6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA-HQ-OAR-2019-0392; FRL-5949.1-01-OAR]

RIN 2060-AT07

National Emission Standards for Hazardous Air Pollutants: Rubber Tire Manufacturing

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The U.S. Environmental Protection Agency (EPA) is proposing amendments to the National Emission Standards for Hazardous Air Pollutants 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 proposing 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: Comments must be received on or before **[INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. Under the Paperwork Reduction Act (PRA), comments on the information collection provisions are best assured of consideration if the Office of Management and Budget (OMB) receives a copy of your comments on or before **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

Public hearing: If anyone contacts us requesting a public hearing on or before **[INSERT DATE 5 CALENDAR DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, we will hold a virtual public hearing. See **SUPPLEMENTARY INFORMATION** for information on requesting and registering for a public hearing.

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

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

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

FOR FURTHER INFORMATION CONTACT: For questions about this proposed action, contact 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*.

SUPPLEMENTARY INFORMATION:

Participation in virtual public hearing.

To request a virtual public hearing, contact the public hearing team at (888) 372-8699 or by email at *SPPDpublichearing@epa.gov*. If requested, the hearing will be held via virtual platform on **[INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. The hearing will convene at 11:00 a.m. Eastern Time (ET) and will conclude at 3:00 p.m. ET. The EPA may close a session 15 minutes after the last pre-registered speaker has testified if there are no additional speakers. The EPA will announce further details at *https://www.epa.gov/stationary-sources-air-pollution/rubber-tire-manufacturing-national-emission-standards-hazardous*.

If a public hearing is requested, the EPA will begin pre-registering speakers for the hearing no later than 1 business day after a request has been received. To register to speak at the virtual hearing, please use the online registration form available at *https://www.epa.gov/stationary-sources-air-pollution/rubber-tire-manufacturing-national-emission-standards-hazardous* or contact the public hearing team at (888) 372-8699 or by email at *SPPDpublichearing@epa.gov*. The last day to pre-register to speak at the hearing will be **[INSERT DATE 12 CALENDAR DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. Prior to the hearing, the EPA will post a general agenda that will list

pre-registered speakers at: *https://www.epa.gov/stationary-sources-air-pollution/rubber-tire-manufacturing-national-emission-standards-hazardous.*

The EPA will make every effort to follow the schedule as closely as possible on the day of the hearing; however, please plan for the hearings to run either ahead of schedule or behind schedule.

Each commenter will have 4 minutes to provide oral testimony. The EPA encourages commenters to provide the EPA with a copy of their oral testimony electronically (via email) by emailing it to *smith.korbin@epa.gov*. The EPA also recommends submitting the text of your oral testimony as written comments to the rulemaking docket.

The EPA may ask clarifying questions during the oral presentations but will not respond to the presentations at that time. Written statements and supporting information submitted during the comment period will be considered with the same weight as oral testimony and supporting information presented at the public hearing.

Please note that any updates made to any aspect of the hearing will be posted online at *https://www.https://www.epa.gov/stationary-sources-air-pollution/rubber-tire-manufacturing-national-emission-standards-hazardous*. While the EPA expects the hearing to go forward as set forth above, please monitor our website or contact the public hearing team at (888) 372-8699 or by email at *SPPDpublichearing@epa.gov* to determine if there are any updates. The EPA does not intend to publish a document in the *Federal Register* announcing updates.

If you require the services of a translator or special accommodation such as audio description, please pre-register for the hearing with the public hearing team and describe your needs by **[INSERT DATE 7 CALENDAR DAYS AFTER DATE OF PUBLICATION IN**

THE FEDERAL REGISTER]. The EPA may not be able to arrange accommodations without advance notice.

Docket. The EPA has established a docket for this rulemaking under Docket ID No. EPA-HQ-OAR-2019-0392. All documents in the docket are listed in *https://www.regulations.gov/*. Although listed, some information is not publicly available, *e.g.*, Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy. With the exception of such material, publicly available docket materials are available electronically in *Regulations.gov*.

Instructions. Direct your comments to Docket ID No. EPA-HQ-OAR-2019-0392. The EPA's policy is that all comments received will be included in the public docket without change and may be made available online at *https://www.regulations.gov/*, including any personal information provided, unless the comment includes information claimed to be CBI or other information whose disclosure is restricted by statute. Do not submit electronically to *https://www.regulations.gov/* any information that you consider to be CBI or other information whose disclosure is restricted by statute. This type of information should be submitted as discussed in the *Submitting CBI* section of this document.

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

submissions, and general guidance on making effective comments, please visit *https://www.epa.gov/dockets/commenting-epa-dockets*.

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

Submitting CBI. Do not submit information containing CBI to the EPA through *https://www.regulations.gov/*. Clearly mark the part or all of the information that you claim to be CBI. For CBI information on any digital storage media that you mail to the EPA, note the docket ID, mark the outside of the digital storage media as CBI, and identify electronically within the digital storage media the specific information that is claimed as CBI. In addition to one complete version of the comments that includes information claimed as CBI, you must submit a copy of the comments that does not contain the information claimed as CBI directly to the public docket through the procedures outlined in the *Instructions* section of this document. If you submit any digital storage media that does not contain CBI, mark the outside of the digital storage media

clearly that it does not contain CBI and note the docket ID. Information not marked as CBI will be included in the public docket and the EPA's electronic public docket without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 Code of Federal Regulations (CFR) part 2.

Our preferred method to receive CBI is for it to be transmitted electronically using email attachments, File Transfer Protocol, or other online file sharing services (*e.g.*, Dropbox, OneDrive, Google Drive). Electronic submissions must be transmitted directly to the Office of Air Quality Planning and Standards (OAQPS) CBI Office at the email address *oaqpscbi@epa.gov*, and as described earlier in this preamble, should include clear CBI markings and note the docket ID. If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, and if you do not have your own file sharing service, please email *oaqpscbi@epa.gov* to request a file transfer link. If sending CBI information through the postal service, please send it to the following address: U.S. Environmental Protection Agency, Attention Docket ID No. EPA-HQ-OAR-2019-0392, OAQPS Document Control Officer (C404-02), OAQPS, 109 T.W. Alexander Drive, P.O. Box 12055, Research Triangle Park, North Carolina 27711. The mailed CBI material should be double wrapped and clearly marked. Any CBI markings should not show through the outer envelope.

Preamble acronyms and abbreviations. Throughout this preamble 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:

acfm	actual cubic feet per minute
BDL	below detection limit
BLDS	baghouse leak detection system
CAA	Clean Air Act

CBI	Confidential Business Information
CEDRI	compliance and emissions data reporting interface
CEMS	continuous emission monitoring system
CFR	Code of Federal Regulations
DLL	detection level limited
DRE	destruction and removal efficiency
dscfm	dry standard cubic feet per meter
EPA	Environmental Protection Agency
ERT	electronic reporting tool
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/hr	pounds per hour
lb/Mton	pounds per million tons
lb/ton	pounds per ton
MACT	maximum achievable control technology
Mg	megagram
mg/dscm	milligrams per dry standard cubic meter
NESHAP	national emission standards for hazardous air pollutants
ng/dscm	nanograms per dry standard cubic meter
NTTAA	National Technology Transfer and Advancement Act
O&M	operations and maintenance
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
ppmv	parts per million by volume
ppmvd	parts per million by volume dry
PRA	Paperwork Reduction Act
RDL	representative detection level
RFA	Regulatory Flexibility Act
RTO	regenerative thermal oxidizer
RTR	risk and technology review

scfm	standard cubic feet per minute
SSM	startup, shutdown, and malfunction
THC	total hydrocarbons
ton/hr	tons per hour
TOSHI	target organ-specific hazard index
tpy	tons per year
µg	microgram
UMRA	Unfunded Mandates Reform Act
UPL	upper predictive limit
VCS	voluntary consensus standards
VOC	volatile organic compound

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

I. General Information

A. Does this action apply to me?

Table 1 of this preamble lists the National Emission Standards for Hazardous Air Pollutants (NESHAP) and associated regulated industrial source categories that are the subject of this proposal. Table 1 is not intended to be exhaustive but rather provides a guide for readers regarding the entities that this proposed action is likely to affect. The proposed standards, once promulgated, will be directly applicable to the affected sources. Federal, State, local, and Tribal government entities would not be affected by this proposed action. As defined in the "Initial List of Categories of Sources Under Section 112(c)(1) of the Clean Air Act Amendments of 1990" (see 57 FR 31576; July 16, 1992) and *Documentation for Developing the Initial Source Category List, Final Report* (see EPA-450/3-91-030; July 1992), the "Tire Production" source category "is any facility engaged in producing passenger car and light duty truck tires, aircraft tires, and miscellaneous other tires." This source category has been referred to as the "Rubber Tire Manufacturing" source category since the EPA first proposed NESHAP requirements for this source category in 2000. (See 65 FR 62414; October 18, 2000.)

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

Source Category	NESHAP	NAICS code[1]
Rubber Tire Manufacturing	40 CFR part 63, subpart XXXX	326211, 326212, 314992

[1] *North American Industry Classification System.*

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

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

A memorandum showing the rule edits that would be necessary to incorporate the changes to 40 CFR part 63, subpart XXXX, proposed in this action is available in the docket (Docket ID No. EPA-HQ-OAR-2019-0392). Following signature by the EPA Administrator, the EPA also will post a copy of this document to *https://www.epa.gov/stationary-sources-air-pollution/rubber-tire-manufacturing-national-emission-standards-hazardous*.

