

The EPA Administrator, Andrew R. Wheeler, signed the following notice on 09/27/2019, and EPA is submitting it for publication in the Federal Register (FR). While we have taken steps to ensure the accuracy of this Internet version of the rule, it is not the official version of the rule for purposes of compliance. Please refer to the official version in a forthcoming FR publication, which will appear on the Government Printing Office's govinfo website (<https://www.govinfo.gov/app/collection/fr>) and on Regulations.gov (<https://www.regulations.gov>) in Docket No. EPA-HQ-OAR-2019-0392. Once the official version of this document is published in the FR, this version will be removed from the Internet and replaced with a link to the official version.

6560-50-P

## **ENVIRONMENTAL PROTECTION AGENCY**

### **40 CFR Part 63**

**[EPA-HQ-OAR-2019-0392; FRL-]**

**RIN 2060-AT07**

### **National Emission Standards for Hazardous Air Pollutants: Rubber Tire Manufacturing Residual Risk and Technology Review**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** The U.S. Environmental Protection Agency (EPA) is proposing amendments to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Rubber Tire Manufacturing source category. The proposal addresses the results of the residual risk and technology review (RTR) conducted as required under the Clean Air Act (CAA). The proposed amendments address the startup, shutdown, and malfunction (SSM) provisions of the rule and amend provisions regarding electronic reporting of certain notifications, performance test results, and semiannual reports.

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

comments on or before **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

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

**ADDRESSES:** You may send comments, identified by Docket ID No. EPA-HQ-OAR-2019-0392, by any of the following methods:

- Federal eRulemaking Portal: <https://www.regulations.gov/> (our preferred method).  
Follow the online instructions for submitting comments.
- Email: [a-and-r-docket@epa.gov](mailto:a-and-r-docket@epa.gov). Include Docket ID No. EPA-HQ-OAR-2019-0392 in the subject line of the message.
- Fax: (202) 566-9744. Attention Docket ID No. EPA-HQ-OAR-2019-0392.
- Mail: U.S. Environmental Protection Agency, EPA Docket Center, Docket ID No. EPA-HQ-OAR-2019-0392, Mail Code 28221T, 1200 Pennsylvania Avenue, NW, Washington, DC 20460.
- Hand/Courier Delivery: EPA Docket Center, WJC West Building, Room 3334, 1301 Constitution Avenue, NW, Washington, DC 20004. The Docket Center's hours of operation are 8:30 a.m. – 4:30 p.m., Monday – Friday (except Federal holidays).

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*Instructions:* All submissions received must include the Docket ID No. for this rulemaking. Comments received may be posted without change to <https://www.regulations.gov/>, including any personal information provided. For detailed instructions on sending comments and additional information on the rulemaking process, see the **SUPPLEMENTARY INFORMATION** section of this document.

**FOR FURTHER INFORMATION CONTACT:** For questions about this proposed action, contact Mr. Korbin Smith, Sector Policies and Programs Division (D243-04), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541-2416; fax number: (919) 541-4991; and email address: *smith.korbin@epa.gov*. For specific information regarding the risk modeling methodology, contact Mr. James Hirtz, Health and Environmental Impacts Division (C539-02), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541-0881; and email address: *hirtz.james@epa.gov*. For questions about monitoring and testing requirements, contact Mr. Ketan Patel, Sector Policies and Programs Division (D243-05), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541-9736; fax number: (919) 541-4991; and email address: *patel.ketan@epa.gov*. For information about the applicability of the NESHAP to a particular entity, contact Mr. John Cox, Office of Enforcement and Compliance Assurance, U.S. Environmental Protection Agency, WJC South Building (Mail Code 2227A), 1200 Pennsylvania Avenue, NW, Washington DC 20460; telephone number: (202) 564-1395; and email address: *cox.john@epa.gov*.

**SUPPLEMENTARY INFORMATION:**

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

*Docket.* The EPA has established a docket for this rulemaking under Docket ID No. EPA-HQ-OAR-2019-0392. All documents in the docket are listed in Regulations.gov. Although listed, some information is not publicly available, *e.g.*, Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy. Publicly available docket materials are available either electronically in Regulations.gov or in hard copy at the EPA Docket Center, Room 3334, 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-2019-0392. The EPA's policy is that all comments received will be included in the public docket without change and may be made available online at <https://www.regulations.gov/>, including any personal information provided, unless the comment includes information claimed to be CBI or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through <https://www.regulations.gov/> or email. This type of information should be submitted by mail as discussed below.

The EPA may publish any comment received to its public docket. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written

comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (*i.e.*, on the Web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <https://www.epa.gov/dockets/commenting-epa-dockets>.

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

*Submitting CBI.* Do not submit information containing CBI to the EPA through <https://www.regulations.gov/> or email. Clearly mark the part or all of the information that you claim to be CBI. For CBI information on any digital storage media that you mail to the EPA, mark the outside of the digital storage media as CBI and then identify electronically within the digital storage media the specific information that is claimed as CBI. In addition to one complete

version of the comments that includes information claimed as CBI, you must submit a copy of the comments that does not contain the information claimed as CBI directly to the public docket through the procedures outlined in *Instructions* above. If you submit any digital storage media that does not contain CBI, mark the outside of the digital storage media clearly that it does not contain CBI. Information not marked as CBI will be included in the public docket and the EPA's electronic public docket without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 Code of Federal Regulations (CFR) part 2. Send or deliver information identified as CBI only to the following address: OAQPS Document Control Officer (C404-02), OAQPS, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, Attention Docket ID No. EPA-HQ-OAR-2019-0392.

*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
CAA	Clean Air Act
CalEPA	California EPA
CBI	Confidential Business Information
CFR	Code of Federal Regulations
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 1.5.5
HF	hydrogen fluoride
HI	hazard index
HQ	hazard quotient
IRIS	Integrated Risk Information System

km	kilometer
MACT	maximum achievable control technology
MIR	maximum individual risk
NAAQS	National Ambient Air Quality Standards
NESHAP	national emission standards for hazardous air pollutants
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
POM	polycyclic organic matter
REL	reference exposure level
RFA	Regulatory Flexibility Act
RfC	reference concentration
RTR	residual risk and technology review
SAB	Science Advisory Board
SBA	Small Business Administration
SSM	startup, shutdown, and malfunction
TOSHI	target organ-specific hazard index
tpy	tons per year
TRIM.FaTE	Total Risk Integrated Methodology.Fate, Transport, and Ecological Exposure model
UF	uncertainty factor
UMRA	Unfunded Mandates Reform Act
URE	unit risk estimate

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

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  - E. Unfunded Mandates Reform Act (UMRA)
  - F. Executive Order 13132: Federalism
  - G. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments
  - H. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks
  - I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use
  - J. National Technology Transfer and Advancement Act (NTTAA)
  - K. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

## **I. General Information**

### *A. Does this action apply to me?*

Table 1 of this preamble lists the NESHAP and associated regulated industrial source 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.

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As defined in the *Initial List of Categories of Sources Under Section 112(c)(1) of the Clean Air Act Amendments of 1990* (see 57 FR 31576, July 16, 1992) and *Documentation for Developing the Initial Source Category List, Final Report* (see EPA-450/3-91-030, July 1992), the Rubber Tire Manufacturing source category is any facility engaged in producing passenger car and light duty truck tires, heavy duty truck tires, off-the-road tires, aircraft tires, and miscellaneous other tires. The category includes the following processes: rubber compounding; tread rubber, cord, and bead production; tire building; green tire spraying; and tire curing and finishing.

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

Source Category	NESHAP	NAICS Code <sup>1</sup>
Rubber Tire Manufacturing	40 CFR part 63, subpart XXXX	326211, 326212, 314992

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

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

In addition to being available in the docket, an electronic copy of this action is available on the Internet. Following signature by the EPA Administrator, the EPA will post a copy of this proposed action at <https://www.epa.gov/stationary-sources-air-pollution/rubber-tire-manufacturing-national-emission-standards-hazardous-air>. 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-2019-0392).

## II. Background

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

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

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

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

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

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

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

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

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 often than every 8 years. In conducting this review, which we call the “technology review,” the EPA is not required to recalculate the MACT floor. *Natural Resources Defense Council (NRDC) v. EPA*, 529 F.3d 1077, 1084 (D.C. Cir. 2008). *Association of Battery Recyclers, Inc. v. EPA*, 716 F.3d 667 (D.C. Cir. 2013). The EPA may consider cost in deciding whether to revise the standards pursuant to CAA section 112(d)(6).

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

The Rubber Tire Manufacturing NESHAP was promulgated on July 9, 2002 (67 FR 45588), and codified at 40 CFR part 63, subpart XXXX. As promulgated, the Rubber Tire Manufacturing NESHAP applies to affected sources of HAP at rubber materials manufacturing facilities that are major sources of HAP. The affected source covered by this subpart is each new, reconstructed, or existing facility that manufactures rubber tires.

The Rubber Tire Manufacturing source category is subcategorized into four subcategories, which include rubber processing, tire production, tire cord production, and puncture sealant application. Components of rubber tires include, but are not limited to, rubber compounds, sidewalls, tread, tire beads, tire cord, and liners. Other components often associated with rubber tires but not integral to the tire, such as wheels, inner tubes, tire bladders, and valve stems, are not components of rubber tires or tire cord and are not subject to this subpart. At the

time of this proposal we did not identify any major source facilities of tire cord production or puncture sealant application.

Emissions limits in the 2002 NESHAP for the Rubber Tire Manufacturing source category were set for each subcategory separately:

1. Rubber Processing

There are no emission limits for rubber processing affected sources.

2. Tire Production

There are two options for compliance under this subcategory. First is a HAP constituent option, which states that emissions of each HAP in Table 16 to 40 CFR part 63, subpart XXXX, must not exceed 1,000 grams HAP per megagram (2 pounds per ton) of total cements and solvents used at the tire production affected source, and that emissions of each HAP not in Table 16 to 40 CFR part 63, subpart XXXX, must not exceed 10,000 grams HAP per megagram (20 pounds per ton) of total cements and solvents used at the tire production affected source.

The second emission limit option is a production-based option. For this option, emissions of HAP must not exceed 0.024 grams per megagram (0.00005 pounds per ton) of rubber used at the tire production affected source.

3. Tire Cord Production

There are three options for compliance under this subcategory. The first option is a production-based option for existing tire cord production affected sources. As part of this option, emissions must not exceed 280 grams HAP per megagram (0.56 pounds per ton) of fabric processed at the tire cord production affected source.

The second option is a production-based option for new or reconstructed tire cord production affected sources. As part of this option, emissions must not exceed 220 grams HAP

per megagram (0.43 pounds per ton) of fabric processed at the tire cord production affected source.

The third option is a HAP constituent option available to both existing and new or reconstructed tire cord production affected sources. As part of this option, emissions of each HAP in Table 16 to 40 CFR part 63, subpart XXXX, must not exceed 1,000 grams HAP per megagram (2 pounds per ton) of total coatings used at the tire cord production affected source, and emissions of each HAP not in Table 16 to 40 CFR part 63, subpart XXXX, must not exceed 10,000 grams HAP per megagram (20 pounds per ton) of total coatings used at the tire cord production affected source.

#### 4. Puncture Sealant Application

There are three options for compliance under this subcategory. The first option is a percent reduction option for existing puncture sealant application spray booths. As part of this option, facilities are required to reduce spray booth HAP (measured as volatile organic compounds (VOC)) emissions by at least 86 percent by weight.

The second option is a percent reduction option for new or reconstructed puncture sealant application spray booths. As part of this option, facilities are required to reduce spray booth HAP (measured as VOC) emissions by at least 95 percent by weight.

The third option is a HAP constituent option for both existing and new or reconstructed puncture sealant application spray booths. As part of this option, emissions of each HAP in Table 16 to 40 CFR part 63, subpart XXXX, must not exceed 1,000 grams HAP per megagram (2 pounds per ton) of total puncture sealants used at the puncture sealant affected source, and emissions of each HAP not in Table 16 to 40 CFR part 63, subpart XXXX, must not exceed

10,000 grams HAP per megagram (20 pounds per ton) of total puncture sealants used at the puncture sealant affected source.

#### 5. Alternatives for Meeting Emission Limits

The three subcategories subject to emission limits (tire production, tire cord production, and puncture sealant application) offer compliance alternatives to meet the above-mentioned emission limits. For more information, a detailed breakdown of the subcategory alternatives can be found in 40 CFR 63.5985, 40 CFR 63.5987, and 40 CFR 63.5989.

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

For the residual risk assessment, the EPA received data from a voluntary data gathering effort led by the United States Tire Manufacturing Association (USTMA). USTMA worked with its major source facility members to provide information to the Agency regarding the rubber tire manufacturing process and the associated air emissions. The information received included description of HAP-emitting processes, information on the HAP-containing materials used, estimates of emissions, and descriptions of control technologies, if present.

For all major sources who are not members of USTMA, data was collected from the 2014 National Emissions Inventory (NEI). The NEI is a database that contains information about sources that emit criteria air pollutants, their precursors, and HAP. The database includes estimates of annual air pollutant emissions from point, nonpoint, and mobile sources in the 50 states, the District of Columbia, Puerto Rico, and the Virgin Islands. The EPA collects this information and releases an updated version of the NEI database every 3 years. The NEI includes data necessary for conducting a risk assessment, including annual HAP emissions estimates from individual emission points at facilities and the related emissions release parameters.



The EPA used NEI emissions and the voluntary data gathered by USTMA as the primary data to develop the model input files for the residual risk assessment for the Rubber Tire Manufacturing source category. Additional information on the development of the modeling file for the Rubber Tire Manufacturing source category can be found in the document, *Residual Risk Assessment for the Rubber Tire Manufacturing Source Category in Support of the 2019 Risk and Technology Review Proposal*, which is available in the docket for this rulemaking.

For both the risk assessment and technology review in this action, the EPA visited three rubber tire manufacturing facilities. During the visits, the EPA discussed process operations, compliance with the existing NESHAP, description of the emission points, process controls, unregulated emissions, and other aspects of facility operations. The EPA used the information provided by the facilities to understand the various operations, existing controls, and new developments in practices, processes, and control technologies for the source category. Additional information can be found in the site visit reports, *Michelin Tire Lexington Site Visit Report*, *Goodyear Tire Fayetteville Site Visit Report*, and *Continental Tire Mt. Vernon Site Visit Report*, which are available in the docket for this action.

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

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

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

Additional information about these data collection activities for the technology review is contained in the technology review memorandum titled *Technology Review for the Rubber Tire Manufacturing Source Category*, which is available in the docket for this action.

