedback from stakeholders asserting that many of the EPA's emissions factors are outdated or not representative of a particular industry emission source. While the EPA believes that the emissions factors are suitable for their intended purpose, we recognize that the quality of emissions factors varies based on the extent and quality of underlying data. We also recognize that emissions profiles on different pieces of equipment can change over time due to a number of factors (fuel changes, equipment improvements, industry work practices), and it is important for emissions factors to be updated to keep up with these changes. The EPA is currently pursuing emissions factor development improvements that include procedures to incorporate the source test data that we are proposing be submitted electronically. By requiring the electronic submission of the reports identified in this proposed action, the EPA would be able to access and use the submitted data to update emissions factors more quickly and efficiently, creating factors that are characteristic of what is currently representative of the relevant industry sector. Likewise, an increase in the number of test reports used to develop the emissions factors would provide more confidence that the factor is of higher quality and representative of the whole industry sector.

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

Under an electronic reporting system, the EPA's Office of Air Quality Planning and Standards (OAQPS) would have air emissions and performance test data in hand; OAQPS would not have to collect these data from the EPA Regional offices or from delegated air agencies or industry sources in cases where these reports are not submitted to the EPA Regional offices. Thus, we anticipate fewer or less substantial information collection requests (ICRs) may be needed in conjunction with prospective CAA-required technology and risk-based reviews. We expect this to result in a decrease in time spent by industry to respond to data collection requests. We also expect the ICRs to contain less extensive stack testing provisions, as we will already have stack test data electronically. Reduced testing requirements would be a cost savings to industry. The EPA should also be able to conduct these required reviews more quickly, as OAQPS will not have to include the ICR collection time in the process or spend time collecting reports from the EPA Regional offices. While the regulated community may benefit from a reduced burden of ICRs, the general public benefits from the agency's ability to provide these required reviews more quickly, resulting in increased public health and environmental protection.

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

Air agencies could benefit from more streamlined and automated review of the electronically submitted data. For example, because performance test data would be readily-available in standard electronic format, air agencies would be able to review reports and data electronically rather than having to conduct a review of the reports and data manually. Having reports and associated data in electronic format facilitates review through the use of software ''search'' options, as well as the downloading and analyzing of data in spreadsheet format. Additionally, air agencies would benefit from the reported data being accessible to them through the EPA's electronic reporting system wherever and whenever they want or need access (as long as they have access to the internet). The ability to access and review reports electronically assists air agencies in determining compliance with applicable regulations more quickly and accurately, potentially allowing a faster response to violations, which could minimize harmful air emissions. This benefits both air agencies and the general public.

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

Additionally, we have identified two broad circumstances in which electronic reporting extensions may be provided. In both circumstances, the decision to accept your claim of needing additional time to report is within the discretion of the Administrator, and reporting should occur as soon as possible.

In 40 CFR 63.3000, we address the situation where an extension may be warranted due to outages of the EPA's CDX or CEDRI which preclude you from accessing the system and submitting required reports. If either the CDX or CEDRI is unavailable at any time beginning 5 business days prior to the date that the submission is due, and the unavailability prevents you from submitting a report by the required date, you may assert a claim of EPA system outage. We consider 5 business days prior to the reporting deadline to be an appropriate timeframe because if the system is down prior to this time, you still have 1 week to complete reporting once the system is back online. However, if the CDX or CEDRI is down during the week a report is due, we realize that this could greatly impact your ability to submit a required report on time. We will notify you about known outages as far in advance as possible by CHIEF Listserv notice, posting on the CEDRI website, and posting on the CDX website so that you can plan accordingly and still meet your reporting deadline. However, if a planned or unplanned outage occurs and you believe that it will affect or it has affected your ability to comply with an electronic reporting requirement, we have provided a process to assert such a claim.

In 40 CFR 63.3000, we address the situation where an extension may be warranted due to a force majeure event, which is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that

prevents you from complying with the requirement to submit a report electronically as required by this rule. Examples of such events are acts of nature, acts of war or terrorism, or equipment failure or safety hazards beyond the control of the facility. If such an event occurs or is still occurring or if there are still lingering effects of the event in the 5 business days prior to a submission deadline, we have provided a process to assert a claim of force majeure.

