



## ENVIRONMENTAL PROTECTION AGENCY

### 40 CFR Part 63

[EPA-HQ-OAR-2019-0392; FRL-5949.1-03-OAR]

RIN 2060-AV70

### National Emission Standards for Hazardous Air Pollutants: Rubber Tire Manufacturing

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

**ACTION:** Final rule.

**SUMMARY:** The U.S. Environmental Protection Agency (EPA) is promulgating amendments to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Rubber Tire Manufacturing, as required by the Clean Air Act (CAA). To ensure that all emissions of hazardous air pollutants (HAP) from sources in the source category are regulated, the EPA is promulgating emissions standards for the rubber processing subcategory of the rubber tire manufacturing industry, which is the only unregulated subcategory within the Rubber Tire Manufacturing source category.

**DATES:** This final rule is effective on [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]. The incorporation by reference (IBR) of certain publications listed in the rule is approved by the Director of the Federal Register as of [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** The U.S. Environmental Protection Agency (EPA) has established a docket for this action under Docket ID No. EPA-HQ-OAR-2019-0392. All documents in the docket are listed on the <https://www.regulations.gov/> website. 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 as pdf versions that can only be accessed on the EPA computers in the docket office reading room. Certain databases and

physical items cannot be downloaded from the docket but may be requested by contacting the docket office at 202-566-1744. The docket office has up to 10 business days to respond to these requests. With the exception of such material, publicly available docket materials are available electronically at <https://www.regulations.gov>.

**FOR FURTHER INFORMATION CONTACT:** For questions about this final action, contact U.S. EPA, Attn: Mr. Korbin Smith, Sector Policies and Programs Division, Mail Drop: D243-04, 109 T.W. Alexander Drive, P.O. Box 12055, RTP, North Carolina 27711; telephone number: (919) 541-2416; and email address: [smith.korbin@epa.gov](mailto:smith.korbin@epa.gov).

**SUPPLEMENTARY INFORMATION:**

*Preamble acronyms and abbreviations.* Throughout this document the use of “we,” “us,” or “our” is intended to refer to the EPA. 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:

3xRDL	three times the representative detection level
BDL	below detection limit
BLDS	bag leak detection system
CBI	Confidential Business Information
CEMS	continuous emission monitoring system
CFR	Code of Federal Regulations
DLL	detection level limited
DRE	destruction and removal efficiency
EPA	Environmental Protection Agency
fPM	filterable particulate matter
g	gram
g/Mg	grams per megagram
HAP	hazardous air pollutant(s)
ICR	information collection request
km	kilometer
lb	pound
lb/Mton	pounds per million tons
lb/ton	pounds per ton
MACT	maximum achievable control technology
Mg	megagram
NAICS	North American Industry Classification System
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
PAH	polycyclic aromatic hydrocarbon
PM	particulate matter
ppm	parts per million
PRA	Paperwork Reduction Act
RDL	representative detection level
RFA	Regulatory Flexibility Act
RTO	regenerative thermal oxidizer
RTR	risk and technology review
SSM	startup, shutdown, and malfunction
THC	total hydrocarbons
the court	United States Court of Appeals for the District of Columbia Circuit
µg/Nm <sup>3</sup>	microgram per normal cubic meter
UMRA	Unfunded Mandates Reform Act
UPL	upper predictive limit
VCS	voluntary consensus standards
VOC	volatile organic compound

*Background information.* On November 16, 2023, the EPA proposed revisions to the Rubber Tire Manufacturing NESHAP (88 FR 78692), specifically standards for the rubber processing subcategory of the rubber tire manufacturing industry, to ensure that all emissions of HAP from sources in the source category are regulated. In this action, we are finalizing decisions and revisions for the rule. We summarize some of the more significant comments we timely received regarding the proposed rule and provide our responses in this preamble. A summary of all other public comments on the proposal and the EPA’s responses to those comments is available in *Comment Summary and Response Document for Proposed NESHAP for Rubber Processing in the Rubber Tire Manufacturing Industry*, Docket ID No. EPA-HQ-OAR-2019-0392. A “track changes” version of the regulatory language that incorporates the changes in this action is available in the docket.

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

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  - H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use
  - I. National Technology Transfer and Advancement Act (NTTAA) and 1 CFR Part 51
  - J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations and Executive Order 14096: Revitalizing Our Nation’s Commitment to Environmental Justice for All
  - K. Congressional Review Act (CRA)

## I. General Information

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

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

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

<b>NESHAP and source category</b>	<b>NAICS<sup>1</sup> code</b>
Rubber Tire Manufacturing (40 CFR part 63, subpart XXXX)	326211, 326212, 314992

<sup>1</sup> North American Industry Classification System (NAICS).

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

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

In addition to being available in the docket, an electronic copy of this final action will also be available on the Internet. Following signature by the EPA Administrator, the EPA will post a copy of this final action at: <https://www.epa.gov/stationary-sources-air-pollution/rubber-tire-manufacturing-national-emission-standards-hazardous>. Following publication in the *Federal Register*, the EPA will post the *Federal Register* version and key technical documents at this same website.

### C. Judicial Review and Administrative Reconsideration

Under CAA section 307(b)(1), judicial review of this final action is available only by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit (the court) by **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. Under CAA section 307(b)(2), the requirements established by

this final rule may not be challenged separately in any civil or criminal proceedings brought by the EPA to enforce the requirements.

Section 307(d)(7)(B) of the CAA further provides that only an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review. This section also provides a mechanism for the EPA to reconsider the rule if the person raising an objection can demonstrate to the Administrator that it was impracticable to raise such objection within the period for public comment or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule. Any person seeking to make such a demonstration should submit a Petition for Reconsideration to the Office of the Administrator, U.S. EPA, Room 3000, WJC South Building, 1200 Pennsylvania Ave., NW, Washington, DC 20460, with a copy to both the person(s) listed in the preceding **FOR FURTHER INFORMATION CONTACT** section, and the Associate General Counsel for the Air and Radiation Law Office, Office of General Counsel (Mail Code 2344A), U.S. EPA, 1200 Pennsylvania Ave., NW, Washington, DC 20460.

## **II. Background**

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

On November 16, 2023, the EPA proposed revisions to the NESHAP for Rubber Tire Manufacturing.<sup>1</sup> The EPA is finalizing in this action amendments to the NESHAP to ensure that all emissions of HAP from sources in the source category are regulated.

In the *Louisiana Environmental Action Network v. EPA* (LEAN) decision issued on April 21, 2020, the United States Court of Appeals for the District of Columbia Circuit held that the EPA has an obligation to address unregulated emissions from a major source category when the Agency conducts the 8-year technology review.<sup>2</sup> In setting standards for major source categories

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<sup>1</sup> 88 FR 78692, November 16, 2023.

<sup>2</sup> *Louisiana Environmental Action Network v. EPA*, 955 F.3d 1088 (D.C. Cir. 2020) (“LEAN”).

under CAA 112(d), EPA has the obligation to address all HAP listed under CAA 112((b)).<sup>3</sup> The amendments in this rulemaking address currently unregulated emissions of HAP from the Rubber Tire Manufacturing source category, specifically from the rubber processing subcategory. Available data indicate the following unregulated pollutants are emitted from the source category: organic HAP compounds and metallic HAP compounds. Therefore, the EPA is finalizing standards that reflect maximum achievable control technology (MACT) for these pollutants emitted by the source category, pursuant to CAA sections 112(d)(2) and (3). Additionally, in accordance with CAA, costs are not considered when setting these initial MACT standards.

*B. What is the Rubber Tire Manufacturing source category and how does the NESHAP regulate HAP emissions from the source category?*

The EPA promulgated the initial Rubber Tire Manufacturing NESHAP on July 9, 2002 (67 FR 45598). The standards are codified in the Code of Federal Regulations (CFR) at 40 CFR part 63, subpart XXXX. The Rubber Tire Manufacturing source category consists of facilities that produce rubber tire components including but not limited to rubber compounds, sidewalls, tread, tire beads, tire cord, and liners. The source category covered by the NESHAP currently includes 15 major source facilities. Since first established, the Rubber Tire Manufacturing source category has been split into 4 subcategories for different phases of rubber tire manufacturing. These subcategories include rubber processing, tire production, tire cord production, and puncture sealant application. In the original Rubber Tire Manufacturing NESHAP, emission limits were established for tire production, tire cord production and puncture sealant application but no standards were established for rubber processing.

The 2002 NESHAP for the Rubber Tire Manufacturing source category (67 FR 45598) established emission limits on a subcategory basis as follows.

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<sup>3</sup> See *Desert Citizens Against Pollution v. EPA*, 699 F3d 524, 527 (D.C. Cir. 2012) (“[W]e have read subparagraphs (1) and (3) of section 112(d) to require the regulation of all HAPs listed in section 112(b)(1)”) (citations omitted).

### 1. Rubber processing

There are currently no emission limits for the rubber processing subcategory. The EPA proposed emission limits for the rubber processing subcategory on November 16, 2023, and the EPA is finalizing emission limits for this subcategory with this action.

### 2. Tire production

There are 2 equivalent standards for the tire production subcategory, and sources can comply with either standard. The first standard, is based on HAP materials purchased and used in the process. This standard considers that the quantity of HAP material purchased will represent the amount of HAP emitted for uncontrolled processes. The emission limit requires that emissions of each HAP in table 21 to 40 CFR part 63, subpart XXXX, that is used in the tire production process not exceed 1,000 grams (g) HAP per megagram (Mg) (2 pounds per ton (lb/ton)) of total cements and solvents used at the tire production affected source, and requires that the amount of each HAP not in table 21 to 40 CFR part 63, subpart XXXX, that is used in the tire production process not exceed 10,000 g HAP per Mg (20 lb/ton) of total cements and solvents used at the tire production affected source.

The second standard is a production-based emission-limit option. A production-based standard sets a quantity of emissions allowed per unit of production (i.e., amount of HAP emitted per ton of rubber produced). For this option, emissions of HAP must not exceed 0.024 grams per megagram (g/Mg), (0.00005 lb/ton) of rubber processed at the tire production affected source.

### 3. Tire cord production

There are 3 standards for the tire cord production subcategory, and sources can choose which standard to comply with within this subcategory, depending, in part, on whether the source is an existing or new source. The first standard is a production-based emission-limit option for existing tire cord production affected sources. As part of this standard, emissions must not exceed 280 g HAP per Mg (0.56 lb/ton) of fabric processed at the tire cord production affected source for the monthly average.

The second standard is a production-based emission-limit option for new or reconstructed tire cord production affected sources. As part of this standard, emissions must not exceed 220 g HAP per Mg (0.43 lb/ton) of fabric processed at the tire cord production affected source.

The third standard is a HAP constituent emission-limit option available to both existing and new or reconstructed tire cord production affected sources. A HAP constituent standard requires that no material be purchased and used at an affected facility that contains HAP in amounts above a specific composition limit. To comply with this standard, emissions of each HAP in table 16 to 40 CFR part 63, subpart XXXX, that is used in the tire cord production process must not exceed 1,000 g HAP per Mg (2 lb/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, that is used in the tire cord production process must not exceed 10,000 g HAP per Mg (20 lb/ton) of total coatings used at the tire cord production affected source.

#### 4. Puncture sealant application

There are 3 equivalent standards for the puncture sealant application subcategory, and sources can choose which standard to comply with within this subcategory depending, in part, on whether the source is an existing or new source. The first standard is a percent reduction emission-limit option for existing puncture sealant application spray booths. As part of this standard, facilities are required to reduce spray booth HAP (measured as volatile organic compounds (VOCs)) emissions by at least 86 percent by weight.

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

The third standard is a HAP constituent emission-limit option for both existing and new or reconstructed puncture sealant application spray booths. As part of this standard, emissions of each HAP in table 16 to 40 CFR part 63, subpart XXXX, must not exceed 1,000 g HAP per Mg (2 lb/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 g HAP per Mg (20 lb/ton) of total puncture sealants used at the puncture sealant affected source.

#### 5. Alternatives for meeting emission limits

Compliance alternatives are available for the 3 subcategories currently subject to emission limits (tire production, tire cord production, and puncture sealant application) to meet the emission limits mentioned earlier in section II.B. of this preamble. For more information on these compliance alternatives, a detailed breakdown of the compliance alternatives for these subcategories may be found at 40 CFR 63.5985, 40 CFR 63.5987, and 40 CFR 63.5989, for tire production, tire cord production, and puncture sealant application, respectively. These alternatives are also summarized here.

For tire production, alternatives for showing compliance are available for both emission standards. For the standard option based on the materials purchased and used the alternatives are to use only cements and solvents that as purchased contain no more HAP than allowed by the specified emission limitations; use cements and solvents such that the monthly average HAP emissions meet the specified emission limitations; or use control devices to reduce HAP emissions such that the monthly average HAP emissions meet the specified emission limitations. For the production-based standard option the alternatives are to use cements and solvents such that the monthly average HAP emissions meet the specified emissions limitations; or use control devices to reduce HAP emissions such that the monthly average HAP emissions meet the specified emission limitations.

For tire cord production there are two alternative compliance options: use coating solutions such that the monthly average HAP emissions do not exceed the applicable emission limit; or use a control device to reduce HAP emissions such that the monthly average HAP emissions do not exceed the applicable emission limitation.

For puncture sealant application, there are two alternative compliance options: use an emissions capture system and control device and demonstrate that the application booth

emissions meet the specified emission limitations and operating limits; or use a permanent total enclosure that satisfies the Method 204 criteria in 40 CFR part 51 and demonstrate that the control device meets the specified operating limits and reduces at least 86 percent of emissions for existing sources and 95 percent of emissions for new sources.

6. Recent actions relating to the NESHAP for the Rubber Tire Manufacturing source category

In the 2020 Risk and Technology Review (RTR) (85 FR 44752), the EPA found that the risk associated with air emissions from rubber tire manufacturing was acceptable considering all the health information and factors evaluated, and risk estimation uncertainty. The EPA found that the current NESHAP provides an ample margin of safety to protect public health and to prevent an adverse environmental effect. The EPA determined that there were no developments in practices, processes, or control technologies that warranted revisions to the MACT standards under CAA section 112(d)(6). Based on the analysis conducted as part of the RTR, no revisions to the numerical emission limits were made for any of the Rubber Tire Manufacturing subcategories. The 2020 RTR addressed periods of startup, shutdown, and malfunction (SSM) by clarifying that emissions during SSM operations are subject to the NESHAP. In addition, the 2020 amendments included provisions requiring electronic reporting of performance test results and reports, compliance reports, and Notification of Compliance Status reports.

*C. What changes did we propose for the Rubber Tire Manufacturing source category in our November 16, 2023, proposal?*

In response to the *LEAN* decision requiring the EPA to ensure that missing emission standards are promulgated when the EPA undertakes a 112(d)(6) technology review, on November 16, 2023, the EPA published a proposed rule in the *Federal Register* for the Rubber Tire Manufacturing NESHAP, 40 CFR part 63, subpart XXXX, that took into consideration the MACT analyses for the rubber processing subcategory. In the proposed rule, the EPA proposed numerical emissions limits for the rubber processing subcategory of the rubber tire

manufacturing industry, which is the only unregulated subcategory within the Rubber Tire Manufacturing source category with unregulated HAP.

Additionally, EPA solicited comment on several aspects of the proposed rulemaking. EPA solicited comment on the use of THC as a surrogate for organic HAP, as well as on the EPA's approach to testing for THC, as opposed to testing for individual speciated organic HAP. EPA solicited comment on the use of THC as a surrogate in place of setting emission limits for PAHs, specifically. EPA solicited comment on our approach regarding the 30-day THC data. EPA solicited comment on the proposed approach to addressing negative THC values. EPA solicited comment on the proposed compliance periods, and specifically requested submission of information from sources in this source category regarding specific actions that would need to be undertaken to comply with the proposed amended provisions and the time needed to make the adjustments for compliance with any of the revised provisions.

The EPA proposed to establish MACT standards for the rubber processing subcategory for total hydrocarbons (THC) as a surrogate for organic HAP. For these MACT standards, we proposed a THC emission limit for mixers processing silica containing compounds and a THC emission limit for mixers processing non-silica containing compounds. Both limits were based on a 15-day rolling average.

The EPA also proposed MACT standards for filterable particulate matter (fPM) and metal HAP. The emission limits proposed for new and existing sources were an emissions limit for fPM, as a surrogate for metal HAP, with an emission limit for total metal HAP as an alternative.

*D. What outreach did we conduct following the proposal?*

Following publication of the proposed rule, the EPA offered the opportunity for a public hearing, but none was requested. However, the USTMA did request a meeting with the EPA, and the EPA and USTMA met in May 2024 and USTMA discussed supplemental testing performed

by USTMA and the use of THC as a surrogate for organic HAP. A summary of that meeting is in the docket for this rulemaking (Docket ID No. EPA-HQ-OAR-2019-0392).

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

This action finalizes the EPA's determinations pursuant to the MACT provisions of CAA section 112(d)(2) and (3) for the Rubber Tire Manufacturing source category and sets emission limitations for the rubber tire processing subcategory within the Rubber Tire Manufacturing NESHAP based on those determinations.

#### *A. What are the final rule amendments pursuant to CAA sections 112(d)(2) and (3) for the Rubber Tire Manufacturing source category?*

We are establishing MACT standards for the rubber processing subcategory in the rubber tire manufacturing source category, as required by the CAA. To satisfy the requirements of CAA section 112(d)(2) and (3), we are revising the NESHAP to include emissions limitations for the previously unregulated rubber processing subcategory including limitations for THC, as a surrogate for organic HAP emissions; fPM, as a surrogate for metal HAP; and an alternative limit for metal HAP. The standards in this final rule are similar in format to those in the proposed rule, but with updates to the standards based on public comments and additional data received and analyzed for the final rule. In the proposal, the EPA included separate THC standards for silica-containing and non-silica-containing processed rubber. Based on comments and data received during the comment period, the EPA is establishing a single MACT standard, instead of setting separate standards for the mixing of silica-containing and non-silica containing compounds, as proposed. The same THC standard is being established for both new and existing facilities and is based on 3 times the representative detection level (3xRDL) since this value is larger than the calculated Upper Prediction Limit (UPL) for THC.<sup>4</sup> Also based on the public

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<sup>4</sup> It is the practice of the EPA to use the higher of the calculated UPL and 3xRDL value when setting an emission limit, as described in the memorandum, *Data and Procedure for Handling Below Detection Level Data in Analyzing Various Pollutant Emissions Databases for MACT and RTR Emissions Limits*, which is available in the docket for this rulemaking.

comments, the final rule is allowing facility-wide averaging of the individual emissions from each mixer to demonstrate compliance with the THC emission limits.

The final rule is also setting standards for fPM, as a surrogate for metal HAP, and an alternative standard for metal HAP, with the same standards applying for new and existing facilities. The final standards for fPM and metal HAP are also based on the 3xRDL value for fPM and metal HAP, since this value is larger than the calculated UPL. Also based on the public comments, the final rule is allowing facility-wide averaging of the individual emissions from each mixer to demonstrate compliance with the fPM emission limits.

### 1. Polycyclic Aromatic Hydrocarbons

The EPA received data from 5 facilities for polycyclic aromatic hydrocarbon (PAH) emissions. The PAH compounds measured were aniline, dibenzofuran, hydroquinone, naphthalene, and o-toluidine. The PAH emissions were collected using U.S. EPA SW-846 Method 0010, extracted using Method 3542, and analyzed using Method 8270E.<sup>5</sup>

Many of the measured emissions for the PAH compounds were below the detection limit (BDL) of the approved testing method, and others were detection level limited (DLL). Results are considered BDL when every measured result for a compound in a test run is less than the laboratory's reported detection level.<sup>6</sup> Data is considered DLL when only some results in a given test run are less than the laboratory's reported detection level for that compound. The Agency's practice in establishing emission limits for pollutants with DLL values is to use the DLL value to calculate the UPL and then to compare the calculated UPL to a value that is 3 times the pollutant's RDL (3xRDL value). Consistent with our practice described in the aforementioned memo,<sup>7</sup> the larger of the UPL calculation or the 3xRDL value becomes the emission limit.

Reported levels of 2 PAH compounds—dibenzofuran and hydroquinone—are BDL at each

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<sup>5</sup> <https://www.epa.gov/hw-sw846/sw-846-compendium>.

<sup>6</sup> In keeping with the EPA's practice, when all pollutant values fall below BDL, no emission limit should be established for that pollutant.

<sup>7</sup> See the memorandum, *Data and Procedure for Handling Below Detection Level Data in Analyzing Various Pollutant Emissions Databases for MACT and RTR Emissions Limits*, which is available in the docket for this rulemaking.

facility; therefore, the EPA did not propose and is not promulgating emission limits for dibenzofuran or hydroquinone. The EPA has no data indicating the presence of polychlorinated dioxins or polychlorinated dibenzofurans, and measured unpolychlorinated dibenzofuran values are BDL, therefore, the EPA did not propose and is not promulgating separate emission limits for dioxin-like compounds.

The test results for the remaining PAH species—*aniline*, *naphthalene*, and *o-toluidine*—were DLL. However, these PAH species are also organic HAP and hydrocarbons and will be accounted for in THC measurements. As such, setting both a separate PAH standard in addition to a THC standard would be redundant and doubly regulate PAH emissions. In order to prevent this redundancy, the EPA did not propose and is not promulgating a separate emission limit for PAHs and instead proposed and is promulgating a limit for THC emissions, which will encompass PAHs. The THC results include the effect of PAH, other organic HAP, and VOC contained in exhaust streams and are well suited to serve as surrogates for these compounds.