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

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

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

As discussed in section II.A of this preamble and in the Benzene NESHAP, in evaluating and developing standards under CAA section 112(f)(2), we apply a two-step approach to determine whether or not risks are acceptable and to determine if the standards provide an ample margin of safety to protect public health. As explained in the Benzene NESHAP, "the first step judgment on acceptability cannot be reduced to any single factor" and, thus, "[t]he Administrator believes that the acceptability of risk under section 112 is best judged on the basis of a broad set

of health risk measures and information.” 54 FR 38046, September 14, 1989. Similarly, with regard to the ample margin of safety determination, “the Agency again considers all of the health risk and other health information considered in the first step. Beyond that information, additional factors relating to the appropriate level of control will also be considered, including cost and economic impacts of controls, technological feasibility, uncertainties, and any other relevant factors.” *Id.*

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

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

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<sup>2</sup> The MIR is defined as the cancer risk associated with a lifetime of exposure at the highest concentration of HAP where people are likely to live. The HQ is the ratio of the potential HAP exposure concentration to the noncancer dose-response value; the HI is the sum of HQs for HAP that affect the same target organ or organ system.

any particular measure of public health risk from the EPA's consideration with respect to CAA section 112 regulations, and thereby implicitly permits consideration of any and all measures of health risk which the Administrator, in his judgment, believes are appropriate to determining what will 'protect the public health'."

See 54 FR 38057, September 14, 1989. Thus, the level of the MIR is only one factor to be weighed in determining acceptability of risk. The Benzene NESHAP explained that "an MIR of approximately one in 10 thousand should ordinarily be the upper end of the range of acceptability. As risks increase above this benchmark, they become presumptively less acceptable under CAA section 112, and would be weighed with the other health risk measures and information in making an overall judgment on acceptability. Or, the Agency may find, in a particular case, that a risk that includes an MIR less than the presumptively acceptable level is unacceptable in the light of other health risk factors." *Id.* at 38045. In other words, risks that include an MIR above 100-in-1 million may be determined to be acceptable, and risks with an MIR below that level may be determined to be unacceptable, depending on all of the available health information. Similarly, with regard to the ample margin of safety analysis, the EPA stated in the Benzene NESHAP that: "EPA believes the relative weight of the many factors that can be considered in selecting an ample margin of safety can only be determined for each specific source category. This occurs mainly because technological and economic factors (along with the health-related factors) vary from source category to source category." *Id.* at 38061. We also consider the uncertainties associated with the various risk analyses, as discussed earlier in this preamble, in our determinations of acceptability and ample margin of safety.

The EPA notes that it has not considered certain health information to date in making residual risk determinations. At this time, we do not attempt to quantify the HAP risk that may be associated with emissions from other facilities that do not include the source 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 risk, where pollutant-specific exposure health reference levels (*e.g.*, reference concentrations (RfCs)) are based on the assumption that thresholds exist for adverse health effects. For example, the EPA recognizes that, although exposures attributable to emissions from a source category or facility alone may not indicate the potential for increased risk of adverse noncancer health effects in a population, the exposures resulting from emissions from the facility in combination with emissions from all of the other sources (*e.g.*, other facilities) to which an individual is exposed may be sufficient to result in an increased risk of adverse noncancer health effects. In May 2010, the Science Advisory Board (SAB) advised the EPA "that RTR assessments will be most useful to decision makers and communities if results are presented in the broader context of aggregate and cumulative risks, including background concentrations and contributions from other sources in the area."<sup>3</sup>

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

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<sup>3</sup> Recommendations of the SAB Risk and Technology Review Methods Panel are provided in their report, which is available at:  
[https://yosemite.epa.gov/sab/sabproduct.nsf/4AB3966E263D943A8525771F00668381/\\$File/EP-A-SAB-10-007-unsigned.pdf](https://yosemite.epa.gov/sab/sabproduct.nsf/4AB3966E263D943A8525771F00668381/$File/EP-A-SAB-10-007-unsigned.pdf).

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

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

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

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

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

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

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

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

In this section, we provide a complete description of the types of analyses that we generally perform during the risk assessment process. In some cases, we do not perform a specific analysis because it is not relevant. For example, in the absence of emissions of HAP known to be persistent and bioaccumulative in the environment (PB-HAP), we would not perform a multipathway exposure assessment. Where we do not perform an analysis, we state that we do not and provide the reason. While we present all of our risk assessment methods, we

only present risk assessment results for the analyses actually conducted (see section IV.B of this preamble).

The EPA conducts a risk assessment that provides estimates of the MIR for cancer posed by the HAP emissions from each source in the source category, the HI for chronic exposures to HAP with the potential to cause noncancer health effects, and the HQ for acute exposures to HAP with the potential to cause noncancer health effects. The assessment also provides estimates of the distribution of cancer risk within the exposed populations, cancer incidence, and an evaluation of the potential for an adverse environmental effect. The seven sections that follow this paragraph describe how we estimated emissions and conducted the risk assessment. The docket for this rulemaking contains the following document which provides more information on the risk assessment inputs and models: *Residual Risk Assessment for Rubber Tire Manufacturing Source Category in Support of the 2019 Risk and Technology Review Proposed Rule*. The methods used to assess risk (as described in the seven primary steps below) are consistent with those described by the EPA in the document reviewed by a panel of the EPA's SAB in 2009;<sup>4</sup> and described in the SAB review report issued in 2010. They are also consistent with the key recommendations contained in that report.

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

The estimated actual emissions and the emission release characteristics for each facility in the source category were obtained from USTMA's voluntary data gathering and the 2014 NEI database. In addition, the EPA provided draft actual emissions data and stack parameters to

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



facilities for review and confirmation. In some cases, facilities were contacted to confirm emissions that appeared to be outliers, otherwise inconsistent with our understanding of the industry, or associated with high risk values in our initial risk screening analyses. Where appropriate, emission values and release characteristics were corrected, based on revised stack parameter information provided by the facilities. Additional information on the development of the modeling file for each source category, including the development of the actual emissions and emissions release characteristics, can be found in the document, *Residual Risk Assessment for Rubber Tire Manufacturing Source Category in Support of the 2019 Risk and Technology Review Proposed Rule*, 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 allowed under the MACT standards are referred to as the “MACT-allowable” emissions. We discussed the consideration of both MACT-allowable and actual emissions in the final Coke Oven Batteries RTR (70 FR 19998–19999, April 15, 2005) and in the proposed and final Hazardous Organic NESHAP RTR (71 FR 34428, June 14, 2006, and 71 FR 76609, December 21, 2006, respectively). In those actions, we noted that assessing the risk at the MACT-allowable level is inherently reasonable since that risk reflects the maximum level facilities could emit and still comply with national emission standards. We also explained that it is reasonable to consider actual emissions, where such data are available, in both steps of the risk analysis, in accordance with the Benzene NESHAP approach. (54 FR 38044, September 14, 1989.)

In order to calculate allowable emissions, a detailed analysis of the source category was conducted to determine how each major source facility meets the emissions standards of the Rubber Tire NESHAP. All major sources comply with NESHAP by utilizing the purchasing alternative (40 CFR 63.5985(a)) or the monthly average alternative, without using an add-on control device (40 CFR 63.5985(b)). The purchasing alternative allows a facility to use only cements and solvents that, as purchased, contain no more HAP than allowed by the emission limits in Table 1 of the NESHAP (40 CFR part 63, subpart XXXX, option 1, HAP constituent option). The monthly average alternative, without using an add-on control device, allows a facility to use cements and solvents in such a way that the monthly average HAP emissions do not exceed the emission limits in Table 1 of the NESHAP to this subpart, option 1 or option 2. Calculating allowable emissions was challenging because certain HAP (those in Table 16 of 40 CFR part 63, subpart XXXX) have lower emission limits than others (those not in Table 16 of 40 CFR part 63, subpart XXXX). Since raw ingredients used in tire production vary for each company and type of tire, the allowable emissions are also variable. This variability makes calculating allowable emissions impractical. It is, however, reasonable to assume that 16 years after promulgation of the MACT standards, tire manufacturers have optimized their use of cements and solvents, and their current emissions, per unit of production, are a good reflection of what the MACT standard allows. For additional information, see *Rubber Tire Manufacturing Emissions Memo*, located in the docket for this action.

Additionally, due to engineering advancements resulting in less cement/solvent usage for this source category, we expect that majority of major source facilities use less than 1 ton of cement/solvent. For facilities using the HAP constituent option (purchasing alternative), the emission limit results in an allowance of less than 2 pounds of HAP for those HAP listed in

Table 16 of 40 CFR part 63, subpart XXXX, and less than 20 pounds for HAP not in Table 16 of this subpart. Due to the complexity of calculating allowable emissions for this source category, we solicit comments on calculating allowable emissions.

Since the two utilized options of the standard cannot effectively be used to calculate representative allowable emissions, production data were used to determine production output from 2007 to 2016. These data are presented in Table 2 of the *Rubber Tire Manufacturing Emissions Memo*, which can be found in the docket for this action. The annual total of tire weight, in pounds, was used instead of the number of tires due to the large variance in size of tires (and hence raw material used) at facilities within the source category. Based on data in Table 2, the highest year of total production was 2015. Actual emissions data we received from the source category were also from 2015. Therefore, we conclude that the emissions data modeled are representative of the maximum annual emissions between 2007 and 2016 and actual emissions are representative of allowable emissions for the Rubber Tire Manufacturing source category.

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

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

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

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modeled sources, and (3) estimating individual and population-level inhalation risk using the exposure estimates and quantitative dose-response information.

*a. Dispersion Modeling*

The air dispersion model AERMOD, used by the HEM-3 model, is one of the EPA's preferred models for assessing air pollutant concentrations from industrial facilities.<sup>6</sup> To perform the dispersion modeling and to develop the preliminary risk estimates, HEM-3 draws on three data libraries. The first is a library of meteorological data, which is used for dispersion calculations. This library includes 1 year (2016) of hourly surface and upper air observations from 824 meteorological stations selected to provide coverage of the United States and Puerto Rico. A second library of United States Census Bureau census block<sup>7</sup> internal point locations and populations provides the basis of human exposure calculations (U.S. Census, 2010). In addition, for each census block, the census library includes the elevation and controlling hill height, which are also used in dispersion calculations. A third library of pollutant-specific dose-response values is used to estimate health risk. These are discussed below.

*b. Risk from Chronic Exposure to HAP*

In developing the risk assessment for chronic exposures, we use the estimated annual average ambient air concentrations of each HAP emitted by each source in the source category. The HAP air concentrations at each nearby census block centroid located within 50 km of the facility are a surrogate for the chronic inhalation exposure concentration for all the people who reside in that census block. A distance of 50 km is consistent with both the analysis supporting

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

<sup>7</sup> A census block is the smallest geographic area for which census statistics are tabulated. This document is a prepublication version, signed by EPA Administrator, Andrew R. Wheeler on 09/27/2019. We have taken steps to ensure the accuracy of this version, but it is not the official version.

the 1989 Benzene NESHAP (54 FR 38044, September 14, 1989) and the limitations of Gaussian dispersion models, including AERMOD.

For each facility, we calculate the MIR as the cancer risk associated with a continuous lifetime (24 hours per day, 7 days per week, 52 weeks per year, 70 years) exposure to the maximum concentration at the centroid of each inhabited census block. We calculate individual cancer risk by multiplying the estimated lifetime exposure to the ambient concentration of each HAP (in micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ )) by its unit risk estimate (URE). The URE is an upper-bound estimate of an individual's incremental risk of contracting cancer over a lifetime of exposure to a concentration of 1 microgram of the pollutant per cubic meter of air. For residual risk assessments, we generally use UREs from the EPA's Integrated Risk Information System (IRIS). For carcinogenic pollutants without IRIS values, we look to other reputable sources of cancer dose-response values, often using California EPA (CalEPA) UREs, where available. In cases where new, scientifically credible dose-response values have been developed in a manner consistent with EPA guidelines and have undergone a peer review process similar to that used by the EPA, we may use such dose-response values in place of, or in addition to, other values, if appropriate. The pollutant-specific dose-response values used to estimate health risk are available at <https://www.epa.gov/fera/dose-response-assessment-assessing-health-risks-associated-exposure-hazardous-air-pollutants>.

To estimate individual lifetime cancer risks associated with exposure to HAP emissions from each facility in the source category, we sum the risks for each of the carcinogenic HAP<sup>8</sup>

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<sup>8</sup> The EPA's 2005 *Guidelines for Carcinogen Risk Assessment* classifies carcinogens as: "carcinogenic to humans," "likely to be carcinogenic to humans," and "suggestive evidence of carcinogenic potential." These classifications also coincide with the terms "known carcinogen, probable carcinogen, and possible carcinogen," respectively, which are the terms advocated in

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

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

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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 risk of these individual compounds to obtain the cumulative cancer risk is an approach that was recommended by the EPA's SAB in their 2002 peer review of the EPA's National Air Toxics Assessment (NATA) titled *NATA - Evaluating the National-scale Air Toxics Assessment 1996 Data -- an SAB Advisory*, available at [https://yosemite.epa.gov/sab/sabproduct.nsf/214C6E915BB04E14852570CA007A682C/\\$File/ecadv02001.pdf](https://yosemite.epa.gov/sab/sabproduct.nsf/214C6E915BB04E14852570CA007A682C/$File/ecadv02001.pdf).

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deleterious effects during a lifetime”

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

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

For each HAP for which appropriate acute inhalation dose-response values are available, the EPA also assesses the potential health risks due to acute exposure. For these assessments, the EPA makes conservative assumptions about emission rates, meteorology, and exposure location. In this proposed rulemaking, as part of our efforts to continually improve our methodologies to evaluate the risks that HAP emitted from categories of industrial sources pose to human health and the environment,<sup>9</sup> we are revising our treatment of meteorological data to use reasonable

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<sup>9</sup> See, e.g., U.S. EPA. *Screening Methodologies to Support Risk and Technology Reviews (RTR): A Case Study Analysis* (Draft Report, May 2017. <https://www3.epa.gov/ttn/atw/rrisk/rtrpg.html>). This document is a prepublication version, signed by EPA Administrator, Andrew R. Wheeler on 09/27/2019. We have taken steps to ensure the accuracy of this version, but it is not the official version.

worst-case air dispersion conditions in our acute risk screening assessments instead of worst-case air dispersion conditions. This revised treatment of meteorological data and the supporting rationale are described in more detail in *Residual Risk Assessment for Rubber Tire Manufacturing Source Category in Support of the 2019 Risk and Technology Review Proposed Rule* and in Appendix 5 of the report: *Technical Support Document for Acute Risk Screening Assessment*. We will be applying this revision in RTR rulemakings proposed on or after June 3, 2019.

To assess the potential acute risk to the maximally exposed individual, we use the peak hourly emission rate for each emission point,<sup>10</sup> reasonable worst-case dispersion conditions (i.e., 99<sup>th</sup> percentile), and the point of highest off-site exposure. Specifically, we assume that peak emissions from the source category and reasonable worst-case air dispersion conditions co-occur and that a person is present at the point of maximum exposure.

