

**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Part 63**

[FRL-6874-9]

RIN 2060-AG29

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

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

**ACTION:** Proposed rule.

**SUMMARY:** This action proposes national emission standards for hazardous air pollutants (NESHAP) for new and existing sources at rubber tire manufacturing facilities. The EPA has identified rubber tire manufacturing facilities as major sources of hazardous air pollutants (HAP) emissions. These proposed standards would implement section 112(d) of the Clean Air Act (CAA) by requiring all major sources to meet HAP emission standards that reflect the application of maximum achievable control technology (MACT). The primary HAP that would be controlled with this action include toluene and hexane. These HAP are associated with a variety of adverse health effects including chronic health disorders (e.g., polyneuropathy, degenerative lesions of the nasal cavity) and acute health disorders (e.g., respiratory irritation, headaches).

**DATES:** *Comments.* Submit comments on or before December 18, 2000.

*Public Hearing.* If anyone contacts EPA requesting to speak at a public hearing by November 7, 2000, a public hearing will be held on November 17, 2000.

**ADDRESSES:** *Comments.* Written comments should be submitted (in duplicate if possible) to: Air and Radiation Docket and Information Center (6102), Attention: Docket No. A-97-14, Room M-1500, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460. The EPA requests that a separate copy also be sent to the contact person listed below (see **FOR FURTHER INFORMATION CONTACT**).

*Public Hearing.* If a public hearing is held, it will be held at 10 a.m. in the EPA's Office of Administration's Auditorium in Research Triangle Park,

North Carolina, or at an alternate site nearby.

*Docket.* Docket No. A-97-14 contains supporting information used in developing the standards. The docket is located at the U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460 in room M-1500, Waterside Mall (ground floor), and may be inspected from 8:30 a.m. to 5:30 p.m., Monday through Friday, excluding legal holidays.

**FOR FURTHER INFORMATION CONTACT:** For information concerning the proposed standards, contact Mr. Anthony Wayne, Policy Planning and Standards Group, Emission Standards Division (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, telephone number (919) 541-5439, electronic mail address wayne.tony@epa.gov.

**SUPPLEMENTARY INFORMATION:**

*Comments.* Comments and data may be submitted by electronic mail (e-mail) to: *a-and-r-docket@epa.gov*. Electronic comments must be submitted as an ASCII file to avoid the use of special characters and encryption problems and will also be accepted on disks in WordPerfect® version 5.1, 6.1, or Corel® 8 file format. All comments and data submitted in electronic form must note the docket number (Docket No. A-97-14). No confidential business information (CBI) should be submitted by e-mail. Electronic comments may be filed online at many Federal Depository Libraries.

Commenters wishing to submit proprietary information for consideration must clearly distinguish such information from other comments and clearly label it as CBI. Send submissions containing such proprietary information directly to the following address, and not to the public docket, to ensure that proprietary information is not inadvertently placed in the docket: Attention: OAQPS Document Control Officer, U.S. Environmental Protection Agency, 411 W. Chapel Hill Street, Room 740B, Durham, NC 27701. The EPA will disclose information identified as CBI only to the extent allowed by the procedures set forth in 40 CFR part 2. If no claim of confidentiality accompanies a submission when it is received by the EPA, the information may be made available to the public

without further notice to the commenter.

*Public Hearing.* Persons interested in presenting oral testimony or inquiring as to whether a hearing is to be held should contact Ms. Dorothy Apple, Policy Planning and Standards Group, Emission Standards Division (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, telephone number (919) 541-4487 at least 2 days in advance of the public hearing. Persons interested in attending the public hearing must also call Ms. Apple to verify the time, date, and location of the hearing. The public hearing will provide interested parties the opportunity to present data, views, or arguments concerning these proposed emission standards.

*Docket.* The docket is an organized and complete file of all the information considered by the EPA in the development of this rulemaking. The docket is a dynamic file because material is added throughout the rulemaking process. The docketing system is intended to allow members of the public and industries involved to readily identify and locate documents so that they can effectively participate in the rulemaking process. Along with the proposed and promulgated standards and their preambles, the contents of the docket will serve as the record in the case of judicial review. (See section 307(d)(7)(A) of the CAA.) The regulatory text and other materials related to this rulemaking are available for review in the docket or copies may be mailed on request from the Air Docket by calling (202) 260-7548. A reasonable fee may be charged for copying docket materials.