A detailed description of the analysis of the PAH data is included in the memorandum, *Final Rule Maximum Achievable Control Technology (MACT) Analysis for the Rubber Processing Subcategory in the Rubber Tire Manufacturing Industry*, located in the docket for this action (Docket ID No. EPA-HQ-OAR-2019-0392).

## 2. Total hydrocarbon emissions

### a. THC existing source standard

The EPA determined the existing source MACT floor THC emission limit based on the top 2 performing mixers. There are 97 mixers; for a source category of this size, the CAA requires the EPA to use the average emission limitation achieved by the best performing 12 percent of the existing sources (for which the Administrator has emissions information) when establishing the MACT floor level of control. The EPA has THC data measured for 12 mixers, and 12 percent of 12 mixers is 1.44 mixers, which we rounded up to 2 mixers for purposes of determining the existing source MACT floor. The EPA received THC data from an additional 5

mixers as a result of the ICR, but these data represented the uncontrolled emissions from units that were collected prior to the emission stream entering a regenerative thermal oxidizer (RTO) and the EPA did not have data for the controlled emissions, which would be collected after the exhaust stream has passed through the RTO. In response to comments, the EPA determined the destruction and removal efficiency (DRE) of an RTO can vary depending on the THC inlet concentration, thus a reported DRE measured at one THC concentration may not be applicable to the THC concentrations observed for these mixers. As such, without specifically measuring DRE values for each THC concentration, accurate controlled emissions could not be determined for these 5 mixers by applying the reported DRE to emissions prior to the control device. While it is expected that emissions from these controlled mixers would be low, the EPA does not have post-control emission data from these mixers. As a result, the EPA is not including these 5 mixers in the MACT analysis.

When determining the best performing 12 percent of existing sources for the MACT floor pool, we round fractional amounts to the next whole number to ensure that the MACT floor calculations are based on no fewer than the best performing 12 percent of existing sources. In this instance, we rounded up to 2 mixers for determining the existing source MACT floor. The EPA is promulgating the MACT floor THC emission limit for existing sources based on the average 15-day emission rate achieved by the 2 best performing (i.e. lowest emitting) mixers. From the data available, the 2 best performing mixers are Continental Mt. Vernon mixer #22, which is controlled by an RTO, and Goodyear Fayetteville mixer #4, which has no control device for THC. For these 2 best performing mixers, the EPA included each mixer's daily average THC emission rate in a list and then calculated 15-day rolling averages from the combined daily averages. The 15-day rolling averages were then used to calculate the 15-day UPL THC emission rate in g/Mg rubber produced, which was 24 g/Mg.

The EPA-calculated THC emission limits for existing mixers are based on the calculated 99 percent UPL or 3xRDL, whichever is higher, calculated from the 15-day rolling averages of the data combined from the 2 mixers.

The 3xRDL for THC for the 2 combined mixers is 63.1 g/Mg rubber produced. Because the 3xRDL value is higher than the calculated UPL value from the 2 combined mixers, and because the EPA rounds up when simplifying to 2 significant figures, the existing source THC limit in the final rule is 64 g/Mg rubber produced. You may choose to comply with the THC emission limit for each rubber processing mixer separately, or for a group of rubber processing mixers routed to the same control device or stack, the emissions and amount of rubber processed for the connected mixers can be combined. Additionally, an alternative facility-wide average for THC emissions for all mixers is discussed in section A.2.d.

The maximum THC parts per million (ppm) value (from minute-to-minute analysis provided during the information collection request (ICR)) from the 2 best performers is 25 ppm, so an appropriate instrument range is 0 to 50 ppm, which leads to an RDL value of 3.082 ppm and a 3xRDL value of 9.25 ppm. For additional information on how the EPA calculated these RDL values please see the memorandum titled *Measurement Detection Capabilities for EPA for Instrumental Test Methods* located in the docket for this rule. When this 3xRDL value is combined with the average flow rate, and production of the best performers, the result is 63.1 g/Mg rubber produced. Since the 3xRDL value is higher than the UPL value of 24 g/Mg rubber produced, the 3xRDL value (63.1 g/Mg) is the basis for the existing source MACT floor for all rubber processing, which is then set to 64 g/Mg.

Of the 12 mixers for which the EPA has measured emissions, 4 mixers (33 percent) have emissions (based on their calculated UPL) that are estimated to be greater than the final rule THC limit of 64 g/Mg rubber produced (rounded to 2 significant figures) and thus would need to install a control device. Therefore, we estimate that 33 percent of the 97 mixers (33 mixers)

located at major sources would need to be controlled (e.g., by an RTO) to meet the final rule limit.

Based on data received in response to the CAA section 114 information request, which shows on average currently installed RTOs are shared by 3 co-located mixers, EPA estimates, on average, one RTO will be shared by 3 mixers for any new RTOs installed as a result of this rulemaking. Accounting for the current number of mixers and RTOs at each major source facility, the EPA estimates that a total of 17 RTOs (corresponding to a total of 35 mixers) would likely be needed to comply with this final rule. Given that 9 RTOs already exist at the regulated facilities at issue, the EPA expects that the cumulative impact to industry would be the installation of 8 new RTOs. EPA acknowledges it is possible some facilities may choose to comply with the rule through a variety of technology pathways including the installation of boilers instead of RTOs or a different ratio of RTOs to mixers than assumed in this analysis. However, EPA has no way of accurately knowing how facilities will choose to comply thus we are unable to determine exactly what business decisions firms will make. For additional information on how EPA calculated the amount of RTOs likely to be installed for this rulemaking see the memo “Rubber Processing Control Costs, Emission Reductions, and Cost Effectiveness” available in the docket for this rulemaking (Docket ID No. EPA-HQ-OAR-2019-0392).

b. THC beyond-the-floor existing source standard

In addition to determining the MACT floor level of control, as a second step in the standard-setting process, the EPA must also examine whether to adopt additional, and more stringent, “beyond-the-floor” regulatory options. The first step, as discussed in the preceding section, requires the establishment of an emission floor – developed under CAA section 112(d)(3). The second step requires consideration of whether additional reductions are achievable, taking into account the factors listed in section 112(d)(2) (*i.e.*, cost, non-air quality health and environmental impacts, and energy requirements). If additional reductions are

determined to be achievable, taking these factors into account, the resulting emissions standards are referred to as “beyond-the-floor” MACT standards.<sup>8</sup>

Unlike the MACT floor, which represents the minimum stringency requirement, the EPA must consider various impacts of more stringent regulatory options when considering beyond-the-floor options. If the EPA concludes that the more stringent regulatory options are not reasonable, then EPA selects the MACT floor as the final MACT standard. However, if the EPA concludes that the beyond-the-floor levels of control are reasonable, when considering additional emissions reductions that would be achieved, then those beyond-the-floor measures represent the applicable MACT standard.

As part of our beyond-the-floor analysis, we identify control options or techniques that could achieve emission reductions beyond the MACT floor level of control. The EPA did not identify any control options or techniques other than what is currently used (*i.e.*, an RTO) that could serve as a basis for establishing a limit beyond the MACT floor.

In addition to the lack of additional control options, the MACT floor limit for the existing source category already reflects the lowest concentration that can be reliably measured. Following the EPA’s well-established approach to determining MACT floor limits, the EPA is finalizing a MACT floor limit for the existing source category that is based on the 3xRDL value. This is because—for the measurement method and data—the value of 3xRDL is higher than the combined calculated UPL for the 2 best performing sources. This MACT floor limit based on 3xRDL reflects the detection limit of the measurement method and represents the lowest concentration that can be reliably measured. Because no further measurable reductions can be achieved from these sources, EPA is unable to adopt a beyond-the-floor limit in this action.

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<sup>8</sup> CAA section 112(d)(2) provides, in pertinent part, that emissions standards promulgated under section 112 “shall require the maximum degree of reduction in emissions of the hazardous air pollutants,” after taking into consideration “the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements,” which EPA “determines is achievable.”

c. THC new source standard

The THC MACT emission limits for new sources are based on the emission limitation achieved by the single best performing similar source. However, as stated above the MACT floor limit is based on the 3xRDL value for the measurement method and data because the 3xRDL value is higher than the combined UPL, and thus represents the lowest level at which THC can be reliably detected. Because the MACT floor limit is based on the 3xRDL value for the THC measurements, it is not feasible to establish a lower limit. Therefore, the final MACT standard for new and existing mixers is the MACT floor limit and is 64 g/Mg. You may choose to comply with the THC emission limit for each rubber processing mixer separately, or for a group of rubber processing mixers routed to the same control device or stack, the emissions and amount of rubber processed for the connected mixers can be combined. Additionally, an alternative facility-wide average for THC emissions for all mixers is discussed in section A.2.d.

d. Alternative THC standard: facility-wide averaging

In response to the proposed rule, the EPA received public comment regarding the potential for a facility-wide standard. Upon review, the EPA is establishing an alternative standard based on facility-wide averaging. Averaging across rubber mixers is appropriate, and consistent with CAA section 112(d)(2)-(3), because the total quantity of HAP that may be emitted by the regulated source is not greater than if each mixer complied separately with the applicable standard. For additional information on EPA's decision to include facility-wide averaging, see the Response to Comments document available in the docket for this rule (Docket ID No. EPA-HQ-OAR-2019-0392). This standard is based on averaging the individual emissions of each mixer at a facility. For an individual mixer, the THC emission limit for both new and existing sources is 64 g/Mg (1.3x10<sup>5</sup> lb/Mton) of rubber processed; thus, the average for all mixers across a facility is also 64 g/Mg. Because the THC emission limit is already set at the 3xRDL level, no emissions discount is applied for setting the standard for facility-wide averaging. To comply based on averaging, the facility would sum the emissions from all mixers

at the facility over a 15-day period and divide the sum of the emissions by the sum of the rubber processed in all of the mixers at the facility over the same 15-day period.

### 3. Particulate matter and metal HAP

#### a. Existing source standard

Based on responses to the CAA section 114 information request, the EPA has fPM data from 7 mixers and of those metal HAP data is available from 5 of the mixers. The EPA had no reason to assume a difference in fPM and metal HAP emissions based on the mixing of silica-containing or non-silica-containing compounds. Thus, a single emission standard was calculated for mixing all classes of rubber compounds. For each mixer, the EPA calculated the 99 percent UPL for both fPM and the sum of the metal HAP that were measured (antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, mercury, nickel, phosphorous, and selenium).

Detailed data by individual run and for each metal HAP, as well as total metal HAP and fPM, were provided and are summarized in the memorandum, *Final Rule Maximum Achievable Control Technology (MACT) Analysis for the Rubber Processing Subcategory in the Rubber Tire Manufacturing Industry*, included in the docket for this rulemaking. In the metal HAP measurements for Continental, Mt. Vernon, the phosphorous data were unreliable because of a contaminated reagent and are not included in the table and in the total metals. The PM data provided from USTMA before proposal for Danville mixers #5 and #7 were the only data containing fPM and corresponding rubber production data. The metal HAP data provided for Danville mixers #5 and #7 by USTMA before proposal were not in the format needed to calculate production-based emission rates.

After proposal, the EPA also received additional fPM data from USTMA for 4 mixers as part of their public comments, and these data are also summarized in *Final Rule Maximum Achievable Control Technology (MACT) Analysis for the Rubber Processing Subcategory in the Rubber Tire Manufacturing Industry* memorandum, available in the docket for this rule (Docket

ID EPA-HQ-OAR-2019-0392). The data for 3 mixers consisted of at least 3 runs, which is consistent with the fPM testing that the EPA requested in the ICR, and the data for the fourth mixer consisted of only 2 runs, which is fewer than the minimum number of runs requested in the ICR and the number needed to calculate a UPL value.

There are 97 mixers; for a source category of this size, the CAA requires the EPA to determine the average emission limitation achieved by the best performing 12 percent of the existing sources (for which the Administrator has information).

The EPA has metal HAP data from 5 mixers. The EPA calculated 12 percent of 5 mixers for metal HAP, which results in 0.6. When determining the best performing 12 percent of existing sources for the MACT floor pool, we round fractional amounts to the next whole number to ensure that the MACT floor calculations are based on no fewer than the best performing 12 percent of existing sources. In this instance, we rounded the value of 0.6 up to one mixer for purposes of determining the existing source MACT floor for metal HAP.

Since the EPA has fPM emissions data from a total of 10 mixers for which UPL values could be calculated, the MACT floor final rule limit for fPM is based on 12 percent of 10 mixers, which is 1.2. This includes the 7 tests from the EPA ICR, and 3 of the tests from USTMA for which a UPL value could be calculated. When determining the best performing 12 percent of existing sources for the MACT floor pool, we round fractional amounts to the next whole number to ensure that the MACT floor calculations are based on no fewer than the best performing 12 percent of existing sources. In this instance, we rounded the fPM of 1.2 up to 2 and the metal HAP value of 0.6 to one mixer for purposes of determining the existing source MACT. Because metal HAP are emitted as fPM, the EPA is using fPM as a surrogate for metal HAP. Additionally, the EPA is finalizing an alternative emission limit for total metal HAP. Data gathered from the CAA section 114 information request identified that the primary control devices utilized for metal HAP emissions on rubber tire mixers are baghouses and capture of fPM will reliably indicate capture of metal HAP. It is also practical to use fPM as a surrogate for

metal HAP because the fPM emission limit accounts for variability in individual metal HAP emission rates among different batches of rubber compound being mixed.

The EPA calculated the UPL for fPM as 2.5 g/Mg (4900 lb/Mton) of rubber produced and total metal HAP emission rate of  $3.7 \times 10^{-2}$  g/Mg (74 lb/Mton) rubber produced. The lowest fPM UPL emission rate and the lowest metal HAP emission rate were measured at the same mixer, and the fPM and metal HAP emissions were measured simultaneously.

The EPA calculated the 3xRDL for fPM using the average flow rate of the top 2 mixers. The average flow rate was 9,622 dry standard cubic feet per minute (dscfm) and average production rate was 17.98 tons per hour (ton/hr) for Goodyear Lawton Mixer #1 and Goodyear Danville Mixer #7 as representative values. The calculations also used a fPM RDL of 2 mg and 3xRDL of 6 mg in a sample volume of 2 dscm, or 3 mg/dscm. These values would provide a fPM 3xRDL value of 3.0 g/Mg (6,000 lb/Mton) rubber processed. These calculations are detailed in the MACT memo for the final rule. Because the 3xRDL value is greater than the UPL, the final rule fPM emission limit is based on the 3xRDL value instead of the 99-percent UPL value. Rounded to 2 significant figures, this limit is 3.0 g/Mg ( $6.0 \times 10^3$  lb/Mton).

The EPA also used the flow and production data from Goodyear Lawton Mixer #1 (top performer) to calculate the 3xRDL value for total metal HAP. The calculations used the RDL values for each metal HAP in a sample volume of 2 dscf. The total metal HAP 3xRDL value is 109.7  $\mu$ g in a sample volume of 2 dscm, or a value of  $5.4 \times 10^{-2}$  g/Mg rubber (110 lb/Mton) rubber processed using the flow and production data for Goodyear Lawton Mixer #1. Because the 3xRDL value is greater than the UPL, the final rule total metal alternative emission limit is based on the 3xRDL value instead of the UPL value. Rounded to 2 significant figures, this limit is  $5.4 \times 10^{-2}$  g/Mg rubber (110 lb/Mton). These calculations are detailed in the memorandum titled *Final Rule Maximum Achievable Control Technology (MACT) Analysis for the Rubber Processing Subcategory in the Rubber Tire Manufacturing Industry* found in the docket for this rule.

You may choose to comply with the fPM emission limit (or the total metal HAP alternative) for each rubber processing mixer separately, or for a group of rubber processing mixers routed to the same control device or stack, the emissions and amount of rubber processed for the connected mixers can be combined. Additionally, an alternative facility-wide average of fPM (or total metal HAP) emissions for all mixers is discussed in section A.3.d.

b. New source standard

The fPM and the total metal HAP alternative MACT emission limits for new sources are based on the emission limitation achieved by the best controlled similar source. However, as stated above the MACT floor limit is set at the value of the 3xRDL for the measurement method and data because the 3xRDL value is higher than the combined UPL. Because the MACT floor limit is set at the 3xRDL value for both fPM and the total metal alternative measurements, it is not feasible to establish a lower limit. Therefore, the final MACT standard for new and existing mixers is the MACT floor limit and is 3.0 g/Mg (6,000 lb/Mton) rubber processed for fPM and  $5.4 \times 10^{-2}$  g/Mg rubber (110 lb/Mton) for total metal HAP. You may choose to comply with the fPM emission limit (or the total metal HAP alternative) for each rubber processing mixer separately, or for a group of rubber processing mixers routed to the same control device or stack, the emissions and amount of rubber processed for the connected mixers can be combined. Additionally, an alternative facility-wide average of fPM (or total metal HAP) emissions for all mixers is discussed in section A.3.d.

c. Beyond the Floor Analysis

In addition to determining the MACT floor level of control, the EPA must examine more stringent “beyond-the-floor” regulatory options when establishing the applicable MACT emission limitation. Unlike the MACT floor minimum stringency requirements, when considering beyond-the-floor options, the CAA provides that the EPA must consider various impacts of the more stringent regulatory options in determining whether beyond-the-floor measures should be included in a final MACT emission standard. If the EPA concludes that the

more stringent regulatory options are not reasonable, then the EPA selects the MACT floor as the final applicable MACT standard. However, if the EPA concludes that the beyond-the-floor levels of control are reasonable considering the additional emissions reductions that would be achieved, the EPA selects those levels as MACT.<sup>9</sup>

As part of our beyond-the-floor analysis, we identify control options or techniques that could achieve emission reductions beyond the MACT floor level of control. The EPA did not identify any control options or techniques other than what is currently used.

The existing source MACT floor limit is set at the value of the 3xRDL for the measurement method and data because the 3xRDL value is higher than the average UPL of the 2 lowest emitting sources for fPM and the UPL of the single lowest emitting source for total metal HAP. For both fPM and total metal HAP, the existing source MACT floor limit is set at the 3xRDL value, which represents the lowest concentration that can be measured. As such, we did not identify additional controls for reducing emissions further because no further reductions can be achieved that are measurable. The final MACT standard for existing mixers is the MACT floor limit and is set at the 3xRDL value.

d. Alternative fPM standard: facility-wide averaging

In response to the proposed rule, the EPA received public comment regarding the potential for a facility-wide standard. Upon review, the EPA agrees with the commenters, and is establishing an alternative standard based on facility-wide averaging. For additional information on EPA's decision to include facility-wide averaging, see the Response to Comments document available in the docket for this rule (Docket ID No. EPA-HQ-OAR-2019-0392). This standard is based on averaging the individual emissions of every mixer at a facility and can be applied to either the fPM or total metal HAP standard. For an individual mixer, the fPM emission limit for both new and existing sources is 3.0 g/Mg rubber produced ( $5.4 \times 10^{-2}$  g/Mg for the total metal

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<sup>9</sup> As discussed in *supra* section III.A.2.b., EPA evaluates whether additional regulatory measures are appropriate under CAA section 112(d)(2).

HAP alternative). Averaging this limit across all mixers at a facility results in an identical emission limit for the facility-wide alternative. Because the facility-wide average emission limit is identical to the limit for individual mixers, the EPA does not anticipate a difference in the achieved emissions reduction. As stated above, this approach is consistent with CAA section 112(d)(2)-(3), because the total quantity of HAP that may be emitted by the regulated source is not greater than if each mixer complied separately with the applicable standard.

*B. What other changes have been made to the NESHAP?*

We are updating the electronic reporting requirements found in 40 CFR 63.6009(k) and in 40 CFR 63.6010(g) and (h) to reflect new procedures for reporting CBI. The update provides an email address to which source owners and operators can electronically mail CBI to the OAQPS CBI Office when submitting compliance reports.

*C. What are the effective and compliance dates of the standards?*

Amendments to the Rubber Tire Manufacturing NESHAP finalized in this rulemaking for adoption under CAA section 112(d)(2) and (3) are subject to the compliance deadlines outlined in the CAA under section 112(i). For existing sources, CAA section 112(i)(3) provides that there shall be compliance “as expeditiously as practicable, but in no event later than 3 years after the effective date of such standard,” subject to certain exemptions further detailed in the statute.<sup>10</sup> In determining what compliance period is as “expeditious as practicable,” we consider the amount of time needed to plan and construct projects, as well as any time necessary to implement changes in operating procedures. As provided in CAA section 112(i), all new affected sources would comply with these provisions by the effective date of the final amendments to the Rubber Tire Manufacturing NESHAP or upon startup, whichever is later.

The EPA projects that some existing sources may be required to install add-on controls to comply with the emission limits, including new RTOs and new or upgraded baghouses. These

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<sup>10</sup> *Association of Battery Recyclers v. EPA*, 716 F.3d 667, 672 (D.C. Cir. 2013) (“Section 112(i)(3)’s 3-year maximum compliance period applies generally to any emission standard . . . promulgated under [section 112]”) (brackets in original).

sources would require time to design, construct, conduct performance testing, and implement monitoring to comply with the revised provisions. Sources would also be required to install a THC continuous emissions monitoring system (CEMS) and conduct performance testing. Therefore, the final rule allows 3 years for existing sources to comply with the new emission standards. All affected facilities must continue meeting the current provisions of 40 CFR part 63, subpart XXXX, until the applicable compliance date of the amended rule. This final action does not meet the criteria under 5 U.S.C. 804(2), so the revisions to the MACT standards being promulgated by this action are effective on **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]** as specified in CAA section 112(d)(10).