We are providing these potential extensions to protect you from noncompliance in cases where you cannot successfully submit a report by the reporting deadline for reasons outside of your control as described above. We are not providing an extension for other instances. You should register for CEDRI far in advance of the initial compliance date, in order to make sure that you can complete the identity proofing process prior to the initial compliance date. Additionally, we recommend you start developing reports early, in case any questions arise during the reporting process.

b. Frequency of Compliance Reports

Section 63.3000(c) of the current rule requires owners and operators of wet-formed fiberglass mat production facilities subject to 40 CFR part 63, subpart HHHH, to submit compliance reports on a semiannual basis unless there are deviations from emission limits or operating limits. In those instances, the current rule requires that compliance reports be submitted on a quarterly basis. The EPA is proposing to revise 40 CFR 63.3000(c) to require that compliance reports be submitted on a semiannual basis in all instances. 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.

c. Parameter Monitoring and Recording During Use of Binder Containing No HAP

Section 63.2984 of the current rule requires owners and operators of wet-formed fiberglass mat production facilities subject to 40 CFR part 63, subpart HHHH to maintain the operating parameters established during the most recent performance test. Sections 63.2996 and 63.2998 of the current rule require owners and operators to monitor and record the parameters listed in Table 1 to subpart HHHH. The EPA is proposing 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 would 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 propose that owners and operators would be required to 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 proposing revisions to 40 CFR part 63, subpart HHHH, sections 63.2984, 63.2996, and 63.2998 and table 1, and also proposing that a definition of Non-HAP binder be added to 40 CFR 63.3004. The new definition of ''Non-HAP binder'' being proposed reads: ''*Non-HAP binder* means a binder formulation that does not contain any hazardous air pollutants listed on the material safety data sheets of the compounds used in the binder formulation.''

3. Technical and Editorial Changes

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

TABLE 2—MISCELLANEOUS PROPOSED CHANGES TO 40 CFR PART 63, SUBPART HHHH

Section of subpart HHHH	Description of proposed change
40 CFR 63.2984	• 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.e.,* the appropriate chapters of ''Industrial Ventilation: A Manual of Recommended Practice for Design'' (27th edition), or an alternate as approved by the Administrator. • Revise text regarding incorporation by reference (IBR) in paragraph (e) by replacing the reference to 40 CFR 63.3003 with, instead, 40 CFR 63.14.
40 CFR 63.2993	• Amend 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–2) 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) 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	• Amend paragraph (b) to update 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 CEDRI may be maintained in electronic format.
40 CFR 63.3003	• Remove text and reserve the section consistent with revisions to the IBR in 40 CFR 63.14.

E. What compliance dates are we proposing?

The EPA is proposing that existing affected sources and affected sources that commenced construction or reconstruction on or before April 6, 2018 must comply with all of the amendments no later than 180 days after the effective date of the final rule. (The final action is not expected to be a ''major rule'' as defined by 5 U.S.C. 804(2), so the effective date of the final rule will be the promulgation date as specified in CAA section 112(d)(10)). For existing sources, we are proposing four changes that would impact ongoing compliance requirements for 40 CFR part 63, subpart HHHH. As discussed elsewhere in this preamble, we are proposing to add a requirement that performance test results be electronically submitted, we are proposing to change the frequency of

required submissions of compliance reports for facilities with deviations from applicable standards from a quarterly basis to a semiannual basis, we are proposing to change the requirements for SSM by removing the exemption from the requirements to meet the standard during SSM periods, and we are proposing to no longer require parameter monitoring during periods when a non-HAP binder is being used to produce mat. Our experience with similar industries that are required to convert reporting mechanisms to install necessary hardware and software, become familiar with the process of submitting performance test results electronically through the EPA's CEDRI, test these new electronic submission capabilities, and reliably employ electronic reporting and to convert logistics of reporting processes to different time-reporting parameters shows that a time period of a minimum of 90 days, and, more typically, 180 days is generally necessary to successfully accomplish these revisions. Our experience with similar industries further shows that this sort of regulated facility generally requires a time period of 180 days to read and understand the amended rule requirements; to evaluate their operations to ensure that they can meet the standards during periods of startup and shutdown as defined in the rule and make any necessary adjustments; to adjust parameter monitoring and recording systems to accommodate revisions such as those proposed here for periods of non-HAP binder use; and to update their operation, maintenance, and monitoring plan to reflect the revised requirements. The EPA recognizes the confusion that multiple different compliance dates for individual requirements would create and the additional burden such an assortment of dates would impose. From our assessment of the timeframe needed for compliance with the entirety of the revised requirements, the EPA considers a period of 180 days to be the most expeditious compliance period practicable and, thus, is proposing that existing affected sources be in compliance with all of this regulation's revised requirements within 180 days of the regulation's effective date. We solicit comment on this proposed compliance period, and we specifically request submission of information from sources in this source category regarding specific actions that would need to be undertaken to comply with the proposed amended requirements and the time needed to make the adjustments for compliance with any of the revised requirements. We note that information provided may result in changes to the proposed compliance date. Affected sources that commence construction or reconstruction after April 6, 2018 must comply with all requirements of the subpart, including the amendments being proposed, no later than the effective date of the final rule or upon startup, whichever is later. All affected facilities would have to continue to meet the current requirements of 40 CFR part 63, subpart HHHH until the applicable compliance date of the amended rule.