*Worldwide Web (WWW).* In addition to being available in the docket, an electronic copy of this proposed rule is also available on the WWW through the Technology Transfer Network (TTN). Following signature, a copy of the rule will be posted on the TTN's policy and guidance page for newly proposed or promulgated rules <http://www.epa.gov/ttn/oarpg>. The TTN provides information and technology exchange in various areas of air pollution control. If more information regarding the TTN is needed, call the TTN HELP line at (919) 541-5384.

*Regulated Entities.* Categories and entities potentially regulated by this action include:

Category	SIC #/NAICS <sup>b</sup>	Examples of regulated entities
Industry .....	3011 or 7534/ .....	Owners or operators of rubber tire manufacturing facilities.

<sup>a</sup> Standard Industrial Classification Code.

<sup>h</sup> North American Information Classification System.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. To determine whether your facility is regulated by this action, you should examine the applicability criteria in § 63.5981 of the proposed rule. If you have questions regarding the applicability of this action to a particular entity, consult the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section. *Outline.* The information in this preamble is organized as follows.

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- D. Executive Order 13132—Federalism
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- G. Paperwork Reduction Act
- H. National Technology Transfer and Advancement Act of 1995

#### I. Background

##### A. What Is the Source of Authority for Developing NESHAP?

Section 112 of the CAA requires us to list categories and subcategories of major sources and area sources of HAP and to establish NESHAP for the listed source categories and subcategories. Major sources of HAP are those stationary sources or groups of stationary sources that are located within a contiguous area and under common control that emit or have the potential to emit, considering controls, 10 ton/yr or more of any one HAP or 25 ton/yr or more of any combination of HAP.

##### B. What Criteria Are Used in Developing NESHAP?

Section 112 of the CAA requires that we establish NESHAP for the control of HAP from both new and existing major sources. The CAA requires the NESHAP to reflect the maximum degree of reduction in emissions of HAP that is achievable. This level of control is commonly referred to as the MACT.

The “MACT floor” is the minimum control level allowed for NESHAP and is defined under section 112(d)(3) of the CAA. In essence, the MACT floor ensures that the standard is set at a level that assures that all major sources achieve the level of control at least as stringent as that already achieved by the better-controlled and lower-emitting sources in each source category or subcategory. For new sources, the MACT floor cannot be less stringent than the emission control that is achieved in practice by the best-controlled similar source. The MACT standards for existing sources can be less stringent than standards for new sources, but they cannot be less stringent than the average emission limitation achieved by the best-performing 12 percent of existing sources in the category or subcategory (or the best-performing 5 sources for

categories or subcategories with fewer than 30 sources).

In developing MACT, we also consider control requirements that are more stringent than the floor. We may establish standards more stringent than the floor based on the consideration of cost of achieving the emissions reductions, any non-air quality health and environmental impacts, and energy requirements.

##### C. What Is the History of the Listing and Schedule for Regulation for the Rubber Tire Manufacturing Source Category?

###### 1. Establishing the Initial List and Schedule

Pursuant to the various specific listing requirements of section 112(c), we published a list of 174 categories of major and area sources referred to as the “initial list” that would be subject to emission standards. Following this listing, pursuant to requirements in section 112(e), on December 3, 1993 (58 FR 63941), we published a schedule for the promulgation of emission standards for each of the 174 listed source categories. The schedule for standards organized the source categories into groups of four separate timeframes with promulgation deadlines of November 15, 1992; November 15, 1994; November 15, 1997; or November 15, 2000.

“Tire Production” is one of the 174 categories of sources included on the initial list of source categories (63 FR 7155). The “Tire Production” category as defined in our report, “Documentation for Developing the Initial Source Category List,” EPA-450/3-91-0310, July 1992, includes any facility that is a major source and is engaged in producing passenger car and light duty truck tires, heavy duty truck tires, off-the-road tires, aircraft tires, and miscellaneous other tires. The listed “tire production” source category name was changed to “rubber tire manufacturing” to better reflect the industry that would be regulated under section 112(d)(2) based on information obtained during the MACT standard development process.