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 concentration by the acute dose-response

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<sup>10</sup> In the absence of hourly emission data, we develop estimates of maximum hourly emission rates by multiplying the average actual annual emissions rates by a factor (either a category-specific factor or a default factor of 10) to account for variability. This is documented in *Residual Risk Assessment for Rubber Tire Manufacturing Source Category in Support of the 2019 Risk and Technology Review Proposed Rule* and in Appendix 5 of the report: *Technical Support Document for Acute Risk Screening Assessment*. Both are available in the docket for this rulemaking.



value. For each HAP for which acute dose-response values are available, the EPA calculates acute HQs.

An acute REL is defined as “the concentration level at or below which no adverse health effects are anticipated for a specified exposure duration.”<sup>11</sup> Acute RELs are based on the most sensitive, relevant, adverse health effect reported in the peer-reviewed medical and toxicological literature. They are designed to protect the most sensitive individuals in the population through the inclusion of margins of safety. Because margins of safety are incorporated to address data gaps and uncertainties, exceeding the REL does not automatically indicate an adverse health impact. AEGLs represent threshold exposure limits for the general public and are applicable to emergency exposures ranging from 10 minutes to 8 hours.<sup>12</sup> They are guideline levels for “once-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<sup>3</sup> (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.” The

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

<sup>12</sup> National Academy of Sciences, 2001. *Standing Operating Procedures for Developing Acute Exposure Levels for Hazardous Chemicals*, page 2. Available at [https://www.epa.gov/sites/production/files/2015-09/documents/sop\\_final\\_standing\\_operating\\_procedures\\_2001.pdf](https://www.epa.gov/sites/production/files/2015-09/documents/sop_final_standing_operating_procedures_2001.pdf). Note that the National Advisory Committee for Acute Exposure Guideline Levels for Hazardous Substances ended in October 2011, but the AEGL program continues to operate at the EPA and works with the National Academies to publish final AEGLs (<https://www.epa.gov/aegl>). This document is a prepublication version, signed by EPA Administrator, Andrew R. Wheeler on 09/27/2019. We have taken steps to ensure the accuracy of this version, but it is not the official version.

document also notes that “Airborne concentrations below AEGL–1 represent exposure levels that can produce mild and progressively increasing but transient and nondisabling odor, taste, and sensory irritation or certain asymptomatic, nonsensory effects.” *Id.* AEGL–2 are defined as “the airborne concentration (expressed as parts per million or milligrams per cubic meter) of a substance above which it is predicted that the general population, including susceptible individuals, could experience irreversible or other serious, long-lasting adverse health effects or an impaired ability to escape.” *Id.*

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

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<sup>13</sup> *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%202014%20Revision%20%28Updated%2010-2-2014%29.pdf>. This document is a prepublication version, signed by EPA Administrator, Andrew R. Wheeler on 09/27/2019. We have taken steps to ensure the accuracy of this version, but it is not the official version.

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).

Rubber tires are manufactured via a continuous batch operation. In a continuous batch operation, manufacturing operations take place continuously, but occur in batches. On any single production line, a batch must complete the manufacturing process before the next batch may begin the manufacturing process on that production line. Since rubber tire facilities are large and have significant production capacities, there are multiple production lines operating simultaneously. This results in relatively consistent emissions. As discussed in the allowable emissions section (III.C.2) above, we do expect there to be some variability in emissions depending on the type of tire a facility is manufacturing. To account for this variability, we have selected a multiplier of two based upon the continuous nature of the batch processes, to use in assessing acute risks.

We believe two is a conservative acute multiplier for this source category. Since the operation is a continuous batch process that operates around the clock, we do not expect there to be significant changes in hour-to-hour emissions such as those that may occur in industries that do not continuously operate their production lines. Slight variation in batch ingredients is accounted for by using the multiplier of two. A further discussion of why this factor was chosen can be found in the memorandum, *Rubber Tire Manufacturing Emissions Memo*, available in the docket for this rulemaking.

In our acute inhalation screening risk assessment, acute impacts are deemed negligible for HAP for which acute HQs are less than or equal to 1, 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 exposures of concern. These refinements are discussed more fully in, *Residual Risk Assessment for the Rubber Tire Manufacturing Source Category in Support of the Risk and Technology Review 2019 Proposed Rule*, which is available in the docket for this action.

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

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

For the Rubber Tire Manufacturing source category, we identified PB-HAP emissions of polycyclic organic matter (POM), cadmium, and lead, so we proceeded to the next step of the evaluation. Except for lead, the human health risk screening assessment for PB-HAP consists of three progressive tiers. In a tier 1 screening assessment, we determine whether the magnitude of the facility-specific emissions of PB-HAP warrants further evaluation to characterize human health risk through ingestion exposure. To facilitate this step, we evaluate emissions against previously developed screening threshold emission rates for several PB-HAP that are based on a hypothetical upper-end screening exposure scenario developed for use in conjunction with the EPA's Total Risk Integrated Methodology, Fate, Transport, and Ecological Exposure (TRIM.FaTE) model. The PB-HAP with screening threshold emission rates are arsenic compounds, cadmium compounds, chlorinated dibenzodioxins and furans, mercury compounds, and POM. Based on the EPA estimates of toxicity and bioaccumulation potential, the pollutants

represent a conservative list for inclusion in multipathway risk assessments for RTR rules. (See Volume 1, Appendix D at [https://www.epa.gov/sites/production/files/2013-08/documents/volume\\_1\\_reflibrary.pdf](https://www.epa.gov/sites/production/files/2013-08/documents/volume_1_reflibrary.pdf).) In this assessment, we compare the facility-specific emission rates of these PB-HAP to the screening threshold emission rates for each PB-HAP to assess the potential for significant human health risks via the ingestion pathway. We call this application of the TRIM.FaTE model the Tier 1 screening assessment. The ratio of a facility's actual emission rate to the Tier 1 screening threshold emission rate is a "screening value."

We derive the Tier 1 screening threshold emission rates for these PB-HAP (other than lead compounds) to correspond to a maximum excess lifetime cancer risk of 1-in-1 million (*i.e.*, for arsenic compounds, polychlorinated dibenzodioxins and furans, and POM) or, for HAP that cause noncancer health effects (*i.e.*, cadmium compounds and mercury compounds), a maximum HQ of 1. If the emission rate of any one PB-HAP or combination of carcinogenic PB-HAP in the Tier 1 screening assessment exceeds the Tier 1 screening threshold emission rate for any facility (*i.e.*, the screening value is greater than 1), we conduct a second screening assessment, which we call the Tier 2 screening assessment. The Tier 2 screening assessment separates the Tier 1 combined fisher and farmer exposure scenario into fisher, farmer, and gardener scenarios that retain upper-bound ingestion rates.

In the Tier 2 screening assessment, the location of each facility that exceeds a Tier 1 screening threshold emission rate is used to refine the assumptions associated with the Tier 1 fisher and farmer exposure scenarios at that facility. A key assumption in the Tier 1 screening assessment is that a lake and/or farm is located near the facility. As part of the Tier 2 screening assessment, we use a U.S. Geological Survey (USGS) database to identify actual waterbodies within 50 km of each facility and assume the fisher only consumes fish from lakes within that 50

km zone. We also examine the differences between local meteorology near the facility and the meteorology used in the Tier 1 screening assessment. We then adjust the previously-developed Tier 1 screening threshold emission rates for each PB-HAP for each facility based on an understanding of how exposure concentrations estimated for the screening scenario change with the use of local meteorology and USGS lakes database.

In the Tier 2 farmer scenario, we maintain an assumption that the farm is located within 0.5 km of the facility and that the farmer consumes meat, eggs, dairy, vegetables, and fruit produced near the facility. We may further refine the Tier 2 screening analysis by assessing a gardener scenario to characterize a range of exposures, with the gardener scenario being more plausible in RTR evaluations. Under the gardener scenario, we assume the gardener consumes home-produced eggs, vegetables, and fruit products at the same ingestion rate as the farmer. The Tier 2 screen continues to rely on the high-end food intake assumptions that were applied in Tier 1 for local fish (adult female angler at 99<sup>th</sup> percentile fish consumption<sup>14</sup>) and locally grown or raised foods (90<sup>th</sup> percentile consumption of locally grown or raised foods for the farmer and gardener scenarios<sup>15</sup>). If PB-HAP emission rates do not result in a Tier 2 screening value greater than 1, we consider those PB-HAP emissions to pose risks below a level of concern. If the PB-HAP emission rates for a facility exceed the Tier 2 screening threshold emission rates, we may conduct a Tier 3 screening assessment.

There are several analyses that can be included in a Tier 3 screening assessment, depending upon the extent of refinement warranted, including validating that the lakes are

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<sup>14</sup> Burger, J. 2002. Daily consumption of wild fish and game: Exposures of high end recreationists. *International Journal of Environmental Health Research* 12:343–354.

<sup>15</sup> U.S. EPA. *Exposure Factors Handbook 2011 Edition (Final)*. U.S. Environmental Protection Agency, Washington, DC, EPA/600/R-09/052F, 2011.

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fishable, locating residential/garden locations for urban and/or rural settings, considering plume-rise to estimate emissions lost above the mixing layer, and considering hourly effects of meteorology and plume-rise on chemical fate and transport (a time-series analysis). If necessary, the EPA may further refine the screening assessment through a site-specific assessment.

In evaluating the potential multipathway risk from emissions of lead compounds, rather than developing a screening threshold emission rate, we compare maximum estimated chronic inhalation exposure concentrations to the level of the current National Ambient Air Quality Standard (NAAQS) for lead.<sup>16</sup> Values below the level of the primary (health-based) lead NAAQS are considered to have a low potential for multipathway risk.

For further information on the multipathway assessment approach, see the *Residual Risk Assessment for the Rubber Tire Manufacturing Source Category in Support of the Risk and Technology Review 2019 Proposed Rule*, which is available in the docket for this action.

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

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

The EPA conducts a screening assessment to examine the potential for an adverse environmental effect as required under section 112(f)(2)(A) of the CAA. Section 112(a)(7) of the CAA defines “adverse environmental effect” as “any significant and widespread adverse effect,

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<sup>16</sup> In doing so, the EPA notes that the legal standard for a primary NAAQS – that a standard is requisite to protect public health and provide an adequate margin of safety (CAA section 109(b)) – differs from the CAA section 112(f) standard (requiring, among other things, that the standard provide an “ample margin of safety to protect public health”). However, the primary lead NAAQS is a reasonable measure of determining risk acceptability (*i.e.*, the first step of the Benzene NESHAP analysis) since it is designed to protect the most susceptible group in the human population – children, including children living near major lead emitting sources. 73 FR 67002/3; 73 FR 67000/3; 73 FR 67005/1. In addition, applying the level of the primary lead NAAQS at the risk acceptability step is conservative, since that primary lead NAAQS reflects an adequate margin of safety.

which may reasonably be anticipated, to wildlife, aquatic life, or other natural resources, including adverse impacts on populations of endangered or threatened species or significant degradation of environmental quality over broad areas.”

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

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

An ecological benchmark represents a concentration of HAP that has been linked to a particular environmental effect level. For each environmental HAP, we identified the available ecological benchmarks for each assessment endpoint. We identified, where possible, ecological benchmarks at the following effect levels: probable effect levels, lowest-observed-adverse-effect level, and no-observed-adverse-effect level. In cases where multiple effect levels were available for a particular PB-HAP and assessment endpoint, we use all of the available effect levels to help



us to determine whether ecological risks exist and, if so, whether the risks could be considered significant and widespread.

For further information on how the environmental risk screening assessment was conducted, including a discussion of the risk metrics used, how the environmental HAP were identified, and how the ecological benchmarks were selected, see Appendix 9 of the *Residual Risk Assessment for the Rubber Tire Manufacturing Source Category in Support of the Risk and Technology Review 2019 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 Rubber Tire Manufacturing source category emitted any of the environmental HAP. For the Rubber Tire Manufacturing source category, we identified emissions of cadmium and POM. Because one or more of the environmental HAP evaluated cadmium and POM are emitted by at least one facility in the source category, we proceeded to the second step of the evaluation.

*c. PB-HAP Methodology*

The environmental screening assessment includes six PB-HAP, arsenic compounds, cadmium compounds, dioxins/furans, POM, mercury (both inorganic mercury and methyl mercury), and lead compounds. With the exception of lead, the environmental risk screening assessment for PB-HAP consists of three tiers. The first tier of the environmental risk screening assessment uses the same health-protective conceptual model that is used for the Tier 1 human health screening assessment. TRIM.FaTE model simulations were used to back-calculate Tier 1 screening threshold emission rates. The screening threshold emission rates represent the emission rate in tons of pollutant per year that results in media concentrations at the facility that equal the

relevant ecological benchmark. To assess emissions from each facility in the category, the reported emission rate for each PB-HAP was compared to the Tier 1 screening threshold emission rate for that PB-HAP for each assessment endpoint and effect level. If emissions from a facility do not exceed the Tier 1 screening threshold emission rate, the facility “passes” the screening assessment, and, therefore, is not evaluated further under the screening approach. If emissions from a facility exceed the Tier 1 screening threshold emission rate, we evaluate the facility further in Tier 2.

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

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

additional refinement, the facility emission rate still exceeds the screening threshold emission rate, the facility may have the potential to cause an adverse environmental effect.

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

*d. Acid Gas Environmental Risk Methodology*

The environmental screening assessment for acid gases evaluates the potential phytotoxicity and reduced productivity of plants due to chronic exposure to HF and HCl. The environmental risk screening methodology for acid gases is a single-tier screening assessment that compares modeled ambient air concentrations (from AERMOD) to the ecological benchmarks for each acid gas. To identify a potential adverse environmental effect (as defined in section 112(a)(7) of the CAA) from emissions of HF and HCl, we evaluate the following metrics: the size of the modeled area around each facility that exceeds the ecological benchmark for each acid gas, in acres and km<sup>2</sup>; the percentage of the modeled area around each facility that exceeds the ecological benchmark for each acid gas; and the area-weighted average screening value around each facility (calculated by dividing the area-weighted average concentration over the 50-km modeling domain by the ecological benchmark for each acid gas). For further information on the environmental screening assessment approach, see Appendix 9 of the

*Residual Risk Assessment for Rubber Tire Manufacturing Source Category in Support of the Risk and Technology Review 2019 Proposed Rule*, which is available in the docket for this action.

6. How do we conduct facility-wide assessments?

To put the source category risks in context, we typically examine the risks from the entire “facility,” where the facility includes all HAP-emitting operations within a contiguous area and under common control. In other words, we examine the HAP emissions not only from the source category emission points of interest, but also emissions of HAP from all other emission sources at the facility for which we have data. For this source category, we conducted the facility-wide assessment using a dataset compiled from the 2014 NEI. For this source category, we conducted the facility-wide assessment using a dataset compiled from the 2014 NEI. The source category records of that NEI dataset were removed, evaluated, and updated as described in section II.C of this preamble: What data collection activities were conducted to support this action? Once a quality assured source category dataset was available, it was placed back with the remaining records from the NEI for that facility. The facility-wide file was then used to analyze risks due to 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 Rubber Tire Manufacturing Source Category in Support of the Risk and Technology Review 2019 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 do we consider uncertainties in risk assessment?