V. Summary of Cost, Environmental, and Economic Impacts

A. What are the affected sources?

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 the proposed amendments. The bases of our estimate of affected facilities are provided in the memorandum, *Wet-Formed Fiberglass: Residual Risk Modeling File Documentation* (*Modeling File Documentation Memo*), 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 proposing revisions to the emission limits, we do not anticipate any air quality impacts as a result of the proposed amendments.

C. What are the cost impacts?

The seven wet-formed fiberglass mat production facilities that would be subject to the proposed 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 costs associated with the proposed requirements are estimated to be $200 per year in each of the 3 years following promulgation of amendments. The EPA believes that the seven wet-formed fiberglass mat production facilities which are known to be subject to the NESHAP can meet the proposed requirements without incurring additional capital or operational costs. Therefore, the only costs associated with the proposed amendments are related to recordkeeping and reporting labor costs. For further information on the requirements being proposed, see section IV of this preamble. For further information on the costs and cost savings associated with the requirements being proposed, see the memorandum, *Cost Impacts of Wet-Formed Fiberglass Mat Production Risk and Technology Review Proposal,* and the document, *Supporting Statement for NESHAP for Wet-Formed Fiberglass Mat Production,* which are both available in the docket for this action. We solicit comment on these estimated cost impacts.

D. What are the economic impacts?

As noted earlier, the nationwide annual costs associated with the proposed requirements are estimated to be $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 proposed, see the memorandum, *Proposal 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 proposed amendments, we believe that the action, if finalized, would result in improvements to the rule. Specifically, the proposed 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 proposed amendments reducing parameter monitoring and recording requirements when non-HAP binder is being used to produce mat and reducing frequency of compliance reports will reduce burden for regulated facilities while continuing to protect public health and the environment. See section IV.D.2 of this preamble for more information.

VI. Request for Comments

We solicit comments on all aspects of this proposed action. In addition to general comments on this proposed action, we are also interested in additional data that may improve the risk assessments and other analyses. We are specifically interested in receiving any improvements to the data used in the site-specific emissions profiles used for risk modeling. Such data should include supporting documentation in sufficient detail to allow characterization of the quality and representativeness of the data or information. Section VII of this preamble provides more information on submitting data.

We specifically solicit comment on an additional issue under consideration that would reduce regulatory burden for owner/operators of certain drying and curing ovens. We are requesting comment on exempting performance testing requirements for drying and curing ovens that are subject to a federally enforceable permit requiring the use of only non-HAP binders. 40 CFR 63.2991 currently requires formaldehyde testing for all drying and curing ovens subject to 40 CFR part 63, subpart HHHH, even if the facility only uses a non-HAP binder. Such an exemption would 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 are still permitted to use HAP containing binders would still be required to conduct periodic performance testing even if they are not currently using binders that contain HAP.

VII. Submitting Data Corrections

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

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

1. Within this downloaded file, enter suggested revisions to the data fields appropriate for that information.
2. Fill in the commenter information fields for each suggested revision (*i.e.,* commenter name, commenter organization, commenter email address, commenter phone number, and revision comments).
3. Gather documentation for any suggested emissions revisions (*e.g.,* performance test reports, material balance calculations).
4. Send the entire downloaded file with suggested revisions in Microsoft® Access format and all accompanying documentation to Docket ID No. EPA–HQ–OAR–2004–0309 (through the method described in the **ADDRESSES** section of this preamble).
5. If you are providing comments on a single facility or multiple facilities, you need only submit one file for all facilities. The file should contain all suggested changes for all sources at that facility (or facilities). We request that all data revision comments be submitted in the form of updated Microsoft® Excel files that are generated by the Microsoft® Access file. These files are provided on the RTR website at *https://www3.epa.gov/airtoxics/rrisk/rtrpg.html.*

VIII. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at *http://www2.epa.gov/laws-regulations/laws-and-executive-orders.*

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

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

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

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

C. Paperwork Reduction Act (PRA)

The information collection activities in this proposed rule have been submitted for approval to OMB under the PRA. The ICR document that the EPA prepared has been assigned EPA ICR number 1964.08. You can find a copy of the ICR in the docket for this rule, and it is briefly summarized here.