###### 2. Listing of the Tire Manufacturing Source Category as a Section 112(c)(6) HAP Source

Section 112(c)(6) of the CAA requires that sources that account for 90 percent of the emissions of seven specified HAP, including hexachlorobenzene (HCB) and polycyclic organic matter (POM), be subject to standards under section 112(d)(2) or (d)(4).

Based on previous information and testing, we estimated that tire production facilities emitted, in aggregate, approximately 395 kilograms (kg) (869 pounds (lbs)), or 29.5 percent, of the total national anthropogenic emissions of HCB per year. Tire production facilities were also estimated to emit, in aggregate, approximately 6,360 kg (14,000 lbs), or 0.03 percent, of the total national anthropogenic emissions of POM per year (63 FR 17838). On April 10, 1998 (63 FR 17838), we listed tire manufacturing as a source category for possible regulation to meet section 112(c)(6) requirements. Because tire manufacturing was already included on the initial major source category list developed to comply with section 112(c), the major source category list did not need to be modified to add it.

The Rubber Manufacturers Association (RMA) responded to the listing of tire manufacturing as a section 112(c)(6) emissions source for HCB by sending us a letter that argued that the tire manufacturing process does not have a chemical or physical mechanism to form HCB. The RMA explained that the analytical results that led us to list tire manufacturing as a source of HCB emissions were based on contaminated samples. In response to RMA's comment, we participated in the planning of, and were present at, tests that were conducted to evaluate RMA's claim. These tests were reconstructed based on the conditions of the original tests. Based on our participation and evaluation of these tests, we agree that the original HCB emission information was incorrect. Based on the limitations of the original tests, and the fact that no HCB was measured in the re-testing, we concluded that tire manufacturing is a highly unlikely source of HCB emissions. We are addressing the April 10, 1998 listing under section 112(c)(6) of tire manufacturing as an HCB emission source in a separate **Federal Register** action.

The POM emissions leading to tire manufacturing being listed as a section 112(c)(6) emission source are due to combustion associated with the use of steam boilers in the rubber tire manufacturing process. These boilers will be addressed under the Industrial, Commercial and Institutional Boiler and Process Heater NESHAP.

#### *D. What Are the Health Effects Associated With Rubber Tire Manufacturing?*

This proposed rule protects air quality and promotes the public health by reducing emissions of some of the HAP listed in section 112(b)(1) of the CAA.

The sources of HAP emissions in the rubber tire manufacturing industry are: (1) Rubber processing; (2) the use of cements, solvents and associated mixtures in the tire production; (3) tire cord production; and (4) puncture sealant application. The primary HAP emitted from the rubber tire production process and puncture sealant operations are toluene and hexane. Tire cord operations also emit these HAP, but the more significant emissions from tire cord production are formaldehyde, styrene, and methanol. Exposure to these compounds has been demonstrated to cause adverse health effects.

The HAP that would be controlled with this proposed rule are associated with a variety of adverse health effects. These adverse health effects include chronic health disorders (e.g., effects on the central nervous system and reproductive systems) and acute health disorders (e.g., irritation of eyes, throat, and mucous membranes, headache, nausea, and blurred vision). One of the HAP has been classified as a probable human carcinogen, and another has been classified as a possible human carcinogen.

#### 1. Toluene

Acute (short-term) inhalation exposure of humans to low or moderate levels of toluene has been associated with central nervous system (CNS) dysfunction and narcosis. Symptoms observed include fatigue, sleepiness, headaches, and nausea. Acute inhalation exposure to toluene has also been associated with cardiac arrhythmias (irregular heartbeats). Central nervous system depression and death have occurred at higher levels of exposure to toluene.

Chronic (long-term) inhalation exposure of humans to high levels of toluene has been associated with CNS depression. Symptoms observed include ataxia, tremors, cerebral atrophy, involuntary eye movements, and impaired speech, hearing, and vision. Chronic inhalation exposure of humans to toluene has also been associated with irritation of the upper respiratory tract, eye irritation, sore throat, nausea, skin conditions, dizziness, headaches, and difficulty with sleep. Chronic inhalation exposure to toluene has been associated with adverse effects on the liver, kidney, and lungs. Human studies of solvent vapor abusers indicate that there may be liver and kidney adverse effects resulting from chronic inhalation exposure to toluene, however, these studies are confounded by probable exposure to multiple solvents.