Uncertainty and the potential for bias are inherent in all risk assessments, including those performed for this proposal. Although uncertainty exists, we believe that our approach, which used conservative tools and assumptions, ensures that our decisions are health and environmentally protective. A brief discussion of the uncertainties in the RTR emissions 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 Rubber Tire Manufacturing Source Category in Support of the Risk and Technology Review 2019 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 quality assurance/quality control processes, the accuracy of emissions values will vary depending on the source of the data, the degree to which data are incomplete or missing, the degree to which assumptions made to complete the datasets are accurate, errors in emission estimates, and other factors. The emission estimates considered in 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 an emission adjustment factor applied to the average annual hourly emission rates, which are intended to account for emission fluctuations due to normal facility operations.

*b. Uncertainties in Dispersion Modeling*

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

*c. Uncertainties in Inhalation Exposure Assessment*

Although every effort is made to identify all of the relevant facilities and emission points, as well as to develop accurate estimates of the annual emission rates for all relevant HAP, the uncertainties in our emission inventory likely dominate the uncertainties in the exposure

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

*d. Uncertainties in Dose-Response Relationships*

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

Cancer UREs used in our risk assessments are those that have been developed to generally provide an upper bound estimate of risk.<sup>17</sup> That is, they represent a “plausible upper limit to the true value of a quantity” (although this is usually not a true statistical confidence limit). In some circumstances, the true risk could be as low as zero; however, in other circumstances the risk could be greater.<sup>18</sup> 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,<sup>19</sup> which considers uncertainty, variability, and gaps in the available data. The UFs are applied to derive dose-response values that are intended to protect against appreciable risk of deleterious effects.

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

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<sup>17</sup> IRIS glossary ([https://ofmpub.epa.gov/sor\\_internet/registry/termreg/searchandretrieve/glossariesandkeywordlists/search.do?details=&glossaryName=IRIS%20Glossary](https://ofmpub.epa.gov/sor_internet/registry/termreg/searchandretrieve/glossariesandkeywordlists/search.do?details=&glossaryName=IRIS%20Glossary)).

<sup>18</sup> An exception to this is the URE for benzene, which is considered to cover a range of values, each end of which is considered to be equally plausible, and which is based on maximum likelihood estimates.

<sup>19</sup> See *A Review of the Reference Dose and Reference Concentration Processes*, U.S. EPA, December 2002, and *Methods for Derivation of Inhalation Reference Concentrations and Application of Inhalation Dosimetry*, U.S. EPA, 1994.

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estimated exposures, the lack of acute dose-response values at different levels of severity should be factored into the risk characterization as potential uncertainties.

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

Although we make every effort to identify appropriate human health effect dose-response values for all pollutants emitted by the sources in this risk assessment, some HAP emitted by this source category are lacking dose-response assessments. Accordingly, these pollutants cannot be included in the quantitative risk assessment, which could result in quantitative estimates understating HAP risk. To help to alleviate this potential underestimate, where we conclude similarity with a HAP for which a dose-response value is available, we use that value as a surrogate for the assessment of the HAP for which no value is available. To the extent use of surrogates indicates appreciable risk, we may identify a need to increase priority for an IRIS assessment for that substance. We additionally note that, generally speaking, HAP of greatest concern due to environmental exposures and hazard are those for which dose-response assessments have been performed, reducing the likelihood of understating risk. Further, HAP not included in the quantitative assessment are assessed qualitatively and considered in the risk

characterization that informs the risk management decisions, including consideration of HAP reductions achieved by various control options.

For a group of compounds that are unspiciated (*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 emission rates, meteorology, and the presence of a person. In the acute screening assessment that we conduct under the RTR program, we assume that peak emissions from the source category and reasonable worst-case air dispersion conditions (*i.e.*, 99<sup>th</sup> percentile) co-occur. We then include the additional assumption that a person is located at this point at the same time. Together, these assumptions represent a reasonable worst-case actual exposure scenario. In most cases, it is unlikely that a person would be located at the point of maximum exposure during the time when peak emissions and reasonable worst-case air dispersion conditions occur simultaneously.

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

For each source category, we generally rely on site-specific levels of PB-HAP or environmental HAP emissions to determine whether a refined assessment of the impacts from multipathway exposures is necessary or whether it is necessary to perform an environmental

screening assessment. This determination is based on the results of a three-tiered screening assessment that relies on the outputs from models – TRIM.FaTE and AERMOD – that estimate environmental pollutant concentrations and human exposures for five PB-HAP (dioxins, POM, mercury, cadmium, and arsenic) and two acid gases (HF and HCl). For lead, we use AERMOD to determine ambient air concentrations, which are then compared to the secondary NAAQS standard for lead. Two important types of uncertainty associated with the use of these models in RTR risk assessments and inherent to any assessment that relies on environmental modeling are model uncertainty and input uncertainty.<sup>20</sup>

Model uncertainty concerns whether the model adequately represents the actual processes (*e.g.*, movement and accumulation) that might occur in the environment. For example, does the model adequately describe the movement of a pollutant through the soil? This type of uncertainty is difficult to quantify. However, based on feedback received from previous EPA SAB reviews and other reviews, we are confident that the models used in the screening assessments are appropriate and state-of-the-art for the multipathway and environmental screening risk assessments conducted in support of RTR.

Input uncertainty is concerned with how accurately the models have been configured and parameterized for the assessment at hand. For Tier 1 of the multipathway and environmental screening assessments, we configured the models to avoid underestimating exposure and risk. This was accomplished by selecting upper-end values from nationally representative datasets for the more influential parameters in the environmental model, including selection and spatial

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<sup>20</sup> In the context of this discussion, the term “uncertainty” as it pertains to exposure and risk encompasses both *variability* in the range of expected inputs and screening results due to existing spatial, temporal, and other factors, as well as *uncertainty* in being able to accurately estimate the true result.

configuration of the area of interest, lake location and size, meteorology, surface water, soil characteristics, and structure of the aquatic food web. We also assume an ingestion exposure scenario and values for human exposure factors that represent reasonable maximum exposures.

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

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

For all tiers of the multipathway and environmental screening assessments, our approach to addressing model input uncertainty is generally cautious. We choose model inputs from the upper end of the range of possible values for the influential parameters used in the models, and

we assume that the exposed individual exhibits ingestion behavior that would lead to a high total exposure. This approach reduces the likelihood of not identifying high risks for adverse impacts.

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

The EPA evaluates the following HAP in the multipathway and/or environmental risk screening assessments, where applicable: arsenic, cadmium, dioxins/furans, lead, mercury (both inorganic and methyl mercury), POM, HCl, and HF. These HAP represent pollutants that can cause adverse impacts either through direct exposure to HAP in the air or through exposure to HAP that are deposited from the air onto soils and surface waters and then through the environment into the food web. These HAP represent those HAP for which we can conduct a meaningful multipathway or environmental screening risk assessment. For other HAP not included in our screening assessments, the model has not been parameterized such that it can be used for that purpose. In some cases, depending on the HAP, we may not have appropriate multipathway models that allow us to predict the concentration of that pollutant. The EPA acknowledges that other HAP beyond these that we are evaluating may have the potential to cause adverse effects and, therefore, the EPA may evaluate other relevant HAP in the future, as modeling science and resources allow.

#### IV. Analytical Results and Proposed Decisions

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

1. Inhalation Risk Assessment Results

Table 2 of this preamble provides an overall summary of the inhalation risk results. The results of the chronic baseline inhalation cancer risk assessment indicate that, based on estimates of current actual and allowable emissions, the MIR posed by the Rubber Tire Manufacturing source category is 4-in-1 million. The risk drivers include several organic and metallic HAP from mixing, curing, and extruding operations. The total estimated cancer incidence from rubber tire manufacturing emission sources based on actual and allowable emission levels is 0.002 excess cancer cases per year, or one case in every 500 years. Based upon actual or allowable emissions, 4,500 people are estimated to be exposed to cancer risks greater than or equal to 1-in-1 million. The maximum chronic noncancer HI (TOSHI) values for the source category, based on actual and allowable emissions, are estimated to be less than 1 (0.2), with aniline emissions from mixing and curing processes driving the TOSHI value.

**Table 2. Rubber Tire Manufacturing Inhalation Risk Assessment Results<sup>1</sup>**

<b>Risk Assessment</b>	<b>Number of Facilities</b>	<b>Maximum Individual Cancer Risk (in 1 million)<sup>2</sup></b>	<b>Estimated Population at Increased Risk of Cancer ≥ 1-in-1 Million</b>	<b>Estimated Annual Cancer Incidence (cases per year)</b>	<b>Maximum Chronic Noncancer TOSHI<sup>3</sup></b>	<b>Maximum Screen Acute Noncancer HQ<sup>4</sup></b>
<b>Baseline Actual Emissions</b>						
Source Category	21	4	4,500	0.002	0.2	0.4
Facility-Wide	21	8	9,200	0.002	0.2	-
<b>Baseline Allowable Emissions</b>						
Source Category	21	4	4,500	0.002	0.2	-

<sup>1</sup> For this source category actual and allowable emissions are the same.

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

<sup>3</sup> Maximum TOSHI. The target organ with the highest TOSHI for the Rubber Tire Manufacturing source category is the spleen.

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<sup>4</sup> The maximum estimated acute exposure concentration was divided by available short-term threshold values to develop an array of HQ values. HQ values shown use the lowest available acute threshold value, which in most cases is the REL. When an HQ exceeds 1, we also show the HQ using the next lowest available acute dose-response value. The HQ of 0.4 is based upon an acute REL based upon worst-case screening values.

## 2. Acute Risk Results

Worst-case acute HQs were calculated for every HAP for which there is an acute health benchmark using actual emissions. Our screening analysis for worst-case acute impacts based on actual emissions indicates that no pollutants exceed an acute HQ value of 1 (0.4). Acute HQs are not calculated for allowable or whole facility emissions.

## 3. Multipathway Risk Screening Results

Results of the worst-case Tier 1 screening analysis indicate that PB-HAP emissions (based on estimates of actual emissions) from facilities within the source category did not exceed the Tier 1 cancer screening value of 1 for POM emissions, while one facility exceeded the Tier 1 noncancer screening value by a factor of 10 for cadmium emissions.

For the one facility that did not screen out at Tier 1 for cadmium, we conducted a Tier 2 screening analysis. The Tier 2 screen replaces some of the assumptions used in Tier 1 with site-specific data, the location of fishable lakes, and local wind direction and speed. The Tier 2 screen continues to rely on high-end assumptions about consumption of local fish and locally grown or raised foods (adult female angler at 99<sup>th</sup> percentile consumption for fish<sup>14</sup> for the fisher scenario and 90<sup>th</sup> percentile for consumption of locally grown or raised foods<sup>15</sup>) for the farmer scenario and uses an assumption that the same individual consumes each of these foods in high end quantities (*i.e.*, that an individual has high-end ingestion rates for each food). The result of this analysis was the development of site-specific concentrations of cadmium. It is important to note that, even with the inclusion of some site-specific information in the Tier 2 analysis, the

multipathway screening analysis is still a very conservative, health-protective assessment (*e.g.*, upper-bound consumption of local fish, locally grown, and/or raised, foods) and likely will yield results that serve as an upper-bound multipathway risk associated with a facility.

The Tier 2 noncancer screening analysis for the single facility emitting cadmium above a Tier 1 screening value of 1 resulted in a Tier 2 noncancer screening value of 1 for the fisher scenario and less than 1 for the farmer scenario. For lead, we did not estimate any exceedances of the primary lead NAAQS.

#### 4. Environmental Risk Screening Results

We conducted an environmental risk screening assessment for the Rubber Tire Manufacturing source category for the following pollutants: cadmium, lead, and POM.

In the Tier 1 screening analysis for PB-HAP (other than lead, which was evaluated differently), POM emissions had no Tier 1 exceedances for any ecological benchmark. Cadmium emissions at one facility had Tier 1 exceedances for the surface soil threshold levels (no observed adverse effect level (NOAEL) mammalian insectivores (shrew) by a maximum screening value of 3.

A Tier 2 screening assessment was performed for cadmium with no exceedances for any ecological benchmark. For lead, we did not estimate any exceedances of the primary lead NAAQS.

#### 5. Facility-Wide Risk Results

Results of the assessment of facility-wide emissions indicate that, of the 21 facilities, 13 facilities have a facility-wide MIR greater than or equal to 1-in-1 million. The maximum facility-wide cancer risk is 8-in-1 million, mainly driven by chromium (VI) compounds and metal emissions from sources outside of the source category which include mixing, extruding,



calendaring, and finishing operations; refer to Table 2. The total estimated cancer incidence from the whole facility is 0.002 excess cancer cases per year, or one case in every 500 years.

Approximately 9,200 people are estimated to have cancer risks greater than 1-in-1 million. The maximum facility-wide chronic noncancer TOSHI is estimated to be less than 1 (0.2), mainly driven by emissions of aniline from mixing and curing processes.

6. What demographic groups might benefit from this regulation?

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

The results of the demographic analysis are summarized in Table 3 below. These results, for various demographic groups, are based on the estimated risk from actual emissions levels for the population living within 50 km of the facilities.

**Table 3. Rubber Tire Manufacturing Demographic Risk Analysis Results**

<b>Rubber Tire Manufacturing: Demographic Assessment Results – 50 km Study Area Radius</b>			
		<b>Population with Cancer Risk at or Above 1-in-1 Million Due to Rubber Tire Manufacturing</b>	<b>Population with Chronic HI Above 1 Due to Rubber Tire Manufacturing</b>
	<b>Nationwide</b>		
Total Population	317,736,049	4,524	0
Race by Percent			
White	62%	66%	0%
Minority	38%	34%	0%
Race by Percent			
African American			

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	12%	25%	0%
Native American	0.8%	0%	0%
Other and Multiracial	7%	3%	0%
Hispanic or Latino (includes white and non-white)	18%	6%	0%
Income by Percent			
Below Poverty Level	14%	21%	0%
Above Poverty Level	86%	79%	0%
Education by Percent			
Over 25 and without High School Diploma	14%	12%	0%
Over 25 and with a High School Diploma	86%	88%	0%
Linguistically Isolated by Percent			
Linguistically Isolated	6%	1%	0%

The results of the Rubber Tire Manufacturing source category demographic analysis indicate that emissions from the source category expose approximately 4,500 people to a cancer risk at or above 1-in-1 million and no people to a chronic noncancer TOSHI greater than 1. The percentages of the at-risk population indicate that the demographic groups White, African American, people below the poverty level, and people over 25 with a high school diploma that are living within 50 km of facilities in the source category exceed the corresponding national percentage for the same demographic groups.

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

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

#### 1. Risk Acceptability

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As noted in section III 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 rubber tire manufacturing facilities, and we considered these in determining acceptability.