For all affected sources that commence construction or reconstruction on or before November 16, 2023, the final rule provides 3 years after the effective date of the final rule (or upon startup, whichever is later) for owners and operators to comply with the provisions of this action. For all affected sources that commence construction or reconstruction after November 16, 2023, owners and operators must comply with the provisions by the effective date of the final rule (or upon startup, whichever is later).

#### **IV. What is the rationale for our final decisions and amendments for the Rubber Tire Manufacturing source category?**

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

##### *A. Emission Standards for Unregulated Organic HAP Emissions from the Rubber Processing Subcategory*

1. What did we propose pursuant to CAA section 112(d)(2) and (3) for the Rubber Tire Manufacturing source category?

In the proposed rule, published on November 16, 2023, we proposed emission limits for THC as a surrogate for organic HAP. Separate limits were proposed for mixing silica-containing and non-silica-containing rubber compounds, including different emission limits for new and existing sources. The proposed emission limits were based on the EPA's determination of the MACT floor after options more stringent than the MACT floor were determined to not be feasible or cost-effective. The format of the proposed limits was in grams of THC emitted per megagram of rubber produced over a 15-day period. The proposed limits for existing sources were based on the average emission rate of the top 2 best performing sources, and the limits for new sources were based on the lowest emitting source.

2. How did the analysis pursuant to CAA section 112(d)(2) and (3) change for the Rubber Tire Manufacturing source category?

In the final rule, the EPA is promulgating THC emission limits as a surrogate for organic HAP for rubber processing but has made several changes since proposal. First, the EPA had proposed separate THC emission limits based on the mixing of silica-containing or non-silica-containing compounds because the EPA believed the presence of silica compounds impacted the emission profiles. However, for the final rule the EPA is not promulgating separate standards for mixing silica-containing and non-silica-containing rubber compounds. Second, the final THC emission limits for both new and existing sources are based on the 3xRDL value for THC because that value is higher than the calculated UPL of the 2 best performing sources for THC. Additionally, in response to comments, the EPA is not using data from mixers that tested and reported emissions prior to a control device such as an RTO. At proposal the EPA applied a DRE to the data from mixers that then routed emissions to an RTO, since those streams were combined with other mixers not being tested at that time. Since the EPA does not have true outlet data (outlet of control device) from those mixers, we determined it is inappropriate to use such data to set MACT standards. Finally, the EPA is allowing facilities to demonstrate compliance with the THC emission limit by averaging emissions across mixers at the same facility.

3. What key comments did we receive on the analysis pursuant to CAA section 112(d)(2) and (3), and what are our responses?

*Comment:* One commenter argued that emissions of organic HAP and THC vary too widely between mixers and even at different times at the same mixer to be practicably measured as the basis for an emission standard. The commenter noted that data already available to the EPA show that emission rates and species of organic HAP can vary depending on the tire component for which the rubber is being mixed, the different raw materials added, and the mixing conditions. The commenter stated that different organic HAP emissions are produced during rubber mixing from small amounts of organic HAP that are contained as impurities in the raw materials and are also generated by the mixing process when natural and synthetic rubbers are mixed at elevated temperatures. The commenter added that each product formulation may include different raw materials and ingredients because the unique combination of the different raw materials and ingredients imparts in a tire compound a specific combination of certain desired tire properties, such as traction, fuel efficiency, noise, vibration, robustness, etc. Thus, according to the commenter, the organic HAP and THC emission profile will differ from tire component to tire component and within the same tire component, between one product formulation and another.

The same commenter added that different passes through the mixer within the rubber mixing process will also impact the levels of organic HAP and THC emissions from rubber mixers with the 3 major passes (initial, middle, and final) being different in terms of the raw materials and ingredients added, heating temperature, and duration. The commenter also noted that each pass specification is different from company to company and sometimes from plant to plant, and the passes that need to be run are different from tire component to tire component. As a result, according to the commenter, each pass will yield significantly different organic HAP and THC emissions, and the same pass at a different tire plant may produce significantly different organic HAP and THC emissions. The commenter stated that these differences in

emissions were demonstrated by past industry testing, the testing in response to the EPA's ICR, and by the supplemental testing results submitted with the public comments.

The commenter argued that attempting to determine an appropriate emission limitation using an average of 15 days or longer does not mean that the resulting limitation would be representative of the actual performance of the particular mixers tested for the ICR, let alone the entire range of operations and designs of the nearly 100 mixers at major source tire manufacturing plants. The commenter stated that, depending on when 15 days of sampling were conducted, or which tire component a mixer happened to be processing entirely or primarily during emissions testing, the average THC concentration emitted could be far higher or lower than what would be measured during a different 15-day interval. The commenter added that what each mixer will produce or run, however, is entirely dependent on each tire plant's production quota that it must meet, and it is nearly impossible to forecast more than a couple of weeks in advance what each mixer will produce or run, such that the results of a short-term testing at a mixer that was running a certain combination of product formulation and pass may not be representative or indicative of its emission levels at other times. The commenter stated that impracticably lengthy and wide-ranging testing would be required both to ensure that emission measurement at such mixers can be used to set an emissions standard that the mixer can meet at other times and to demonstrate compliance with such an emissions standard.

Finally, the commenter noted that THC emissions are so variable that the agency proposes in its RTR rule to not only require each mixer to be equipped with a CEMS, but also use a dual-range calibration system to capture the range of different emission levels. The commenter stated that the need to install, operate, and maintain a THC CEMS device at each mixer carries a heavy financial burden which underlines the impracticability of measuring THC emissions at rubber mixers. The commenter estimated that based on EPA's 2007 Cost Tool for CEMS, adjusted with current vendor costs for continuous monitoring systems and updated costs for labor, installing continuous THC monitors for all mixers would impose a capital cost of

millions of dollars per facility, with annualized capital and operating costs of around \$180,000 to \$1.8 million per plant. The commenter estimated that the cost may be as much as \$9 million annually for the rubber tire manufacturing industry to monitor THC emissions.

*Response:* The EPA disagrees with the commenter's statement that emissions of THC vary too widely to be practicably measured. While the EPA acknowledges that manufacturing rubber tires, like many other manufacturing processes, exhibits variable emissions. However, in phase I of the 114 information collection request, data received showed all known mixers within this source category have stacks where emissions can be measured; as such, emissions measured at these point sources may be used to set a numerical emission standard. The EPA collected from the industry and then processed data that demonstrate this source variability; the EPA obtained from industry test results from a variety of mixers at different facilities that run different types of passes. Data were gathered for 30 days per mixer to account for emissions variability and show representative data during normal operation. Additionally, the EPA set emission limits based on a 15-day average, and the UPL for the mixers, which is an approach used by the EPA in this and other standards, calculated from all 15-day averages in the data from each mixer to account for variability in emissions. Facilities may need to install and operate control devices, such as an RTO or similar control technology, to account for variability while ensuring the emission limit is met.

The Agency agrees with the commenter's assertions that THC CEMS are necessary due to variability, as stressed by the commenter, but disagrees that dual-range calibration systems are required, and further disagrees that industry would be required to pay annualized costs of between \$180,000 to \$1.8 million per plant. As mentioned earlier, given the potential disparity between and among individual mixer emissions, coupled with the lack of THC data from source owners or operators, the EPA's ICR obtained at least 30 days of continuous THC data per mixer. Source owners or operators may not have known their mixers' THC emissions or potential emission limit during ICR testing; however, now that the THC emission limit is known, source

owners need not choose a dual-range THC CEMS; rather they can select an instrument with a range appropriate for the emission limit. Of course, should source owners or operators believe additional calibrated ranges beyond the emission limit are necessary, they are able to select and use multiple ranges – but those additional range choices represent voluntary selection and are not imposed by this rule. The EPA agrees that THC CEMS have the ability to properly measure a wide range of emissions and that they also provide those data continuously, which allows for ongoing compliance demonstration, unlike the sporadic compliance demonstration offered by periodic testing. As an aside, most THC CEMS include a built-in variety of ranges, including site-developed and selected ranges, so source owners or operators should have little trouble narrowing their instruments' focus on a range appropriate to the THC emission limit. EPA's Monitoring and Cost Analysis Tool shows the initial cost of a THC CEMS is less than \$145,000 and the annualized cost would be less than \$50,000. Finally, the EPA estimated the cost for installing and operating a THC CEMS for each individual mixer.<sup>11</sup> However, it is likely that facilities will choose to share THC CEMS given that one THC CEMS should be able to serve 3 mixers – and perhaps more.

*Comment:* One commenter argued the EPA should establish work practice standards under CAA section 112(h) instead of numerical emission limits. The commenter stated that the unique characteristics of mixing operations at tire manufacturing facilities imply that not even multiple days of stack testing a single mixer would be sufficient to produce organic HAP or THC emission rates that even that mixer would have a high probability of not exceeding during other periods of operation. The commenter cited Continental's 2019 engineering test at Mixer 22, to argue that when processing a single worst-case rubber formulation or compound most likely to generate highest emissions of ethanol, the resulting THC emissions may be almost 2 times higher than during any other time. The commenter continued by saying if this single worst-case rubber

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<sup>11</sup> For calculations of the THC CEMS cost, see the memorandum *Final Rule – Rubber Processing Control Costs, Emission Reductions, and Cost Effectiveness*, available in the docket for this rule (Docket ID No. EPA-HQ-OAR-2019-0392).

formulation were processed 15 days in a row at Mixer 22, it would generate THC emissions at rates nearly 7 times higher than the EPA's proposed THC emission limit for silica-containing category for existing sources, even after RTO control – despite the fact that the EPA identified Continental Mixer 22 as the best performing mixer among those mixers for which the EPA has test data.

The commenter stated that it would be prohibitively costly and time-consuming to conduct enough stack testing on individual mixers, performed on enough mixers, to determine emission rates representative of the ranges of operations of mixers at tire plants, which would be needed to support establishment of emissions limitations that all mixers would have to meet at all times. The commenter added that even if stack testing could reasonably be accomplished to support emission limitations, modifying dozens of mixers to allow compliance testing, and then conducting enough stack tests on each of those mixers to be assured that measured emissions fall below the emissions limitations, would itself be impracticable.

The commenter argued that mixers, therefore, present a clear example of a type of source for which the measurement of emissions is not practicable due to technological or economic factors, and so work practice standards are authorized and appropriate under CAA section 112(h). The commenter argues that the impracticability of measuring (for purposes of establishing emission limitations, or for purposes of determining compliance) emissions that vary widely over time and over the variety of products manufactured is precisely the kind of situation in which the EPA can and should use work practice standards. As an example, the commenter refers to the EPA rulemaking setting MACT standards for periodic [batch] brick kilns, where the EPA concluded that work standards were appropriate due to the wide variety in emissions over time and products manufactured.

*Response:* The EPA disagrees with the commenter's statement that the EPA should recognize that conditions at rubber mixers warrant the establishment of work practice standards in lieu of numerical emissions limits. CAA section 112(h) provides, in pertinent part, that the

EPA may establish a design, equipment, work practice, or operational standard if it is “not feasible” for EPA to prescribe or enforce an emission standard. CAA section 112(h)(2)(A) further clarifies that the phrase “not feasible to prescribe or enforce an emission standard” includes situations in which “a hazardous air pollutant or pollutants cannot be emitted through a conveyance designed and constructed to emit or capture such pollutant ...”

The EPA acknowledges that, like many other regulated source categories, rubber processing is a “batch” process. However, as stated in the 2020 RTR (85 FR 44752), rubber processing is a *continuous* batch operation which generates more consistent emissions than other batch processes. Additionally, a 15-day average inherently reduces the effect of emissions variability and allows owners and operators to determine whether it is necessary to install and operate a control device, such as an RTO, to ensure that the emission limit is met at all times. As verified in the responses to phase I of the ICR, all mixers route to stacks which can and should be used for testing and for emissions measurements to establish appropriate emission limits for the rubber processing subcategory. As such, since rubber processing operations emissions are, or are capable of being, routed to stacks, these operations do not satisfy the requirement described in CAA section 112(h)(2)(A).

The EPA disagrees with the commenter that the test results at Continental mixers 12 and 22 in 2019 support the need for a work practice standard. The test results cited by commenters were obtained over relatively short test runs of only 3 hours per test condition. The EPA acknowledges that individual mixers will exhibit variable emissions, depending on the material being mixed and the pass of the material through the mixer, and this was also shown in the phase II emissions testing conducted to support this rulemaking. However, the EPA has specifically addressed the issue of emissions variability by establishing the standards based on a 15-day average THC emission rate, rather than on short-term testing.

The EPA also disagrees with the commenter’s assertion that rubber processing is comparable to periodic [batch] brick kilns. Unlike the process of rubber tire production, brick

kilns are truly batch processes that may take from between several days to nearly a week (or more) to complete, whereas rubber processing is a continuous batch process where each batch takes only a few minutes, then another batch is mixed allowing for more steady emissions. Therefore, the type of scenario described by commentators (whereby they claim that the process with the highest emissions could result in exceeding the limit seven-fold) is not expected to occur during normal business operations. In addition, the HAP of concern (and their potential surrogates) for periodic brick kilns cannot be easily measured on a continuous basis, whereas THC can be monitored continuously with a CEMS. Therefore, the situations are not comparable.

*Comment:* One commenter disagreed with the EPA's decision to regulate organic HAP through the use of THC as a surrogate instead of developing a design, equipment, work practice, or operational standard under CAA section 112(h) because measurement of organic HAP emissions from mixing is infeasible. The commenter argued that the EPA ignored process information and emissions testing, provided by USTMA members, that showed THC is not an appropriate surrogate because it is affected primarily by emissions of pollutants that are not classified as HAPs. The commenter stated that organic HAP testing required by the EPA through the ICR, as well as additional testing conducted at numerous USTMA member mixers, demonstrated that organic HAP emissions are not correlated with THC emissions and that HAP emissions are affected by different factors. The commenter argued that, unlike the instances in which the EPA's use of surrogate emission limitations has been upheld by the court, in the Rubber Processing affected source subcategory, even the "MACT floor" best performer mixers sometimes do not have emission control technologies in place that reduce either organic HAPs or THC, nor is there some aspect of the mixing process that can be controlled that affects THC and organic HAPs similarly, such as how controlling incomplete combustion in a boiler affects both carbon monoxide and organic HAP emissions.

*Response:* The EPA disagrees with the commenter's statement that THC is not a viable surrogate for organic HAP. We have long recognized that regulation by surrogate is appropriate,

so long as controlling emissions of the surrogate achieves the Act's requirement to limit emissions of corresponding HAPs. See *Sierra Club v EPA*, 863 F.3d at 838 (D.C. Cir 2017); *U.S. Sugar v EPA*, 830 F.3d at 628 (D.C. Cir. 2016).

EPA acknowledges the commenter provided additional data relevant to a relationship between THC and volatile organic HAP. However, data provided by the commenter only shows limited data, whereas historical testing (e.g., HAP data collected by a predecessor rubber tire manufacturing trade organization to support the development of AP-42 emission factors) shows over 40 organic HAP emitted from a bench scale mixing operation.

Additionally, upon further review the data submitted relevant to the relationship between THC and volatile organic HAP was done in short 3 run tests, unlike the 30 days of continuous THC data collected as part of ICR. As the commenter has stated throughout their comment document, emissions are variable, thus a simple 3 run test for THC is not likely to take variability into account, unlike the 30-day continuous THC data used to set the MACT floor. Additionally, the ICR required concurrent testing for both semi-volatile organic compounds and THC; however, the data supplied by the commenter were not collected concurrently, greatly reducing, if not eliminating, their suitability for showing a correlation between the datasets due to differing operation conditions during data collection. Finally, the data collected by the commenter were not certified according to the requirements of the ICR. For these reasons, the EPA is unable to assess the usefulness or suitability of the data collected and submitted by the commenter regarding the relationship between THC and organic HAP.

The commenter is expecting a single shared correlation to exist across all sources; however, the EPA believes each source will have its own individual relationship between organic HAP and THC. The figure below provides an example, showing the relationship between the concurrently-collected organic HAP and THC data obtained from the best-performing THC source (Continental Mt. Vernon Mixer 22). These data were collected, certified, and submitted

by that source.<sup>12</sup> Note that THC increases as organic HAP increases and that the relationship has an R-squared value of 0.959, which indicates a very high correlation between the THC and organic HAP measurements.<sup>13</sup> Although the EPA only has concurrent organic HAP and THC data from the best performing source, we expect, based on the data before us, that the better performing sources would exhibit similarly high correlations.

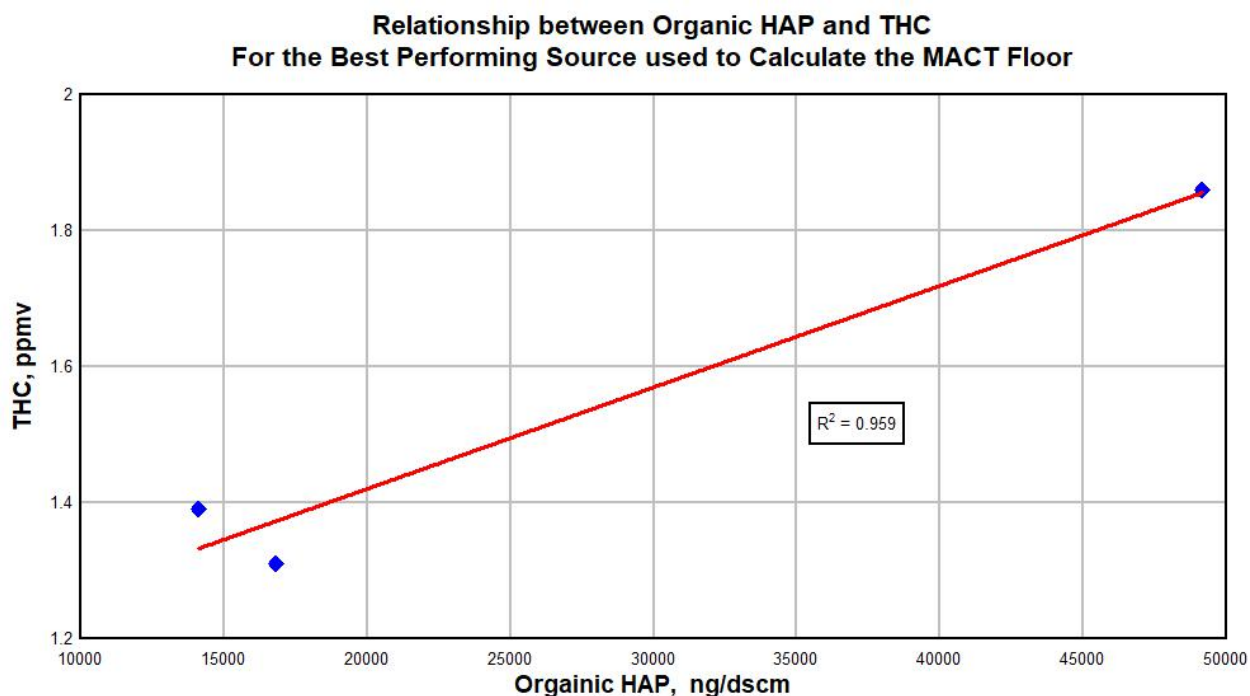


Figure 1. Relationship between Organic HAP and THC for the best performing source.<sup>14</sup>

In this case THC encompasses all relevant organic HAP emitted. Additionally, by using a control device such as an RTO, which is currently operated in the source category and which meets minimum temperature, loading, and retention times, one can reasonably conclude that the associated organic HAP is also being controlled. VOC destruction (which includes organic HAP) efficiencies range from 95 to 99 percent, according to EPA's Air Pollution Control Technology

<sup>12</sup> See test reports for Continental Mixer 22, Goodyear Lawson Mixer 1, Goodyear Fayetteville Mixer 8, Goodyear Danville Mixer 7, Michelin Mixer 81, and Cooper Mixer 9. Note that Goodyear Fayetteville Mixer 8 and Goodyear Lawson Mixer 1 data are separated according to Belt, Tread, and Mixed categories.

<sup>13</sup> R-squared values shows the relationship between two variables (THC and organic HAP). Generally, R-squared values range from 0 to 1. A value of 0 implies that there is no relationship, while a value of 1 indicates a direct relationship.

<sup>14</sup> THC vs Organic HAP tables are available in the docket for this rulemaking.

Fact Sheet.<sup>15</sup> Although combustion is a complex process that can produce some HAP, it is well documented that the use of an RTO is an effective way to reduce organic HAP.<sup>16</sup> While the use of RTOs does have secondary impacts,<sup>17</sup> the EPA expects few HAP emissions created as a result of combustion in an RTO: the EPA's experience for any such created HAP is that they are below current detection levels.

As a result, the EPA believes THC is both a reasonable and viable surrogate to represent organic HAP emitted from rubber processing.

*Comment:* One commenter argued that the EPA cannot subcategorize an industry category based on factors that are unrelated to HAP emissions, including whether silica is an ingredient in the rubber compound being mixed, whether the mixer has high emissions of a non-HAP (THC), or whether the mixer already has a particular type of control technology. The commenter stated that USTMA's supplemental testing shows that high emissions of THC are not correlated with high emissions of organic HAPs, and thus the EPA should not subcategorize mixers or set different limitations for mixers where silica is used in the compound being mixed based on the perception that this leads to higher THC emissions. The commenter added that even if subcategorizing were appropriate because of higher THC emissions associated with the silanization reaction when mixing high-silica tread compounds and silane coupling agents under certain operating conditions, the limits should apply only when silane coupling agents are being introduced under such operating conditions. The commenter argued subcategories should not be based solely on the presence of silica as an ingredient, because the presence of silica as an ingredient on its own (without silane coupling agents) is not expected to contribute to higher THC or organic HAP emissions, and this was confirmed by the emissions data the EPA collected through the ICR testing and supplemental emission testing at USTMA member facilities.