Children of pregnant women exposed to toluene or mixed solvent by inhalation have been observed to have CNS dysfunction, attention deficits, craniofacial and limb anomalies, and developmental and growth retardation.

#### 2. Hexane

Acute (short-term) inhalation exposure of humans to hexane is associated with mild CNS depression and irritation of the mucous membranes. Central nervous system effects include dizziness, giddiness, slight nausea, and headache. Acute exposure to hexane vapors may also cause dermatitis and irritation of the eyes and throat in humans.

Chronic (long-term) exposure of humans to hexane is associated with polyneuropathy in humans, with numbness in the extremities, muscular weakness, blurred vision, headache, and fatigue. Studies of animals chronically exposed to hexane by inhalation indicate neurotoxic effects, and mild inflammatory, erosive, and degenerative lesions in the olfactory and respiratory epithelium of the nasal cavity.

#### 3. Formaldehyde

Both acute (short-term) and chronic (long-term) exposure to formaldehyde irritates the eyes, nose, and throat, and may cause coughing, chest pains, and bronchitis. Reproductive effects, such as menstrual disorders and pregnancy problems, have been reported in female workers exposed to formaldehyde. Limited human studies have reported an association between formaldehyde exposure and lung and nasopharyngeal cancer. Animal inhalation studies have reported an increased incidence of nasal squamous cell cancer. We consider formaldehyde a probable human carcinogen (Group B2).

#### 4. Methanol

Acute (short-term) or chronic (long-term) exposure of humans to methanol by inhalation or ingestion may result in blurred vision, headache, dizziness, and nausea. No information is available on the reproductive, developmental, or carcinogenic effects of methanol in humans. Birth defects have been observed in the offspring of rats and mice exposed to methanol by inhalation. A methanol inhalation study using rhesus monkeys reported a decrease in the length of pregnancy and limited evidence of impaired learning ability in offspring. We have not classified methanol with respect to carcinogenicity.

## 5. Styrene

Acute (short-term) exposure to styrene in humans results in mucous membrane and eye irritation and gastrointestinal effects. Chronic (long-term) exposure to styrene in humans may cause effects on the CNS such as headache, fatigue, weakness, depression, and hearing loss. There is limited evidence that occupational exposure to styrene is associated with an increased frequency of spontaneous abortions and decreased frequency of births and an increased risk of leukemia and lymphoma. We consider this evidence to be inconclusive. The International Agency for Research on Cancer (IARC) has classified styrene as a Group 2B, possible human carcinogen. We have not classified styrene with respect to carcinogenicity.

### *E. Rubber Manufacturers Association Survey*

Based on surveys of its member and non-member companies, the RMA compiled and provided us two comprehensive data bases on HAP emissions and controls at rubber tire and/or tire component producers and tire cord producers.

In 1997, the RMA surveyed the 46 known tire production facilities in the U.S. Each facility received a questionnaire designed to gather information on the quantity of HAP emissions and controls within the industry. The questionnaire requested the following information for calendar year 1996:

- General facility information such as facility name, address, parent company;
- Manufacturing information such as number of employees, products made, production rates, whether HAP-containing cements and solvents were used, and facilitywide HAP emissions;
- Specific process information such as the individual processes used, the number of processes used, and general information on hooding, ducting and control devices;
- Detailed information on the HAP-containing material used and the processes where the material is used, the type of material, the density of the material, and the total HAP usage; and
- Information on air pollution control devices (APCD) including the process controlled, the type of APCD, exhaust flow rate, control efficiency, reason for installation of APCD, and economics associated with installation of APCD.

Of the 46 facilities receiving the questionnaire, 42 (91 percent) responded, including all the major tire production facilities and parent companies. The RMA estimated that 41

of these facilities produce more than 99 percent of the rubber tires produced in the U.S. Thirty-one of the 42 reporting facilities have indicated potential emissions which would qualify the facility as a major source pursuant to section 112 of the CAA. One of the 42 responding facilities does not manufacture rubber tires, but rather mixes rubber compound for distribution to noncontiguous manufacturing facilities. This facility is within the scope of the rubber tire manufacturing source category because it mixes rubber compound, which is a basic material for the manufacturing of specific components of rubber tires.