II. Background

A. What is the statutory authority for this action?

This action proposes to amend the NESHAP for the Rubber Tire Manufacturing source category.

The statutory authority for this action is provided by section 112 of the CAA, as amended (42 U.S.C. 7401, *et seq.*). In the first stage of the CAA section 112 standard-setting process, the

EPA promulgates technology-based standards under CAA section 112(d) for categories of sources identified as emitting one or more of the HAP listed in CAA section 112(b). Sources of HAP emissions are either major sources or area sources, and CAA section 112 establishes different requirements for major source standards and area source standards. "Major sources" are those that emit or have the potential to emit 10 tons per year (tpy) or more of a single HAP or 25 tpy or more of any combination of HAP. All other sources are "area sources." For major sources, CAA section 112(d)(2) provides that the technology-based NESHAP must reflect the maximum degree of emission reductions of HAP achievable (after considering cost, energy requirements, and non-air quality health and environmental impacts). These standards are commonly referred to as MACT standards. CAA section 112(d)(3) also establishes a minimum control level for MACT standards, known as the MACT "floor." In certain instances, as provided in CAA section 112(h), the EPA may set work practice standards in lieu of numerical emission standards. The EPA must also consider control options that are more stringent than the floor. Standards more stringent than the floor are commonly referred to as "beyond-the-floor" standards.

CAA section 112(d)(6) requires the EPA to review standards promulgated under CAA section 112 and revise them "as necessary (taking into account developments in practices, processes, and control technologies)" no less often than every 8 years. While conducting this review, which we call the "technology review," the EPA is not required to recalculate the MACT floors that were established during earlier rulemakings. *Nat. Resources Def. Council (NRDC)* v. *EPA,* 529 F.3d 1077, 1084 (D.C. Cir. 2008); *Ass'n of Battery Recyclers, Inc.* v. *EPA,* 716 F.3d 667 (D.C. Cir. 2013). The EPA may consider cost in deciding whether to revise the standards pursuant to CAA section 112(d)(6).

CAA section 112(f) requires the EPA to determine whether promulgation of additional standards is needed to provide an ample margin of safety to protect public health or to prevent an adverse environmental effect. This review is known as the "residual risk review," and it must occur within 8 years after promulgation of the standards. When the EPA conducts the "technology review" together with the "residual risk review," the combined review is known as a "risk and technology review" (RTR).

The EPA initially promulgated the Rubber Tire Manufacturing NESHAP on July 9, 2002 (67 FR 45588). These standards are codified at 40 CFR part 63, Subpart XXXX.

In 2016, a coalition of environmental advocacy groups filed a lawsuit to compel the EPA to fulfill its statutory duty to conduct the CAA sections 112(d) and 112(f)(2) reviews of 13 NESHAPs, including the NESHAP for the Rubber Tire Manufacturing source category. *Blue Ridge Environmental Defense League* v. *McCarthy*, No. 1:16-cv-00364. As a result of that litigation, the EPA was required to complete its review of the Rubber Tire Manufacturing source category. The resulting residual RTR conducted for the Rubber Tire Manufacturing NESHAP was published in the *Federal Register* on July 24, 2020 (85 FR 44752) (2020 RTR).

In an April 2020 decision by the U.S. Court of Appeals for the District of Columbia Circuit, the court held that the EPA has an obligation to address unregulated HAP emissions from a source category when the Agency conducts the 8-year technology review required by CAA section 112(d)(6). *Louisiana Environmental Action Network* v. *EPA,* 955 F.3d, at 1098–99 (D.C. Cir. 2020) ("*LEAN* decision or *LEAN*"). The parties in the *Blue Ridge Environmental Defense League* case filed a joint motion for an extension of the deadline to allow the EPA to revise the 2020 final rule to comply with the *LEAN* opinion. The court granted the motion, setting a new deadline for this rule of October 27, 2022. *Blue Ridge Environmental Defense*

League, Order (Apr. 15, 2021). This deadline was subsequently extended to November 13, 2024. *Id.*, Order (Mar. 14, 2022).

In light of this litigation history, this proposed rule includes proposed new emission standards to address currently unregulated emissions of HAP from the rubber processing subcategory of Rubber Tire Manufacturing, pursuant to the *LEAN* decision and CAA sections 112(d)(2) and (d)(3).

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

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 facilities. The Rubber Tire Manufacturing source category is 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.

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

1. Rubber processing

There are currently no emission limits for the rubber processing subcategory.

2. Tire production

There are 2 equivalent standards for the tire production subcategory, and sources can choose to comply with either standard. The first standard, which is based on HAP materials purchased and used in the process, is an emission limit that requires that emissions of each HAP in table 16 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 16 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. For this option, emissions of HAP must not exceed 0.024 g/Mg (0.00005 lb/ton) of rubber used at the tire production affected source.

3. Tire cord production

There are 3 equivalent 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.

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. 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.

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

In the 2020 RTR, the EPA found that the risk associated with air emissions from rubber tire manufacturing was acceptable and that the current NESHAP provides an ample margin of safety to protect public health. The EPA determined that there were no developments in practices, processes, or control technologies that warranted revisions to the standards. 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 data collection activities were conducted to support this action?

To inform this current action, the EPA sent an information request pursuant to CAA section 114 (hereinafter "CAA section 114 information request") to all 5 parent companies that operate major source rubber tire facilities (15 major source facilities) within the United States. The CAA section 114 information request was conducted in 2 phases.

The first phase was sent to the parent companies in June 2022. It consisted of a questionnaire relating to rubber tire manufacturing processes. The questionnaire requested the following information from rubber tire facilities: facility information, including facility location and production background; process and control information from each mixer at the facility, including ingredients added and associated tire component for each combination of ingredients; available mixer emissions data for filterable particulate matter (fPM) HAP and VOC HAP; mixing schematics; and emission controls in use at the facility.

The second phase of the CAA section 114 information request sought emissions data on mixers through stack testing and required each company that received the request to submit the data and associated documentation via an EPA-developed response template. Draft emission factors developed by the U.S. Rubber Tire Manufacturers Association (USTMA) in 2008, and available in the Mixing 30800111 tab in the Emission Factors Tables excel file at *https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-fifth-edition-volume-i-chapter-4-evaporation-loss-0*, were reviewed and those compounds whose unit risks were assessed to provide risks near or above 1-in-1 million were selected for emissions testing. Those compounds included polycyclic aromatic hydrocarbons (PAHs)—aniline, dibenzofuran, hydroquinone, naphthalene, and *o*-toluidine. In addition, HAP metals, fPM, and total hydrocarbons (THC) were required to be collected using EPA test methods. The second phase of the CAA section 114 information request specified the emission testing procedures and methods to be followed, the process information to be collected during emission testing, how to report and submit the data to the EPA, and required contact information for the facility.

The measured HAP were reported in units of nanograms per dry standard cubic meter (ng/dscm) and rates in pounds per hour (lb/hr). The amount of rubber processed in units of tons per hour (ton/hr) was recorded, and the HAP data were also reported in units of lb/ton rubber processed. For HAP testing, one 3-run test was conducted for each mixer when organic HAP emissions were expected to be highest. THC measured in parts per million by volume dry (ppmvd) as propane were also collected during the second phase. For THC, data were also collected over a minimum 30-day period. Emissions of fPM and metal HAP were measured in units of milligrams per dry standard cubic meter (mg/dscm) and lb/hr, and data were collected per parent company for a minimum of six runs. The amount of rubber processed was recorded

and the fPM and metal HAP data were reported in the units of lb/ton rubber processed. For units and facilities, the testing runs were split between mixing silica-containing compounds and non-silica-containing compounds, due to an expected difference in emission profiles.

Other parameters measured during testing included: gas flow rate, measured in actual cubic feet per minute (acfm); oxygen (O_2) and carbon dioxide (CO_2), measured in dry percent volume; and moisture, measured in percent volume. The measured flow rates were converted to standard cubic feet per minute (scfm) and dry standard cubic feet per minute (dscfm). The THC measurements were converted to ppmvd.

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

In November of 2022, the USTMA voluntarily provided to the EPA test reports containing metals and particulate matter (PM) data. Of the test reports provided, only 1 report (pertaining to Mixer #5 and #7 of the Goodyear Danville, Virginia facility) contained the fPM and corresponding rubber production data needed to calculate a production-based emission limit (pounds of fPM per ton of rubber produced). As a result, we considered fPM data from Mixer #5 and #7 from the Goodyear Danville facility when setting the MACT standard for fPM.

III. Analytical Procedures and Decision Making

The current Rubber Tire Manufacturing NESHAP does not contain any emission limits for the rubber processing subcategory. For the HAP emitted from this subcategory, we are proposing to establish MACT emission limits pursuant to CAA section 112(d)(2) and 112(d)(3). The results and proposed decisions based on the analyses performed pursuant to CAA section 112(d)(2) and 112(d)(3) are presented in section IV of this preamble. We discuss these emissions in the following 3 groupings: THC, PAH, and PM & metal HAP.

A. Total Hydrocarbons

In response to the CAA section 114 information request, we received THC emissions data from the rubber processing subcategory that we did not have in 2002 when subpart XXXX was first promulgated nor when we conducted the 2020 RTR. The emissions data received indicate that THC is emitted from the rubber processing subcategory. Measured THC includes organic HAP, including but not limited to 2-butanone, acetophenone, cumene, hexane, isooctane, methylene chloride, phenol, toluene, and xylene, which are the compounds identified by the rubber manufacturing association (now USTMA) as being emitted during rubber processing in original testing to determine emission factors for the Rubber Tire Manufacturing NESHAP. Draft emission factors developed by the U.S. Rubber Tire Manufacturers Association (USTMA) in 2008 are available in the Mixing 30800111 tab in the Emission Factors Tables excel file at *https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-fifth-edition-volume-i-chapter-4-evaporation-loss-0*.