For the Rubber Tire Manufacturing source category, the risk analysis indicates that the cancer risk to the individual most exposed is 4-in-1 million from actual and allowable emissions. The risk analysis also estimates a cancer incidence of 0.002 excess cancer cases per year, or 1 case every 500 years, as well as a maximum chronic noncancer TOSHI value of 0.2 for both actual and allowable emissions. The results of the acute screening analysis also estimate a maximum acute noncancer HQ screening value of less than 1 based on the acute REL. By definition, the acute REL represents a health-protective level of exposure, with effects not anticipated below those levels, even for repeated exposures. Based on the results of the multipathway cancer screening analyses of POM emissions, we conclude that the maximum cancer risk from ingestion exposure to the individual most exposed is less than 1-in-1 million for the Tier 1 farmer and fisher scenario. The maximum multipathway noncancer TOSHI screen value for cadmium is equal to 1 based upon the Tier 2 fisher scenario. Multipathway screening values were below a level of concern for both carcinogenic and non-carcinogenic PB-HAP as well as emissions of lead compounds. No additional screens or site-specific assessment was conducted since the multipathway screening values were deemed sufficient to demonstrate protection of public health based upon the conservative nature of our model design. The cancer

risk for both inhalation and ingestion is considerably less than 100-in-1 million, which is the presumptive upper limit of acceptable risk. Considering all the health risk information and factors discussed above, including the uncertainties discussed in section III of this preamble, we propose that the risks from the Rubber Tire Manufacturing source category are acceptable.

## 2. Ample Margin of Safety Analysis

As directed by CAA section 112(f)(2), we conducted an analysis to determine whether the current emissions standards provide an ample margin of safety to protect public health. Under the ample margin of safety analysis, we evaluated the cost and feasibility of available control technologies and other measures (including the controls, measures, and costs reviewed under the technology review) that could be applied to this source category to further reduce the risks (or potential risks) due to emissions of HAP identified in the risk assessment. In this analysis, we considered the results of the technology review, risk assessment, and other aspects of the MACT rule review to determine whether there are any cost-effective controls or other measures that would reduce emissions further.

The risks from this source category were deemed acceptable with a cancer risk to the individual most exposed of 4-in-1 million. Our risk analysis indicated the inhalation risks from this source category are low for both cancer and noncancer health effects, and, therefore, any risk reductions to control process emissions from rubber tire manufacturing operations would result in minimal health benefits. Mixing, extruding, and buffing emissions result in 88 percent of the cancer incidence for this source category with metal emissions contributing to 40 percent of the cancer incidence. The inhalation chronic and acute noncancer risks were also below a HI and a HQ of 1, respectively. In addition, the multipathway screening analyses for PB-HAP and lead emissions also demonstrate a low potential for risks for cancer and noncancer health effects. The

ingestion cancer risk also is less than 1-in-1 million based upon for the Tier 1 farmer and fisher scenario and the ingestion noncancer HI is less than 1 based upon the Tier 2 fisher scenario.

Our review of post-control options for the Rubber Tire Manufacturing source category identified regenerative thermal oxidizers (RTOs) as an option for reducing organic HAP emissions. The use of RTOs to control organic HAP emissions was evaluated and determined to not be cost effective during the original NESHAP. Upon review, we do not believe the associated costs for installing and operating an RTO have changed significantly since the original NESHAP. When evaluating the cost effectiveness of installing RTOs during the 2002 Rubber Tire Manufacturing NESHAP, a model facility was used. The model facility estimated a mean reduction of 103 tons of HAP by using an RTO (Docket: A-97-14 Document: II-B-12). The current mean total HAP emitted per facility within the Rubber Tire Manufacturing source category is 18.8 tons of total HAP. This significant reduction in total HAP emitted for the source category, coupled with similar associated costs for installing and operating an RTO, leads to the conclusion that RTOs would be less cost effective now. Thus, we still find the use of an RTO to not be cost effective. We solicit comment on the cost effectiveness of using an RTO to control HAP emissions.

If RTOs were installed, the MIR would change from 4-in-1 million to 3-in-1 million and would result in an estimated 50-percent reduction in cancer incidence from 0.002 excess cancer cases per year to 0.001 cases per year. This control option would reduce excess cancer cases from one in every 500 years to one in every 1,000 years based upon actual emissions from controlled HAP emission sources.

The source category is already controlling particulate matter or metal HAP with all facilities utilizing fabric filters/baghouses to control emissions, and we did not identify additional

measures that could be used to control these HAP. As noted above, any further control of process emissions from rubber tire manufacturing operations would result in minimal health benefits. Based upon the low baseline risks, minimal available risk reductions, and lack of cost-effective control options to reduce organic and metal emissions from mixing, extrusion, and other process operations, we are proposing that the current NESHAP provides an ample margin of safety to protect the public health.

### 3. Adverse Environmental Effect

As described in section III.A of this document, we conducted an environmental risk screening assessment for the Rubber Tire Manufacturing source category. In the Tier 1 screening analysis for PB-HAP (other than lead, which was evaluated differently), POM emissions had no exceedances of any of the ecological benchmarks evaluated. Cadmium emissions had a Tier 1 exceedance at one facility with a maximum screening value of 3 for a surface soil NOAEL (mammalian insectivores – shrew).

A Tier 2 screening analysis was performed for cadmium emissions for this one facility, with no exceedances of any of the ecological benchmarks. For lead, we did not estimate any exceedances of the secondary lead NAAQS. Based on the results of the environmental risk screening analysis, we do not expect an adverse environmental effect as a result of HAP emissions from this source category and, therefore, propose that it is not necessary to set more stringent standards to prevent 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, the technology review focused on the identification and evaluation of developments in practices, processes, and control technologies that have occurred since the MACT standards were promulgated. In conducting the technology

review, we reviewed various informational sources regarding the emissions from the Rubber Tire Manufacturing source category. The review included a search of the RBLC database, reviews of air permits for rubber tire manufacturing facilities, and meetings with industry and the trade association (summarized in the docket for this action). We reviewed these data sources for information on practices, processes, and control technologies that were not considered during the development of the Rubber Tire Manufacturing NESHAP. We also looked for information on improvements in practices, processes, and control technologies that have occurred since the development of the Rubber Tire Manufacturing NESHAP.

After reviewing information from the aforementioned sources, we did not identify any cost-effective developments in practices, processes, or control technologies used at rubber tire manufacturing facilities since promulgation of the MACT standard.

Based on the technology review, we have determined that there are no new control technologies. Additional information of our technology review can be found in the memorandum, *Technology Review for Rubber Tire Manufacturing Source Category*, which is available in the docket for this action.

*D. What other actions are we proposing?*

In addition to the proposed decisions described above, we are proposing revisions to the Rubber Tire Manufacturing NESHAP related to SSM and electronic reporting. We are proposing revisions to the SSM provisions of the rule in order to ensure that it is consistent with the Court decision in *Sierra Club v. EPA*, 551 F. 3d 1019 (D.C. Cir. 2008), which vacated two provisions that exempted sources from the requirement to comply with otherwise applicable CAA section 112(d) emission standards during periods of SSM. We are proposing to require electronic submittal of notifications, semiannual reports, and compliance reports (which include

performance test reports) for rubber tire manufacturing facilities. The proposed changes related to these issues are discussed below.

## 1. SSM Requirements

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

In its 2008 decision in *Sierra Club v. EPA*, 551 F.3d 1019 (D.C. Cir. 2008), the Court vacated portions of two regulatory provisions governing the emissions of HAP during periods of SSM, which were promulgated pursuant to CAA section 112. Specifically, the Court vacated the SSM exemption contained in 40 CFR 63.6(f)(1) and 40 CFR 63.6(h)(1), holding that under section 302(k) of the CAA, emissions standards or limitations must be continuous in nature and that the SSM exemption violates the CAA's requirement that some section 112 standards apply continuously.

We are proposing the elimination of the SSM exemption, which currently appears at 40 CFR 63.5990, and any reference to SSM requirements in 40 CFR part 63, part A (General Provisions). Consistent with the Court's decision in *Sierra Club v. EPA*, we are proposing standards in this rule that apply at all times. We are also proposing several revisions to Table 17 of 40 CFR part 63, subpart XXXX (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.

All facilities subject to this rulemaking comply with the emission limits by either using the HAP constituent option (purchase alternative) found in 40 CFR 63.5985(a), or the monthly average alternative without using an add-on control device (40 CFR 63.5985(b)). Due to the continuous batch operation utilized across this source category, the EPA has no reason to believe that emissions are significantly different during periods of startup and shutdown from those during normal operations.

Periods of startup, normal operations, and shutdown are all predictable and routine aspects of a source's operations. Malfunctions, in contrast, are neither predictable nor routine. Instead, they are, by definition, sudden, infrequent, and not reasonably preventable failures of emissions control, process or monitoring equipment. (40 CFR 63.2) (containing regulatory 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. The EPA's interpretation has been upheld as reasonable. See *United States Sugar Corp. v. EPA*, 830 F.3d 579, 606–10 (D.C. Cir. 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. See, e.g., *National Ass'n of Clean Water Agencies v. EPA*, 734 F.3d 1115, 1141 (D.C.

Cir. 2013) (noting that “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”).

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 *United States Sugar Corp v. EPA*, 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. See *United States Sugar Corp.*, 830 F.3d at 608 (discussing work practice standards and explaining that “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 pollutant 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 in a way as 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 the EPA to set standards for malfunctions, the EPA has the discretion to do so where feasible. For example, in the Petroleum Refinery Sector RTR, 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.

The EPA anticipates that it is unlikely that a malfunction will result in a violation of the standards at this time. At the time of this proposal, there are no major source facilities using control devices to comply with the emissions limits of this standard. However, the NESHAP contains the option to use a control device for compliance with the emission limits. Thus, while a malfunction event leading to increased emissions is unlikely at this time, it is possible if a facility were to use a control device in the future.

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, 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. See *United States Sugar Corp.*, 830 F.3d at 606–10.

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

(1) 40 CFR 63.5990 General Compliance Requirements

We are proposing to revise the General Provisions table (Table 17) entry for 40 CFR 63.6(e)(1)(i) by changing the “yes” in column 4 and 5 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 compliance requirement regulatory text at 40 CFR 63.5990 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 compliance requirement 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 compliance requirement. Therefore, the language the EPA is proposing at 40 CFR 63.5990(b) does not include that language from 40 CFR 63.6(e)(1).

We are also proposing the General Provisions table (Table 17) entry for 40 CFR 63.6(e)(1)(ii) by changing the “yes” in column 4 and 5 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 compliance requirement being added at 40 CFR 63.5990.

(2) SSM Plan

We are proposing to revise the General Provisions table (Table 17) entry for 40 CFR 63.6(e)(3) by changing the “yes” in column 4 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.

(3) Compliance with Standards

We are proposing to revise the General Provisions table (Table 17) entry for 40 CFR 63.6(f)(1) by changing the “yes” in column 4 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 v. EPA* vacated the exemptions contained in this provision and held that the CAA requires that some section 112 standards apply continuously. *Sierra Club v. EPA*, 167 F.3d 658 (D.C. Cir. 1999). Consistent with the decision in *Sierra Club v. EPA*, the EPA is proposing to revise standards in this rule to apply at all times.

(4) 40 CFR 63.5993 Performance Testing

We are proposing to revise the General Provisions table (Table 17) entry for 40 CFR 63.7(e)(1) by changing the “yes” in column 4 to a “no.” Section 63.7(e)(1) describes performance testing requirements. The EPA is instead proposing to add performance testing requirement at 40 CFR 63.5993. 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 may not be performed during startup, shutdown, or malfunction, as specified in 40 CFR 63.7(e)(1). 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.

#### (5) Monitoring

We are proposing to revise the General Provisions table (Table 17) entry for 40 CFR 63.8(c)(1)(iii) by changing the “yes” in columns 4 and 5 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 17) entry for 40 CFR 63.8(d)(3) by changing the “Applies as modified by §63.5990(e) and (f)” in column 4 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 63.5990(f)(3) 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).”

#### (6) Recordkeeping

We are proposing to revise the General Provisions table (Table 17) entry for 40 CFR 63.10(b)(2)(i) by changing the “yes” in column 4 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. Special provisions applicable to startup and shutdown, such as a startup and shutdown plan, have been removed from the rule (with exceptions discussed below), thereby reducing the need for additional recordkeeping for startup and shutdown periods.

We are proposing to revise the General Provisions table (Table 17) entry for 40 CFR 63.10(b)(2)(ii) by changing the “yes” in column 4 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.

#### (7) Reporting

We are proposing to revise the General Provisions table (Table 17) entry for 40 CFR 63.10(d)(5) by changing the “yes” in column 4 to a “no.” Section 63.10(d)(5) describes the reporting requirements for startups, shutdowns, and malfunctions. To replace the General Provisions reporting requirement for malfunctions, the EPA is proposing to replace the SSM report under 40 CFR 63.10(d)(5) with the existing reporting requirements under 40 CFR 63.4720(a). 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 the semiannual report to be required under the proposed rule. 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 source or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.

Examples of such methods would include 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, shutdown, and malfunctions when a source failed to meet an applicable standard, but did not follow the SSM plan. We will no

longer require owners and operators to report when actions are taken during a startup, shutdown, or malfunction.

## 2. Electronic Reporting Requirements

Through this proposal, the EPA is proposing that owners and operators of Rubber Tire Manufacturing NESHAP facilities submit electronic copies of the required notification of compliance status reports required in 40 CFR 63.9(h) and 63.6009(k), performance test reports required in 40 CFR 63.6010(h), and semiannual compliance reports required in 40 CFR 63.6010(g) through the EPA's Central Data Exchange (CDX) using the Compliance and Emissions Data Reporting Interface (CEDRI). A description of the electronic data submission process is provided in the memorandum, "*Electronic Reporting Requirements for New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) Rules*," available in Docket ID No. EPA-HQ-OAR-2019-0392. This proposed rule requirement does not affect submittals required by state air agencies as required by 40 CFR 63.13.

For the performance test reports required in 40 CFR 63.6010(h), the proposed rule requires that performance test results collected using test methods that are supported by the EPA's Electronic Reporting Tool (ERT) as listed on the ERT website<sup>21</sup> at the time of the test be submitted in the format generated through the use of the ERT. Performance tests results collected using test methods that are not supported by the ERT at the time of the performance test are required to be submitted to the EPA electronically in a portable document format (PDF) using the attachment module of the ERT.

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<sup>21</sup> <https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>. This document is a prepublication version, signed by EPA Administrator, Andrew R. Wheeler on 09/27/2019. We have taken steps to ensure the accuracy of this version, but it is not the official version.