In 1998, the RMA surveyed the twelve known tire cord production facilities. Each of these facilities received a questionnaire designed to gather information on the quantity of HAP emissions and controls within the tire cord production industry. The questionnaire requested the following information for calendar year 1997:

- General facility information such as facility name, address, parent company, number of employees;
- Production information such as the quantity of fabric processed, whether the facility provides treated fabric to non-tire manufacturers, and whether the dip (coating solution) mixing equipment and/or storage tanks have HAP emission controls; and
- Specific process information including the individual processes used, the number of processes used, air pollution control equipment used and its efficiencies, ventilation rates, costs of air pollution control equipment, annual HAP emissions, and general chemical characteristics of coating solutions.

All twelve facilities responded. Eight of the facilities represent over 90 percent of the domestic tire cord produced in the U.S. At least four of these facilities appear to be major sources based on their reported potential emissions. The RMA survey responses include eleven facilities that reported they did not use or emit HAP associated with cements, solvents, or mixtures.

In order to standardize responses and minimize the collection burden, the RMA questionnaires provided guidance for respondents on how to report usage of HAP-containing compounds (*i.e.*, cements, solvents and associated mixtures used in the manufacture of rubber tires). In particular, to prevent respondents from having to estimate very small concentrations of HAP in their HAP-containing materials, the questionnaires focused on collecting information on the significant cements, solvents and associated mixtures (or

sealants) used at each facility. The guidance used in these questionnaires was based on the Superfund Amendments and Reauthorization Act (SARA) de minimis reporting threshold limitations for HAP-containing compounds. Thus, facilities reported the use of only those solvents, cements or related mixtures having HAP concentrations greater than these de minimis levels.

The SARA de minimis thresholds for reporting for each component in a mixture are 0.1 percent by weight for some selected hazardous chemicals (see table 16 of this proposed rule for a list of these chemicals) and 1.0 percent by weight for all other hazardous chemicals (§ 370.28(b) of 40 CFR part 370-Hazardous Chemical Reporting: Community Right-To-Know). This means if the weight percent of a HAP in a cement, solvent or related mixture used was 0.1 percent or less for selected HAP or 1.0 percent or less for all other HAP, it did not have to be accounted for in the emissions information reported in the RMA questionnaire. Thus, if the information reported in the data base indicates that a rubber tire manufacturing facility has "none or zero potential or actual HAP emissions," the facility may still have actual HAP emissions below the accountable quantities in the guidance. Based on this information, a rubber tire manufacturing facility reporting "none or zero potential or actual HAP emissions" from cements, solvents and associated mixtures could be using cements, solvents or related mixtures containing up to 0.1 percent of a "selected" HAP or 1.0 percent of all other HAP by mass.

Using this de minimis cutoff for accounting of the HAP at a facility, the companies compiled their annual emissions of HAP on the basis of HAP use for 1996. In the cases where they reported they did have HAP, they accounted for the HAP used in the processes (liquids) and then equated the use to 100 percent emissions of HAP.

## II. Summary of Proposed Rule

### *A. What Sources Are Included in the Category and Subcategories Regulated by This Rule?*

We have defined the rubber tire manufacturing source category to include: The construction of rubber tires and components integral to rubber tires, the production of tire cord, and the application of puncture sealant. Components of rubber tires include, but are not limited to, rubber compounds, sidewalls, tread, tire beads, and liners. Other components often associated with rubber tires but not integral to the tire,

such as wheels, valve stems, and inner tubes, are not included in our definition of components of rubber tires and would not be subject to the requirements proposed with today's action. For purposes of regulation, we have subcategorized this source category as follows: (1) Rubber processing, (2) tire production, (3) tire cord production, and (4) puncture sealant application.