The THC emissions data also includes PAHs and other VOCs that are not HAP, such as ethanol. Because the THC measurements, by definition, include all relevant organic HAP (as well as non-HAP), and considering the significant difficulty of measuring numerous individual, speciated organic HAP compounds, we are proposing a MACT standard in accordance with CAA section 112(d)(2) and (d)(3) to limit THC emissions as a surrogate for organic HAP emissions, as described further in section IV.A.2 of this preamble. We solicit 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. As explained below, we consider the use of THC as a surrogate to be an appropriate alternative to testing mixers to identify all individual, speciated, organic HAP emitted during rubber processing, and

subsequently setting separate standards and monitoring requirements for each specific identified HAP.

B. Polycyclic Aromatic Hydrocarbons

PAHs are a group of over 100 different chemicals that are formed during the incomplete burning of coal, oil and gas, garbage, or other organic substances. PAHs are usually found as a mixture containing 2 or more of these compounds, such as soot. Additives to rubber provide characteristics important for tire performance; included in those additives is carbon black, which, depending on its origin, includes many PAHs. In response to the CAA section 114 information request, the EPA received PAH emissions data from the rubber processing subcategory that we did not have in 2002 when subpart XXXX was first promulgated nor in 2020 when we conducted the RTR. We used this new emissions data to develop the proposed MACT standards in accordance with CAA section 112(d)(2) and (d)(3). Specifically, we are proposing to use THC emissions as a surrogate for PAH and all organic HAP emissions, as discussed further in section IV.A.1 of this preamble.

C. Particulate Matter and Metal HAP

PM, specifically fPM, is a criteria pollutant created and emitted by many activities, including addition of carbon black to rubber while mixing. Filterable particulate matter contains a number of compounds including filterable metals, which are HAP. Baghouses, or fabric filters, employed at tire manufacturing facilities control and collect fPM and its inherent filterable metals, and, in some instances, the collected fPM is reintroduced into the mixers. In response to the CAA section 114 information request, the EPA received fPM and metal HAP emissions data from rubber processing that we did not have in 2002 when subpart XXXX was first promulgated nor in 2020 when we conducted the 2020 RTR. The emissions data received indicate that fPM

and metal HAP are emitted from rubber processing. Pursuant to this data and information, we are proposing a MACT standard in accordance with CAA section 112(d)(2) and (d)(3) to limit fPM emissions as a surrogate for metal HAP emissions, as described further in section IV.A.3 of this preamble.

IV. Analytical Results and Proposed Decisions

When developing MACT standards, the MACT "floor" for existing sources is calculated based on the average performance of the best performing sources in each category or subcategory. The MACT floor for new sources is based on the single best performing source. The MACT floor for new sources cannot be less stringent than the emissions performance that is achieved in practice by the best controlled similar source. To account for variability in the rubber processing operations and resulting emissions, we calculated the MACT floors using the 99 percent Upper Predictive Limit (UPL) approach with available stack test data.[1]

The UPL approach addresses emissions data from the best performing source or sources in setting MACT standards. The UPL also accounts for uncertainty associated with emission values in a dataset, which can be influenced by factors such as the number of samples available for developing MACT standards and the number of samples that will be collected to assess compliance with the emission limit. The UPL approach has been used in many environmental science applications. As explained in more detail in the memorandum, *Use of Upper Prediction Limit for Calculating MACT Floors,* available in the docket for this action, the EPA uses the UPL approach to reasonably estimate the emissions performance of the best performing source or sources to establish MACT floor standards.

[1] For more information regarding the general use of the UPL and why it is appropriate for calculating MACT floors, see the memorandum *Use of Upper Prediction Limit for Calculating MACT Floors* , which is available in the docket for this action.

In addition, under CAA section 112(d)(2), the EPA must examine more stringent "beyond-the-floor" regulatory options to determine the appropriate level for the MACT standards. Unlike the MACT floor minimum stringency requirements, the EPA must consider various impacts of the more stringent regulatory options in determining whether MACT standards are to reflect beyond-the-floor requirements. These impacts include the cost of achieving emission reductions beyond those achieved by the MACT floor, and any non-air quality health and environmental impacts and energy requirements that would result from imposing controls beyond the MACT floor. If the EPA concludes that the more stringent regulatory options are not reasonable, the EPA sets the standards at the MACT floor level. However, if the EPA concludes that impacts associated with beyond-the-floor levels of control are reasonable in light of the additional considerations, the EPA selects those levels as MACT.

Data submitted to the EPA in response to the CAA section 114 information request included air emissions test results from 12 rubber processing mixers at 6 facilities in the source category. The responses also included the types of materials being processed and the types of controls in use at mixers within the source category. The types of tires produced included passenger and light truck tires, off road tires, truck tires, earth moving tires, and aircraft tires, which are representative of the major types of tires produced by facilities in the Rubber Tire Manufacturing source category. Similarly, all of the tire component types of rubber compounds (inner liner, ply coat, belt coat, base/sidewall, apex, tread) were represented. The types of air emission controls included fPM controls (*e.g.*, fabric filter baghouses, cartridge dust collectors, and scrubbers) on all mixers and regenerative thermal oxidizers (RTOs) on 3 mixers at 3 facilities (in addition to the fPM controls).

Due to issues with availability of testing equipment and due to unforeseen issues with some of the emissions testing, not all data for the second phase of the CAA section 114 information request was timely submitted. The EPA received some data after the requested deadline, and some of the late-submitted data was not submitted in time for us to consider it for the proposal. The EPA anticipates incorporating these additional data, which includes data from 6 additional mixers (Continental Mt Vernon Mixer 19 and 21, Cooper Texarkana Mixer 1, 5, and 8, and Titan Tire Mixer 6 (just 30-day THC data)) when we develop the final rule. Three of these mixers (Continental Mt Vernon Mixer 19 and 21, Cooper Texarkana Mixer 8) operate RTOs, with the two mixers from Continental (Mixer 19 and 21) operating RTOs continuously for all batch types and Cooper (mixer 8) operating only when utilizing silica containing compounds. Although we have not had adequate time to evaluate the data from these mixers it is possible that the mixers (especially those that operate RTOs) may be among the top performing mixers tested, and thus be the new basis of the MACT floor calculations. Additionally, we anticipate that the addition of data for these 6 mixers will change the number of mixers used to calculate the MACT floors both for mixers using silica-containing compounds and for mixers using non-silica-containing compounds, thus resulting in a change of the proposed calculated MACT floor emission limits. All the CAA section 114 data, including the late-submitted data are available at https://www.epa.gov/stationary-sources-air-pollution/rubber-tire-manufacturing-national-emission-standards-hazardous. We are specifically requesting comment on the late-submitted data, which was not received in time for us to consider for proposal.

The CAA provides that MACT standards for existing sources may be no less stringent, but may be more stringent, than the average emission limitation achieved by the best performing 12 percent of the existing sources (or best performing 5 sources in the category or subcategory

where there are fewer than 30 sources) for which the Administrator has information. Since there are over 29 mixers for each of the silica-containing and non-silica-containing compounds, the MACT floors are calculated using the top 12 percent of data available. For this proposal, the EPA was able to use THC data for 11 mixers, and 12 percent of 11 mixers is 1.32 mixers. 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 purposes of determining the existing source MACT floor. As previously mentioned, we received late-submitted data for an additional 6 mixers that were not provided in time to consider for this proposal, but which we intend to consider for the final rule; when the data from the additional 6 mixers are included, the number of mixers identified as the best performers is expected to change from 2 to 3 (*i.e.*, 17 mixers, and 12 percent of 17 mixers is 2.04, which rounds up to 3 mixers). It is possible that the fPM and metal HAP MACT floor may change when including the new data. For additional information on the data collected in the CAA section 114 information request, please see the memorandum, *Maximum Achievable Control Technology (MACT) Analysis for the Rubber Processing Subcategory in the Rubber Tire Manufacturing Industry,* available in the docket for this action.

A. What are the results of our analyses of unregulated pollutants and how did we set MACT standards?

1. Polycyclic aromatic hydrocarbons

The EPA received data from five facilities for 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[2].

Many of the measured emissions were below the detection limit of the approved testing method, and others were detection level limited (DLL). Results are considered below detection limit (BDL) when every measured result for a compound in a test run is less than the laboratory's reported detection level. Data are considered DLL when the results in a given test run are a mixture of values less than and greater than the laboratory's reported detection level for that compound. All of the test results for hydroquinone and dibenzofuran were BDL. The test results for aniline, naphthalene, and *o*-toluidine included values that were above the detection level.

Reported levels of two PAH compounds—dibenzofuran and hydroquinone—are below current detection levels at each facility; therefore, the EPA is not proposing emission limits for dibenzofuran or hydroquinone. Moreover, because the World Health Organization recognizes 17 dioxin-like congeners[3] (7 polychlorinated dioxins and 10 polychlorinated dibenzofurans), the USTMA emission factor data contain no polychlorinated dioxins or polychlorinated dibenzofurans, and measured unpolychlorinated dibenzofuran values are BDL, the EPA is proposing that no emission limits for dioxin-like compounds are needed.