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<sup>15</sup> See EPA's Regenerative Thermal Oxidizer Fact Sheet EPA-452/F-03-021, available at <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1008OH5.PDF>.

<sup>16</sup> See EPA's Thermal Oxidizer Fact Sheet EPA-452/F-03-022, available at <https://www.epa.gov/sites/production/files/2020-11/documents/fthermal.pdf>.

<sup>17</sup> See the memorandum *Final Rule – Rubber Processing Control Costs, Emission Reductions, and Cost Effectiveness* available in the docket for this rule (Docket ID No. EPA-HQ-OAR-2019-0392)

The commenter argued that the EPA's derivation of MACT floor emission limitations for THC fails to meet the statutory directive because the EPA ignored "emissions information" that CAA section 112(d)(3) requires it to consider, which shows that less than 12 percent of existing mixers achieve an emission limitation reflective of RTO controls, because only 4 percent of mixers are routed continuously to an RTO. The commenter asserted that while additional mixers are controlled intermittently with an RTO, RTO control does not represent an "emission limitation achieved" by those additional mixers, since an emission limitation, by statutory definition and as interpreted by the Court and by the EPA, is only a level of control that is achieved on a continuous basis.

*Response:* The EPA acknowledges the commenter's statement that an increase in THC emissions is attributed to the addition of both silica and the silane coupling agent (forms bonds between organic and inorganic materials). Upon further evaluation, the EPA agrees there are factors other than just the addition of silica, such as the inclusion of a silane coupling agent, variations in raw materials used, and type of rubber being processed, that create different emission profiles. In response, the EPA decided to set a single standard for THC emissions from mixers for the final rule.

The EPA disagrees with the commenter's statement that the EPA selected separate standards based on what processes were currently controlled. As stated in the proposal, the EPA determined it was appropriate to set separate standards for silica-containing batches and non-silica-containing batches due to expected different emission profiles between the 2 processes that use different raw materials, because the addition of silica leads to chemical reactions producing additional organics. The expected increase in organics for silica-containing batches is represented by higher levels of THC emissions compared to non-silica batches.

Furthermore, the standard based on the application of RTOs as a control technology satisfies the CAA's requirement that an emission limitation or standard apply continuously. Commenters misstate the statutory requirements, suggesting that a control technology must be

used continuously for an emission standard to be valid. This is incorrect; commenter's position conflates the requirement that a standard apply continuously with the notion that a control technology, or tool used to achieve that standard, apply, or be operated continuously. In this MACT Final Rule, the EPA determined that one standard will apply to all units. The requirement to meet this standard is "continuous," in that regulated parties must demonstrate compliance with the emission rate standards at all times (*i.e.*, there are no exceptions for periods of startup, shutdown, or malfunction). However, a regulated party need not operate an RTO, if the regulated party can demonstrate compliance with the emission rate standard. This is consistent with other emission standards, in that a regulated party is generally not required to conform to any specific control technology, provided they demonstrate compliance with the emission standard at all times.

The EPA disagrees that our MACT floor emissions limitation for THC failed to meet the statutory directive. The CAA provides specific guidance for setting MACT standards for source categories which include setting the average emission limitation achieved by the best-performing 12 percent of the existing sources (for which the Administrator has emissions information). For this source category, the EPA only received emissions data from 17 mixers, and data from only 12 mixers represented actual THC emissions after the application of any controls (THC data from five mixers were collected before an RTO and EPA was unable to accurately estimate values for their emissions after being controlled by an RTO); therefore, the EPA set the MACT standard for THC using the actual THC emissions data from the 12 mixers that were made available to the Administrator as the CAA requires.

*Comment:* One commenter stated that tire plants typically have a number of mixers, which may be used for different purposes on different days or even different portions of a day, and tire plants must have the flexibility with the mixers to produce the rubber needed for various processes within the Tire Production affected source, in the quantities involved and on the time schedule involved.

The commenter argued that the proposed rule treats the mixers as if each one operated entirely independently of other mixers at the plant and would not recognize the interplay among mixer exhaust points, requiring each mixer exhaust to demonstrate compliance with an identical emission limitation.

The commenter recommended that instead, numerical emission limitations for THC should be expressed as the overall average of pounds of THC emissions per ton of rubber processed for all mixers at the plant. The commenter suggested this would recognize that mixers are used in an interrelated way, and it would allow tire plants to more cost-effectively optimize controls to prevent excessive emissions across the entire facility. The commenter noted that the EPA has taken this approach for numerous other source categories and averaged emissions would still reflect MACT.

The commenter added that expressing a THC numerical emission limitation as an overall average for all mixers at a plant would allow plants to optimize their investments by installing controls on units where lower emissions can be most cost effective, facilitate pollution prevention innovations, and facilitate tire plants developing measures that reduce organic HAP emissions by taking advantage of the interconnectedness of mixers in ways that might, for example, affect emissions only from particular compounds or particular passes. Finally, the commenter noted that emissions averaging may also allow for control options that benefit the environment by minimizing energy use.

*Response:* The EPA agrees with the commenter that a facility wide-average emission limit for mixers is an appropriate approach to account for variability in emissions among mixers and to provide flexibility in demonstrating compliance. In response to the comment, the EPA has added an alternative compliance option for THC that allows facilities to average their emissions at all mixers at an individual facility to meet the emission limit. (The EPA has allowed a similar option for demonstrating compliance with the limits for fPM described below in section IV.B. of this preamble.)

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

For the reasons explained in the preamble to the proposed rule (88 FR 78692, November 16, 2023), and in the comment responses above in section IV.A.3. of this preamble, we are finalizing the emission limits for THC as a surrogate for organic HAP from rubber processing as proposed, but with several changes since proposal. First, we are establishing a single emission limit for THC without separate emission limits for subcategories for mixing silica-containing and non-silica-containing compounds to reflect the fact that variables other than silica affect emissions, such as the inclusion of a silane coupling agent, variations in raw materials used, and type of rubber being processed. Therefore, the EPA determined it was not appropriate to separate emission limits by silica and non-silica. Additionally, by setting a single emission limit instead of two separate emission limits, the compliance demonstration for facilities that mix multiple compounds in the same mixer at different times will be significantly simplified. Second, upon additional review of the data and new knowledge of emission range that contributes to the calculation of 3xRDL, we are revising the THC emission limit for new and existing rubber processing affected sources so that it is equal to the 3xRDL value for THC emission measurements calculated from the available testing data. The same 3xRDL value will apply to both new and existing rubber processing affected sources, and the 3xRDL value in the final rule is higher than the proposed THC emission limits for new and existing sources for both silica-containing and non-silica-containing batches. Third, in response to comments, we are allowing owners and operators to demonstrate compliance with the THC emission limit by using facility-wide averaging among mixers within a single facility. For each 15-day compliance period, the owner or operator would demonstrate compliance using averaging by summing the mass of emissions from the mixers included in the average over that period and dividing that sum by the sum of the rubber produced from the same mixers over the same period. This change results in reducing reporting burden and accounts for additional variability across the source category.

*B. Emission Standards for Unregulated Metal HAP Emissions from the Rubber Processing*

*Subcategory*

1. What did we propose pursuant to CAA section 112(d)(2) and (3) for the Rubber Tire Manufacturing source category?

Based on responses to the CAA section 114 information request, the EPA had fPM data from 7 mixers and of those metal HAP data from 5 of the mixers. The EPA had no reason to assume a difference in fPM and metal HAP emissions based on the mixing of silica-containing or non-silica-containing compounds, as silica was expected to cause an increase in organic emissions, which does not impact PM. Thus, a single emission standard was proposed for mixing of all rubber compounds. For each mixer, the EPA calculated the 99 percent UPL for both fPM and the sum of the metal HAP that were measured (antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, mercury, nickel, phosphorus, and selenium). The CAA requires the EPA to determine the average emission limitation achieved by the best performing 12 percent of the existing sources (for which the Administrator has information) when establishing the MACT floor level of control. There are an estimated 97 mixers in the source category, and the MACT floor is calculated using data from the top performing 12 percent of mixers for which we have data. At proposal, the EPA had fPM data from 7 mixers and of those metal HAP data for 5 of the mixers. The EPA calculated 12 percent of 7 mixers (fPM) and 12 percent of 5 mixers (metal HAP) which results in 0.84 and 0.6, respectively. When determining the best performing 12 percent of existing sources for the MACT floor pool, we rounded the fractional amounts to the next whole number of mixers. In this instance, we rounded up to one mixer for purposes of determining the existing source MACT floors for both the fPM and metal HAP emission limits.

When setting new source MACT floors, the emission limit is achieved in practice by the best controlled similar source. As a result, the MACT floors for both new and existing sources are based on the best performing existing source. Based on responses to the CAA section 114

information request, all mixers in this subcategory are controlled by a baghouse or similar control devices which control PM emissions.

To account for variability in the rubber processing operations and resulting emissions, the stack test data were used to calculate the PM MACT floor limits based on the 99 percent UPL.

We calculated the MACT floor UPL emission rate for fPM as 1.7 g/Mg (3,410 pounds per million tons (lb/Mton)) rubber produced, and a total metal HAP UPL emission rate of 0.037 g/Mg (74.1 lb/Mton) rubber produced. The lowest fPM emission rate and the lowest metal HAP emission rate were measured at the same mixer, and the fPM and metal HAP emissions were measured simultaneously. Because metal HAP are emitted as fPM, the EPA proposed an emission limit for fPM as a surrogate for metal HAP, and also an alternative emission limit for total metal HAP itself. The baghouses that are used to capture fPM will also reliably capture metal HAP, and the fPM emission limit accounts for variability in individual metal HAP emission rates among different batches of rubber compound being mixed.

Because the proposed standards for new and existing sources are based on the best performing mixer, which is already controlled by a baghouse, and no more effective controls than a baghouse for PM or metal HAP are in use or were identified, we did not identify any beyond-the-floor options to evaluate for either existing or new mixers.

2. How did the analysis pursuant to CAA section 112(d)(2) and (3) change for the Rubber Tire Manufacturing source category?

Since proposal, the EPA has received additional fPM data for 3 mixers (bringing the total to 10) and has recalculated the MACT floor to include the additional data and has also recalculated the 3xRDL values for fPM and metal HAP. (The EPA also received fPM data for a fourth additional mixer in the public comments, but those data did not include the production data needed to calculate emissions per mass of rubber processed, so the fourth mixer could not be included in the final rule MACT analysis.) The final rule limits for fPM and metal HAP have been increased since proposal. The existing source MACT floor UPL has been recalculated using

the combined data from the 2 lowest emitting mixers because they represent 12 percent of the 10 mixers for which the Administrator now has fPM data. The EPA has also recalculated the 3xRDL value to reflect the higher number of sources for which the Administrator has data.

The final rule limits for fPM and metal HAP also include the option of facility-wide averaging among mixers to demonstrate compliance.

3. What key comments did we receive on the analysis pursuant to CAA section 112(d)(2) and (3), and what are our responses?

*Comment:* One commenter argued that the EPA should find that HAP metals emissions from mixers are already controlled and are incidental to the very efficient dust control measures that are an integral part of mixing operations for materials recovery purposes and safety reasons, and therefore there is no “gap” that is “necessary” for the EPA to fill under CAA section 112(d)(6), as the EPA effectively already recognized in the 2020 RTR rulemaking. The commenter asserted it is inappropriate to impose additional costs for essentially no benefit, since metals emissions from mixing are already low, often below detection limits, and the EPA has already determined the residual risk from metals emissions from all processes at tire plants is acceptable. However, the commenter agreed that if the EPA nevertheless imposes new limits on HAP metal emissions from mixing, then total fPM is an appropriate surrogate, and establishing alternative emission limitations for HAP metals as the EPA proposed is permissible under the CAA.

The commenter also argued that the EPA should base the MACT floor for fPM on more than just a single mixer and supplied additional particulate test data from which the EPA could calculate a fPM emission limitation substantially higher than what the EPA proposed.

*Response:* The EPA disagrees that there is no “gap” in the standards for metal HAPs. While mixers operate baghouses to control nuisance PM, the current MACT standard does not specifically regulate emissions of metal HAP or the fPM surrogate from mixers. Metal HAPs

emitted during rubber processing include, antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, mercury, nickel, phosphorus, and selenium.

The court in *National Lime Association v. EPA*, 233 F.3d 625, 633-34 (D.C. Cir. 2000), found that section 112(d)(1) requires the EPA to set emissions standards for all listed HAP emitted from each listed major source category (or subcategory). The court in *Sierra Club v. EPA*, 479 F.3d 875, 878 (D.C. Cir. 2007) confirmed the prior holding in *National Lime Association* that section 112(d)(1) requires the EPA to set emissions standards for all listed HAP emitted from each listed major source category (or subcategory). Additionally, the *LEAN* decision requires that when the EPA undertakes a 112(d)(6) technology review, it must set a MACT standard for previously unregulated pollutants, even if there is a prior risk assessment that identifies the risk from those pollutants as “low.”<sup>18</sup> This requirement, that the EPA address all enumerated air toxic pollutants, is applicable to the EPA regardless of any findings that the EPA has made regarding the risk posed by the expected emission levels from those currently unregulated pollutants, or other cited considerations from commenters.

The CAA does not authorize the EPA to decline to set the emission limits required by 112(d)(1) because a risk assessment under 112(f)(2) finds that the existing standards provide an ample margin of safety. It is clear that Congress intended the EPA to set technology-based standards that address all emitted HAP, and the EPA does not agree that the absence of such limits in an existing NESHAP justifies a decision at this point not to address all emitted HAP from a major source.

Additionally, the CAA provides specific guidance for setting MACT standards for source categories, which includes setting the average emission limitation achieved by the best-performing 12 percent of the existing sources (for which the Administrator has emissions information). For this source category the EPA received fPM emissions data from 7 mixers

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<sup>18</sup> See *LEAN*, 955 F.3d 1088 at 1091 (“We hold that ... EPA’s section 112(d)(6) review of a source category’s emission standard must address all listed air toxics the source category emits.”)

before proposal and from 3 more mixers since proposal that could be used to calculate UPL values for each mixer. Therefore, for the proposed rule, the EPA set the MACT standard using the top 12 percent of the 7 mixers data (i.e., the best performing mixer) that was made available to the administrator at proposal, as the act requires. However, after proposal the EPA received additional fPM data representing 4 more mixers, including 3 mixers with enough data to calculate a UPL value. (The data for one mixer included only 2 runs.) For the final rule, the EPA has recalculated the MACT floor for existing sources using the data from the 2 best performing mixers, but the MACT floor for new sources is still equal to the best performing source. The MACT floor fPM UPL emission limit for existing sources from the combined data for the 2 lowest emitters is 2.4 g/Mg ( $4.9 \times 10^3$  lb/Mton). However, the recalculated 3xRDL from the same 2 mixers is equal to 3.0 g/Mg ( $6.0 \times 10^3$  lb/Mton).

The EPA acknowledges the commenter agrees with the EPA that fPM is an appropriate surrogate for HAP metals, noting that fPM contains HAP metals and that fPM control devices such as baghouses also collect HAP metals, just as THC emissions contain organic HAP and that THC control devices such as thermal oxidizers also control organic HAP emissions.

This rule correctly applies statutory requirements, consistent with past Agency practice, to select the best performing source and to calculate appropriate emission limits. In keeping with regulatory requirements and past Agency practice, this rule applies techniques to ensure source owners or operators can determine compliance with the rule on a continuous basis. While use of PM CEMS could provide this information, the rule allows the use of bag leak detection system (BLDS) parameter measurement to supply data upon which compliance can be determined. The commenter's assertion that mixer emissions are too variable and should escape regulation appears to disregard the use of a 15-day averaging period, which, as described earlier, smooths out production and emissions spikes and dips. Contrary to the commenter's view, BLDS parameters provide a better description of ongoing baghouse operation than the typical baghouse

continuous parameters of pressure drop and flow rate, which typically only show catastrophic failure.

*Comment:* One commenter argued that the EPA must base the fPM emission limitations on stack tests conducted while mixing nonproductive rubber. The commenter stated that the EPA has long recognized that the majority of emissions from rubber mixing occur during nonproductive passes, such as in the documentation supporting the AP-42 emission factors for rubber tire manufacturing. The commenter noted that most of the raw materials are added during the nonproductive passes, so one would expect that fPM emissions during nonproductive passes are greater than during mixing of productive rubber. The commenter noted that the available fPM emissions data from both the ICR testing and the additional fPM stack testing data submitted by the commenter show that fPM emissions were higher when mixing non-productive passes: over twice as high on a concentration basis and over 5 times higher on a mass of fPM per mass of rubber processed basis.<sup>19</sup>

The commenter asserted that MACT floor emissions must represent an emissions rate that the best performers can achieve under the worst-case conditions,<sup>20</sup> and an fPM emission limitation based on what the best performers achieve during productive passes would not reflect what those mixers can achieve during non-productive passes. The commenter stated that a majority of mixers at major-source tire plants either are presently used or could be used for non-productive passes, and non-productive mixing is essential for processing rubber for rubber tire components. The commenter added that the EPA would have to conduct additional fPM emissions testing and data collection and re-propose if the EPA wanted to create 2 subcategories

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<sup>19</sup> The commenter cited the data presented on pages 4-6 of Attachment 4 of docket item EPA-HQ-OAR-2019-0392-0132.

<sup>20</sup> The commenter cited, *e.g.*, *National Ass'n of Clean Water Agencies v. EPA*, 734 F.3d 1115, 1132 (D.C. Cir. 2013) (“[A]s we explained in *Sierra Club*, it is reasonable to expect that the incinerator on which the MACT floors are based should be able to ‘achieve’ the MACT floor ‘in practice,’ which it could not do unless ‘achieved in practice’ meant ‘achieved under the worst foreseeable circumstances.’”) (internal citations omitted); *Mossville Environmental Action Now v. EPA*, 370 F.3d 1232, 1242 (D.C. Cir. 2004) (“[E]ven the best performing sources occasionally have spikes, and under the standard, each facility must meet the 400 ppm standard every day and under all operating conditions.”)

of mixers for productive and non-productive rubber fPM emission limitations. Thus, according to the commenter, the EPA must establish fPM surrogate emissions limitations based only on testing that occurred while mixing non-productive rubber.

*Response:* The EPA disagrees that the final rule limit cannot be achieved by sources during the mixing of non-productive rubber passes. The emission standard was developed based on data submitted to EPA by regulated parties, and the emission standard is therefore “achieved in practice” by the best controlled similar source. *See* CAA section 112(d)(3). In the data provided by USTMA in Attachment 6 to their comments, Goodyear Mt. Vernon Mixer #14 achieved an average emission rate of 2.3 g/Mg while mixing non-productive rubber on all 3 passes. As explained above in the response to comments in this same section, the EPA has revised the fPM limit in the final rule to 3.0 g/Mg and added facility wide averaging allowing for increased flexibility to account for variability in emissions. Therefore, the final rule emission limits are achievable during the mixing of non-productive rubber on all passes.. For a detailed discussion of the EPA stance on worst-case performance, see section IV.c. of the Response to Comments document found in the docket for this rule.

4. What is the rationale for our final approach for the final rule?

For the reasons explained in the preamble to the proposed rule (88 FR 78692, November 16, 2023), and in the comment responses above in section IV.B.3. of this preamble, we are promulgating emission limits for fPM from rubber processing with several changes since proposal. First, we are revising the emission limit for both fPM and metal HAP. For fPM, we are basing the existing source MACT floor on the average performance of the 2 lowest emitting sources instead of the single lowest emitting source because we have more fPM data than at proposal. We have fPM data for 10 mixers and 12 percent of 10 is 1.2, which is rounded up to 2 mixers. The UPL calculated for the combined data for the 2 lowest emitting mixers is 2.4 g/Mg ( $4.9 \times 10^3$  lb/Mton) rubber produced.

We have also recalculated the 3xRDL value to reflect the higher number of mixers for which the Administrator has data. The 3xRDL value recalculated for the final rule is 3.0 g/Mg (6.0 x10<sup>3</sup> lb/Mton) rubber produced. Because this value is higher than the revised UPL value(s) for new and existing sources, the final rule is based on the 3xRDL values for fPM.

### *C. Emission Testing and Compliance Demonstrations*

1. What did we propose pursuant to CAA section 112(d)(2) and (3) for the Rubber Tire Manufacturing source category?

The EPA proposed that facilities demonstrate compliance with the THC emission limits by monitoring the emissions from each mixer with a CEMS and also monitoring production and calculating the emission rate in grams THC per megagram rubber produced (g/Mg) on a 15-day rolling average. The EPA proposed that compliance would be demonstrated for each mixer separately.

The EPA also proposed that THC emissions would be measured at the outlet for each RTO on a 5-year interval and during the testing operating limits would be established for each RTO.

The EPA proposed that facilities could choose to comply with either the emission limit for fPM or the alternative emission limit for total metal HAP and, accordingly, measure fPM emissions using EPA Method 5 or the metal HAP emissions using EPA Method 29. The fPM or metal HAP measurements would be required every 5 years. For each baghouse, owners and operators would need to install and operate a bag leak detection system.

2. How did the analysis pursuant to CAA section 112(d)(2) and (3) change for the Rubber Tire Manufacturing source category?

The final rule will allow facilities to average among mixers to demonstrate compliance with both the THC and fPM or metal HAP emission limits. The final rule does not include the requirement to perform a THC compliance test every 5 years and does not require the facility to

establish and comply with operating limits for the RTO, but instead requires the use of THC CEMS. The other proposed emission testing and monitoring compliance requirements have been retained in the final rule.