We are proposing changes to the recordkeeping and reporting requirements associated with 40 CFR part 63, subpart 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 requirements during use of binder containing no HAP. We also included review of the amended rule by affected facilities in the updated ICR for this proposed 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 proposed 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 proposed 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.

Submit your comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden to

the EPA using the docket identified at the beginning of this rule. You may also send your ICR-related comments to OMB's Office of Information and Regulatory Affairs via email to *OIRA_submission@omb.eop.gov,* Attention: Desk Officer for the EPA. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after receipt, OMB must receive comments no later than May 7, 2018. The EPA will respond to any ICR-related comments in the final rule.

D. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This action will not impose any requirements on small entities. There are no small entities affected in this regulated industry. See the document, *Proposal Economic Impact Analysis for the Reconsideration of the Risk and Technology Review: Wet-Formed Fiberglass Mat Production Source Category,* 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 proposed 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 C and sections IV.A and B of this preamble, and further documented in the risk report, *Residual Risk Assessment for the Wet-Formed Fiberglass Mat Production Source Category in Support of the February 2018 Risk and Technology Review Proposed Rule,* 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. Therefore, the EPA conducted a search to identify potentially applicable voluntary consensus standards (VCS). The EPA proposes to use EPA Methods 1, 2, 3, 3A, 4, 316, 318, and 320 of 40 CFR part 60, appendix A. While the EPA identified 11 VCS as being potentially applicable as alternatives to EPA Methods 1, 2, 3, 3A, and 4 of 40 CFR part 60, the Agency does not propose to use them. Use of these VCS would be impractical because of their lack of equivalency, documentation, validation data, and/or other important technical and policy considerations. Results of the search are documented in the memorandum, *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. 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). Methods 1, 2, 3, 3A, and 4 of 40 CFR part 60, appendix A are used the determine the gas flow rate which is used with the concentration of formaldehyde to calculate the mass emission rate. Additional information can be found at *https://www.epa.gov/emc/emc-promulgated-test-methods.*

Industrial Ventilation: A Manual of Recommended Practice, 23rd Edition, 1998, Chapter 3, ''Local Exhaust Hoods'' and Chapter 5, ''Exhaust System Design Procedure,'' and Industrial Ventilation: A Manual of Recommended Practice for Design, 27th Edition, 2010, are compilations of research data and information on design, maintenance, and evaluation of industrial exhaust ventilation systems. They include suggestions for appropriate hood design considerations and aspects for fan design. The Manuals are used by engineers and industrial hygienists as guidance for design and evaluation of industrial ventilation systems. Additional information can be found at *https://www.acgih.org.*

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, *Risk and Technology Review Analysis of Demographic Factors for Populations Living Near Wet-Formed Fiberglass Mat Production,* available in the docket for this action.

List of Subjects in 40 CFR Part 63

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

Dated: March 19, 2018.

E. Scott Pruitt,

Administrator.

For the reasons stated in the preamble, the EPA proposes to amend title 40, chapter I, part 63 of the Code of Federal Regulations as follows:

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

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

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

Subpart A—General Provisions

■ 2. Section 63.14 is amended by revising the last sentence of paragraph (a) and paragraphs (b)(2) and (3) to read as follows:

§ 63.14 Incorporations by reference.

(a) * * * For information on the availability of this material at NARA, call 202–741–6030 or go to *http://www.archives.gov/federal-register/cfr/ibr-locations.html.*

(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, 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, 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), (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 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 paragraph (b) and adding paragraph (d) to read as follows:

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

* * * * *

(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.

* * * * *

(d) Drying and curing ovens constructed or reconstructed after April 6, 2018 must be in compliance with this subpart at startup or by [DATE OF PUBLICATION OF FINAL RULE 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 [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**], you 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 [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**], you must be in compliance with the emission limits in § 63.2983 and the operating limits in § 63.2984 at all times.