The remaining PAH species—aniline, naphthalene, and *o*-toluidine—are also organic HAP and hydrocarbons and so will be accounted for in THC measurements. Therefore, the EPA is not proposing a separate emission limit for PAHs and is instead proposing a limit for THC emissions. Total THC results include the effect of PAH, organic HAP, and VOC contained in exhaust streams and are well suited to serve as surrogates for these compounds. We are soliciting

[2] https://www.epa.gov/hw-sw846/sw-846-compendium

[3] The International Union of Pure and Applied Chemistry defines congeners as chemical substances "related to each other by origin, structure, or function."

comment on the use of THC as a surrogate in place of setting emission limits for PAHs, specifically.

A detailed description of the analysis of the PAH data is included in the memorandum, *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

We received long-term (30 days or longer) THC emissions test results from 5 facilities and a total of 11 mixers in response to the second phase of the CAA section 114 information request. From 5 mixers, we also received short-term THC data (*e.g.*, 3 to 11 runs lasting from 20 minutes to 3 hours per run). The following were monitored continuously for each mixer over a period of at least 30 days: uncorrected THC as propane measured in parts per million by volume (ppmv) using EPA Method 25A, oxygen volume (percent), moisture volume (percent), the quantity of rubber processed, and the start and stop timestamps for each batch of rubber processed. Additional data collected during these tests included the tire component processed and whether the processed tire component contained silica. Although all rubber mixing operations produce THC emissions, the addition of silica, which is used to create longer wearing and more fuel-efficient tread rubber compounds, reacts with other compounds during the mixing operation, leading to increased THC emissions during the mixing operation. Some facilities vent mixer exhaust to an RTO to reduce emissions when mixing silica-containing compounds, and 1 tested facility exhausts the mixing of all rubber compounds to an RTO.

Flow rate was measured during short-term testing (3 to 11 runs with 20- to 360-minute run duration) over several runs for five mixers. For the remaining six mixers for which 30-day THC monitoring was performed, flow rate data were not available. However, the six mixers

without flow-rate data are located at facilities that included at least one other mixer with available flow-rate data, and the flow rates were comparable among mixers at different facilities. The flow rate data were used to estimate the hourly mass emissions of THC from the THC concentration data. The THC concentration (ppmv) was corrected for each measurement to a dry basis (ppmvd) if a simultaneous moisture content measurement was available. If a moisture content measurement was not available, then the as-measured concentration (ppmv) was used. Moisture in the air was typically less than 2 percent, so adjusting the THC measurements using a default moisture content for those concentrations without moisture would not have a significant effect on emissions. The oxygen concentrations were always close to ambient levels, so the THC concentrations were not corrected to a standard oxygen concentration. The ppmvd (or ppmv) values were combined with the exhaust flow (dscfm) to calculate the lb/hr THC emission rates. If the THC measurements were made upstream from an RTO (*i.e.*, THC levels were measured before reaching the control device), then the emission rates were corrected to account for the measured destruction and removal efficiency (DRE) of the RTO. We are soliciting comment on this approach regarding the 30-day THC data.

The CAA section 114 information request required that, during the THC monitoring, facilities record the amount of rubber produced for silica-containing and non-silica-containing rubber, including the start and end times of each batch and whether the batch was silica-containing or non-silica containing. The information request sought data that was separated into silica-containing and non-silica-containing batches, due to differences in raw ingredients, resulting in different expected emission profiles when silica is added. The EPA expected different emission profiles between the two processes that use different raw materials, because the addition of silica leads to chemical reactions producing additional organics. The expected

increase in organics, is represented by higher levels of THC emissions, compared to non-silica batches. The data received in the CAA section 114 information request confirmed that THC emissions from silica batches are higher, resulting in the EPA determination that it is appropriate to set two separate standards for silica-containing and non-silica-containing batches. EPA seeks comment on its approach to propose two separate standards, based on those material-based processes exhibiting markedly different emission profiles.

The time data were used to match the THC and production data to calculate daily THC emissions and production in pounds per hour of THC and rubber for silica-containing and non-silica-containing rubber. The THC lb/hr emissions data were combined with the hourly production data to calculate the daily THC emission rate in terms of grams of THC emitted per megagram (g/Mg) of rubber produced for each mixer. The EPA calculated separate values for silica-containing and non-silica-containing rubber compounds.

For several mixers, responses to the CAA section 114 information request showed negative THC concentration values for significant periods of time. Individual THC values (*i.e.*, those recorded every minute) that were more negative than -5 ppmv were excluded from the dataset on the assumption that they represented faulty THC monitoring measurements and were not replaced. Individual THC measurements between 0 and -5 ppmv were kept in the data but were treated as a 0 ppmv value when calculating the daily average THC concentration in ppmv. We are soliciting comment on the proposed approach to addressing negative THC values.

From these THC values and production data for silica-containing and non-silica-containing rubber compounds, we calculated UPL values for each mixer for 7-day and 15-day rolling averages in terms of grams of THC emitted per megagram (g/Mg) of silica-containing or non-silica-containing rubber produced. Separate UPL values were calculated for silica-

containing and non-silica-containing compound production. Consistent with the approach we have developed to set MACT standards, we also determined the representative detection level (RDL) for THC values, as well as 3 times the RDL (3xRDL) for THC values and compared the 3xRDL values to the UPL values. When the 99-percent UPL values exceed 3xRDL values, the EPA uses the 99-percent UPL values for emission limit setting purposes, but when 3xRDL values exceed the 99-percent UPL values, the EPA uses 3xRDL values for emission limit setting purposes because the standard needs to be established at a level that sources can demonstrate with reasonable confidence.

The RDL process for THC values is determined at 6 percent of the high end of the measurement range appropriate for the best performing sources. This means that once the EPA determines the THC parts per million (ppm) values from the best performers, the EPA selects an appropriate instrument range, which may not necessarily be the range used in a particular instance by a particular source. For instance, if the best performers had THC ppm values from 1 to 67 ppm, then an appropriate instrument range would be 0 to 100 ppm, even though one or more of the best performers may have used an instrument with a range of 0 to 1000 ppm. Note that common instrument ranges include 0 to 10 and 0 to 100 ppm; furthermore, many instruments allow custom ranges, so ranges from 0 to 50 ppm and 0 to 500 ppm are available. Also note that dual range instruments are available in the commerce stream such that a primary (low) range and secondary (high) range can be used as needed for THC measurements.

The EPA considered 7– and 15-day rolling averages for both silica-containing and non-silica-containing compounds because they are more representative of emissions over time due to the variability across the mixing operation compared to a 1-day emission limit, considering that mixers may not mix both silica-containing and non-silica-containing materials in a single day.

The EPA is proposing a 15-day rolling average THC emission limit for mixers of both silica-containing and non-silica-containing compounds, rather than a 7-day rolling average THC emission limit, because emissions begin to normalize after 15 days with fewer significant deviations in the rolling-average THC values compared to a 7-day rolling average. We believe a 15-day rolling average THC emission limit better represents actual emissions from mixers and better encompasses variability due to batch type. In addition, separate 15-day rolling average THC emission limits are being proposed for mixers of silica-containing and non-silica-containing compounds due to differences in emissions profiles of the mixtures, which results in distinct THC ranges for these 2 types of compounds.

The EPA is proposing an emission limit for THC as a surrogate for organic HAP emitted from rubber mixers for silica-containing and non-silica-containing compounds. Total quantities of THC emitted from rubber processing invariably contain organic HAP. Because EPA Method 25A measures the carbon content of compounds, as opposed to mass of individual compounds, THC values are not speciated into specific compounds; rather, total THC results include the effect of, and therefore encompass the emissions of PAH, organic HAP, and VOC contained in exhaust streams. As such, THC serves as a form of categorical "umbrella," capturing various pollutants, and is therefore well suited to serve as a surrogate for these compounds. The destruction of THC, will indiscriminately result in the destruction of organic HAP. Therefore, and based on our understanding of the processes at these facilities, we believe that there is an expected relationship between controlling THC emissions and controlling organic HAP emissions.

Data gathered from responses to the CAA section 114 information request identified that the primary control device utilized for organic compound emissions control on rubber tire mixers

is an RTO, and destruction of THC will reliably indicate destruction of organic HAP. Because multiple organic HAP may be emitted from the mixers, it is more practical to monitor and measure THC emissions than to monitor and measure individual organic HAP. Furthermore, EPA is not aware of any evidence that there is any emission control device (other than an RTO), that would directly regulate organic HAP and be as, or more, effective at reducing organic HAP than simply regulating THC emissions themselves. As discussed above, it is expected that lower aggregate THC emissions are associated with lower total organic HAP emissions. It is also more practical to establish an emission limit for THC than for individual organic HAP because a THC emission limit accounts for variability in individual organic emission rates among different batches of rubber compound being mixed.