For semiannual compliance reports required in 40 CFR 63.6010(g), the proposed rule requires that owners and operators use the appropriate spreadsheet report form to submit information to CEDRI, 1 year after finalizing this proposed action. A draft version of the proposed electronic spreadsheet reporting template for this report is included in the docket for this action (Docket ID No. EPA-HQ-OAR-2019-0392). The EPA specifically requests comment on the content, layout, and overall design of the template. Prior to availability of the final spreadsheet report template in CEDRI, owners and operators of affected sources will be required to submit the semiannual compliance report as currently required by the rule. When the EPA finalizes the spreadsheet report template, rubber tire sources will be notified about its availability via the CEDRI website. We plan to finalize a required reporting template with the final rule. The owner or operator would begin submitting reports electronically with the next report that is due, once the electronic spreadsheet report template has been available for at least 1 year.

For the electronic submittal of notification of compliance status reports required in 40 CFR 63.9(h) and 63.6009(k), the final spreadsheet report template discussed above, which will reside in CEDRI, will also contain the information required for the notification of compliance status report and will satisfy the requirement to provide the notifications of compliance status information electronically, eliminating the need to provide a separate notification of compliance status report. As stated above, the final spreadsheet report template will be available after finalizing this proposed action and sources will be required to use the spreadsheet report template after 1 year. Prior to the availability of the final spreadsheet report template in CEDRI, owners and operators of affected sources will be required to submit notice of compliance status reports as currently required by the rule. As stated above, we will notify sources about the availability of the final spreadsheet report template via the CEDRI website.

Additionally, the EPA has identified two broad circumstances in which an extension of time for electronic reporting may be requested from the EPA. In both circumstances, the decision to grant additional time to report is within the discretion of the Administrator, and reporting should occur as soon as possible. The EPA is providing a mechanism for requesting extensions of time for electronic reporting to protect owners and operators from noncompliance in cases where they cannot successfully submit a report by the reporting deadline for reasons outside of their control. An extension of time may be requested due to outages of the EPA's CDX or CEDRI where an owner or operator is precluded from accessing the system and submitting required reports is addressed in 40 CFR 63.6010. The situation where an extension may be warranted due to a force majeure event, which is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents an owner or operator from complying with the requirement to submit a report electronically as required by this rule is addressed in 40 CFR 63.6010. Examples of force majeure events may include acts of nature, acts of war or terrorism, or equipment failure or safety hazards beyond the control of the facility.

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

simplifying data entry, eliminating redundancies, minimizing data reporting errors, and providing data quickly and accurately to the affected facilities, air agencies, the EPA, and the public. Moreover, electronic reporting is consistent with the EPA's plan<sup>22</sup> to implement Executive Order 13563 and is in keeping with the EPA's Agency-wide policy<sup>23</sup> developed in response to the White House's Digital Government Strategy.<sup>24</sup> For more information on the benefits of electronic reporting, see the memorandum, *Electronic Reporting Requirements for New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) Rules*, available in the docket for this action.

*E. What compliance dates are we proposing?*

The EPA is proposing that affected sources that commenced construction or reconstruction on or before **[DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]** must comply with all of the amendments, with the exception of the proposed electronic format for submitting notifications and compliance reports, no later than 180 days after the effective date of the final rule, or upon startup, whichever is later. Affected sources that commence construction or reconstruction after **[DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]** must comply with all requirements of the subpart, including the amendments being proposed, with the exception of the proposed electronic format for submitting notifications and compliance reports, no later than the effective date of the

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<sup>22</sup> EPA's Final Plan for Periodic Retrospective Reviews, August 2011. Available at <https://www.regulations.gov/document?D=EPA-HQ-OA-2011-0156-0154>.

<sup>23</sup> E-Reporting Policy Statement for EPA Regulations, September 2013. Available at <https://www.epa.gov/sites/production/files/2016-03/documents/epa-ereporting-policy-statement-2013-09-30.pdf>.

<sup>24</sup> Digital Government: Building a 21<sup>st</sup> Century Platform to Better Serve the American People, May 2012. Available at <https://obamawhitehouse.archives.gov/sites/default/files/omb/egov/digital-government/digital-government.html>.

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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 XXXX, until the applicable compliance date of the amended rule. The final action is not expected to be a “major rule” as defined by 5 U.S.C. 804(2), so the effective date of the final rule will be the promulgation date as specified in CAA section 112(d)(10).

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

would impose. From our assessment of the time frame needed for compliance with the entirety of the revised requirements, the EPA considers a period of 180 days to be the most expeditious compliance period practicable and, thus, is proposing that all affected sources that commenced construction or reconstruction on or before **[DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]** be in compliance with all of this regulation's revised requirements within 180 days of the regulation's effective date.

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

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

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

The EPA estimates that there are 21 rubber tire manufacturing facilities that are subject to the Rubber Tire Manufacturing NESHAP affected by the proposed amendments to 40 CFR part 63, subpart XXXX. The bases of our estimates of affected facilities are provided in the memorandum, *Rubber Tire Major Source Memo*, which is available in the docket for this action. We are not currently aware of any planned or potential new or reconstructed rubber tire manufacturing facilities in the source category.

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

We are not finalizing revisions to the emission limits other than to make them applicable during SSM periods, we do not anticipate any air quality impacts as a result of the proposed

amendments, since facilities are already in compliance with emission limits during all periods, including SSM.

*C. What are the cost impacts?*

The one-time cost associated with reviewing the revised rule and becoming familiar with the electronic reporting requirements is estimated to be \$6,740 (2017\$). The total cost per facility is estimated to be \$321 per facility to review the final rule requirements and become familiar with the electronic reporting requirements. All other costs associated with notifications, reporting, and recordkeeping are believed to be unchanged because the facilities in each source category are currently required to comply with notification, reporting, and recordkeeping requirements and will continue to be required to comply with those requirements. The number of personnel-hours required to develop the materials in support of reports required by the NESHAP remain unchanged.

*D. What are the economic impacts?*

Economic impact analyses focus on changes in market prices and output levels. If changes in market prices and output levels in the primary markets are significant enough, impacts on other markets may also be examined. Both the magnitude of costs needed to comply with a proposed rule and the distribution of these costs among affected facilities can have a role in determining how the market will change in response to a proposed rule. The total cost associated with this proposed rule is estimated to be \$6,740, which is a one-time cost associated with reviewing the revised rule and becoming familiar with the electronic reporting requirements. The estimated cost per facility is \$321. These costs are not expected to result in a significant market impact, regardless of whether they are passed on to the purchaser or absorbed by the firms.



*E. What are the benefits?*

The EPA does not anticipate reductions in HAP emissions as a result of the proposed amendments to the Rubber Tire Manufacturing NESHAP. However, the proposed amendments would improve the rule by ensuring that the standards apply at all times and by requiring electronic submittal of initial notifications, performance test results, and semiannual reports that would increase the usefulness of the data and would ultimately result in less burden on the regulated community. Because these proposed amendments are not considered economically significant, as defined by Executive Order 12866, and because no emission reductions were estimated, we did not estimate any health benefits from reducing emissions.

**VI. Request for Comments**

We solicit comments on 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.

**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://www.epa.gov/stationary-sources-air-pollution/rubber-tire-manufacturing-national-emission-standards-hazardous-air>. 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-2019-0392 (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 project website at <https://www.epa.gov/stationary-sources-air-pollution/rubber-tire-manufacturing-national-emission-standards-hazardous-air>.

#### VIII. Statutory and Executive Order Reviews

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

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

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

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

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

*C. Paperwork Reduction Act (PRA)*

The information collection activities in this proposed rule have been submitted for approval to OMB under the PRA. The Information Collection Request (ICR) document that the EPA prepared has been assigned EPA ICR number 1982.03. 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 XXXX, in the form of eliminating the SSM plan and reporting requirements; including reporting requirements for deviations in the semiannual report; and including the requirement for electronic submittal of reports. In addition, the number of facilities subject to the standards changed. The number of respondents was reduced from 23 to 21 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 rubber tire manufacturing facilities subject to 40 CFR part 63, subpart XXXX.

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

*Estimated number of respondents:* 21 facilities.

*Frequency of response:* The frequency of responses varies depending on the burden item.

Responses include one-time review of rule amendments, reports of periodic performance tests, and semiannual compliance reports.

*Total estimated burden:* The annual recordkeeping and reporting burden for responding facilities to comply with all of the requirements in the NESHAP, averaged over the 3 years of this ICR, is estimated to be 5,870 hours (per year). 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 \$819,000 (rounded, per year). There are no estimated capital and operation and maintenance costs.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9.

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

**THE FEDERAL REGISTER]**. The EPA will respond to any ICR-related comments in the final rule.

*D. Regulatory Flexibility Act (RFA)*

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This action will not impose any requirements on small entities, since there are no small entities in the source category.

*E. Unfunded Mandates Reform Act (UMRA)*

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

*F. Executive Order 13132: Federalism*

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

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

This action does not have tribal implications as specified in Executive Order 13175. No tribal facilities are known to be engaged in the Rubber Tire Manufacturing source category, and would not be affected by this action. Thus, Executive Order 13175 does not apply to this action.

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

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the

environmental health or safety risks addressed by this action present a disproportionate risk to children. This action's health and risk assessments are contained in sections III.A and IV.A and B of this preamble.

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

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

*J. National Technology Transfer and Advancement Act (NTTAA)*

This rulemaking does not involve technical standards.

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

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

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

Results of the demographic analysis performed for the Rubber Tire Manufacturing source category indicate that, for four of the 10 demographic groups, White, African American, people living below the poverty level, and adults over 25 without a high school diploma that reside within 5 km of facilities in the source category is greater than the corresponding national percentage for the same demographic groups. When examining the risk levels of those exposed to emissions from rubber manufacturing facilities, we find 4,500 people exposed to a cancer risk at or above 1-in-1 million and nobody exposed to a chronic noncancer TOSHI greater than 1.

The results of the Rubber Tire Manufacturing source category demographic analysis indicate that emissions from the source category expose approximately 4,500 people to a cancer risk at or above 1-in-1 million and no people to a chronic noncancer TOSHI greater than 1. The percentages of the at-risk population for four of the 10 demographic groups; White people, people living below the poverty level, adults with a high school diploma, and African Americans that reside within 50 km of facilities in the source category is greater than the corresponding national percentage for the same demographic groups.

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

Environmental protection, Air pollution control, Hazardous substances, Reporting and recordkeeping requirements.

\_\_\_\_\_.  
Dated:

\_\_\_\_\_  
**Andrew R. Wheeler,**

*Administrator.*



For the reasons set forth in the preamble, the EPA proposes to amend 40 CFR part 63 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 XXXX—National Emission Standards for Hazardous Air Pollutants; Rubber Tire  
Manufacturing**

2. Section 63.5990 is amended by:

- a. Revising paragraph (a);
- b. Revising paragraph (b);
- c. Revising paragraph (d);
- d. Revising paragraphs (f), (f)(2), and (f)(3); and
- e. Adding new paragraph (f)(4).

The revision reads as follows:

**§63.5990 What are my general requirements for complying with this subpart?**

(a) Before [DATE 181 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE  
IN THE FEDERAL REGISTER], you must be in compliance with the applicable emission  
limitations specified in Tables 1 through 4 to this subpart at all times, except during periods of  
startup, shutdown, and malfunction if you are using a control device to comply with an emission  
limit. After [DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN  
THE FEDERAL REGISTER], you must be in compliance with the applicable emission  
limitations specified in Tables 1 through 4 to this subpart at all times

(b) Before **[DATE 181 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, except as provided in §63.5982(b)(4), you must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in §63.6(e)(1)(i). After **[DATE 180 DAYS AFTER DATE OF 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.

\* \* \* \* \*

(d) Before **[DATE 181 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, for each affected source that complies with the emission limits in Tables 1 through 3 to this subpart using a control device, you must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3). After **[DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, a startup, shutdown, and malfunction plan is not required.

\* \* \* \* \*

(f) Before **[DATE 181 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, in your site-specific monitoring plan, you must also address the ongoing procedures specified in paragraphs (f)(1) through (3) of this section as follows. After **[DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, in your site-specific monitoring plan, you must also address the ongoing procedures specified in paragraphs (f)(1) through (4) of this section as follows.

\* \* \* \* \*

(2) Before **[DATE 181 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d). After **[DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d)(1) and (2).

(3) Before **[DATE 181 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i). After **[DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, the owner or operator shall 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, the owner or operator shall 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); and

(4) After **[DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i).

3. Section 63.5993 is amended by:

a. Revising paragraph (c) and (d).

The revision reads as follows:

**§63.5993 What performance tests and other procedures must I use?**

\* \* \* \* \*

(c) Before **[DATE 181 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, you may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §63.7(e)(1). After **[DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance of the affected source for the period being tested. Representative conditions exclude periods of startup and shutdown unless specified by the Administrator or an applicable subpart. The owner or operator may not conduct performance tests during periods of malfunction. The owner or operator must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(d) Before **[DATE 181 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, You must conduct three separate test runs for each

performance test required in this section, as specified in §63.7(e)(1) unless otherwise specified in the test method. Each test run must last at least 1 hour. After **[DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, you must conduct three separate test runs for each performance test required in this section, as specified in §63.5993(c) above, unless otherwise specified in the test method. Each test run must last at least 1 hour.

\* \* \* \* \*

4. Section 63.5995 is amended by revising paragraph (d).

The revisions read as follows:

**§63.5995 What are my monitoring installation, operation, and maintenance requirements?**

\* \* \* \* \*

(d) For any other control device, or for other capture systems, ensure that the CPMS is operated according to a monitoring plan submitted to the Administrator with the Notification of Compliance Status report required by §63.9(h). The monitoring plan must meet the requirements in paragraphs (a) and (d)(1) through (3) of this section. Conduct monitoring in accordance with the plan submitted to the Administrator unless comments received from the Administrator require an alternate monitoring scheme.

\* \* \* \* \*

5. Section 63.6009 is amended by:

- a. Revising paragraph (e)(2); and
- b. Adding new paragraph (k)

The revisions read as follows:

\* \* \* \* \*

(e) \* \* \*

(2) Before **[DATE 181 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, for each initial compliance demonstration required in tables 6 through 8 to this subpart that includes a performance test conducted according to the requirements in table 5 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to §63.10(d)(2). After **[DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, For each initial compliance demonstration required in tables 6 through 8 to this subpart that includes a performance test conducted according to the requirements in table 5 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to §63.10(d)(2) and §63.6010(h)(1) through (3).

\* \* \* \* \*

(k) You must submit to the Administrator notification reports of the following recorded information. Beginning on **[DATE 181 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]** or once the reporting form has been available on the CEDRI website for 1 year, whichever date is later, you must submit all subsequent notification of compliance status reports required in § 63.9(h) and § 63.6009(d) through (i) to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI).

The CEDRI interface can be accessed through the EPA's Central Data Exchange (CDX)

(<https://cdx.epa.gov>). You must use the appropriate electronic report form (*i.e.*, template) on the

This document is a prepublication version, signed by EPA Administrator, Andrew R. Wheeler on 09/27/2019. We have taken steps to ensure the accuracy of this version, but it is not the official version.