(2) Before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**], you 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 [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**], 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 levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(3) Before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**], you must develop a 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 after [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**].

■ 6. Section 63.2992 is amended by revising paragraphs (b) 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).

* * * * *

(e) Performance tests must be conducted under such conditions as the Administrator specifies to you based on representative performance of the affected source for the period being tested. 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 include in such 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

* * * * *

■ 7. Section 63.2993 is amended by:

■ 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 newly redesignated paragraph (e).

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.

* * * * *

■ 8. 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 monitoring system (CMS) quality control program that includes written procedures for CMS 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 part, to be made available for inspection, upon request, by the Administrator. If the performance evaluation plan is revised, 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. The program of corrective action should be included in the plan required under § 63.8(d)(2).

(3) Conduct a performance evaluation of the CMS 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.

* * * * *

■ 9. Section 63.2996 is revised to read as follows:

§ 63.2996 What must I monitor?

(a) You must monitor the parameters listed in table 1 of this subpart and any other parameters specified in your OMM plan. The parameters must be monitored, at a minimum, at the corresponding frequencies listed in table 1 of 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 of this subpart.

■ 10. Section 63.2998 is amended by:
■ a. Revising the introductory text, paragraphs (a) and (c), and paragraph (e) introductory text;
■ b. Revising paragraph (f);
■ c. Redesignating paragraph (g) as paragraph (h)
■ d. Adding new paragraph (g).

The revisions 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 (h) 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 of this subpart to show continuous compliance with each operating limit specified in Table 1 of this subpart. During periods when using non-HAP binder, and that you elect not to monitor the parameters in table 1 of this subpart, you are required to record the dates and times that production of mat using non-HAP binder began and ended.

* * * * *

(e) Before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**], if an operating parameter deviation occurs, you must record:

* * * * *

(f) Before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**], keep all records specified in § 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(g) After [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**], 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 the operating parameter to the limit or to within the range specified in the OMM plan, along with dates and times at which corrective actions were initiated and completed.

* * * * *

■ 10. Section 63.2999 is amended by revising paragraph (b) and adding paragraph (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) Any records required to be maintained by this part that are submitted electronically via the EPA's Compliance and Emissions Data Reporting Interface (CEDRI) may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.

■ 11. Section 63.3000 is amended by revising paragraphs (c) introductory text, (1), (4), (5), (d), and (e) and adding paragraphs (c)(6), (f), and (g) to 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 [DATE 1 DAY AFTER PUBLICATION OF FINAL RULE 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 [DATE OF PUBLICATION OF FINAL RULE IN THE **Federal Register**], quarterly compliance reports are not required.

* * * * *

(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 [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**], 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)(5)(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, 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 process units.

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

(6) *Deviations.* After [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**], 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)(5)(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, 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 process units.

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

(d) *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 to be included 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. Beginning no later than [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**], you must submit the results following the procedures specified in paragraphs (d)(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/*).) Performance test data must be submitted 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 being submitted under paragraph (d)(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 disc, flash drive or other commonly used electronic storage medium to the EPA. The electronic medium must be clearly marked as CBI and mailed 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. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described in paragraph (d)(1) of this section.

(e) *Startup, shutdown, malfunction reports.* Before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**], if you have a startup, shutdown, or malfunction during the semiannual reporting period, you must submit the reports specified § 63.10(d)(5).

(f) If you are required to electronically submit a report through the CEDRI in the EPA's CDX, and due to a planned or actual outage of either the EPA's CEDRI or CDX systems within the period of time beginning 5 business days prior to the date that the submission is due, you will be or are precluded from accessing CEDRI or CDX and submitting a required report within the time prescribed, you may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. 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 caused a delay in reporting. You must provide to the Administrator a written description identifying the date, time and length of the outage; a rationale for attributing the delay in reporting beyond the regulatory deadline to the EPA system outage; describe the measures taken or to be taken to minimize the delay in reporting; and identify a 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. In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved. 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.

(g) If you are required to electronically submit a report through CEDRI in the EPA's CDX and 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 5 business days prior to the date the submission is due, the owner or operator may assert a claim of force majeure for failure to timely comply with the reporting requirement. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (*e.g.,* hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (*e.g.,* large scale power outage). If you intend to assert a claim of force majeure, 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 caused a delay in reporting. You must provide to the Administrator a written description of the force majeure event and a rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event; describe the measures taken or to be taken to minimize the delay in reporting; and identify a 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. In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs. 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.