Based on responses to the CAA section 114 information request, the EPA determined that 97 mixers are located at major sources of rubber tire manufacturing. The EPA has THC data for 11 mixers, and 3 of these mixers are equipped with RTOs. For one mixer controlled by an RTO (Continental, Mount Vernon, Illinois, Mixer #22), the emissions are continuously routed to the RTO, and the THC emissions were measured at the outlet of the RTO for silica and non-silica emissions. For the other two mixers equipped with RTOs (Goodyear, Fayetteville, North Carolina, Mixer #8; and Goodyear, Danville, Virginia, Mixer #110), THC emissions are only routed to the RTOs when the mixers are running batches that contain silica, such as tread rubber. For these two mixers, the THC emissions were required to be measured at the outlet of the mixer, but before the RTO. This sampling location was selected because several mixers share the tested RTO; therefore, to get data representative of a single mixer, it was necessary to test at the outlet of the mixer prior to the combined stream at the RTO. The most recent measured DREs

provided by the facilities for these mixers were applied to determine the controlled THC emission rate in g/Mg rubber produced.

a. THC existing source standard for silica-containing compounds

The EPA determined the existing source MACT floor THC emission limit for silica-containing compounds based on the top two performing mixers. As discussed in section IV of this preamble, 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 information) when establishing the MACT floor level of control. Based on responses to the CAA section 114 information request, there are an estimated 56 mixers that use silica, and the MACT floor is calculated using the available data for the top performing 12 percent of mixers. The EPA has THC data for 11 mixers, and 12 percent of 11 mixers is 1.32 mixers. 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 purposes of determining the existing source MACT floor. The existing source MACT floor THC emission limit for silica-containing compounds is based on the average 15-day emission rate achieved by the two lowest emitting mixers. For these 2 mixers, the EPA included each mixer's daily average THC emission rate in a list, and then calculated 15-day rolling averages from the daily averages.

The proposed 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 controlled by RTOs, and represents the average performance of the 2 mixers.

Based on these data, we are proposing an existing source MACT floor THC limit for mixing silica-containing compounds of 9.4 g/Mg rubber produced (18,840 pounds per million tons (lb/Mton)), based on a 15-day rolling average. The maximum THC ppm value from the best performers is 385 ppm, so an appropriate instrument range would be 0 to 500 ppm, which leads to an RDL value of 30 ppm and a 3xRDL value of 90 ppm. When this 3xRDL value is combined with the average flow rate, percent removal, and production of the best performers, the result is 7.7 g/Mg rubber processed (15,430 lb/Mton). Since the 3xRDL value is less than the UPL value of 9.4 g/Mg rubber processed (18,840 lb/Mton), the UPL value is the basis for the proposed existing source MACT floor for mixing silica-containing compounds. We request comment on the proposed MACT floor THC emission limit for mixing silica-containing compounds.

b. THC beyond-the-floor analysis for existing source standard for silica-containing compounds

In addition to determining the MACT floor level of control, the EPA must examine more stringent "beyond-the-floor" regulatory options to determine MACT. 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 MACT standards are to reflect beyond-the-floor requirements. If the EPA concludes that the more stringent regulatory options are not reasonable, then the EPA selects the MACT floor as MACT. However, if the EPA concludes that the beyond-the-floor levels of control are reasonable in light of additional emissions reductions achieved, then the EPA selects those levels as MACT.

As part of our beyond-the-floor analysis, we identify control options or techniques that have the ability to achieve emission reductions beyond the MACT floor level of control. The EPA did not identify any new control options or techniques other than those which are currently used by existing facilities. However, the EPA performed an illustrative analysis, estimating costs

associated with requiring mixers to meet the current emission limit achieved by the single best performing mixer, as a potential beyond-the-floor option. The existing source MACT floor limit for mixing silica-containing compounds is based on the combined UPL for the 2 lowest emitting mixers controlled by an RTO. We evaluated the cost effectiveness of going beyond the floor to adopt the single lowest emitting mixer controlled by an RTO. The UPL for the single lowest emitting mixer controlled by an RTO and mixing silica-containing compounds is 9.4 g/Mg rubber produced (18,840 lb/Mton), based on a 15-day rolling average.

To comply with such a standard, we estimate that existing mixers that use silica-containing compounds would be required to use an RTO or similar control device. In order to achieve this standard, RTOs would likely need to have a higher DRE than that required for the existing source emission limit to achieve the level of emission reduction of the best performing source. To increase the DRE, we estimate that RTOs would need to increase their operating temperature. To represent this increase, we calculated the estimated cost of increasing the operating temperature of an RTO from 1400 degrees Fahrenheit (°F) to 1600 °F. The beyond-the-floor standard would achieve an additional 8.7 Mg per year (9.6 tpy) of THC reductions. The incremental cost-effectiveness, compared to the MACT floor level of control, would be about $35,000 per additional Mg ($32,000/ton) of THC reduced beyond the MACT floor level of control, due to the increased fuel consumption to operate the RTO at a higher temperature and achieve a higher DRE.

The EPA proposes to conclude that the cost of setting THC emission limits beyond the MACT floor for silica-containing compounds existing sources is not reasonable when considering cost. Therefore, the EPA is proposing to set THC emission limits for silica-

containing compounds existing sources at the MACT floor level of control. We request comment on our approach to considering beyond-the-floor controls.

For additional information see the memorandum, *Maximum Achievable Control Technology (MACT) Analysis for the Rubber Processing Subcategory in the Rubber Tire Manufacturing Industry*, available in the docket for this action.

c. THC existing source standard for non-silica-containing compounds

For the existing source THC MACT floor emission limit for non-silica-containing compounds, the EPA has THC data from 1 mixer that is controlled by an RTO for non-silica-containing compounds and from 10 other mixers that use non-silica-containing compounds and are not equipped with an RTO. As discussed in the beginning of section IV of this preamble, 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 information) when establishing the MACT floor level of control. There are an estimated 41 mixers that do not use silica, and the MACT floor is calculated using data from the top performing 12 percent of mixers for which we have data. The EPA has THC data for 11 mixers, and 12 percent of 11 mixers is 1.32 mixers. 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 purposes of determining the existing source MACT floor.

To determine the MACT floor emission limit for non-silica-containing compounds, the EPA combined the THC emissions data from the one mixer with an RTO controlling the mixing of non-silica-containing compounds (Continental, Mount Vernon, Illinois, Mixer #22) and the emissions data from the next best performing mixer (Goodyear, Lawton, Texas, Mixer #1). The

UPL was then calculated from the 15-day averages for the combined Goodyear and Continental mixers for non-silica-containing compounds and determined to be 16.4 g/Mg rubber produced (32,870 lb/Mton).

The maximum THC value from the best performers is 37 ppm, so an appropriate instrument range would be 0 to 50 ppm, which leads to an RDL value of 3 ppm and a 3xRDL value of 9 ppm. When this 3xRDL value is combined with the average flow rate and production of the best performers, the result is 45.4 g/Mg rubber processed (91,000 lb/Mton). Since the 3xRDL value is greater than the UPL value of 16.4 g/Mg rubber processed (32,870 lb/Mton), the 3xRDL value is the basis for the proposed existing source MACT floor for mixing non-silica-containing compounds. The proposed existing source MACT floor THC emission limit for mixing non-silica-containing compounds is 45.4 g/Mg rubber produced (91,000 lb/Mton), based on a 15-day rolling average. For additional information see the memorandum, *Maximum Achievable Control Technology (MACT) Analysis for the Rubber Processing Subcategory in the Rubber Tire Manufacturing Industry*, available in the docket for this action.

We request comment on our proposed approach to setting the existing source MACT floor THC emission limit for non-silica-containing compounds from mixers and the proposed MACT floor emission limit.

d. THC beyond-the-floor analysis for existing source standard for non-silica-containing compounds

As discussed earlier in this document, as part of our beyond-the-floor analysis, we identify control options or techniques that have the ability to achieve emission reductions beyond the MACT floor level of control. The EPA did not identify any new control options or techniques other than what is currently used. However, the EPA evaluated the beyond-the-floor option of requiring mixers to meet the current emission limit of the single best performing mixer.

The EPA has THC data from one facility that operates an RTO at all times (Continental, Mt. Vernon, Illinois, Mixer #22). As explained below, the 15-day UPL for mixing non-silica-containing compounds from that mixer, measured at the outlet of the RTO, is 13.4 g/Mg (26,860 lb/Mton), while its 3xRDL value is 17.2 g/Mg (34,470 lb/Mton), based on a 15-day rolling average.

Based on data collected in response to the CAA section 114 information request, of the mixers for which we have data, we expect that three mixers (25 percent) of the 12 mixers for which we have data, would be able to comply with the existing source UPL for non-silica-containing compounds without requiring an RTO or similar control device. We expect all mixers would need to operate an RTO or similar control device to achieve the level of emission reduction of the best performing source. We assume that if an additional 25 percent of mixers needed to install RTOs, as many as four additional RTOs would be needed (25 percent of 41 = 10.25, which would round up to 11 mixers; an average of 3 mixers per RTO would require at least 4 new RTOs for those 11 mixers) to meet a beyond-the-floor emission limit. The total annual cost of those four additional RTOs would be $2.2 million per year.

Additionally, in order to establish MACT standards that achieve emissions reductions beyond the MACT floor level of control, RTOs would likely need to have a higher DRE compared to the existing source emission limit to meet the lower new source emission limit. To increase the DRE, we estimate that RTOs would have to increase their operating temperature. To represent this increase, we calculated the estimated cost of increasing the operating temperature of an RTO from 1400 °F to 1600 °F. The annual cost difference to operate one RTO at 1600 degrees F compared to 1400 degrees F is estimated to be $16,000 per year, due to higher gas and electricity costs. The total annual cost for 14 RTOs would be $226,000 per year. The total

combined cost for new RTOs and increased RTO operating temperature would be $2.4 million per year.

The beyond-the-floor emission limit would achieve an additional 57.5 Mg (63.2 tpy) of THC reductions at an added cost of approximately $42,000/Mg of THC reduced ($38,000/ton), based on the installation of four additional RTOs and the increased fuel consumption to operate the RTOs at a higher temperature to achieve a higher DRE. For additional information see the memorandum, *Maximum Achievable Control Technology (MACT) Analysis for the Rubber Processing Subcategory in the Rubber Tire Manufacturing Industry*, available in the docket for this action.