3. What key comments did we receive on the analysis pursuant to CAA section 112(d)(2) and (3), and what are our responses?

*Comment:* One commenter stated that the rule should not require multiple THC CEMS at each mixer exhaust point instead of allowing for measurement of THC emissions at the actual point at which they exhaust to the atmosphere. The commenter suggested that this approach would reduce the number of THC CEMS required and also eliminate the need for continuous monitoring of RTO combustion temperature and a 5-year repeat performance test using Method 25A. The commenter added that if the EPA requires use of CEMS for compliance, then parameter monitoring, and a 5-year repeat performance test are not needed.

*Response:* The EPA recognizes that because sources will be operating THC CEMS that will continuously record the THC concentration in the emissions at the stack, there is no need to require operating limits for the RTOs (*e.g.*, operating temperature) if an RTO is being used for compliance and there is similarly no need for a periodic (*e.g.*, every 5 years) performance test of the RTO. Therefore, the operating limits for RTOs and the periodic THC testing requirement have been removed from the final rule.

In addition, as explained above in section IV.A., the final rule will allow for demonstrating compliance with facility-wide emission limits for THC, which will also allow for use of a single THC CEMS at the exhaust point for combined mixer exhausts and reduce the number of THC CEMS needed.

*Comment:* One commenter disagreed with the proposal to require BLDS as the continuous compliance demonstration method for the proposed PM emission limit for rubber processing because they were not justified by the current fPM and metal HAP from particulate controls on mixers and the EPA has not justified them as a beyond-the-floor technology.

The commenter reported that no BLDS are currently installed at rubber processing facilities, and over 100 BLDS will need to be installed as a result of the proposed requirement, resulting in additional capital costs not only for the monitors and data acquisition and handling system, but also for stack/duct modifications to accommodate a monitor. The commenter noted that the EPA has estimated that the proposed standards will result in a reduction of only 318 lb of metal HAP per year and asserted that installation of a complicated monitoring system that is not currently in use in the industry is not reasonable for the expected HAP reduction. The commenter stated that facilities currently employ pressure drop and/or visible emissions observations along with a program of regular internal and external inspections and maintenance of the duct work and baghouse to ensure compliance with PM limits in their air permits.

The commenter recommended that the EPA should replace the requirement for BLDS with the use of baghouse pressure drop or twice daily visible emissions monitoring to ensure baghouses are operating properly as the continuous compliance determination method.

*Response:* The EPA disagrees with the commenter's suggestion to rely on continuous parameter monitoring other than that associated with BLDS; those other parameters – including visible emissions, flow rate, or pressure drop – do not provide relevant information quickly enough to correct problems before emission limits may be compromised. For example, the commenter mentions twice daily visible emission checks; such an approach is not continuous and detection with the human eye is only possible at 5 percent opacity and above. As a result, lower opacities may yield fPM values that exceed the emission limits but would occur undetected by visible emission checks. As mentioned earlier, flow rate and pressure drop across baghouses can indicate catastrophic failures, but not provide information to preclude baghouse problems before exceedances occur. Of course, owners or operators could use PM CEMS in lieu of BLDS; PM CEMS would provide direct, continuous measurement of the pollutant of concern and would enable source owners or operators to forgo any type of fPM control device parameter monitoring. Using the process in the NESHAP general provisions, mentioned earlier, owners or

operators could request – and expect to receive – approval from the EPA for use of PM CEMS for rule compliance purposes.

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

For the reasons explained in the preamble to the proposed rule (88 FR 78692, November 16, 2023), and in the comment responses above in section IV.C.3. of this preamble, we are finalizing emission testing and compliance demonstration requirements as proposed, but with several changes since proposal.

First, the EPA has removed the requirement for a periodic THC compliance test and compliance with THC operating limits and monitoring (*e.g.*, RTO operating temperature) because THC emissions will be continuously monitored by a THC CEMS. The final rule will also allow for demonstrating compliance with facility-wide emission limits for THC, which will also allow for use of a single THC CEMS at the exhaust point for combined mixer exhausts and reduce the number of THC CEMS needed.

Second, the EPA believes requiring BLDS will provide significantly more accurate and continuous feedback on the operation of a baghouse and can provide an earlier indication of potential bag leaks compared to the requested visible emission inspections.

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

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

As listed in CFR 63.5982 (b)(4), the rubber processing affected source is the collection of all rubber mixing processes (*e.g.*, banburys and associated drop mills) that either mix compounds or warm a rubber compound before the compound is processed into components of rubber tires. The mixed rubber compound itself is also included in the rubber processing affected source. Among the 15 major sources that are subject to the NESHAP, 12 facilities perform rubber processing, while 3 facilities do not perform rubber processing and use rubber that is processed at other facilities.

*B. What are the air quality impacts?*

This action proposes first-time MACT floor-based emission standards for THC (as a surrogate for organic HAP), metal HAP, and fPM from rubber processing. These first-time MACT standards will limit HAP emissions and require, in some cases, the installation of additional controls at rubber tire manufacturing plants that are major sources of HAP. We estimate that the rubber tire manufacturing industry will comply with the final standards for THC, metal HAP, and fPM through the installation and operation of control devices.

For THC, we estimate that the installation of RTOs or similar control devices will achieve annual reductions of THC of 94 Mg (104 tons) across the source category.

For fPM and metal HAP, we estimate that the replacement or upgrade of baghouses will achieve annual reductions of fPM of 61 Mg (67 tons) or 0.073 Mg (160 lb) of total metal HAP (antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, mercury, nickel, phosphorous, and selenium) across the source category.

Indirect or secondary air emissions impacts are impacts that would result from the increased energy usage associated with the operation of control devices (*e.g.*, increased secondary emissions of criteria pollutants from power plants). Energy impacts are due to use of natural gas needed to operate control devices and other equipment. We conclude that the secondary impacts of this action are minimal, resulting from the operation of the control device, and would comprise CO<sub>2</sub> and methane (CH<sub>4</sub>) emissions from the combustion of the natural gas required to operate an RTO. For purposes of assessing the projected disbenefits, we estimate that the monetized disbenefits would be no greater than \$8.1 million in any year, with estimates ranging from \$2.7 million to \$8.1 million per year depending on the discount rate assumption.<sup>21</sup>

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<sup>21</sup> This range of disbenefit estimates is presented in 2022 dollars and was calculated by multiplying the social cost of carbon (SC-CO<sub>2</sub>) by 17,536 metric tons of CO<sub>2</sub>e reductions for each year in the timeframe of 2027 to 2036. We applied near-term Ramsey discount rates of 2.5 percent, 2.0 percent, and 1.5 percent, and found that the largest disbenefit estimate was for 2036 when using a 1.5 percent near-term Ramsey discount rate. Additional information on the social cost of carbon and an EPA workbook for applying SC-CO<sub>2</sub> estimates is found here: <https://www.epa.gov/environmental-economics/scghg>.

For the final rule, we estimate that 8 new RTOs would be needed and each RTO would consume about 29,800 thousand standard feet (mscf) per year of natural gas and 1.33 million kilowatt hours per year of electricity. For all 8 new RTOs, the indirect greenhouse gas emissions of CO<sub>2</sub> and CH<sub>4</sub> from the combustion of the natural gas and the generation of electricity would be equivalent to 19,330 tons (17,536 Mg) of CO<sub>2</sub> emissions.

*C. What are the cost impacts?*

This action proposes MACT floor-based emission limits for new and existing sources in the Rubber Tire Manufacturing source category, specifically the rubber processing subcategory. Although the action contains requirements for new sources, we are not aware of any new sources being constructed now or planned in the next 3 years and we are not aware of any new additional mixers to existing facilities. Consequently, we did not estimate any cost impacts for new sources. We estimate the total annualized cost of the final rule to existing sources in the Rubber Tire Manufacturing source category to be \$13.3 million per year. The costs are a combination of the annualized capital and annual operating costs for installing and operating RTOs or similar control devices to control THC and organic HAP; baghouses and associated BLDSs to control fPM and metal HAP; and THC CEMS to monitor THC emissions. The capital and annual costs are summarized in table 2.

**Table 2. Summary of Capital and Annual Costs**

<b>Cost element</b>	<b>Total capital investments</b>	<b>Annualized equipment and operation and maintenance costs</b>
RTOs (8 new)	\$25.0 million	\$4.9 million
THC CEMS (97 CEMS)	\$14.0 million	\$4.2 million
Total Annual RTO and CEMS Costs		\$9.1 million
New Baghouses (46 mixers)	\$19.6 million	\$2.0 million
Retrofitted Baghouses (new bags; 34 mixers)	-	\$0.5 million
BLDS and PM Testing (114 BLDS)	\$2.54 million	\$1.7 million

Total Annual Baghouse, BLDS, and PM Testing Costs		\$4.2 million
Totals		\$13.3 million

The estimated annual costs are based on operation and maintenance of the added control systems. A memorandum titled *Final Rule Rubber Processing Control Costs, Emission Reductions, And Cost Effectiveness*, includes details of our cost assessment, and is included in the docket for this action (Docket ID EPA-HQ-OAR-2019-0392).

*D. What are the economic impacts?*

The EPA conducted economic impact analyses for the final rule in the report titled *Economic Impact Analysis for the National Emission Standards for Hazardous Air Pollutants: Rubber Tire Manufacturing Amendments, Final*, which is available in the docket for this action (Docket ID No. EPA-HQ-OAR-2019-0392). The economic impacts of the final rule are calculated as the percentage of total annualized costs incurred by affected ultimate parent owners compared to their revenues. This ratio provides a measure of the direct economic impact to ultimate parent owners of facilities while presuming no impact on consumers. We estimate that none of the ultimate parent owners affected by this final rule will incur total annualized costs of 1 percent or greater of their revenues. Thus, these economic impacts are low for affected companies and the industry impacted by the final rule, and there will not be substantial impacts on the markets for affected products. We lack the information necessary to independently assess the downtime loss of production due to capital improvements or deferred maintenance that would be associated with these controls for each affected facility. The costs of the final rule 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 benefits of this rule include any benefits relating to the reduction of emissions of organic HAP and fPM. The rule is projected to reduce emissions of THC, as a surrogate for

organic HAP, and fPM, as a surrogate for metal HAP, through the installation and operation of control devices. The reduction in fPM can also result in associated reduction in PM-related mortality and morbidity.

The EPA is currently unable to monetize most benefits associated with HAP reductions. The potential benefits from reducing THC were not monetized and are therefore not reflected in the benefit estimates associated with this rulemaking. However, we estimate that the final rule amendments would reduce THC emissions by 104 tons/yr and metal HAP emissions by 160 lb/yr and thus lower risk of serious adverse health effects from exposure to certain HAPs in communities near rubber tire manufacturing plants. It is reasonable to expect that emissions reductions from this rule will improve air quality and public health for populations exposed to emissions from rubber tire manufacturing facilities. Due to methodology and data limitations, we could not monetize the health benefits of HAP reductions for this final rulemaking.

Although we are unable to quantify the benefits of reducing HAPs from this rulemaking, we are providing a qualitative assessment of the benefits of reducing both organic and metal HAPs. This is detailed in section 4 of *Economic Impact Analysis for the National Emission Standards for Hazardous Air Pollutants: Rubber Tire Manufacturing Amendments, Final*, which is available in the docket for this action (Docket ID No. EPA-HQ-OAR-2019-0392). These HAPs include, but are not limited to, the following: organic HAPs such as 2-butanone, acetophenone, cumene, hexane, isooctane, methylene chloride, phenol, toluene, and xylene, and metal HAPs such as antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, mercury, nickel, phosphorus, and selenium.

The control measures are expected to reduce fPM by 66.7 tons/yr for the source category. Any monetization of PM-related health benefits would require the EPA to assume the percentage of fPM that is PM<sub>2.5</sub>. As the percentage of the fPM reductions that is PM<sub>2.5</sub> is unknown, it is too uncertain to estimate the PM-related benefit impacts of this rule. For purposes of assessing the economic significance of these benefits, we can determine that if all of the fPM were PM<sub>2.5</sub>, the

annual benefits would be estimated to be no greater than \$24 million, occurring in 2028.<sup>22</sup>

Therefore, this action is not economically significant based on benefit impacts. This rule is expected to limit emissions of directly emitted PM<sub>2.5</sub>, which may will in turn reduce ambient concentrations of PM<sub>2.5</sub> and in turn benefit public health. Though EPA neither quantified nor monetized these benefits, we anticipate reducing PM<sub>2.5</sub> concentrations will reduce the incidence or premature death, non-fatal heart attacks, cases of aggravated asthma, lost days of work and school and other adverse effects (U.S. EPA, 2022).<sup>23</sup> This rule is also expected to reduce emissions of Hg. Methylmercury (MeHg), which is formed by microbial action in the top layers of sediment and soils, after mercury has precipitated from the air and deposited into waterbodies or land, can cause a number of adverse effects when impacting fishes associated with recreational or commercial consumption and present at sufficiently elevated levels. Though not quantified here, these effects include IQ loss measured by performance on neurobehavioral tests, particularly on tests of attention, fine motor-function, language, and visual spatial ability.

*F. What analysis of environmental justice did we conduct?*

For purposes of analyzing regulatory impacts, the EPA relies upon its June 2016 “*Technical Guidance for Assessing Environmental Justice in Regulatory Analysis*,” which provides recommendations that encourage analysts to conduct the highest quality analysis feasible, recognizing that data limitations, time, resource constraints, and analytical challenges will vary by media and circumstance. The Technical Guidance states that a regulatory action may involve potential environmental justice concerns if it could: (1) create new disproportionate impacts on communities with EJ concerns; (2) exacerbate existing disproportionate impacts on

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<sup>22</sup> This estimate is based on the use of a “benefit-per-ton” (BPT) approach to estimate the benefits of this rulemaking assuming that all fPM is PM<sub>2.5</sub>. These BPT estimates provide the estimated monetized human health benefits (the sum of premature mortality and premature morbidity) of reducing one ton of the PM<sub>2.5</sub> from a specified source. Specifically, in this analysis, we multiplied the estimates from the “Synthetic Organic Chemicals” sector by the corresponding emission reductions. The method used to derive these estimates is described in the BPT Technical Support Document on Estimating the Benefit per Ton of Reducing Directly Emitted PM<sub>2.5</sub>.

<sup>23</sup> U.S. EPA, 2022. Estimating PM<sub>2.5</sub>- and Ozone-Attributable Health Benefits. Office of Air and Radiation, Research Triangle Park, NC.

communities with EJ concerns; or (3) present opportunities to address existing disproportionate impacts on communities with EJ concerns through this action under development.

The EPA's EJ technical guidance states that "[t]he analysis of potential EJ concerns for regulatory actions should address three questions: (A) Are there potential EJ concerns associated with environmental stressors affected by the regulatory action for population groups of concern in the baseline? (B) Are there potential EJ concerns associated with environmental stressors affected by the regulatory action for population groups of concern for the regulatory option(s) under consideration? (C) For the regulatory option(s) under consideration, are potential EJ concerns created or mitigated compared to the baseline?"<sup>24</sup>

The environmental justice analysis is presented for the purpose of providing the public with as full as possible an understanding of the potential impacts of this final action. The EPA notes that analysis of such impacts is distinct from the determinations finalized in this action under CAA section 112, which are based solely on the statutory factors the EPA is required to consider under this section.

We did not conduct any new demographic analyses for this final rule. There were no known changes to the population of Rubber Tire Manufacturing facilities nor any known changes to our estimates of HAP emissions from Rubber Tire Manufacturing facilities since proposal. Therefore, the EPA relied on the demographic analysis performed for the 2020 proposal for this final rulemaking.

In the 2020 proposal, we conducted a baseline proximity analysis and baseline risk-based analysis (*i.e.*, before implementation of any controls promulgated by this action). The baseline proximity demographic analysis is an assessment of individual demographic groups in the total

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<sup>24</sup> "Technical Guidance for Assessing Environmental Justice in Regulatory Analysis", U.S. EPA, June 2016. Quote is from Section 3 – Key Analytic Considerations, page 11. <https://www.epa.gov/environmentaljustice/technical-guidance-assessing-environmental-justice-regulatory-analysis>.

population living within 5 kilometers (km) (approximately 3.1 miles) and 50 km (approximately 31 miles) of the facilities. The baseline risk-based demographic analysis is an assessment of risks to individual demographic groups in the population living within 5 km and 50 km of the facilities prior to the implementation of any controls promulgated by this action. The results of the proximity demographic analysis and the risk-based demographic analysis for populations living within 5 km and 50 km are included in the document titled *Analysis of Demographic Factors for Populations Living Near Rubber Tire Manufacturing Source Category Operations*, which is available in the docket for this action (see Docket ID No. EPA-HQ-OAR-2019-0392-0069).

The results of the proximity analysis conducted for the 2020 proposal indicated that a total of approximately 516,000 people live within 5 km of the 21 Rubber Tire Manufacturing facilities. The percent of the population that is Black (24 percent, 124,000 people) is double the national average (12 percent). The percent of people living below the poverty level (21 percent, 108,000 people) and the percent of people over the age of 25 without a high school diploma (16 percent, 83,000 people) are higher than the national averages (14 percent and 14 percent, respectively). The results of the baseline proximity analysis indicate that the proportion of other demographic groups living within 5 km of Rubber Tire Manufacturing facilities is similar to or below the national average.

The baseline risk-based demographic analysis conducted for the 2020 proposal, indicated that emissions from the source category, prior to the controls we are proposing, expose approximately 4,500 people living near 21 facilities to a cancer risk at or above 1-in-1 million (maximum individual risk is 4-in-1 million) and expose no people to a chronic noncancer target organ-specific hazard index (TOSHI) greater than 1 (maximum noncancer HI is 0.2). The percent of the baseline population with estimated cancer risks great than or equal to 1-in-1 million that are Black (25 percent, 1,000 people) is more than 2 times the average percentage of the national population (12 percent). The percent of the population with cancer risks greater than or equal to 1-in-1 million resulting from Rubber Tire Manufacturing source category emissions

prior to the proposed controls that is Below the Poverty Level (21 percent, 1,000 people) is above the national average (14 percent).

As indicated in section V.B. of this preamble, this final action is projected to reduce HAP emissions from Rubber Tire Manufacturing facilities by setting first time emission limits on the mixing operation. As a result, we expect risk for all exposed individuals and communities will also be reduced. See section V.B. of this preamble for more details.

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

In the July 24, 2020, final Rubber Tire Manufacturing RTR rule (85 FR 44752), the EPA conducted a residual risk assessment and determined that risk from the Rubber Tire Manufacturing source category was acceptable, and the standards provided an ample margin of safety to protect public health (see Docket Item No. EPA-HQ-OAR-2019-0392-0013). There are no known changes that would increase risk, thus the EPA relied on the 2020 demographic analysis for this rulemaking. In addition, this action promulgates first-time emissions standards for THC and fPM and metal HAP, including mercury and lead which are known to cause particular impacts to children's health and/or from early life exposure, for the rubber processing subcategory, which will further reduce emissions. Specifically, we estimate that the new emission limits will reduce THC and fPM emissions by 94 Mg/yr and 61 Mg/yr, respectively.

This action's health and risk assessments are protective of the most vulnerable populations, including children, due to how we determine exposure and through the health benchmarks that we use. Specifically, the risk assessments we perform assume a lifetime of exposure, in which populations are conservatively presumed to be exposed to airborne concentrations at their residence continuously, 24 hours per day for a 70-year lifetime, including childhood. With regards to children's potentially greater susceptibility to noncancer toxicants, the assessments rely on the EPA's (or comparable) hazard identification and dose-response values that have been developed to be protective for all subgroups of the general population, including children. For further details on the health and risk assessments can be found in the document

“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 (Docket ID No. EPA-HQ-OAR-2019-0392).

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

Additional information about these statutes and Executive Orders can be found at

*<https://www.epa.gov/laws-regulations/laws-and-executive-orders>.*

*A. Executive Order 12866: Regulatory Planning and Review, Executive Order 13563: Improving Regulation and Regulatory Review, and Executive Order 14094: Modernizing Regulatory Review*

This action is a “significant regulatory action” as defined in Executive Order 12866, as amended by Executive Order 14094. Accordingly, EPA submitted this action to the Office of Management and Budget (OMB) for Executive Order 12866 review. Documentation of any changes made in response to the Executive Order 12866 review is available in the docket. The EPA prepared an economic analysis of the potential impacts associated with this action. This analysis is briefly summarized in section V. Summary of Cost, Environmental, and Economic Impacts and Additional Analyses Conducted. This analysis, “Economic Impact Analysis for the National Emission Standards for Hazardous Air Pollutants: Rubber Tire Manufacturing Amendments, Final” (Docket ID No. EPA-HQ-OAR-2019-0392), is also available in the docket.

### *B. Paperwork Reduction Act (PRA)*

The information collection activities in this final rule have been submitted for approval to the Office of Management and Budget (OMB) under the PRA. The ICR document that the EPA prepared has been assigned EPA ICR number 1982.06. You can find a copy of the ICR in the docket for this rule, and it is briefly summarized here. The information collection requirements are not enforceable until OMB approves them.

The final rule ICR describes changes to the reporting and recordkeeping requirements for the Rubber Tire Manufacturing NESHAP associated with the incorporation of reporting and

recordkeeping requirements associated with the new and existing source MACT standards for THC, fPM, and metal HAP.

*Respondents/affected entities:* Owners or operators of rubber tire manufacturing facilities conducting rubber processing operations that are major sources.

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

*Estimated number of respondents:* 12.

*Frequency of response:* Initially, semiannually, annually.