■ 12. Section 63.3003 is removed and reserved.

■ 13. Section 63.3004 is amended by removing the definition for ''Deviation'' and adding definitions for ''Deviation after,'' ''Deviation before,'' ''Non-HAP binder,'' ''Shutdown,'' and ''Startup'' in alphabetical order to read as follows:

§ 63.3004 What definitions apply to this subpart?

* * * * *

Deviation after [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**] means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

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

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

Deviation after [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**] means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

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

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

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

* * * * *

Non-HAP binder means a binder formulation that does not contain any hazardous air pollutants listed on the material safety data sheets of the compounds used in the binder formulation.

* * * * *

Shutdown after [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**] means the cessation of operation of the drying and curing of wet-formed fiberglass mat for any purpose. Shutdown ends when fiberglass mat is no longer being dried or cured in the oven and the oven no longer contains any resin infused binder.

Startup after [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**] means the setting in operation of the drying and curing of wet-formed fiberglass mat for any purpose. Startup begins when resin infused fiberglass mat enters the oven to be dried and cured for the first time or after a shutdown event.

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■ 14. Table 1 to Subpart HHHH of Part 63 is revised 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 [a]	Continuously	15-minute and 3-hour block averages.
2. Other process or control device parameters specified in your OMM plan.[b]	As specified in your OMM plan	As specified in your OMM plan.
3. Urea-formaldehyde resin solids application rate.[d]	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 [d]	For each lot of resin purchased	The value for each lot used during the operating day.
5. Loss-on-ignition [c d]	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 [c d]	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).[c d]	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).[c d]	For each product manufactured during the operating day.	The average value for each product manufactured during operating day.

[a] Required if a thermal oxidizer is used to control formaldehyde emissions.
[b] "Required if process modifications or a control device other than a thermal oxidizer is used to control formaldehyde emissions.
[c] These parameters must be monitored and values recorded, but no operating limits apply.
[d] You are not required to monitor or record these parameters during periods when using a non-HAP binder. If you elect to not monitor these parameters during these periods, you must record the dates and times that production of mat using the non-HAP binder began and ended.

■ 15. Table 2 to Subpart HHHH of Part 63 is revised 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.

TABLE 2 TO SUBPART HHHH OF PART 63—APPLICABILITY OF GENERAL PROVISIONS (40 CFR PART 63, SUBPART A) TO SUBPART HHHH—Continued

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
§ 63.6(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 ..	Yes before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**].	See § 63.2986(g) for general duty requirement.
	.....	No after [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**].	
§ 63.6(e)(1)(ii)	Requirement to Correct Malfunctions ASAP.	Yes before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**].	
	.....	No after [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**].	
§ 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	Yes before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**].	
	.....	No after [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**].	
§ 63.6(f)(1)	SSM Exemption	No.	
§ 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	Yes before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**].	See § 63.2992(c).
		No after [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**].	
§ 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.	Yes before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**].	
		No after [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**].	
§ 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.	Yes before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**].	

TABLE 2 TO SUBPART HHHH OF PART 63—APPLICABILITY OF GENERAL PROVISIONS (40 CFR PART 63, SUBPART A) TO SUBPART HHHH—Continued

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
	No after [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**].		
§ 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	Yes before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**]. No after [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**].	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.	Yes before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**]. No after [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**].	
§ 63.10(b)(2)(ii)	Recordkeeping of Failures to Meet a Standard.	Yes before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**]. No after [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**].	See § 63.2998(e) 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.	Yes before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**]. No after [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**].	
§ 63.10(b)(2)(vi)	Recordkeeping for CMS Malfunctions	Yes.	
§ 63.10(b)(2)(vii)–(xiv)	Other CMS Requirements	Yes.	

TABLE 2 TO SUBPART HHHH OF PART 63—APPLICABILITY OF GENERAL PROVISIONS (40 CFR PART 63, SUBPART A) TO SUBPART HHHH—Continued

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
§ 63.10(b)(3)	Recordkeeping requirement for applicability determinations.	Yes after [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**].	
§ 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	Yes before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**]. No after [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**].	
§ 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	Yes before [DATE 181 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**]. No after [DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE **Federal Register**].	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.	
§ 63.15	Availability of Information/Confidentiality.	Yes.	

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