We propose to conclude that setting THC emission limits beyond the MACT floor for non-silica-containing compounds existing sources is not reasonable when considering cost. Therefore, we are proposing to set THC emission limits for non-silica-containing compounds existing sources at the MACT floor level of control. We request comment on our approach to considering beyond-the-floor control.

e. THC new source standard

The THC MACT emission limits for new sources are based on the emission limitation achieved by the best controlled similar source. For both silica-containing and non-silica-containing compounds, the best controlled source were mixers that operate an RTO. One mixer (Continental, Mount Vernon, Illinois, Mixer #22), routes all emissions (silica and non-silica) to an RTO. This mixer serves as the best performing source for non-silica-containing compounds.

There are 3 mixers that operate silica-containing compounds that are controlled by RTOs for which the EPA has data (Goodyear, Fayetteville, North Carolina, Mixer #8, Continental, Mount Vernon, Illinois, Mixer #22, and Goodyear, Danville, Virginia, Mixer #110).

We calculated the 15-day UPL rolling average emission rate for the mixers controlled by RTOs that control the mixing of silica-containing compounds and the one mixer controlled by an RTO that also controls the mixing of non-silica-containing compounds.

f. THC new source standard for silica-containing compounds

For mixing silica-containing compounds, the proposed new source UPL is 2.1 grams of THC per megagram (g/Mg) of rubber produced (4,210 lb/Mton). The maximum THC value from the best performers is 37 ppm, so an appropriate instrument range would be 0 to 100 ppm, which leads to an RDL value of 6 ppm and a 3xRDL value of 18 ppm. When this 3xRDL value is combined with the average flow rate, percent removal, and production of the best performers, the result is 1.8 g/Mg rubber processed (3,610 lb/Mton). Since the 3xRDL value is less than the UPL value of 2.1 g/Mg rubber processed (4,210 lb/Mton), the UPL value is the basis for the proposed new source MACT floor for mixing silica-containing compounds. For additional information see the memorandum, *Maximum Achievable Control Technology (MACT) Analysis for the Rubber Processing Subcategory in the Rubber Tire Manufacturing Industry*, available in the docket for this action.

g. THC new source standard for non-silica-containing compounds

For mixing non-silica-containing compounds, the proposed new source UPL is 13.4 grams of THC per megagram (g/Mg) of rubber produced (26,860 lb/Mton). The maximum THC value from the best performers is 2 ppm, so an appropriate instrument range would be 0 to 10 ppm, which leads to an RDL value of 0.6 ppm and a 3xRDL value of 1.8 ppm. When this 3xRDL value is combined with the average flow rate and production of the best performers, the result is 17.2 g/Mg rubber processed (34,470 lb/Mton). Since the 3xRDL value is greater than the UPL value of 13.4 g/Mg rubber processed (26,860 lb/Mton), the 3xRDL value is the basis for the proposed new source MACT floor for mixing silica-containing compounds. For additional

information see the memorandum, *Maximum Achievable Control Technology (MACT) Analysis for the Rubber Processing Subcategory in the Rubber Tire Manufacturing Industry*, available in the docket for this action.

The proposed new and existing source THC MACT floor limits are summarized in table 3.

TABLE 3—PROPOSED THC MACT FLOOR LIMITS FOR NEW AND EXISTING RUBBER PROCESSING SOURCES

Rubber Compound Type	New Source MACT Floor Limit THC per rubber produced [primary THC instrument range, ppm]	Existing Source MACT Floor Limit THC per rubber produced [primary THC instrument range, ppm]
Silica-Containing	2.1 g/Mg (4,200 lb/Mton) [0-100]	9.4 g/Mg (18,800 lb/Mton) [0-500]
Non-Silica-Containing	17.2 g/Mg (34,400 lb/Mton) [0-10]	45.4 g/Mg (90,800 lb/Mton) [0-50]

A detailed description of the analysis of THC data, and the controls necessary to reduce THC emissions, is included in the document, *Maximum Achievable Control Technology (MACT) Analysis for the Rubber Processing Subcategory in the Rubber Tire Manufacturing Industry*, available in the docket for this action.

3. Particulate matter and metal HAP

Based on responses to the CAA section 114 information request, the EPA has fPM data from seven mixers and metal HAP data from five 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 is known to cause an increase in organic emissions, which does not impact PM; thus, a single emission standard was calculated for both classes of 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). As discussed in the beginning of section IV of this preamble, 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) 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. The EPA has fPM data from 7 mixers and metal HAP data for 5 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 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 one mixer for purposes of determining the existing source MACT floor for fPM and metal HAP.

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 fabric filter baghouse or similar control devices that control PM emissions.

The EPA calculated the MACT floor for fPM as 3,410 lb/Mton rubber produced (1.7 grams of fPM per megagram (g/Mg) of rubber produced) and a total metal HAP emission rate of 74.1 lb/Mton rubber produced (0.037 g/Mg). 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 the metal HAP are emitted as fPM, the EPA is proposing to use fPM as a surrogate for metal HAP and also 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 fabric filter 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 is proposing to require facilities to measure fPM using EPA Method 5 and the metal HAP will be measured using EPA Method 29. Facilities may choose either the emission limit for fPM or the alternative emission limit for total metal HAP to comply. We request comment on our proposal to use fPM as a surrogate for metal HAP emission limits at the MACT floor level and on our MACT floor calculations.

All existing mixers in the subcategory are already controlled by fabric filter baghouses to recover raw materials in the form of fPM and recycle them back to the process and to minimize nuisance emissions. The proposed emission limits for new and existing sources are based on the use of a fabric filter baghouse. As part of our beyond-the-floor analysis, we identify control options and techniques that have the ability to achieve an emission limit more stringent than the MACT floor. No control options or techniques were identified that would achieve HAP reductions greater than the best performing mixer. Because the proposed standards for new and existing sources are based on the best performing mixer, which is already controlled by a fabric filter baghouse, and no more effective controls than a fabric filter baghouse for fPM 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. We request comment on whether there are any beyond-the-

floor control options that the EPA should consider for controlling fPM emissions from the rubber processing subcategory.

The rubber processing operations and resulting emissions, the stack test data were used to calculate the fPM MACT floor limits based on the 99 percent UPL. Because the UPL value exceeds the 3xRDL value, the UPL value was used to establish the MACT floor. The fPM MACT floor limits were calculated based on concentration of fPM, in units of g/Mg (lb/Mton) of rubber produced. The new and existing source fPM and metal HAP MACT floor limits are summarized in table 4.

TABLE 4—PROPOSED FPM MACT FLOOR LIMITS AND TOTAL METAL HAP ALTERNATIVE FOR NEW AND EXISTING RUBBER PROCESSING SOURCES

Pollutant	New Source MACT Floor Limit (g/Mg rubber produced)	Existing Source MACT Floor Limit (g/Mg rubber produced)
fPM	1.70 (3,400 lb/Mton rubber produced)	1.70 (3,400 lb/Mton rubber produced)
Alternative: Total Metal HAP	0.037 (74 lb/Mton rubber produced)	0.037 (74 lb/Mton rubber produced)

A detailed description of the analysis of fPM and metal HAP, and the control devices to reduce fPM and metal HAP emissions, is included in the memorandum, *Maximum Achievable Control Technology (MACT) Analysis for the Rubber Processing Subcategory in the Rubber Tire Manufacturing Industry*," available in the docket for this action (Docket ID No. EPA-HQ-OAR-2019-0392).

B. What performance testing, monitoring, and recordkeeping and reporting are we proposing?

1. Performance testing

We are proposing, based on the new and existing source limits for rubber processing, that new sources demonstrate initial compliance within 180 days after startup, and existing sources demonstrate initial compliance within 3 years after the promulgation of the final rule. We are proposing that the initial performance tests to demonstrate compliance with the MACT standards of tables 3 and 4 of this preamble are conducted using the methods identified in table 5. Subsequent performance testing will be required every 5 years, using the methods identified in table 5.

TABLE 5—SUMMARY OF PROPOSED TEST METHODS

Pollutant or Parameter	EPA Method
Velocity/Volumetric Flow Rate	1 and 2
Oxygen and Carbon Dioxide	3B
Moisture	4
PM	5
Metal HAP	29

Additionally, consistent with the existing performance testing requirements of the Rubber Tire Manufacturing NESHAP (40 CFR 63.5992), owners or operators must operate and maintain their dual range THC continuous emission monitoring system (CEMS) in accordance with Performance Specification (PS) 8A and 40 CFR part 60, appendix F, procedure 2. Note that as an alternative to using a dual range THC CEMS, owners or operators may choose to use more than one THC CEMS.

2. Parameter monitoring

Under this proposal, sources would be required to maintain continuous compliance with the emission limits, which, for fPM or metals, would be demonstrated through control device

parameter monitoring coupled with periodic emissions testing described earlier in this preamble, and, for THC, via use of THC CEMS.

We are proposing to amend the parametric monitoring currently specified in the rule to add table 16 to the NESHAP to include parameter monitoring requirements for fPM control devices that we expect would be used to comply with the standards for fPM from rubber processing, as surrogates for metal HAP. Proposed additional requirements include the following:

For fPM controls, continuously operate a baghouse leak detection system (BLDS). We propose that owners or operators would install, operate, and maintain BLDS such that, among other things: concentrations of 1.0 milligram per dry standard cubic meter can be detected; sensors can provide output of relative fPM loadings; the BLDS has alarm systems that indicate when an increase in relative loading occurs; and the BLDS is installed an operated consistent with the guidance provided in "*Office of Air Quality Planning and Standards (OAQPS) Fabric Filter Bag Leak Detection Guidance*" (see EPA–454/R–98–015). These requirements are consistent with those for a BLDS in our Mineral Wool Production and Ferroalloys Production MACT standards.