*Total estimated burden:* The average annual burden to industry over the next 3 years from the recordkeeping and reporting requirements is estimated to be 1,162 hours per year. Burden is defined at 5 CFR 1320.3(b).

*Total estimated cost:* The annual recordkeeping and reporting costs for all facilities to comply with all of the requirements in the NESHAP is estimated to be \$2.12 million per year. This includes labor costs of \$149,000 per year and non-labor capital and operations and maintenance costs of \$1.97 million per year for monitoring systems for the final rubber processing amendments when they are fully implemented.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9. When OMB approves this ICR, the Agency will announce that approval in the *Federal Register* and publish a technical amendment to 40 CFR part 9 to display the OMB control number for the approved information collection activities contained in this final rule.

### *C. 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. The Agency has determined that none of the 4 ultimate parent companies owning the potentially affected facilities are small entities, as defined by the U.S. Small Business

Administration. Details of this analysis are presented in “Economic Impact Analysis for the National Emission Standards for Hazardous Air Pollutants: Rubber Tire Manufacturing Amendments, Final,” which is located in the docket for this action (Docket ID No. EPA-HQ-OAR-2019-0392).

*D. Unfunded Mandates Reform Act (UMRA)*

This action does not contain an unfunded mandate of \$100 million or more as described in the Unfunded Mandates Reform Act, 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.

*E. 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.

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

This action does not have Tribal implications as specified in Executive Order 13175. The EPA does not know of any rubber tire manufacturing facilities owned or operated by Indian Tribal governments. Thus, Executive Order 13175 does not apply to this action.

*G. 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 a significant regulatory action under section 3(f)(1) of Executive Order 12866 (as amended by Executive Order 14094), and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. The risks due to HAP emissions from this source category were found to be acceptable for all populations (e.g., with inhalation cancer risks less than or equal to 4-in-1 million for all populations and non-cancer hazard indexes are less than 1). The methodology and the results of the demographic analyses are

included 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 (Docket ID No. EPA-HQ-OAR-2019-0392). The first-time emission standards for THC and fPM (or metal HAP) promulgated by this action, will further reduce emissions and thereby protect children’s health.

However, EPA’s Policy on Children’s Health applies to this action. Information on how the Policy was applied is available under “What analysis of children’s environmental health did we conduct” in section V.G. of this preamble.

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

This action is not a “significant energy action” because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. In this final action, the EPA is setting emission standards for two previously unregulated pollutants. This does not impact energy supply, distribution, or use.

#### *I. National Technology Transfer and Advancement Act (NTTAA) and 1 CFR Part 51*

This action involves technical standards. Therefore, the EPA conducted searches for the Rubber Tire Manufacturing NESHAP through the Enhanced National Standards Systems Network (NSSN) Database managed by the American National Standards Institute (ANSI). We also conducted a review of voluntary consensus standards (VCS) organizations and accessed and searched their databases. We conducted searches for EPA Methods 5, 25A, 29, SW-846, M0010, SW-846 M3542, SW-846, M8270E, M204, PS 8A, and QA Procedure 2. During the EPA’s VCS search, if the title or abstract (if provided) of the VCS described technical sampling and analytical procedures that are similar to that of the EPA’s referenced method, the EPA ordered a copy of the standard and reviewed it as a potential equivalent method. We reviewed all potential standards to determine the practicality of the VCS for this rule. This review requires significant

method validation data that meet the requirements of EPA Method 301 for accepting alternative methods or scientific, engineering, and policy equivalence to procedures in the EPA referenced methods. The EPA may reconsider determinations of impracticality when additional information is available for any particular VCS.

Two VCS were identified as acceptable alternatives to EPA test methods for this final rule. The VCS ANSI/ASME PTC 19.10-1981, Part 10 of *Flue and Exhaust Gas Analyses*, is an acceptable alternative to EPA Method 3B (the manual portion only and not the instrumental portion). The voluntary consensus standard ASTM D6784-16 – Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method) D6784-16 was revised and approved in 2016 to include better quality control than the earlier 2008 version. It is an acceptable alternative to EPA Methods 101A and Method 29 (portion for particulate mercury only) as a method for measuring mercury. [Note: this acceptability applies to concentrations between approximately 0.5 and 100 micrograms per normal cubic meter ( $\mu\text{g}/\text{Nm}^3$ )].

The EPA is incorporating by reference the VCS ANSI/ASME PTC 19.10-1981- Part 10, *Flue and Exhaust Gas Analyses*,” a method for quantitatively determining the gaseous constituents of exhausts resulting from stationary combustion and includes a description of the apparatus, and calculations which are used in conjunction with Performance Test Codes to determine quantitatively, as an acceptable alternative to EPA Method 3B of appendix A-2 to 40 CFR part 60 for the manual procedures only and not the instrumental procedures. The manual method segment of the oxygen determination is performed through the absorption of oxygen. This VCS may be obtained from Two Park Avenue, New York, NY 10016-5990; phone: (800) 843-2763; email: [CustomerCare@asme.org](mailto:CustomerCare@asme.org); website: <https://www.asme.org>.

The EPA is incorporating by reference the VCS ASTM D6784-16, “Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method)” as an acceptable alternative to EPA Method

29 (particulate portion for mercury only) as a method for measuring mercury concentrations ranging from approximately 0.5 to 100 µg/Nm<sup>3</sup>. This test method describes equipment and procedures for obtaining samples from effluent ducts and stacks, equipment and procedures for laboratory analysis, and procedures for calculating results. VCS ASTM D6784-16 allows for additional flexibility in the sampling and analytical procedures for the earlier version of the same standard VCS ASTM D6784-02 (Reapproved 2008).

The EPA is also incorporating by reference EPA-454/R-98-015, Fabric Filter Bag Leak Detection Guidance, Office of Air Quality Planning and Standards (OAQPS), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina, September 1997. This document provides guidance on the use of triboelectric monitors as fabric filter bag leak detectors. The document includes fabric filter and monitoring system descriptions; guidance on monitor selection, installation, setup, adjustment, and operation; and quality assurance procedures. The document is reasonably available and can be viewed or downloaded at <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=2000D5T6.PDF>.

Detailed information on the VCS search and determination can be found in the memorandum, “Voluntary Consensus Standard Results for National Emission Standards for Hazardous Air Pollutants: Rubber Tire Manufacturing Amendments,” which is available in the docket for this action (Docket ID No. EPA-HQ-OAR-2017-0329). The two VCS may be obtained from <https://www.astm.org> or from the ASTM Headquarters at 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, Pennsylvania, 19428-2959. The standards are available to everyone at a cost determined by ASTM. The costs of obtaining these methods are not a significant financial burden, making the methods reasonably available.

*J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations and Executive Order 14096: Revitalizing Our Nation's Commitment to Environmental Justice for All*

The EPA believes that the human health and environmental conditions that exist prior to this action do not result in disproportionate and adverse effects on communities with EJ concerns. The risks due to HAP emissions from this source category were found to be acceptable for all populations (e.g., with inhalation cancer risks less than or equal to 4-in-1 million for all populations and non-cancer hazard indexes are less than 1). The methodology and the results of the demographic analyses are included 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 (Docket ID No. EPA-HQ-OAR-2019-0392).

The EPA believes that this action is not likely to result in new disproportionate and adverse effects on communities with environmental justice concerns. We expect this final rule to achieve reductions in HAP emissions. This final rule will provide additional benefits to all populations, including these demographic groups that have a greater representation in the 50 km radius of modeled facilities, by establishing new emission limits for rubber processing.

The information supporting this Executive Order review is contained in section V.F. of this preamble.

*K. Congressional Review Act (CRA)*

This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action does not meet the criteria under 5 U.S.C. 804(2).

## List of Subjects in 40 CFR Part 63

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

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**Michael S. Regan,**

*Administrator.*

For the reasons set forth in the preamble, the EPA is amending 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 A—General Provisions**

2. Amend § 63.14 by revising paragraphs (f)(1), (i)(105), and (o)(4) to read as follows:

#### **§ 63.14 Incorporations by reference.**

\* \* \* \* \*

(f) \* \* \*

(1) ANSI/ASME PTC 19.10-1981, Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus], issued August 31, 1981; §§ 63.116(c) and (h); 63.128(a); 63.145(i); 63.309(k); 63.365(b); 63.457(k); 63.490(g); 63.772(e) and (h); 63.865(b); 63.997(e); 63.1282(d) and (g); 63.1450(a), (b), (d), (e), (g); 63.1625(b); table 5 to subpart EEEE; §§ 63.3166(a); 63.3360(e); 63.3545(a); 63.3555(a); 63.4166(a); 63.4362(a); 63.4766(a); 63.4965(a); 63.5160(d); table 4 to

subpart UUUU; tables 5, 16, and 17 to subpart XXXX; table 3 to subpart YYYY; table 4 to subpart AAAAA; § 63.7322(b); table 5 to subpart DDDDD; §§ 63.7822(b); 63.7824(e); 63.7825(b); 63.8000(d); table 4 to subpart JJJJJ; table 4 to subpart KKKKK; §§ 63.9307(c); 63.9323(a); 63.9621(b) and (c); table 4 to subpart SSSSS; tables 4 and 5 of subpart UUUUU; table 1 to subpart ZZZZZ; §§ 63.11148(e); 63.11155(e); 63.11162(f); 63.11163(g); table 4 to subpart JJJJJ; §§ 63.11410(j); 63.11551(a); 63.11646(a); 63.11945.

\* \* \* \* \*

(i) \* \* \*

(105) ASTM D6784-16, Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method), Approved March 1, 2016; IBR approved for §§ 63.1450(d); 63.9621; table 5 to subpart AAAAA; table 17 to subpart XXXX; table 5 to subpart UUUUU; appendix A to subpart UUUUU.

\* \* \* \* \*

(o) \* \* \*

(4) EPA-454/R-98-015, Fabric Filter Bag Leak Detection Guidance, September 1997; IBR approved for §§ 63.548(e); 63.864(e); 63.6012(c); 63.7525(j); 63.8450(e); 63.8600(e); 63.9632(a); 63.9804(f); 63.11224(f); 63.11423(e). (Available at: <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=2000D5T6.pdf>).

\* \* \* \* \*

**Subpart XXXX—National Emissions Standards for Hazardous Air Pollutants: Rubber Tire Manufacturing**

3. Amend § 63.5981 by revising paragraph (a)(1) to read as follows:

**§ 63.5981 Am I subject to this subpart?**

(a) \* \* \*

(1) Rubber tire manufacturing includes rubber processing, the production of rubber tires and/or the production of components integral to rubber tires, the production of tire cord, and the application of puncture sealant. 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.

\* \* \* \* \*

4. Amend § 63.5982 by revising paragraphs (b)(1), (b)(4), and (c) to read as follows:

**§ 63.5982 What parts of my facility does this subpart cover?**

\* \* \* \* \*

(b) \* \* \*

(1) The tire production affected source is the collection of all processes that use or process cements and solvents as defined in § 63.6022, located at any rubber tire manufacturing facility. It includes, but is not limited to: Storage and mixing vessels and the transfer equipment containing cements and/or solvents; wastewater handling and treatment operations; tread and cement operations; tire painting operations; ink and finish operations; undertread cement operations; process equipment cleaning materials; bead cementing operations; tire building operations; green tire spray operations; extruding, to the extent cements and solvents are used; cement house operations; marking operations; calendar operations, to the extent solvents are used; tire striping operations; tire repair operations; slab dip operations; other tire building operations, to the extent that cements and solvents are used; and balance pad operations.

\* \* \* \* \*

(4) The rubber processing affected source is the collection of all rubber mixing processes (e.g., banburys and associated drop mills) that either mix compounds or warm rubber compound before the compound is processed into components of rubber tires. The mixed rubber compound itself is also included in the rubber processing affected source. On and before [INSERT DATE

**OF PUBLICATION IN THE FEDERAL REGISTER]**, there are no emission limitations or other requirements for the rubber processing affected source. The emission limitations for the rubber processing affected source are effective after **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

(c) An affected source that is not a rubber processing affected source is a new affected source if construction of the affected source commenced after October 18, 2000, and it met the applicability criteria of § 63.5981 at the time construction commenced. An affected source that is a rubber processing affected source is a new affected source if construction of the affected source commenced after November 16, 2023, and it met the applicability criteria of § 63.5981 at the time construction commenced.

\* \* \* \* \*

5. Amend § 63.5983 by revising paragraphs (b) and (d) to read as follows:

**§ 63.5983 When do I have to comply with this subpart?**

\* \* \* \* \*

(b) If you own or operate an existing affected source that is not a rubber processing affected source, you must comply with the emission limitations for existing sources no later than July 11, 2005. If you own or operate a rubber processing affected sources that began construction or reconstruction before November 16, 2023, you must comply with the emission limitations for existing rubber processing existing sources no later than **[INSERT DATE 3 YEARS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

\* \* \* \* \*

(d) You must meet the notification requirements in § 63.6016 according to the schedule in § 63.6016 and in subpart A of this part. Some of the notifications must be submitted before the date you are required to comply with the emission limitations in this subpart.

6. Amend § 63.5990 by revising paragraphs (a) and (f)(2) to read as follows:

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

(a) Before January 21, 2021, 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 January 20, 2021, you must be in compliance with the applicable emission limitations specified in tables 1 through 4 to this subpart at all times. After **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you must be in compliance with the applicable emission limitations for rubber processing specified in tables 15 and 16 to this subpart at all times according to the compliance dates in § 63.5983.

\* \* \* \* \*

(f) \* \* \*

(2) Before January 21, 2021, ongoing data quality assurance procedures in accordance with the general requirements of § 63.8(d). After January 20, 2021, ongoing data quality assurance procedures in accordance with the general requirements of § 63.8(d)(1) and (2). 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 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 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).

\* \* \* \* \*

7. Revise § 63.5992 to read as follows:

**§ 63.5992 When must I conduct subsequent performance tests?**

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. The requirements of this paragraph do not apply to the measurement of THC emissions that are monitored with a continuous emission monitoring system for demonstrating compliance with the THC emission limitations for rubber processing in § 63.6009. When complying with the emission limits for rubber processing in § 63.6009 for fPM or metal HAP based on averaging to comply with the facility-wide average alternatives, the subsequent performance tests must begin no later than 5 years after the first test of the averaged mixers is performed.

8. Revise and republish § 63.5993 to read as follows:

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

(a) If you use a control system to meet the emission limitations, you must conduct each performance test in table 5 to this subpart that applies to you, except that for the rubber processing affected source, you must conduct performance tests according to table 17 instead of table 5.

(b) Each performance test must be conducted according to the specific conditions specified in table 5 to this subpart, except that for the rubber processing affected source, you must conduct performance tests according to table 17 instead of table 5.

(c) Before January 21, 2021, you may not conduct performance tests during periods startup, shutdown, or malfunction, as specified in § 63.7(e)(1). After January 20, 2021, 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 the entire range of normal

operation, including operational conditions for maximum emissions if such emissions are not expected during maximum production. 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 January 21, 2021, 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 January 20, 2021, you must conduct three separate test runs for each performance test required in this section, as specified in paragraph (c) of this section, unless otherwise specified in the test method. Each test run must last at least 1 hour.

(e) If you are complying with the emission limitations using a control system, you must also conduct performance tests according to the requirements in paragraphs (e)(1) through (e)(3) of this section as they apply to you. The provisions of paragraphs (e)(1) through (e)(3) of this section do not apply to the rubber processing subcategory.

(1) *Determining capture efficiency of permanent or temporary total enclosure.* Determine the capture efficiency of a capture system by using one of the procedures in Table 5 to this subpart.

(2) *Determining capture efficiency of an alternative method.* As an alternative to constructing a permanent or temporary total enclosure, you may determine the capture efficiency using any capture efficiency protocol and test methods if the data satisfy the criteria of either the Data Quality Objective or the Lower Confidence Limit approach in appendix A to subpart KK of this part.

(3) *Determining efficiency of an add-on control device.* Use Table 5 to this subpart to select the test methods for determining the efficiency of an add-on control device.

9. Amend § 63.5996 by revising paragraph (b) to read as follows:

**§ 63.5996 How do I demonstrate initial compliance with the emission limits for tire production affected sources?**

\* \* \* \* \*

(b) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.6016(e).

10. Amend § 63.5999 by revising paragraph (b) to read as follows:

**§ 63.5999 How do I demonstrate initial compliance with the emission limits for tire cord production affected sources?**

\* \* \* \* \*

(b) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.6016(e).

11. Amend § 63.6002 by revising paragraph (b) to read as follows:

**§ 63.6002 How do I demonstrate initial compliance with the emission limits for puncture sealant application affected sources?**

\* \* \* \* \*

(b) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.6016(e).

12. Amend § 63.6004 by revising paragraph (b) to read as follows:

**§ 63.6004 How do I demonstrate continuous compliance with the emission limits for tire production affected sources?**

\* \* \* \* \*

(b) You must report each instance in which you did not meet an emission limit in table 1 to this subpart. You must also report each instance in which you did not meet the applicable requirements in table 10 to this subpart. These instances are deviations from the emission limits in this subpart. The deviations must be reported in accordance with the requirements in § 63.6017(e).

\* \* \* \* \*

13. Amend § 63.6006 by revising paragraph (b) to read as follows:

**§ 63.6006 How do I demonstrate continuous compliance with the emission limits for tire cord production affected sources?**

\* \* \* \* \*

(b) You must report each instance in which you did not meet an applicable emission limit in table 2 to this subpart. You must also report each instance in which you did not meet the applicable requirements in table 12 to this subpart. These instances are deviations from the emission limits in this subpart. The deviations must be reported in accordance with the requirements in § 63.6017(e).

14. Amend § 63.6008 by revising paragraph (b) to read as follows:

**§ 63.6008 How do I demonstrate continuous compliance with the emission limitations for puncture sealant application affected sources?**

\* \* \* \* \*

(b) You must report each instance in which you did not meet an applicable emission limit in table 3 to this subpart. You must also report each instance in which you did not meet the applicable requirements in table 14 to this subpart. These instances are deviations from the emission limits in this subpart. The deviations must be reported in accordance with the requirements in § 63.6017(e).

15. Add undesignated center heading “Emission Limits for Rubber Processing Affected Sources” immediately following § 63.6008.

16. Redesignate §§ 63.6013 through 63.6015 as §§ 63.6020 through 63.6022 and transfer undesignated center “Other Requirements and Information” to immediately before newly redesignated § 63.6020.

17. Redesignate §§ 63.6009 through 63.6012 as §§ 63.6016 through 63.6019 and transfer undesignated center heading “Notifications, Reports, and Records” to immediately before newly redesignated § 63.6016.

18. Add new §§ 63.6009 through 63.6015, undesignated center heading “Emission Limits for Rubber Processing Affected Sources” before new §§ 63.6009, undesignated center heading “Testing and Initial Compliance Requirements for Rubber Processing Affected Sources” immediately following new § 63.6010, and undesignated center heading “Continuous Compliance Requirements for Rubber Processing Affected Sources” immediately following new § 63.6013 to read as follows:

**Emission Limits for Rubber Processing Affected Sources**

§ 63.6009 What emission limits must I meet for rubber processing affected sources?

§ 63.6010 What are my alternatives for meeting the emission limits for rubber processing affected sources?

**Testing and Initial Compliance Requirements for Rubber Processing Affected Sources**

§ 63.6011 How do I conduct tests and procedures for rubber processing affected sources?

§ 63.6012 What are my rubber processing monitoring installation, operation, and maintenance requirements?

§ 63.6013 How do I demonstrate initial compliance with the emission limits for rubber processing affected sources?

**Continuous Compliance Requirements for Rubber Processing Affected Sources**

§ 63.6014 How do I monitor and collect data to demonstrate continuous compliance with the emission limits for rubber processing affected sources?

§ 63.6015 How do I demonstrate continuous compliance with the emission limits for rubber processing affected sources?

**Emission Limits for Rubber Processing Affected Sources**

**§ 63.6009 What emission limits must I meet for rubber processing affected sources?**

(a) You must meet the emission limit for total hydrocarbons (THC) and either total metal HAP or the alternative emission limit for filterable particulate matter (fPM) in table 15 to this subpart that applies to you. You may choose to comply with each emission limit for each rubber processing mixer separately or for a group of rubber processing mixers routed to the same control device or stack, or with an alternative for all mixers combined based on a facility-wide average.

(b) You must also meet each operating limit in table 16 to this subpart that applies to you.

**§ 63.6010 What are my alternatives for meeting the emission limits for rubber processing affected sources?**

(a) You must comply with the applicable emission limit for THC in table 15 of this subpart for each rubber processing mixer or a group of rubber processing mixers routed to the same control device, or you must demonstrate compliance by averaging among all mixers and comply with the limit as a facility-wide emission limit.

(b) You must demonstrate compliance with either the emission limit for fPM or the alternative emission limit for total metal HAP in table 15 of this subpart; if you demonstrate compliance with the alternative fPM emission limit, you do not have to demonstrate compliance with the emission limit for metal HAP. You must comply with the applicable emission limit for fPM or metal HAP in table 15 of this subpart for each rubber processing mixer or group of rubber processing mixers routed to the same control device, or you must demonstrate compliance by averaging among all mixers and comply with the limit as a facility-wide emission limit.

(c) For each rubber processing mixer, you must show that the control device and capture system meet the operating limits in table 16 to this subpart.

**Testing and Initial Compliance Requirements for Rubber Processing Affected Sources**

**§ 63.6011 How do I conduct tests and procedures for rubber processing affected sources?**

(a) Conduct any required compliance demonstration according to the requirements in § 63.5993 (b), (c), and (d).