CEDRI website (<https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri>) for this subpart. The date on which the report form becomes available will be listed on the CEDRI website. If the reporting form for the notification of compliance status report specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate addresses listed in § 63.13. Once the form has been available in CEDRI for 1 year, you must begin submitting all subsequent notification of compliance status reports via CEDRI. The applicable notification must be submitted by the deadline specified in this subpart, regardless of the method in which the report is submitted. If you claim that some of the information required to be submitted via CEDRI is confidential business information (CBI), submit a complete report, including information claimed to be CBI, to the EPA. The report must be generated using the appropriate electronic reporting form found on the CEDRI website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted shall be submitted to the EPA via the EPA's CDX as described earlier in this paragraph. Where applicable, you may assert a claim of EPA system outage, in accordance with §63.6010(i), or force majeure, in accordance with §63.6010(j), for failure to timely comply with this requirement.

6. Section 63.6010 is amended by:

- a. Revising paragraphs (b)(2) and (4);
- b. Revising paragraphs (c)(4);
- c. Revising paragraphs (d),(d)(1)and (2);

- d. Adding paragraph (d)(3);
- e. Revising paragraph (g); and
- f. Adding paragraphs (h)-(j).

The revisions read as follows:

\* \* \* \* \*

(b) \* \* \*

(2) Before **[DATE 181 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, the first semiannual compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.5983. After **[DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, the first semiannual compliance report must be submitted electronically via CEDRI no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.5983.

\* \* \* \* \*

(4) Before **[DATE 181 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, each subsequent semiannual compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. After **[DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, each subsequent semiannual compliance report must be submitted electronically via CEDRI no later than July 31



or January 31, whichever date is the first date following the end of the semiannual reporting period.

\* \* \* \* \*

(c) \* \* \*

(4) Before **[DATE 181 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, if you had a startup, shutdown or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i). After **[DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, a startup, shutdown, and malfunction plan is not required.

\* \* \* \* \*

(d) Before **[DATE 181 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, for each deviation from an emission limitation (emission limit or operating limit) that occurs at an affected source, the compliance report must contain the information in paragraphs (c)(1) through (4) and paragraphs (d)(1) and (2) of this section. This includes periods of startup, shutdown, and malfunction when the affected source is operating. After **[DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, for each deviation from an emission limitation (emission limit or operating limit) that occurs at an affected source, the compliance report must contain the information in paragraphs (c)(1) through (3) and (d)(1) through (3) of this section. This includes periods of startup, shutdown, and malfunction when the affected source is operating.

(1) Before **[DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]** the total operating time of each affected source during the

reporting period. After **[DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, in the event that an affected unit fails to meet an applicable standard, record the number of failures. For each failure record the date, time and duration of each failure.

(2) Before **[DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]** information on the starting date, starting time, duration, and cause of each deviation (including unknown cause, if applicable) and the corrective action taken. After **[DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, for each failure to meet an applicable standard, record and retain a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions.

(3) After **[DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, record actions taken to minimize emissions in accordance with §63.5990, and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

\* \* \* \* \*

(g) Before **[DATE 1 YEAR AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, or once the reporting form has been available on the CEDRI website for 1 year, whichever date is later, if acceptable to both the Administrator and you, you may submit reports and notifications electronically. Beginning on **[DATE 1 YEAR AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, or once the reporting form has been available on the CEDRI website for 1 year, whichever date is later, you must submit the semiannual compliance report required in §63.6010(c)(1) through (10), as

applicable, to the EPA via the CEDRI. The CEDRI interface can be accessed through the EPA's CDX (<https://cdx.epa.gov>). You must use the appropriate electronic report form on the CEDRI website (<https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri>) for this subpart. The date on which the report form becomes available will be listed on the CEDRI website. If the reporting form for the semiannual compliance report specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate addresses listed in §63.13. Once the form has been available in CEDRI for 1 year, you must begin submitting all subsequent reports via CEDRI. The reports must be submitted by the deadlines specified in this subpart, regardless of the method in which the reports are submitted. If you claim that some of the information required to be submitted via CEDRI is CBI, submit a complete report, including information claimed to be CBI, to the EPA. The report must be generated using the appropriate electronic reporting form found on the CEDRI website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted shall be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

(h) After **[DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, if you use a control system (add-on control device and capture system) to meet the emission limitations, you must also conduct a performance test at least once every 5 years following your initial compliance demonstration to verify control system performance and reestablish operating parameters or operating limits for control systems used to

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

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

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

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

C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described in paragraph (h) of this section.

(i) After **[DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]** if you are required to electronically submit a report or notification (*i.e.*, Notification of Compliance Status Report) through CEDRI in the EPA's CDX, you may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. To assert a claim of EPA system outage, you must meet the requirements outlined in paragraphs (i)(1) through (7) of this section.

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

(2) The outage must have occurred within the period of time beginning 5 business days prior to the date that the submission is due.

(3) The outage may be planned or unplanned.

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

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

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

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

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

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

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

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

(j) After **[DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]** if you are required to electronically submit a report or notification (*i.e.*, Notification of Compliance Status Report) through CEDRI in the EPA's CDX, you may assert a claim of force majeure for failure to timely comply with the reporting requirement. To assert a claim of force majeure, you must meet the requirements outlined in paragraphs (j)(1) through (5) of this section.

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

or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (*e.g.*, large scale power outage).

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

(3) You must provide to the Administrator:

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

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

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

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

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

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

7. Section 63.6011 is revised by:

a. Revising paragraph (a)(3); and

b. Adding paragraph (e).

The revisions read as follows:

(a) \* \* \*

(3) Before **[DATE 181 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, the records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction. After **[DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, it is not required to keep records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, or malfunction.

\* \* \* \* \*

(e) After **[DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]** any records required to be maintained by this subpart that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.

8. Section 63.6015 is amended by revising, in alphabetical order, the definition for Deviation.

The revisions read as follows:

\* \* \* \* \*

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 limitation (including any 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) Before **[DATE 181 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, fails to meet any emission limitation (including any 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. On and after **[DATE 181 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, this paragraph no longer applies.

\* \* \* \* \*

9. Table 15 of Subpart XXXX is amended to read as follows:

**Table 15 to Subpart XXXX of Part 63—Requirements for Reports**

As stated in §63.6010, you must submit each report that applies to you according to the following table

<b>You must submit a(n)</b>	<b>The report must contain . . .</b>	<b>You must submit the report . . .</b>
1. Compliance report	a. If there are no deviations from any emission limitations that apply to you, a statement that there were no deviations from the emission limitations during the reporting period. If there were no periods during which the CPMS was out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-	Semiannually according to the requirements in §63.6010(b), unless you meet the requirements for annual reporting in §63.6010(f).

	control during the reporting period	
	b. If you have a deviation from any emission limitation during the reporting period at an affected source where you are not using a CPMS, the report must contain the information in §63.6010(d). If the deviation occurred at a source where you are using a CMPS or if there were periods during which the CPMS were out-of-control as specified in §63.8(c)(7), the report must contain the information required by §63.5990(f)(3)	Semiannually according to the requirements in §63.6010(b), unless you meet the requirements for annual reporting in §63.6010(f).
	c. Before <b>[DATE 181 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]</b> , If you had a startup, shutdown or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i). After <b>[DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]</b> , this report is no longer required.	Before <b>[DATE 181 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]</b> , semiannually according to the requirements in §63.6010(b), unless you meet the requirements for annual reporting in §63.6010(f). After <b>[DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]</b> , this report is no longer required.
2. Before <b>[DATE 181 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]</b> , immediate startup, shutdown, and malfunction report if you had a startup, shutdown, or malfunction during the reporting period that is not	a. Before <b>[DATE 181 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]</b> , actions taken for the event. After <b>[DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL</b>	Before <b>[DATE 181 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]</b> , by fax or telephone within 2 working days after starting actions inconsistent with the plan. After <b>[DATE 180 DAYS AFTER DATE OF PUBLICATION</b>

consistent with your startup, shutdown, and malfunction plan. After <b>[DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]</b> , this report is no longer required.	<b>REGISTER]</b> , this report is no longer required.	<b>OF FINAL RULE IN THE FEDERAL REGISTER]</b> , this report is no longer required.
	b. Before <b>[DATE 181 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]</b> , the information in §63.10(d)(5)(ii). After <b>[DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]</b> , this report is no longer required.	Before <b>[DATE 181 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]</b> , by letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authority (§63.10(d)(5)(ii)). After <b>[DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]</b> , this report is no longer required.
3. Performance Test Report	If you use a control system (add-on control device and capture system) to meet the emission limitations	Conduct a performance test at least once every 5 years following your initial compliance demonstration according to the requirements in §63.5993.

10. Table 17 of Subpart XXXX is amended to read as follows:

**Table 17 to Subpart XXXX of Part 63—Applicability of General Provisions to This Subpart XXXX**

Before **[DATE 181 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, as stated in §63.6013, you must comply with the applicable General Provisions (GP) requirements according to the following table:

Citation	Subject	Brief description of applicable sections	Applicable to Subpart XXXX?
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			Using a control device	Not using a control device
§63.1	Applicability	Initial applicability determination; applicability after standard established; permit requirements; extensions; notifications	Yes	Yes.
§63.2	Definitions	Definitions for part 63 standards	Yes	Yes.
§63.3	Units and Abbreviations	Units and abbreviations for part 63 standards	Yes	Yes.
§63.4	Prohibited Activities	Prohibited activities; compliance date; circumvention; severability	Yes	Yes.
§63.5	Construction/Reconstruction	Applicability; applications; approvals	Yes	Yes.
§63.6(a)	Applicability	GP apply unless compliance extension; GP apply to area sources that become major	Yes	Yes.
§63.6(b)(1)-(4)	Compliance Dates for New and Reconstructed Sources	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for section 112(f)	Yes	Yes.
§63.6(b)(5)	Notification	Must notify if commenced construction or reconstruction after proposal	Yes	Yes.
§63.6(b)(6)	[Reserved]			
§63.6(b)(7)	Compliance Dates for New and Reconstructed Area Sources that Become Major		No	No.
§63.6(c)(1)-(2)	Compliance Dates for Existing Sources	Comply according to date in subpart, which must be no later than 3 years after effective date; for CAA section 112(f) standards, comply within 90 days of effective date unless compliance extension	Yes	Yes.
§63.6(c)(3)-(4)	[Reserved]			

§63.6(c)(5)	Compliance Dates for Existing Area Sources that Become Major	Area sources that become major must comply with major source standards by date indicated in subpart or by equivalent time period (for example, 3 years)	Yes	Yes.
§63.6(d)	[Reserved]			
§63.6(e)(1)-(2)	Operation & Maintenance	Operate to minimize emissions at all times; correct malfunctions as soon as practicable; and operation and maintenance requirements independently enforceable; information Administrator will use to determine if operation and maintenance requirements were met	Yes	Yes.
§63.6(e)(3)	Startup, Shutdown, and Malfunction Plan (SSMP)		Yes	No.
§63.6(f)(1)	Compliance Except During SSM		Yes	No.
§63.6(f)(2)-(3)	Methods for Determining Compliance	Compliance based on performance test; operation and maintenance plans; records; inspection	Yes	Yes.
§63.6(g)(1)-(3)	Alternative Standard	Procedures for getting an alternative standard	Yes	Yes.
§63.6(h)	Opacity/Visible Emission (VE) Standards		No	No.
§63.6(i)	Compliance Extension	Procedures and criteria for Administrator to grant compliance extension	Yes	Yes.
§63.6(j)	Presidential Compliance Exemption	President may exempt source category from requirement to comply with rule	Yes	Yes.
§63.7(a)(1)-(2)	Performance Test Dates		No	No.
§63.7(a)(3)	CAA section 114 Authority	Administrator may require a performance test under CAA section 114 at any time	Yes	No.
§63.7(b)(1)	Notification of Performance Test	Must notify Administrator 60 days before the test	Yes	No.

§63.7(b)(2)	Notification of Rescheduling	If rescheduling a performance test is necessary, must notify Administrator 5 days before scheduled date of rescheduled date	Yes	No.
§63.7(c)	Quality Assurance/Test Plan	Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with: test plan approval procedures; performance audit requirements; and internal and external quality assurance procedures for testing	Yes	No.
§63.7(d)	Testing Facilities	Requirements for testing facilities	Yes	No.
§63.7(e)(1)	Conditions for Conducting Performance Tests	Performance tests must be conducted under representative conditions; cannot conduct performance tests during SSM; not a violation to exceed standard during SSM	Yes	No.
§63.7(e)(2)	Conditions for Conducting Performance Tests	Must conduct according to rule and EPA test methods unless Administrator approves alternative	Yes	No.
§63.7(e)(3)	Test Run Duration	Must have three test runs of at least 1 hour each; compliance is based on arithmetic mean of three runs; and conditions when data from an additional test run can be used	Yes	No.
§63.7(f)	Alternative Test Method	Procedures by which Administrator can grant approval to use an alternative test method	Yes	No.
§63.7(g)	Performance Test Data Analysis	Must include raw data in performance test report; must submit performance test data 60 days after end of test with the Notification of	Yes	No.

		Compliance Status report; and keep data for 5 years		
§63.7(h)	Waiver of Tests	Procedures for Administrator to waive performance test	Yes	No.
§63.8(a)(1)	Applicability of Monitoring Requirements	Subject to all monitoring requirements in standard	Yes	Yes.
§63.8(a)(2)	Performance Specifications	Performance Specifications in appendix B of 40 CFR part 60 apply	Yes	No.
§63.8(a)(3)	[Reserved]			
§63.8(a)(4)	Monitoring with Flares		No	No.
§63.8(b)(1)	Monitoring	Must conduct monitoring according to standard unless Administrator approves alternative	Yes	Yes.
§63.8(b)(2)-(3)	Multiple Effluents and Multiple Monitoring Systems	Specific requirements for installing monitoring systems; must install on each effluent before it is combined and before it is released to the atmosphere unless Administrator approves otherwise; if more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup	Yes	Yes.
§63.8(c)(1)	Monitoring System Operation and Maintenance	Maintain monitoring system in a manner consistent with good air pollution control practices	Applies as modified by §63.5990(e) and (f)	No.
§63.8(c)(1)(i)	Routine and Predictable SSM		No	No.
§63.8(c)(1)(ii)	SSM not in SSMP		No	No.
§63.8(c)(1)(iii)	Compliance with Operation and Maintenance Requirements	How Administrator determines if source complying with operation and maintenance requirements; review of source operation and maintenance procedures, records, manufacturer's instructions,	Yes	Yes.

		recommendations, and inspection of monitoring system		
§63.8(c)(2)-(3)	Monitoring System Installation	Must install to get representative emission and parameter measurements; must verify operational status before or at performance test	Yes	No.
§63.8(c)(4)	Continuous Monitoring System (CMS) Requirements		Applies as modified by §63.5990(f)	No.
§63.8(c)(5)	Continuous Opacity Monitoring Systems (COMS) Minimum Procedures		No	No.
§63.8(c)(6)	CMS Requirements		Applies as modified by §63.5990(e)	No.
§63.8(c)(7)-(8)	CMS Requirements	Out-of-control periods, including reporting	Yes	No.
§63.8(d)	CMS Quality Control		Applies as modified by §63.5990(e) and (f)	No.
§63.8(e)	CMS Performance Evaluation		No	No.
§63.8(f)(1)-(5)	Alternative Monitoring Method	Procedures for Administrator to approve alternative monitoring	Yes	Yes.
§63.8(f)(6)	Alternative to Relative Accuracy Test		No	No.
§63.8(g)	Data Reduction		Applies as modified by §63.5990(f)	No.
§63.9(a)	Notification Requirements	Applicability and state delegation	Yes	Yes.
§63.9(b)(1)-(5)	Initial Notifications	Submit notification 120 days after effective date; notification of intent to construct/reconstruct, notification of commencement of construct/reconstruct, notification of startup; and contents of each	Yes	Yes.