3. Recordkeeping and reporting

Under this proposal, and consistent with existing requirements in the Rubber Tire Manufacturing NESHAP, a source owner or operator will be required to submit semiannual compliance summary reports electronically; these reports document both compliance with the requirements of the Rubber Tire Manufacturing NESHAP and any deviations from compliance with any of those requirements.

Owners and operators would be required to maintain the records specified by 40 CFR 63.10 and, in addition, would be required to maintain records of all inspection and monitoring data, in accordance with the Rubber Tire Manufacturing NESHAP (40 CFR 63.6011).

C. What other actions are we proposing?

We are proposing to update 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.

D. What compliance dates are we proposing, and what is the rationale for the proposed compliance dates?

Amendments to the Rubber Tire Manufacturing NESHAP proposed 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.[4] In determining what compliance period is as "expeditious as practicable," we consider the amount of time needed to plan and construct projects and change 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.

[4] *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)).

The EPA projects that many existing sources would need to install add-on controls to comply with the proposed emission limits, including new RTOs and new or upgraded fabric filter baghouses. These sources would require time to construct, conduct performance testing, and implement monitoring to comply with the revised provisions. Sources would also be required to install THC CEMS and conduct performance testing. Therefore, we are proposing to allow 3 years for existing sources to comply with the new emission standards.

All affected facilities would have to continue to meet the current provisions of 40 CFR part 63, subpart XXXX, until the applicable compliance date of the amended rule. The final action is not a "major rule" as defined by 5 U.S.C. 804(2), so the effective date of the final rule will be the promulgation date as specified in CAA section 112(d)(10).

For all affected sources that commence construction or reconstruction on or before **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, we are proposing that it is necessary to provide 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 **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, we are proposing that owners and operators comply with the provisions by the effective date of the final rule (or upon startup, whichever is later).

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

V. Summary of Cost, Environmental, and Economic Impacts

A. What are the affected sources?

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. One rubber tire major source is now closed but has a currently active title V permit.

B. What are the air quality impacts?

This action proposes first-time MACT floor emission standards for THC (as a surrogate for organic HAP), metal HAP, and fPM from rubber processing. These first-time MACT floor emission 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 proposed 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 909.6 Mg (996 tons) across the source category.

For fPM and metal HAP, we estimate that the replacement or upgrade of fabric filter baghouses will achieve annual reductions of fPM of 7.92 Mg (8.72 tons) or 0.14 Mg (318 pounds) of metal HAP 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 propose to conclude that the secondary impacts of this action are minimal, resulting from the operation of the control device, and would comprise CO_2 and fugitive methane (CH_4) emissions from the combustion of the natural gas required to maintain an RTO.

C. What are the cost impacts?

This action proposes MACT floor emission limits for new and existing sources in the Rubber Tire Manufacturing source category, specifically the rubber processing subcategory. Although the action contains proposed requirements for new sources, we are not aware of any new sources being constructed now or planned in the next 3 years, and, consequently, we did not estimate any cost impacts for new sources. We estimate the total annualized cost of the proposed rule to existing sources in the Rubber Tire Manufacturing source category to be $20.8 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 PM and metal HAP; and THC CEMS to monitor THC emissions. The capital and annual costs are summarized in table 6.

TABLE 6—SUMMARY OF CAPITAL AND ANNUAL COSTS

Cost Element	Total Capital Investments	Annualized Equipment and Operation and Maintenance Costs
RTOs (23 new)	$71.9 million	$12.7 million
Baghouses (39 new and 29 upgraded)	$13.7 million	$1.8 million
THC CEMS (97 new)	$14.0 million	$4.2 million
BLDS and PM Testing	$2.2 million	$1.4 million
Recordkeeping and Reporting Costs		$0.7 million
Totals	$101.8 million	$20.8 million

The estimated annual costs are based on operation and maintenance of the added control systems. A memorandum titled *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 proposed rule, as detailed in the memorandum, *Economic Impact and Small Business Analysis for the National Emission Standards for Hazardous Air Pollutants: Rubber Tire Manufacturing Amendments, Proposal,* which is available in the docket for this action (Docket ID No. EPA-HQ-OAR-2019-0392). The economic impacts of the proposed rule are calculated as the percentage of total annualized costs incurred by affected ultimate parent owners 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 proposed 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 proposed rule, and there will not be substantial impacts on the markets for affected products. The costs of the proposed 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 HAP or surrogates of HAP. Reduction of emissions of $PM_{2.5}$ will result in associated reduction in $PM_{2.5}$-related mortality and morbidity. Ecosystem effects related to deposition of sulfur will also be avoided.

F. What analysis of environmental justice did we conduct?

The EPA defines environmental justice as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies."[5] The EPA further defines fair treatment to mean that "no group of people should bear a disproportionate burden of environmental harms and risks, including those resulting from the negative environmental consequences of industrial, governmental, and commercial operations or programs and policies." In recognizing that communities with environmental justice concerns often bear an unequal burden of environmental harms and risks, the EPA continues to consider ways of protecting them from adverse public health and environmental effects of air pollution. For purposes of analyzing regulatory impacts, the EPA relies upon its June 2016 *Technical Guidance for Assessing Environmental Justice in Regulatory Analysis*,[6] 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 minority populations, low-income populations, and/or Indigenous peoples; (2) exacerbate existing disproportionate impacts on minority populations, low-income populations, and/or Indigenous peoples; or (3) present opportunity to address existing disproportionate impacts on minority populations, low-income populations, and/or Indigenous peoples through this action under development.

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[5] *https://www.epa.gov/environmentaljustice.*

[6] See *https://www.epa.gov/environmentaljustice/technical-guidance-assessing-environmental-justice-regulatory-analysis.*

The demographic analysis was conducted for the 2020 RTR. There are no known changes that would increase demographic risk, thus the EPA relied on the 2020 demographic analysis for this rulemaking. The methodology and the results of the demographic analysis are presented in a technical report, *Risk and Technology Review—Analysis of Demographic Factors for Populations Living Near Rubber Tire Manufacturing Source Category Operations*, made available in the 2020 action; see Docket ID No. EPA-HQ-OAR-2019-0392.

In the 2020 RTR, the EPA examined the potential for the 21 source category facilities to pose concerns to communities living in proximity to facilities. Specifically, the EPA analyzed how demographics and risk are distributed pre-control, enabling us to address the core questions that are posed in the EPA's 2016 *Technical Guidance for Assessing Environmental Justice in Regulatory Analysis*.

To examine the potential for environmental justice concerns, the EPA conducted a baseline proximity analysis and baseline risk-based analysis (*i.e.*, before implementation of any controls proposed by this action). The baseline proximity demographic analysis is an assessment of individual demographic groups in the total 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 proposed by this action. The results of the proximity analysis for populations living within 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.

Under the risk-based demographic analysis, the total population, population percentages, and population count for each demographic group for the entire U.S. population are shown in the column titled "Nationwide Average for Reference" in table 7 of this document. These national data are provided as a frame of reference to compare the results of the proximity analysis and the baseline risk-based analysis.

The results of the proximity analysis indicate 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 African American (24 percent) is double the national average (12 percent). The percent of people living below the poverty level and the percent of people over the age of 25 without a high school diploma are higher than the national averages. 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, which focuses on populations that have higher cancer risks, suggests that African Americans and people living below the poverty level are overrepresented at all cancer risk levels greater than 1-in-1 million. At all risk levels, in most cases, populations living around facilities where the percentage of the population below the poverty level is 1.5 to 2 times the national average also are above the national average for African American, Native American, Hispanic/Latino, or Other/Multiracial.

a. Baseline Proximity Analysis

The column titled "Baseline Proximity Analysis for Pop. Living within 5 km of Rubber Tire Manufacturing Facilities" in table 7 of this preamble shows the share and count of people for each of the demographic categories for the total population living within 5 km

(approximately 3.1 miles) of Rubber Tire Manufacturing facilities. These are the results of the baseline proximity analysis.

Approximately 516,000 people live within 5 km of the 21 Rubber Tire Manufacturing facilities assessed. The results of the proximity demographic analysis indicate that the percent of the population that is African American (24 percent, 124,000 people) is double the national average (12 percent). The percent of the people living below the poverty level (21 percent, 108,000 people) and 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 baseline proximity analysis indicates that the proportion of other demographic groups living within 10 km of Rubber Tire Manufacturing facilities is similar to or below the national average.

b. Baseline Risk-Based Demographics

The baseline risk-based demographic analysis results are shown in the furthest right column of table 7 of this preamble. This analysis focused on the populations living within 5 km (approximately 3.1 miles) of the Rubber Tire Manufacturing facilities with estimated cancer risks greater than or equal to 1-in-1 million resulting from source category emissions (table 7 of this preamble). The risk analysis 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 and expose no people to a chronic noncancer target organ-specific hazard index (TOSHI) greater than 1.