(b) You must use the methods in table 17 of this subpart and according to paragraphs (b)(1) through (b)(3) of this section to measure emissions and stack gas flow rates and characteristics to determine THC and fPM or metal HAP mass emission rates in grams per day.

(1) You must operate a THC CEMS in accordance with the requirements in § 63.6012 and Performance Specification 8A in appendix B to 40 CFR part 60. For the purposes of conducting the accuracy and quality assurance evaluations for CEMS, the reference method (RM) is Method 25A of appendix A-7 to 40 CFR part 60. Owners or operators are responsible

for ensuring their instruments provide appropriate data continuously. If a THC monitor will be used for an emission stream that could have a wide variability in THC concentrations because of mixing both high-emitting and low-emitting compounds at different times, then a dual-span monitor should be considered for use. If the THC monitor is used for emissions that are relatively constant, then a dual-span monitor may not be needed, but it remains the responsibility of source owners or operators to make that determination. Owners and operators cannot discard from the compliance determination THC concentration data that exceed the calibration range of the monitor.

(2) Use the THC CEMS to conduct the initial compliance test for the first 15 mixer operating days after the applicable compliance date for each mixer. All THC values must be used as they are recorded by the THC CEMS, except that negative values equal to or greater than to -5 should be treated as zeros, and values less than (i.e., more negative than) -5 cannot be used as valid compliance data in the calculations.

(3) To convert the THC concentration measurements to mass emission rates, you must measure the volumetric flow rate in the same duct or stack in which the THC concentration is monitored no less frequently than once every 5 years. You may use the same flow rate measurements that are completed for demonstrating compliance with the emission limits for fPM or total metal HAP according to table 17 of this subpart. If you change operations in a way that would likely result in a change to volumetric flow rate, you must conduct an additional measurement of the new volumetric flow rate.

(c) You must monitor mixed rubber compound processed in each mixer in Mg per day during the testing for THC. During the testing for fPM or total metal HAP, you must monitor the mixed rubber compound processed in each mixer in Mg for the same periods that fPM or total metal HAP testing runs are performed, excluding the mass of rubber processed during the time between fPM or metal HAP sampling runs.

(d) You must use the methods in paragraphs (d)(1) and (d)(2) of this section to calculate the THC emission rate for the 15-day initial compliance period to demonstrate initial compliance. You must use the average THC emission rate obtained during the first 15 mixer operating days after the applicable compliance date to determine initial compliance for each mixer, group of mixers routed to the same control device or stack, or all mixers combined if complying with the facility-wide average alternative.

(1) Use Equation 1 to paragraph (d)(1) of this section to calculate the 15-day average THC emission rate in grams THC per megagram of mixed rubber compound processed. This emission rate is calculated for each rubber mixer separately, group of mixers routed to the same control device or stack, or for all rubber mixers combined if complying with the facility-wide average alternative.

**Equation 1 to paragraph (d)(1)**

$$E_{15 \text{ days}} = \frac{(\sum_{i=1}^n THC_i)}{\sum_{i=1}^n RP_i} \quad \text{Eq. 1}$$

Where:

$E_{15 \text{ days}}$  = Emission rate of the THC emitted per total mass of mixed rubber compounds processed per 15-day period, grams THC per megagram of mixed rubber compound processed.

$THC_i$  = Daily THC emissions for each day during the 15-day compliance period, grams/day, using the methods in paragraph (b) of this section. These THC emission values are calculated for each rubber mixer separately if compliance is demonstrated for each mixer separately, or for all rubber mixers combined if complying with the facility-wide average alternative. If you are demonstrating compliance for two or more mixers routed to the same control device or stack, then these THC emission values are calculated using the data for the combined mixer emissions at the common stack.

$RP_i$  = Daily mass of mixed rubber compound processed for each day  $i$  during the 15-day compliance period, megagrams/day. These rubber mass processed values are calculated for each rubber mixer separately if compliance is demonstrated for each mixer separately, or for all

rubber mixers combined if complying with the facility-wide emission average alternative. If you are demonstrating compliance for two or more mixers that are routed to the same control device or stack, then these rubber mass values are calculated for the combined mass processed for the mixers that share the common stack.

(2) Use Equation 2 to paragraph (d)(2) of this section to calculate the THC emission rate in grams per day THC as propane for each day *i* in the 15-day initial compliance period for rubber processing for each rubber mixer emission stack.

**Equation 2 to paragraph (d)(2)**

$$THC_i = \frac{(THC_j) \left( 44.097 \frac{lb}{lb-mole} \right) (Q) (60 \text{ min/hr}) (H) (454 \text{ grams/lb})}{\left( 386.5 \frac{ft^3}{lb \text{ mole}} \right) (10^6)} \quad \text{Eq. 2}$$

Where:

THC<sub>i</sub> = Daily THC emissions from rubber processing, grams/day for each rubber mixer emission stack.

THC<sub>j</sub> = Daily average THC concentration, parts per million by volume, for each day during the 15-day compliance period for rubber processing for each rubber mixer emission stack, as measured by the THC CEMS.

Q = Average volumetric flow rate of gas, dry standard cubic feet per minute, dscfm, for each rubber mixer emission stack from the most recent available emissions test.

H = Hours per day that rubber processing is performed in at least one of the mixers vented to the rubber mixer emission stack for which emissions are being calculated.

(e) You must use Equation 3 to this paragraph to calculate the fPM emission rate in grams per megagram of mixed rubber compound processed or use Equation 4 to of this paragraph to calculate the metal HAP emission rate in grams per megagram of mixed rubber compound processed to demonstrate initial compliance. The rubber mass processed at each mixer must be recorded for the exact same period of time as the fPM or metal HAP emissions are measured at each mixer. If you are demonstrating compliance with the facility-wide emission average alternative, the relevant measurement of fPM or metal HAP, as appropriate, at each

mixer does not need to be done simultaneously for all mixers, but all tests of mixers to be averaged must be done within the same 3-month period.

**Equations 3 and 4 to paragraph (e)**

$$E_{PM} = \frac{(\sum_{i=1}^n fPM_i)}{\sum_{i=1}^n RP_i} \quad \text{Eq. 3}$$

Or

$$E_{MHAP} = \frac{(\sum_{i=1}^n MHAP_i)}{\sum_{i=1}^n RP_i} \quad \text{Eq. 4}$$

Where:

$E_{fPM}$  = Emission rate of the fPM emitted in grams of fPM per megagram of mixed rubber compound processed.

$fPM_i$  = Total grams of fPM emitted during the performance test, measured using EPA method 5.

These fPM emission values are calculated for each rubber mixer  $i$  separately if compliance is demonstrated for each mixer separately, and it is summed for all rubber mixers combined if complying with the facility-wide average alternative.

$RP_j$  = Total megagrams of mixed rubber compound mass processed rate recorded during the fPM (Eq. 3A) or total metal HAP emissions test (Eq. 3B).

$E_{MHAP}$  = Emission rate of the total metal HAP in grams of metal HAP per megagram of mixed rubber compound processed.

$MHAP_i$  = Total grams of total metal HAP emitted during the performance test, measured using the methods specified in table 17 to this subpart. These total metal HAP emission values are calculated for each rubber mixer separately if compliance is demonstrated for each mixer separately, and it is summed for all rubber mixers combined if complying with the facility-wide average alternative.

$N$  = Number of mixers included if complying with the facility-wide average alternative.

**§ 63.6012 What are my rubber processing monitoring installation, operation, and maintenance requirements?**

(a) You must install and operate a THC continuous emission monitoring system (CEMS) according to § 63.8 (b) and (c) and comply with the monitoring requirements of paragraphs (a)(1) and (2) of this section. Standard operating procedures must be incorporated into the monitoring plan required by § 63.5990(e).

(1) On each stack used to exhaust emissions from a rubber processing mixer to the atmosphere, you must install, operate, and maintain a THC CEMS in accordance with Performance Specification 8A of appendix B to 40 CFR part 60 and comply with all of the requirements for CEMS found in the general provisions, subpart A of this part. The THC CEMS must be installed downstream of any organic vapor control device (such as a thermal oxidizer), if present. A single THC CEMS may be used to monitor the combined emissions from multiple rubber mixers.

(2) You must operate and maintain each CEMS according to the quality assurance requirements in Procedure 1 of appendix F to 40 CFR part 60. Where a dual range analyzer is used, the daily calibration drift check must be performed for each operating range. For THC CEMS certified under Performance Specification 8A of appendix B to 40 CFR part 60, conduct the relative accuracy test audits required under Procedure 1 in accordance with Performance Specification 8, sections 8 and 11 using Method 25A in appendix A-7 to 40 CFR part 60 as the reference method; the relative accuracy must meet the criteria of Performance Specification 8, section 13.2.

(b) Parameter monitoring requirements. If you have an operating limit that requires the use of a continuous parameter monitoring system (CPMS), you must install, operate, and maintain each CPMS according to the procedures in paragraphs (b)(1) through (4) of this section by the applicable compliance date specified in § 63.5983. Standard operating procedures must be incorporated into the monitoring plan required by § 63.5990(e).

(1) The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four successive cycles of operation to have a valid hour of data.

(2) You must conduct all monitoring in continuous operation at all times that the mixer is operating.

(3) Determine the 1-hour block average of all recorded readings.

(4) Record the results of each inspection, calibration, and validation check.

(c) For each bag leak detection system (BLDS), you must meet any applicable requirements in paragraphs (c)(1) through (10) of this section. Standard operating procedures must be incorporated into the monitoring plan required by § 63.5990(e).

(1) The BLDS must be certified by the manufacturer to be capable of detecting fPM emissions at concentrations of 1.0 milligrams per dry standard cubic meter or less.

(2) The sensor on the BLDS must provide output of relative fPM emissions.

(3) The BLDS must be equipped with a device to continuously record the output signal from the sensor.

(4) The BLDS must have an alarm that will sound automatically when it detects an increase in relative fPM emissions greater than a preset level.

(5) The alarm must be located in an area where appropriate plant personnel will be able to hear it.

(6) For a positive-pressure fabric filter baghouse, each compartment or cell must have a bag leak detector (BLD). For a negative-pressure or induced-air fabric filter baghouse, the BLD must be installed downstream of the fabric filter. If multiple BLD are required (for either type of fabric filter baghouse), the detectors may share the system instrumentation and alarm.

(7) Each triboelectric BLDS must be installed, calibrated, operated, and maintained according to EPA-454/R-98-015, *Fabric Filter Bag Leak Detection Guidance*, (incorporated by reference; see § 63.14). Other types of bag leak detection systems must be installed, operated,

calibrated, and maintained according to the manufacturer's written specifications and recommendations. Standard operating procedures must be incorporated into the monitoring plan required by § 63.5990(e).

(8) At a minimum, initial adjustment of the system must consist of establishing the baseline output in both of the following ways in paragraphs (c)(8)(i) and (ii), according to section 5.0 of the EPA-454/R-98-015, *Fabric Filter Bag Leak Detection Guidance*, (incorporated by reference; see § 63.14):

(i) Adjust the range and the averaging period of the device.

(ii) Establish the alarm set points and the alarm delay time.

(9) After initial adjustment, the sensitivity or range, averaging period, alarm set points, or alarm delay time may not be adjusted except as specified in the monitoring plan required by § 63.5990(e). In no event may the range be increased by more than 100 percent or decreased by more than 50 percent over a 365-day period, unless such adjustment follows a complete fabric filter inspection that demonstrates that the fabric filter is in good operating condition, as defined in section 5.2 of the EPA-454/R-98-015, *Fabric Filter Bag Leak Detection Guidance*, (incorporated by reference; see § 63.14). You must record each adjustment.

(10) Record the results of each inspection, calibration, and validation check.

(d) For each emission unit equipped with an add-on air pollution control device, you must inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system vents captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter. You must record the results of each inspection.

**§ 63.6013 How do I demonstrate initial compliance with the emission limits for rubber processing affected sources?**

(a) You must demonstrate initial compliance with each emission limit that applies to you according to table 17 to this subpart.

(b) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.6016(e).

### **Continuous Compliance Requirements for Rubber Processing Affected Sources**

#### **§ 63.6014 How do I monitor and collect data to demonstrate continuous compliance with the emission limits for rubber processing affected sources?**

(a) You must monitor and collect data to demonstrate continuous compliance with the emission limits for rubber processing affected sources as specified in table 18 to this subpart.

(b) You must monitor and collect data according to the requirements in § 63.6012.

#### **§ 63.6015 How do I demonstrate continuous compliance with the emission limits for rubber processing affected sources?**

(a) You must demonstrate continuous compliance with each applicable emission limit in table 15 and each operating limit in table 16 to this subpart using the methods specified in table 18 to this subpart.

(b) You must report each instance in which you did not meet an applicable emission limit in table 15 or operating limit in table 16 to this subpart. You must also report each instance in which you did not meet the applicable requirements in table 18 to this subpart. These instances are deviations from the emission limitations in this subpart. The deviations must be reported in accordance with the requirements in § 63.6017(e).

19. Amend newly redesignated § 63.6016 by revising paragraphs (e) and (k) to read as follows:

#### **§ 63.6016 What notifications must I submit and when?**

\* \* \* \* \*

(e) If you are required to conduct a performance test, design evaluation, or other initial compliance demonstration as specified in tables 5 through 8 and table 17 to this subpart, you must submit a Notification of Compliance Status according to § 63.9(h)(2)(ii). The Notification must contain the information listed in table 20 to this subpart for compliance reports. The

Notification of Compliance Status must be submitted according to the following schedules, as appropriate:

(1) For each initial compliance demonstration required in tables 6 through 8 and table 17 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th calendar day following the completion of the initial compliance demonstration.

(2) Before January 21, 2021, for each initial compliance demonstration required in tables 6 through 8 and table 17 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 January 20, 2021, 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 63.6017(h)(1) through (3).

\* \* \* \* \*

(k) You must submit to the Administrator notification reports of the following recorded information. Beginning on January 21, 2021, or once the reporting form has been available on the Compliance and Emissions Data Reporting Interface (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 paragraphs (d) through (i) of this section to the EPA via the 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 CEDRI website (<https://www.epa.gov/electronic-reporting-air-emissions/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. The EPA will make all the information submitted through CEDRI available to the public without further notice to you. Do not use CEDRI to submit information you claim as confidential business information (CBI). Anything submitted using CEDRI cannot later be claimed to be CBI. Although we do not expect persons to assert a claim of CBI, if persons wish to assert a CBI, 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 CEDRI as described earlier in this paragraph. All CBI claims must be asserted at the time of submission. Furthermore, under CAA section 114(c) emissions data is not entitled to confidential treatment and requires EPA to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available. Where applicable, you may assert a claim of the EPA system outage, in accordance with § 63.6017(i), or force majeure, in accordance with § 63.6017(j), for failure to timely comply with this requirement.

20. Amend newly redesignated § 63.6017 by:

- a. Revising paragraphs (a), (b) introductory text, and (c) introductory text;
- b. Adding paragraph (c)(11);

- c. Revising paragraphs (d) introductory text, (d)(2), (g), and (h) introductory text; and
- d. Adding paragraph (k).

The revisions and additions read as follows:

**§ 63.6017 What reports must I submit and when?**

(a) You must submit each applicable report in table 20 to this subpart.

(b) Unless the Administrator has approved a different schedule for submission of reports under § 63.10(a), you must submit each report by the date in table 20 to this subpart and according to the requirements in paragraphs (b)(1) through (5) of this section.

\* \* \* \* \*

(c) The compliance report must contain information specified in paragraphs (c)(1) through (11) of this section.

\* \* \* \* \*

(11) For each rubber processing affected source, whether you are complying with the particulate matter or total metal HAP emission limit alternative in table 15 to this subpart.

(d) Before January 21, 2021, for each deviation from an emission limitation (emission limit or operating limit) that occurs at an affected source where you are not using a CPMS to comply with the emission limitations in this subpart, 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 January 20, 2021, for each deviation from an emission limitation (emission limit or operating limit) that occurs at an affected source where you are not using a CPMS to comply with the emission limitations in this subpart, 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 of process, air pollution control, and monitoring equipment when the affected source is operating.

\* \* \* \* \*

(2) Before January 20, 2021, information on the number, duration, and cause of deviations (including unknown cause, if applicable) and the corrective action taken. After January 20, 2021, for each failure to meet an applicable standard, record and retain a list of the cause of deviations (including unknown cause, if applicable), affected sources or equipment, whether the failure occurred during startup, shutdown, or malfunction, 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.

\* \* \* \* \*

(g) Before July 24, 2021, 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 July 24, 2021, or once the reporting form has been available on the CEDRI website for 1-year, whichever date is later, you must submit compliance reports required in paragraphs (c)(1) through (11) of this section, 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/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 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. The EPA will make all the information submitted through CEDRI available to the public without further notice to you. Do not use CEDRI to submit information you claim as CBI. Anything submitted using CEDRI cannot later be claimed to be CBI. Although we do not expect persons to assert a claim of CBI, if persons wish to assert a CBI, 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 CEDRI as described earlier in this paragraph. All CBI claims must be asserted at the time of submission. Furthermore, under CAA section 114(c) emissions data is not entitled to confidential treatment and requires EPA to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available.

(h) After January 20, 2021, 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. The provisions of this paragraph (h) and (h)(1) and (h)(3) do not apply to control devices and capture systems to control THC emissions from rubber processing when monitored by a THC CEMS.

\* \* \* \* \*

(k) For each THC CEMS, within 60 days after the reporting period ends, you must report all of the calculated 15-day rolling average values derived from the THC CEMS for THC emissions in grams of THC per megagram (g/Mg) of rubber processed, either for each mixer individually, or for all mixers that use a single control device or stack, or that are averaged to comply on the basis of the facility-wide average alternative.

21. Amend newly redesignated § 63.6018 by redesignating paragraph (e) as paragraph (f) and adding new paragraph (e) to read as follows:

**§ 63.6018 What records must I keep?**

\* \* \* \* \*

(e) For each rubber processing affected source, you must keep the records specified in table 19 to this subpart to show continuous compliance with each emission limit that applies to you.

\* \* \* \* \*

22. Revise newly redesignated § 63.6020 to read as follows:

**§ 63.6020 What parts of the General Provisions apply to me?**

Table 22 to this subpart shows which parts of the General Provisions in §§ 63.1 through 63.15 apply to you.

23. Amend newly redesignated § 63.6021 by revising paragraph (c)(1) to read as follows:

**§ 63.6021 Who implements and enforces this subpart?**

\* \* \* \* \*

(c) \* \* \*

(1) Approval of alternatives to the requirements in §§ 63.5981 through 63.5984, 63.5986, 63.5988, and 63.6009.

\* \* \* \* \*

24. Amend newly redesignated § 63.6022 by adding the definitions “Bag leak detector system (BLDS)” and “Particulate matter (PM) detector” in alphabetical order to read as follows:

**§ 63.6022 What definitions apply to this subpart?**

\* \* \* \* \*

*Bag leak detector system* (BLDS) is a type of PM detector used on fabric filters to identify an increase in PM emissions resulting from a broken filter bag or other malfunction and sound an alarm.

\* \* \* \* \*

*Particulate matter (PM) detector* means a system that is continuously capable of monitoring PM loading in the exhaust of a fabric filter in order to detect bag leaks, upset conditions, or control device malfunctions and sounds an alarm at a preset level. A PM detector system includes, but is not limited to, an instrument that operates on triboelectric, light scattering, light transmittance, or other effects to continuously monitor relative particulate loadings. A BLDS is a type of PM detector.

\* \* \* \* \*

25. Revise tables 1 through 3 to subpart XXXX of part 63 to read as follows:

**Table 1 to Subpart XXXX of Part 63-Emission Limits for Tire Production Affected Sources**

As stated in § 63.5984, you must comply with the emission limits for each new, reconstructed, or existing tire production affected source in the following table:

For each . . .	You must meet the following emission limits.
1. Option 1 - HAP constituent option	a. Emissions of each HAP in table 21 to this subpart 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 b. Emissions of each HAP not in table 21 to this subpart 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.
2. Option 2 - production-based 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.