§63.9(c)	Request for Compliance Extension	Can request if cannot comply by date or if installed best available control technology or lowest achievable emission rate	Yes	Yes.
§63.9(d)	Notification of Special Compliance Requirements for New Source	For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date	Yes	Yes.
§63.9(e)	Notification of Performance Test	Notify Administrator 60 days prior	Yes	No.
§63.9(f)	Notification of VE/Opacity Test	No	No	
§63.9(g)	Additional Notifications When Using CMS	No	No	
§63.9(h)	Notification of Compliance Status	Contents; due 60 days after end of performance test or other compliance demonstration, except for opacity/VE, which are due 30 days after; when to submit to Federal vs. State authority	Yes	Yes.
§63.9(i)	Adjustment of Submittal Deadlines	Procedures for Administrator to approve change in when notifications must be submitted	Yes	Yes.
§63.9(j)	Change in Previous Information	Must submit within 15 days after the change	Yes	Yes.
§63.10(a)	Recordkeeping/Reporting	Applies to all, unless compliance extension; when to submit to Federal vs. State authority; procedures for owners of more than 1 source	Yes	Yes.
§63.10(b)(1)	Recordkeeping/Reporting	General Requirements; keep all records readily available; and keep for 5 years.	Yes	Yes.
§63.10(b)(2)(i)-(iv)	Records related to Startup, Shutdown, and Malfunction.	Yes	No	
§63.10(b)(2)(vi) and (x)-(xi)	CMS Records	Malfunctions, inoperative, out-of-control; calibration checks; adjustments, maintenance	Yes	No.

§63.10(b)(2) (vii)-(ix)	Records	Measurements to demonstrate compliance with emission limitations; performance test, performance evaluation, and visible emission observation results; and measurements to determine conditions of performance tests and performance evaluations	Yes	Yes.
§63.10(b)(2) (xii)	Records	Records when under waiver	Yes	Yes.
§63.10(b)(2) (xiii)	Records		No	No.
§63.10(b)(2) (xiv)	Records	All documentation supporting Initial Notification and Notification of Compliance Status	Yes	Yes.
§63.10(b)(3)	Records	Applicability determinations	Yes	Yes.
§63.10(c)	Records		No	No.
§63.10(d)(1)	General Reporting Requirements	Requirement to report	Yes	Yes.
§63.10(d)(2)	Report of Performance Test Results	When to submit to Federal or State authority	Yes	No.
§63.10(d)(3)	Reporting Opacity or VE Observations		No	No.
§63.10(d)(4)	Progress Reports	Must submit progress reports on schedule if under compliance extension	Yes	Yes.
§63.10(d)(5)	Startup, Shutdown, and Malfunction Reports		Yes	No.
§63.10(e)	Additional CMS Reports		No	No.
§63.10(f)	Waiver for Recordkeeping/Reporting	Procedures for Administrator to waive	Yes	Yes.
§63.11	Flares		No	No.
§63.12	Delegation	State authority to enforce standards	Yes	Yes.
§63.13	Addresses	Addresses where reports, notifications, and requests are sent	Yes	Yes.
§63.14	Incorporation by Reference	Test methods incorporated by reference	Yes	Yes.
§63.15	Availability of Information	Public and confidential information	Yes	Yes.

After [DATE 180 DAYS AFTER DATE OF PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER], as stated in §63.6013, you must comply with the applicable General Provisions (GP) requirements according to the following table:

Citation	Subject	Brief description of applicable sections	Applicable to Subpart XXXX?	
			Using a control device	Not using a control device
§63.1	Applicability	Initial applicability determination; applicability after standard established; permit requirements; extensions; notifications	Yes	Yes.
§63.2	Definitions	Definitions for part 63 standards	Yes	Yes.
§63.3	Units and Abbreviations	Units and abbreviations for part 63 standards	Yes	Yes.
§63.4	Prohibited Activities	Prohibited activities; compliance date; circumvention; severability	Yes	Yes.
§63.5	Construction/Reconstruction	Applicability; applications; approvals	Yes	Yes.
§63.6(a)	Applicability	GP apply unless compliance extension; GP apply to area sources that become major	Yes	Yes.
§63.6(b)(1)-(4)	Compliance Dates for New and Reconstructed Sources	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for section 112(f)	Yes	Yes.
§63.6(b)(5)	Notification	Must notify if commenced construction or	Yes	Yes.

		reconstruction after proposal		
§63.6(b)(6)	[Reserved]			
§63.6(b)(7)	Compliance Dates for New and Reconstructed Area Sources that Become Major		No	No.
§63.6(c)(1)-(2)	Compliance Dates for Existing Sources	Comply according to date in subpart, which must be no later than 3 years after effective date; for CAA section 112(f) standards, comply within 90 days of effective date unless compliance extension	Yes	Yes.
§63.6(c)(3)-(4)	[Reserved]			
§63.6(c)(5)	Compliance Dates for Existing Area Sources that Become Major	Area sources that become major must comply with major source standards by date indicated in subpart or by equivalent time period (for example, 3 years)	Yes	Yes.
§63.6(d)	[Reserved]			
§63.6(e)(1)(i)-(ii)	Operations & Maintenance		No	No
§63.6(e)(1)(iii)-(2)	Operation & Maintenance	Operate to minimize emissions at all times; correct malfunctions as soon as practicable; and operation and maintenance requirements independently enforceable; information Administrator will use to determine if operation and maintenance requirements were met	Yes	Yes.
§63.6(e)(3)	Startup, Shutdown, and Malfunction Plan (SSMP)		No	No.
§63.6(f)(1)	SSM Exemption		No	No.
§63.6(f)(2)-(3)	Methods for Determining Compliance	Compliance based on performance test;	Yes	Yes.

		operation and maintenance plans; records; inspection		
§63.6(g)(1)-(3)	Alternative Standard	Procedures for getting an alternative standard	Yes	Yes.
§63.6(h)	Opacity/Visible Emission (VE) Standards		No	No.
§63.6(i)	Compliance Extension	Procedures and criteria for Administrator to grant compliance extension	Yes	Yes.
§63.6(j)	Presidential Compliance Exemption	President may exempt source category from requirement to comply with rule	Yes	Yes.
§63.7(a)(1)-(2)	Performance Test Dates		No	No.
§63.7(a)(3)	CAA section 114 Authority	Administrator may require a performance test under CAA section 114 at any time	Yes	No.
§63.7(b)(1)	Notification of Performance Test	Must notify Administrator 60 days before the test	Yes	No.
§63.7(b)(2)	Notification of Rescheduling	If rescheduling a performance test is necessary, must notify Administrator 5 days before scheduled date of rescheduled date	Yes	No.
§63.7(c)	Quality Assurance/Test Plan	Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with: test plan approval procedures; performance audit requirements; and internal and external quality assurance procedures for testing	Yes	No.
§63.7(d)	Testing Facilities	Requirements for testing facilities	Yes	No.
§63.7(e)(1)	Conditions for Conducting Performance Tests	Performance tests must be conducted under representative	No	No.

		conditions; cannot conduct performance tests during SSM; not a violation to exceed standard during SSM		
§63.7(e)(2)	Conditions for Conducting Performance Tests	Must conduct according to rule and EPA test methods unless Administrator approves alternative	Yes	No.
§63.7(e)(3)	Test Run Duration	Must have three test runs of at least 1 hour each; compliance is based on arithmetic mean of three runs; and conditions when data from an additional test run can be used	Yes	No.
§63.7(f)	Alternative Test Method	Procedures by which Administrator can grant approval to use an alternative test method	Yes	No.
§63.7(g)	Performance Test Data Analysis	Must include raw data in performance test report; must submit performance test data 60 days after end of test with the Notification of Compliance Status report; and keep data for 5 years	Yes	No.
§63.7(h)	Waiver of Tests	Procedures for Administrator to waive performance test	Yes	No.
§63.8(a)(1)	Applicability of Monitoring Requirements	Subject to all monitoring requirements in standard	Yes	Yes.
§63.8(a)(2)	Performance Specifications	Performance Specifications in appendix B of 40 CFR part 60 apply	Yes	No.
§63.8(a)(3)	[Reserved]			
§63.8(a)(4)	Monitoring with Flares		No	No.
§63.8(b)(1)	Monitoring	Must conduct monitoring according to standard unless	Yes	Yes.

		Administrator approves alternative		
§63.8(b)(2)-(3)	Multiple Effluents and Multiple Monitoring Systems	Specific requirements for installing monitoring systems; must install on each effluent before it is combined and before it is released to the atmosphere unless Administrator approves otherwise; if more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup	Yes	Yes.
§63.8(c)(1)	Monitoring System Operation and Maintenance	Maintain monitoring system in a manner consistent with good air pollution control practices	Applies as modified by §63.5990(e) and (f)	No.
§63.8(c)(1)(i)	Routine and Predictable SSM		No	No.
§63.8(c)(1)(ii)	SSM not in SSMP		No	No.
§63.8(c)(1)(iii)	Compliance with Operation and Maintenance Requirements	How Administrator determines if source complying with operation and maintenance requirements; review of source operation and maintenance procedures, records, manufacturer's instructions, recommendations, and inspection of monitoring system	No	No
§63.8(c)(2)-(3)	Monitoring System Installation	Must install to get representative emission and parameter measurements; must verify operational status before or at performance test	Yes	No.

§63.8(c)(4)	Continuous Monitoring System (CMS) Requirements		Applies as modified by §63.5990(f)	No.
§63.8(c)(5)	Continuous Opacity Monitoring Systems (COMS) Minimum Procedures		No	No.
§63.8(c)(6)	CMS Requirements		Applies as modified by §63.5990(e)	No.
§63.8(c)(7)-(8)	CMS Requirements	Out-of-control periods, including reporting	Yes	No.
§63.8(d)	CMS Quality Control		Applies as modified by §63.5990(e) and (f)	No.
§63.8(d)(3)	Written Procedures for CMS		No	No
§63.8(e)	CMS Performance Evaluation		No	No.
§63.8(f)(1)-(5)	Alternative Monitoring Method	Procedures for Administrator to approve alternative monitoring	Yes	Yes.
§63.8(f)(6)	Alternative to Relative Accuracy Test		No	No.
§63.8(g)	Data Reduction		Applies as modified by §63.5990(f)	No.
§63.9(a)	Notification Requirements	Applicability and state delegation	Yes	Yes.
§63.9(b)(1)-(5)	Initial Notifications	Submit notification 120 days after effective date; notification of intent to construct/reconstruct, notification of commencement of construct/reconstruct, notification of startup; and contents of each	Yes	Yes.
§63.9(c)	Request for Compliance Extension	Can request if cannot comply by date or if installed best available control technology or lowest achievable emission rate	Yes	Yes.



§63.9(d)	Notification of Special Compliance Requirements for New Source	For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date	Yes	Yes.
§63.9(e)	Notification of Performance Test	Notify Administrator 60 days prior	Yes	No.
§63.9(f)	Notification of VE/Opacity Test		No	No
§63.9(g)	Additional Notifications When Using CMS		No	No
§63.9(h)	Notification of Compliance Status	Contents; due 60 days after end of performance test or other compliance demonstration, except for opacity/VE, which are due 30 days after; when to submit to Federal vs. State authority	Yes	Yes.
§63.9(i)	Adjustment of Submittal Deadlines	Procedures for Administrator to approve change in when notifications must be submitted	Yes	Yes.
§63.9(j)	Change in Previous Information	Must submit within 15 days after the change	Yes	Yes.
§63.10(a)	Recordkeeping/Reporting	Applies to all, unless compliance extension; when to submit to Federal vs. State authority; procedures for owners of more than 1 source	Yes	Yes.
§63.10(b)(1)	Recordkeeping/Reporting	General Requirements; keep all records readily available; and keep for 5 years.	Yes	Yes.
§63.10(b)(2)(i) and (iv-v)	Records related to Startup, Shutdown, and Malfunction.		No	No
§63.10(b)(2)(ii)	Recordkeeping of failures to meet a standard		No. See 63.6010 for recordkeeping of (1) date, time	

			and duration; (2) listing of affected source or equipment, and an estimate of the quantity of each regulated pollutant emitted over the standard; and (3) actions to minimize emissions and correct the failure.	
§63.10(b)(2)(iii), (vi), and (x)-(xi)	CMS Records	Malfunctions, inoperative, out-of-control; calibration checks; adjustments, maintenance	Yes	No.
§63.10(b)(2)(vii)-(ix)	Records	Measurements to demonstrate compliance with emission limitations; performance test, performance evaluation, and visible emission observation results; and measurements to determine conditions of performance tests and performance evaluations	Yes	Yes.
§63.10(b)(2)(xii)	Records	Records when under waiver	Yes	Yes.
§63.10(b)(2)(xiii)	Records		No	No.
§63.10(b)(2)(xiv)	Records	All documentation supporting Initial Notification and Notification of Compliance Status	Yes	Yes.
§63.10(b)(3)	Records	Applicability determinations	Yes	Yes.
§63.10(c)	Records		No	No.

§63.10(d)(1)	General Reporting Requirements	Requirement to report	Yes	Yes.
§63.10(d)(2)	Report of Performance Test Results	When to submit to Federal or State authority	Yes	No.
§63.10(d)(3)	Reporting Opacity or VE Observations		No	No.
§63.10(d)(4)	Progress Reports	Must submit progress reports on schedule if under compliance extension	Yes	Yes.
§63.10(d)(5)	Startup, Shutdown, and Malfunction Reports		No	No.
§63.10(e)	Additional CMS Reports		No	No.
§63.10(f)	Waiver for Recordkeeping/Reporting	Procedures for Administrator to waive	Yes	Yes.
§63.11	Flares		No	No.
§63.12	Delegation	State authority to enforce standards	Yes	Yes.
§63.13	Addresses	Addresses where reports, notifications, and requests are sent	Yes	Yes.
§63.14	Incorporation by Reference	Test methods incorporated by reference	Yes	Yes.
§63.15	Availability of Information	Public and confidential information	Yes	Yes.