In baseline, there are 4,500 people living around 21 Rubber Tire Manufacturing facilities with a cancer risk greater than or equal to 1-in-1- million resulting from Rubber Tire Manufacturing source category emissions. The percent of the baseline population with estimated

cancer risks great than or equal to 1-in-1 million who are African American (25 percent, 1,000 people) is more than 2 times the average percentage of the national population that is African American (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 similar to that in the baseline proximity analysis (21 percent, 108,000 people).

TABLE 7—SOURCE CATEGORY: COMPARISON OF BASELINE DEMOGRAPHICS OF POPULATIONS WITH CANCER RISK GREATER THAN OR EQUAL TO 1-IN-1 MILLION RESULTING FROM RUBBER TIRE MANUFACTURING SOURCE CATEGORY EMISSIONS LIVING WITHIN 5 KM OF FACILITIES TO THE NATIONAL AVERAGE AND PROXIMITY DEMOGRAPHICS

Demographic Group	Nationwide Average for Reference (Million or "M")	Baseline Proximity Analysis for Pop. Living Within 5 km of Rubber Tire Manufacturing Facilities (Thousand or "K")	Cancer Risk ≥1-in-1 Million Within 5 km of Rubber Tire Manufacturing Facilities ("Baseline")
Total Population	328 M	515,800	4,524
	Race and Ethnicity by Percent		
White	60 percent [197M]	63 percent [325K]	66 percent [3K]
Minority	40 percent [131M]	37 percent [191K]	34 percent [2K]
Race and Ethnicity by Percent			
African American	12 percent [40M]	24 percent [124K]	25 percent [1K]
Native American	0.7 percent [2M]	0.7 percent [4K]	0 percent [0]
Hispanic or Latino (includes white and nonwhite)	19 percent [62M]	5 percent [26K]	3 percent [100]
Other and Multiracial	8 percent [27M]	8 percent [41K]	6 percent [300]
	Income by Percent		
Below Poverty Level	13 percent [44M]	21 percent [108K]	21 percent [1K]
Above Poverty Level	87 percent [284M]	79 percent [407K]	79 percent [4K]

	Education by Percent		
Over 25 and without a High School Diploma	12 percent [40M]	16 percent [83K]	12 percent [500]
Over 25 and with a High School Diploma	88 percent [288M]	84 percent [433K]	88 percent [4K]
	Linguistically Isolated by Percent		
Linguistically Isolated	5 percent [18M]	2 percent [10K]	1 percent [50]

Notes:
Nationwide population and demographic percentages are based on Census's 2015–2019 American Community Survey (ACS) 5-year block group averages. Total population count within 10 km is based on 2010 Decennial Census block population.

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 proposes first-time emissions standards for THC and filterable PM & metal HAP) for the rubber processing subcategory, which will further reduce emissions. Specifically, we estimate that the new emission limits will reduce THC and filterable PM emissions by 996 tpy and 8.72 tpy, 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.

VI. Request for Comments

We solicit comments on this proposed action. In addition to general comments on this proposed action, we are interested in additional data that may improve the analyses. We are specifically interested in receiving any information regarding developments in practices, processes, and control technologies that reduce HAP emissions for the rubber processing sub-category within the Rubber Tire Manufacturing source category.

VII. Submitting Data Corrections

The site-specific emissions data used in setting MACT standards for THC and fPM/Metal HAP as emitted from the Rubber Tire Manufacturing source category are available at *https://www.epa.gov/stationary-sources-air-pollution/rubber-tire-manufacturing-national-emission-standards-hazardous.*

If you believe that the data are not representative or are inaccurate, please identify the data in question, provide your reason for concern, and provide any "improved" data that you have, if available. When you submit data, we request that you provide documentation of the basis for the revised values to support your suggested changes. Your data should be prepared using our Electronic Reporting Tool (ERT), whose instructions are available at the internet address *https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert*, and your ERT files should be submitted to our Compliance and Emissions Data Reporting Interface (CEDRI). Be sure to include a complete copy of the relevant test reports as a portable document format (PDF) file as an attachment to your ERT file.

For information on how to submit comments, including the submittal of data corrections, refer to the instructions provided in the introduction of this preamble.

VIII. Statutory and Executive Order Reviews

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

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

This action is not a significant regulatory action as defined in Executive Order 12866, as amended by Executive Order 14094, and was therefore not subject to a requirement for Executive Order 12866 review.

B. Paperwork Reduction Act (PRA)

The information collection activities in this proposed rule have been submitted for approval to OMB under the PRA. The Information Collection Request (ICR) document that the EPA prepared has been assigned EPA ICR number 1982.06. You can find a copy of the ICR in the docket for this rule, and it is briefly summarized here.

We are proposing changes to the reporting and recordkeeping requirements for the Rubber Tire Manufacturing NESHAP by incorporating the reporting and recordkeeping requirements associated with the new and existing source MACT standards proposed for the rubber processing subcategory source.

Respondents: Rubber tire manufacturing facilities conducting rubber processing operations.

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

Estimated number of respondents: 12.

Frequency of response: Initially, semiannually, annually.

Estimated Annual burden: The average annual burden to industry over the next 3 years from the proposed recordkeeping and reporting requirements is estimated to be 2,121 hours per year. Burden is defined at 5 CFR 1320.3(b).

Estimated Annual cost: The annual recordkeeping and reporting costs for all facilities to comply with all of the requirements in the NESHAP is estimated to be $2.13 million per year. This includes labor costs of $258,000 per year and non-labor capital and O&M costs of $1.87 million per year for monitoring systems for the proposed 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.
Submit your comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden to the EPA using the docket identified at the beginning of this rule. The EPA will respond to any ICR-related comments in the final rule. You may also send your ICR-related comments to OMB's Office of Information and Regulatory Affairs using the interface at *https://www.reginfo.gov/public/do/PRAMain*. Find this particular information collection by selecting "Currently under Review – Open for Public Comments" or by using the search function. OMB must receive comments no later than **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

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 four 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 and Small Business Analysis for the National Emission Standards for Hazardous Air Pollutants: Rubber Tire Manufacturing Amendments, Proposal,"* 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

Executive Order 13045 directs Federal agencies to include an evaluation of the health and safety effects of the planned regulation on children in Federal health and safety standards and

explain why the regulation is preferable to potentially effective and reasonably feasible alternatives. 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, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. This action proposes emission standards for a currently unregulated emission source; therefore, the rule should result in health benefits to children by reducing the level of HAP emissions emitted from the rubber tire manufacturing process.

However, EPA's Policy on Children's Health applies to this action. Information on how the Policy was applied is available under "Children's Environmental Health" in the Supplementary Information section of this preamble.

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

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

I. National Technology Transfer and Advancement Act (NTTAA)

This action involves technical standards. Therefore, the EPA conducted searches for the Rubber Tire Manufacturing NESHAP through the Enhanced National Standards Systems Network Database managed by the American National Standards Institute. 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 voluntary consensus standards were identified as acceptable alternatives to EPA test methods for the purposes of this rule. The voluntary consensus standard ANSI/ASME PTC 19-10-1981- Part 10 (2010), "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 reapproved in 2016 to include better quality control than 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 $\mu g/Nm^3$].

The EPA proposes to incorporate by reference the VCS ANSI/ASME PTC 19.10-1981-Part 10 (2010), "Flue and Exhaust Gas Analyses." The manual procedures (but not instrumental procedures) of VCS ANSI/ASME PTC 19.10-1981—Part 10 may be used as an alternative to EPA Method 3B for measuring the oxygen or carbon dioxide content of the exhaust gas. This standard is acceptable as an alternative to EPA Method 3B and is available from ASME at *http://www.asme.org*; by mail at Three Park Avenue, New York, NY 10016-5990; or by telephone at (800) 843-2763. This method determines quantitatively the gaseous constituents of

exhausts resulting from stationary combustion sources. The gases covered in ANSI/ASME PTC 19.10–1981 are oxygen, carbon dioxide, carbon monoxide, nitrogen, sulfur dioxide, sulfur trioxide, nitric oxide, nitrogen dioxide, hydrogen sulfide, and hydrocarbons; however, the use in this rule is only applicable to oxygen and carbon dioxide.

The EPA proposes to incorporate 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 micrograms per normal cubic meter. 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).

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 2 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.

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 or environmental conditions that exist prior to this action do not result in disproportionate and adverse human health or environmental effects on communities with environmental justice concerns.

The EPA additionally identified and addressed environmental justice concerns in the demographic analysis conducted for the 2020 RTR. There are no known changes that would increase demographic risk, thus the EPA relied on the 2020 demographic analysis for this rulemaking. The methodology and the results of the demographic analysis are presented in section V.F. of this preamble, as well as in the technical report, *Risk and Technology Review—Analysis of Demographic Factors for Populations Living Near Rubber Tire Manufacturing Source Category Operations*, made available in the 2020 action; see Docket ID No. EPA-HQ-OAR-2019-0392.

The EPA believes that this action is likely to reduce existing adverse effects on communities with environmental justice concerns. The EPA is proposing MACT standards for THC as a surrogate for organic HAP and PM as a surrogate for metal HAP. EPA expects that facilities may have to implement control measures to reduce emissions to comply with the MACT standards and that HAP exposures for the communities with environmental justice concerns living near these facilities would decrease.

The EPA will additionally identify and address environmental justice concerns by conducting outreach after signature of this proposed rule. The EPA will reach out to tribes through a monthly policy call and with consultation letters. The EPA will address this rule during the monthly Environmental Justice call for communities burdened by disproportionate environmental impacts. The information supporting this Executive Order review is contained in section V.F of this preamble.

List of Subjects in 40 CFR Part 63

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

Michael S. Regan,

Administrator.