**Table 2 to Subpart XXXX of Part 63-Emission Limits for Tire Cord Production Affected Sources**

As stated in § 63.5986, you must comply with the emission limits for tire cord production affected sources in the following table:

For each . . .	You must meet the following emission limits.
1. Option 1.a (production-based option) - Existing tire cord production affected source	Emissions must not exceed 280 grams HAP per megagram (0.56 pounds per ton) of fabric processed at the tire cord production affected source.
2. Option 1.b (production-based option) - New or reconstructed tire cord production affected source	Emissions must not exceed 220 grams HAP per megagram (0.43 pounds per ton) of fabric processed at the tire cord production affected source.
3. Option 2 (HAP constituent option) - Existing, new or reconstructed tire cord production affected source	<p>a. Emissions of each HAP in table 21 to this subpart 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</p> <p>b. Emissions of each HAP not in table 21 to this subpart must not exceed 10,000 grams HAP per megagram (20 pounds per ton) of total coatings used at the tire cord production affected source.</p>

**Table 3 to Subpart XXXX of Part 63-Emission Limits for Puncture Sealant Application Affected Sources**

As stated in § 63.5988(a), you must comply with the emission limits for puncture sealant application affected sources in the following table:

For each . . .	You must meet the following emission limit.
1. Option 1.a (percent reduction option) - Existing puncture sealant application spray booth	Reduce spray booth HAP (measured as volatile organic compounds (VOC)) emissions by at least 86 percent by weight.
2. Option 1.b (percent reduction option) - New or reconstructed puncture sealant application spray booth	Reduce spray booth HAP (measured as VOC) emissions by at least 95 percent by weight.
3. Option 2 (HAP constituent option) Existing, new or reconstructed puncture sealant application spray booth	<p>a. Emissions of each HAP in table 21 to this subpart 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</p> <p>b. Emissions of each HAP not in table 21 to this subpart must not exceed 10,000 grams HAP per megagram (20 pounds per ton) of total puncture sealants used at the puncture sealant affected source.</p>

26. Revise table 5 to subpart XXXX of part 63 to read as follows:

**Table 5 to Subpart XXXX of Part 63-Requirements for Performance Tests**

As stated in § 63.5993, you must comply with the requirements for performance tests in the following table:

If you are using . . .	You must . . .	Using . . .	According to the following requirements . . .
1. A thermal oxidizer	<p>a. Measure total HAP emissions, determine destruction efficiency of the control device, and establish a site-specific firebox secondary chamber temperature limit at which the emission limit that applies to the affected source is achieved</p>	<p>i. Method 25 or 25A performance test and data from the temperature monitoring system</p>	<p>(1). Measure total HAP emissions and determine the destruction efficiency of the control device using Method 25 (40 CFR part 60, appendix A-7). You may use Method 25A (40 CFR part 60, appendix A-7) if: an exhaust gas volatile organic matter concentration of 50 parts per million (ppmv) or less is required to comply with the standard; the volatile organic matter concentration at the inlet to the control system and the required level of control are such that exhaust volatile organic matter concentrations are 50 ppmv or less; or because of the high efficiency of the control device exhaust, is 50 ppmv or less, regardless of the inlet concentration.</p> <p>(2). Collect firebox secondary chamber temperature data every 15 minutes during the entire period of the initial 3-hour performance test, and determine the average firebox temperature over the 3-hour performance test by computing the average of all of the 15-minute reading.</p>
2. A carbon adsorber (regenerative)	<p>a. Measure total organic HAP emissions, establish the total regeneration mass or volumetric flow, and establish the temperature of the carbon bed within 15 minutes of completing any cooling cycles. The total regeneration mass, volumetric flow, and carbon bed temperature must be those at which the emission limit that applies</p>	<p>i. Method 25 or Method 25A performance test and data from the carbon bed temperature monitoring device</p>	<p>(1). Measure total HAP emissions using Method 25. You may use Method 25A, if an exhaust gas volatile organic matter concentration of 50 ppmv or less; or because of the high efficiency of the control device, exhaust is 50 ppmv or less is required to comply with the standard; the volatile organic matter concentration (VOMC) at</p>

If you are using . . .	You must . . .	Using . . .	According to the following requirements . . .
	to the affected source is achieved		<p>the inlet to the control system and the required level of control are such that exhaust VOMCs are 50 ppmv or less; or because of the high efficiency of the control device, exhaust is 50 ppmv or less, regardless of the inlet concentration.</p> <p>(2). Collect carbon bed total regeneration mass or volumetric flow for each carbon bed regeneration cycle during the performance test.</p> <p>(3). Record the maximum carbon bed temperature data for each carbon bed regeneration cycle during the performance test.</p> <p>(4). Record the carbon bed temperature within 15 minutes of each cooling cycle during the performance test.</p> <p>(5). Determine the average total regeneration mass or the volumetric flow over the 3-hour performance test by computing the average of all of the readings.</p> <p>(6). Determine the average maximum carbon bed temperature over the 3-hour performance test by computing the average of all of the readings.</p> <p>(7). Determine the average carbon bed temperature within 15 minutes of the cooling cycle over the 3-hour performance test.</p>
3. Any control device other than a thermal oxidizer or carbon adsorber	Determine control device efficiency and establish operating parameter limits with which you will demonstrate continuous compliance with the	EPA-approved methods and data from the continuous parameter monitoring system	Conduct the performance test according to the site-specific plan submitted according to § 63.7(c)(2)(i).

If you are using . . .	You must . . .	Using . . .	According to the following requirements . . .
	emission limit that applies to the affected source		
4. All control devices	a. Select sampling ports' location and the number of traverse ports	Method 1 or 1A of 40 CFR part 60, appendix A	Locate sampling sites at the inlet and outlet of the control device and prior to any releases to the atmosphere.
	b. Determine velocity and volumetric flow rate	Method 2, 2A, 2C, 2D, 2F, or 2G of 40 CFR part 60, appendix A	
		Method 3, 3A, or 3B of 40 CFR part 60 appendix A; as an alternative to the manual portion of Method 3B, you may use ANSI/ASME PTC 19.10-1981 (incorporated by reference; see § 63.14).	
	c. Conduct gas analysis		
	d. Measure moisture content of the stack gas	Method 4 of 40 CFR part 60, appendix A	
5. A permanent total enclosure (PTE)	Measure the face velocity across natural draft openings and document the design features of the enclosure	Method 204 of CFR part 51, appendix M	Capture efficiency is assumed to be 100 percent if the criteria are met
6. Temporary total enclosure (TTE)	Construct a temporarily installed enclosure that allows you to determine the efficiency of your capture system and establish operating parameter limits	Method 204 and the appropriate combination of Methods 204A-204F of 40 CFR part 51, appendix M	

**Table 8 to Subpart XXXX of Part 63-Initial Compliance With the Emission Limits for Puncture Sealant Application Affected Sources**

27. Revise the heading of table 8 to subpart XXXX of part 63 to read as set forth above.

28. Redesignate tables 15 through 17 to subpart XXXX of part 63 as tables 20 through 22 to subpart XXXX of part 63.

29. Add new tables 15 through 17 and tables 18 and 19 to subpart XXXX of part 63 to read as follows:

**Table 15 to Subpart XXXX of Part 63-Emission Limits for Rubber Processing**

**Affected Sources**

As stated in § 63.6009(a), you must comply with the emission limits for each new, reconstructed, or existing rubber processing affected source in the following table:

For each . . .	You must meet the following emission limits.
1. Existing rubber processing affected sources	a. THC emissions, measured as propane must not exceed 64 grams/Mg mixed rubber compound processed, based on a 15-day rolling average. b. fPM emissions must not exceed 3.0 grams/Mg mixed rubber compound processed, or metal HAP emissions must not exceed 0.051 grams/Mg mixed rubber compound processed.
2. New or reconstructed rubber processing affected sources	a. THC emissions, measured as propane must not exceed 64 grams/Mg mixed rubber compound processed, based on a 15-day rolling average. b. fPM emissions must not exceed 3.0 grams/Mg mixed rubber compound processed, or metal HAP emissions must not exceed 0.051 grams/Mg mixed rubber compound processed.

**Table 16 to Subpart XXXX of Part 63-Operating Limits for Rubber Processing Control**

**Devices**

As stated in § 63.6009(b) you must comply with the operating limits for rubber processing affected sources in the following table:

For each . . .	You must . . .
1. For each rubber processing mixer	a. Inspect each emission capture system or enclosure and closed vent system at least once each calendar year to ensure that each system or enclosure vents captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter. You must record the results of each inspection.
2. Each mixer equipped with a fabric filter	a. Maintain and operate the fabric filter such that the BLDS detector alarm condition does not exist for more than 5 percent of the total operating time in a 6-month period; and comply with the requirements in § 63.6012(c). Standard operating procedures must be incorporated into the monitoring plan required by § 63.5990(e).

**Table 17 to Subpart XXXX of Part 63-Initial Compliance with the Emission Limits for**

**Rubber Processing Affected Sources**

As stated in § 63.6011, you must show initial compliance with the emission limits for the rubber processing affected source and conduct performance tests according to the following table:

<b>For the following emission limit . . .</b>	<b>You must do the following. . .</b>
1. The applicable THC emission limit in table 15 to this subpart.	<ul style="list-style-type: none"> <li>a. Continuously measure THC emissions using a THC CEMS and mass of mixed rubber compounds processed over a period of not less than 15 days.</li> <li>b. Use the applicable methods in item 2 in this table to measure exhaust flow rate in dry standard cubic feet per minute to determine THC mass emissions in grams per day using the equations and procedures in § 63.6011.</li> <li>c. Demonstrate that you have achieved the applicable THC emission limits in table 15 to this subpart according to the applicable procedures in § 63.6011</li> </ul>
2. The applicable fPM emission limit in table 15 to this subpart.	<ul style="list-style-type: none"> <li>a. Conduct the performance test according to the site-specific plan submitted according to § 63.7(c)(2)(i).</li> <li>b. Measure fPM and the mass of mixed rubber compound processed for at least 3 runs lasting at least 1 hour per run.</li> <li>c. Use Method 5 in appendix A-3 to 40 CFR part 60 to measure fPM emissions.</li> <li>d. Select sampling ports' location and the number of traverse ports according to Method 1 or 1A of 40 CFR part 60, appendix A-1.</li> <li>e. Determine velocity and volumetric flow rate according to Method 2, 2A, 2C, 2D, 2F, or 2G of 40 CFR part 60, appendix A-1 and A-2.</li> <li>f. Conduct the gas analysis according to Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2; as an alternative to the manual portion of Method 3B, you may use ANSI/ASME PTC 19.10-1981 (incorporated by reference; see § 63.14).</li> <li>g. Measure moisture content of the stack gas using Method 4 of 40 CFR part 60, appendix A-3.</li> <li>h. Demonstrate that you have achieved the applicable fPM emission limit in table 15 to this subpart according to the applicable procedures in § 63.6011.</li> <li>i. Install, operate, and maintain the BLDS according to the requirements in § 63.6012(c) at the time of the initial compliance test. Standard operating procedures for the BLDS must be incorporated into the monitoring plan required by § 63.5990(e).</li> </ul>
3. The applicable metal HAP alternative emission limit in table 15 to this subpart.	<ul style="list-style-type: none"> <li>a. Conduct the performance test according to the site-specific plan submitted according to § 63.7(c)(2)(i).</li> <li>b. Measure metal HAP emissions and mass of mixed rubber compound processed for at least 3 runs lasting at least 1 hour per run.</li> <li>c. Use Method 29 in appendix A-8 to 40 CFR part 60 to measure metal HAP emissions. As an alternative to Method 29 for mercury only, you may use the particulate mercury portion of ASTM D6784-16 to measure particulate mercury emissions (incorporated by reference; see § 63.14).</li> </ul>

For the following emission limit . . .	You must do the following. . .
	<p>d. Select sampling ports' location and the number of traverse ports according to Method 1 or 1A of 40 CFR part 60, appendix A-1.</p> <p>e. Determine velocity and volumetric flow rate according to Method 2, 2A, 2C, 2D, 2F, or 2G of 40 CFR part 60, appendix A-1 and A-2.</p> <p>f. Conduct the gas analysis according to Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2; as an alternative to the manual portion of Method 3B, you may use ANSI/ASME PTC 19.10-1981 (incorporated by reference; see § 63.14).</p> <p>g. Measure moisture content of the stack gas using Method 4 of 40 CFR part 60, appendix A-3.</p> <p>h. Demonstrate that you have achieved the applicable metal HAP emission limit in table 15 to this subpart according to the applicable procedures in § 63.6011.</p> <p>i. Install, operate, and maintain the BLDS according to the requirements in § 63.6012(c) at the time of the initial compliance test. Standard operating procedures for the BLDS must be incorporated into the monitoring plan required by § 63.5990(e).</p>

**Table 18 to Subpart XXXX of Part 63-Continuous Compliance with the Emission**

**Limitations for Rubber Processing Affected Sources**

As stated in § 63.6014(a), you must show continuous compliance with the emission limitations for rubber processing affected sources according to the following table:

For . . .	You must demonstrate continuous compliance by . . .
1. Each THC continuous emissions monitoring system installed in a rubber processing mixer affected source.	a. Continuously monitoring and record the THC concentration and calculate the daily THC emissions in grams per day.
2. Each rubber processing affected source.	a. Continuously monitor the daily mass of mixed rubber compound processed for each mixer in megagrams per day.
3. Each rubber processing affected source fabric filter.	<p>a. Maintain and operate the fabric filter so that the alarm on the BLDS is not activated and an alarm condition does not exist for more than 5 percent of the total operating time in each 6-month reporting period; and continuously recording the output from the BLDS detection system; and</p> <p>b. Each time the alarm sounds and the owner or operator initiates corrective actions within 1 hour of the alarm, 1 hour of alarm time will be counted (if the owner or operator takes longer than 1 hour to initiate corrective actions, alarm time will be counted as the actual amount of time taken by the owner or operator to</p>

**For . . .**

**You must demonstrate continuous compliance by . . .**

initiate corrective actions); if inspection of the fabric filter system demonstrates that no corrective actions are necessary, no alarm time will be counted.

**Table 19 to Subpart XXXX of Part 63-Minimum Data for Continuous Compliance with the Emission Limitations for Rubber Processing Affected Sources**

As stated in § 63.6018(e), you must maintain minimum data to show continuous compliance with the emission limitations for rubber processing affected sources according to the following table:

<b>For . . .</b>	<b>You must maintain . . .</b>
1. Rubber processing affected sources using an emission capture system or enclosure to capture emissions and performing the inspections specified in table 16 to this subpart.	a. Records of the annual inspections of the enclosure and closed vent system specified in table 16 to this subpart.
2. Rubber processing affected sources using a continuous emissions monitoring system to comply with the THC limits in table 15 to this subpart.	a. Records of each THC concentration measurement and each inspection, calibration, and validation check. b. Records of each flow rate measurement.
3. Rubber processing affected sources subject to the THC emission limit in table 15 to this subpart.	a. Records of daily mass of mixed rubber compound processed for each mixer, in megagrams per day. b. Records of each calculated 15-day rolling average THC emission rate, in grams THC per Mg rubber processed for each mixer separately or for all mixers combined and complying with the facility-wide emission limit.
4. Rubber processing affected sources subject to the fPM or metal HAP emission limits in table 15 to this subpart	a. Records of applicable periodic fPM or metal HAP performance tests. b. Records of mass of mixed rubber compound processed during the periodic fPM or metal HAP performance test. c. Records of the calculated fPM or metal HAP emission rate, in grams fPM or metal HAP per Mg rubber processed for each mixer separately or for all mixers combined and complying with the facility-wide emission limit. d. Records of each inspection, calibration, and validation check of the bag leak detection system. e. Records of each bag leak detection system alarm, the amount of time taken to initiate corrective action after the alarm, and the response and corrective action taken.

30. Revise newly redesignated table 20 to subpart XXXX of part 63 to read as follows:

**Table 20 to Subpart XXXX of Part 63-Requirements for Reports**

As stated in § 63.6017, you must submit each report that applies to you according to the following table.

You must submit a(n)	The report must contain . . .	You must submit the report . . .
1. Compliance report	<p>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-control during the reporting period</p> <p>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)</p> <p>c. Before January 21, 2021, If you had a startup, shutdown, and 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 January 20, 2021, this information is no longer required</p>	<p>Semiannually according to the requirements in § 63.6017(b), unless you meet the requirements for annual reporting in § 63.6017(f) for the tire production affected source only.</p> <p>Semiannually according to the requirements in § 63.6017(b), unless you meet the requirements for annual reporting in § 63.6017(f) for the tire production affected source only.</p> <p>Before January 21, 2021, semiannually according to the requirements in § 63.6017(b), unless you meet the requirements for annual reporting in § 63.6017(f). After January 20, 2021, this information is no longer required.</p>
2. Before January 21, 2021, immediate startup, shutdown, and malfunction report if you	<p>a. Before January 21, 2021, actions taken for the event. After</p>	<p>Before January 21, 2021, by fax or telephone within 2 working days after starting</p>

You must submit a(n)	The report must contain . . .	You must submit the report . . .
had a startup, shutdown, and malfunction during the reporting period that is not consistent with your startup, shutdown, and malfunction plan. After January 20, 2021, this report is no longer required	January 20, 2021, this report is no longer required	actions inconsistent with the plan. After January 20, 2021, this report is no longer required.
	b. Before January 21, 2021, the information in § 63.10(d)(5)(ii). After January 20, 2021, this report is no longer required	Before January 21, 2021, 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 January 20, 2021, 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.

31. Amend newly redesignated table 22 to subpart XXXX of part 63 by:

- a. Revising the introductory text to the first table (that applies before January 21, 2021);
- and
- b. Revising the second table (that applies after January 20, 2021).

The revisions read as follows:

**Table 22 to Subpart XXXX of Part 63-Applicability of General Provisions to This Subpart XXXX**

Before January 21, 2021, as stated in § 63.6020, you must comply with the applicable General Provisions (GP) requirements according to the following table:

\* \* \* \* \*

After January 20, 2021, as stated in § 63.6020, 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 CAA 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]			

Citation	Subject	Brief description of applicable sections	Applicable to subpart XXXX?	
			Using a control device	Not using a control device
§ 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 and Maintenance		No. See § 63.5990(a)	No. See § 63.5990(a)
§ 63.6(e)(1)(iii)-(2)	Operation and 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.

Citation	Subject	Brief description of applicable sections	Applicable to subpart XXXX?	
			Using a control device	Not using a control device
§ 63.6(e)(3)	Startup, Shutdown, and Malfunction Plan		No	No.
§ 63.6(f)(1)	Startup, Shutdown, and Malfunction Exemption		No. See § 63.5990(a)	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 Emissions (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	Yes	No.

Citation	Subject	Brief description of applicable sections	Applicable to subpart XXXX?	
			Using a control device	Not using a control device
		date Administrator agrees with: test plan approval procedures; performance audit requirements; and internal and external quality assurance procedures for testing		
§ 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 startup, shutdown, and malfunction	No. See § 63.5993(c)	No.
§ 63.7(e)(2)	Conditions for Conducting Performance Tests	Must conduct according to rule and the 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	Yes	No.

Citation	Subject	Brief description of applicable sections	Applicable to subpart XXXX?	
			Using a control device	Not using a control device
		the Notification of 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, if using a CEMS	Yes, if using a CEMS
§ 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.

Citation	Subject	Brief description of applicable sections	Applicable to subpart XXXX?	
			Using a control device	Not using a control device
§ 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)	Applies as modified by § 63.5990(e) and (f).
§ 63.8(c)(1)(i)	Routine and Predictable Startup, Shutdown, and Malfunction		No	No.
§ 63.8(c)(1)(ii)	Startup, Shutdown, and Malfunction not in Startup, Shutdown, and Malfunction Plan		No	No.
§ 63.8(c)(1)(iii)	Compliance with Operation and Maintenance Requirements	How the 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	Yes.
§ 63.8(c)(4)	CMS Requirements		Applies as modified by § 63.5990(f)	Applies as modified by § 63.5990(f).
§ 63.8(c)(5)	Continuous Opacity Monitoring Systems Minimum Procedures		No	No.
§ 63.8(c)(6)	CMS Requirements		Applies as modified by § 63.5990(e)	Applies as modified by § 63.5990(e).

Citation	Subject	Brief description of applicable sections	Applicable to subpart XXXX?	
			Using a control device	Not using a control device
§ 63.8(c)(7)-(8)	CMS Requirements	Out-of-control periods, including reporting	Yes	Yes.
§ 63.8(d)(1)-(2)	CMS Quality Control		Applies as modified by § 63.5990(e) and (f)	Applies as modified by § 63.5990(e) and (f)
§ 63.8(d)(3)	Written Procedures for CMS		No. See § 63.5990(f)(2)	No. See § 63.5990(f)(2)
§ 63.8(e)	CMS Performance Evaluation	Performance evaluation of continuous monitoring systems	Yes	Yes.
§ 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	Requesting an alternative to the relative accuracy test for a CEMS	Yes	Yes.
§ 63.8(g)	Data Reduction	How to reduce CMS data	Applies as modified by § 63.5990(f)	Applies as modified by § 63.5990(f).
§ 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	Yes	Yes.

Citation	Subject	Brief description of applicable sections	Applicable to subpart XXXX?	
			Using a control device	Not using a control device
		or lowest achievable emission rate		
§ 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	Additional notification requirements for sources with continuous monitoring systems	Yes	Yes.
§ 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.
§ 63.9(k)	Notification	Electronic reporting procedures.	Yes, as specified in § 63.9(j).	Yes, as specified in § 63.9(j).
§ 63.10(a)	Recordkeeping/Reporting	Applies to all, unless compliance	Yes	Yes.

Citation	Subject	Brief description of applicable sections	Applicable to subpart XXXX?	
			Using a control device	Not using a control device
		extension; when to submit to Federal vs. State authority; procedures for owners of more than 1 source		
§ 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.
				No. <i>See</i> 63.6017 for recordkeeping of (1) date, time, cause, and duration; (2) listing of affected source or equipment, whether the failure occurred during startup, shutdown, or malfunction, an estimate of the quantity of each regulated pollutant emitted over the standard and the method used to estimate the emissions; and (3) actions to minimize
§ 63.10(b)(2)(ii)	Recordkeeping of failures to meet a standard			

Citation	Subject	Brief description of applicable sections	Applicable to subpart XXXX?	
			Using a control device	Not using a control device
				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	Yes
§ 63.10(b)(2)(vii)-(ix)	Records	Measurements to demonstrate compliance with emission limitations; performance test, performance evaluation, and VE 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	Emission levels relative to the criterion for obtaining permission to use an alternative to the relative accuracy test	Yes	Yes.
§ 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)(1)-(14)	Records	Additional recordkeeping requirements for sources with continuous monitoring systems.	Yes	Yes.
§ 63.10(c)(15)	Use of SSM plan		No	No

Citation	Subject	Brief description of applicable sections	Applicable to subpart XXXX?	
			Using a control device	Not using a control device
§ 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	See § 63.6017(d) for malfunction reporting requirements	No	No.
§ 63.10(e)	Additional CMS Reports	Additional reporting requirements for sources with continuous monitoring systems	Yes	Yes.
§ 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.