*B. What Are the Primary Sources of Emissions and What Are the Emissions?*

The primary sources of HAP emissions in the rubber tire production industry are: (1) Rubber processing; (2) the use of cements, solvents and associated mixtures for tire production; (3) tire cord production; and (4) puncture sealant application. Other HAP emission sources include storage vessels that contain cements, solvents and associated mixtures, wastewater, and research and development areas.

1. Rubber Processing

Rubber processing consists of the combination and mixing of various ingredients used to make mixed rubber compound, and the processing of the mixed rubber compound into components that make up a tire. The primary source of organic HAP emissions from rubber processing is the initial rubber compounding (e.g., mixing, milling, and extrusion) prior to the application of solvents and cement. During the initial rubber compounding, process materials including natural rubber, synthetic rubber, plasticizers (e.g., oils and waxes), curatives (e.g., sulfur), antioxidants, and reinforcements (e.g., silica, carbon black and resins) are mixed together in large mixers, called "banburys," to make a particular rubber compound. Little or no HAP are added as raw materials to make the rubber compound.

The physical breakdown of synthetic and natural rubber polymers during mixing results in HAP emissions such as styrene and butadiene emissions. Heat generated by the physical nature of compound mixing and added curing agents also causes HAP emissions (e.g., carbon black and sulfur chemically combine to form carbon disulfide). Actual emissions from rubber compounding operations and other mechanical warming of the compounds (e.g., milling) are approximately 829 megagrams per year (Mg/yr) (914 tons/yr). This is approximately 46 percent of the total annual tire production emissions in 1996.

Six generic rubber compounds are used to manufacture rubber tires. A seventh compound is manufactured for use as bladder material in the curing

presses. Manufacturers modify these six compounds into proprietary rubber compounds to meet company-specified tire performance criteria and functions. We considered whether the use of different compounds, as well as differences in the sequence and nature of some of the intermediate processing steps, affects our overall analysis of the rubber processing operation. We concluded that, despite the use of these proprietary compounds, the overall steps taken to process the rubber and subsequently manufacture the tires are essentially the same across the industry.

2. Tire Production

Various cements, solvents and related mixtures are used in producing tires and tire components. Tire production processes where these cements and solvents may be used include extruding, tread stock cementing, side wall cementing, bead cementing, liner tack operations, tire building, curing press spray operations, and finishing paint operations. Cements and solvents are defined in § 63.6015 of the proposed rule as:

\* \* \* the collection of all organic chemicals, mixtures of chemicals, and compounds used in the production of rubber tires, including cements, solvents, and mixtures thereof as process aides in storage tanks, wastewater, and research and development areas. Cements and solvents include, but are not limited to, tread end cements, undertread cements, bead cements, tire building cements and solvents, green tire spray, blemish repair paints, side wall protective paints, marking inks, general cleaning solvents, and slab dip mixtures. Cements and solvents do not include coatings used in tire cord production, puncture sealant application, or chemicals and compounds that are not used in the tire production process such as restroom cleaning compounds, office supplies (e.g., dry-erase markers, correction fluid), architectural paint, or any substance to the extent it is used for personal, family, or household purposes, or is present in the same form and concentration as a product packaged for distribution and use by the general public.

We estimate that processes using cements and solvents account for 54 percent of the HAP emissions associated with the tire production industry, including emissions from storage vessels, wastewater, and research and development areas.

Cements and solvents are used for many purposes. For example, they may be used in "cement" application to generate a tacky surface for temporary binding of components prior to curing. In addition, they are often used for marking lines on rubber components for identification and component alignment at tire building. They may also be used

as constituents in green tire lubricant spray, blemish paint used in tire finishing, and coatings used in white wall protection.

The RMA rubber tire manufacturing survey for the 1996 calendar year estimated potential HAP emissions from the usage of cements and solvents and sealants to be 1,280 Mg/yr (1,411 tons/yr). One operation, tread-end cementing, accounted for approximately 30 percent of these emissions, 383 Mg/yr (422 tons/yr). The 1996 estimated emissions of HAP associated with cements, solvents and associated mixtures for other operations are presented in table 1 as follows:

TABLE 1.—ESTIMATED EMISSIONS FROM CEMENTS AND SOLVENTS USAGE IN TIRE PRODUCTION [1997 RMA tire production survey]

Operation	1996 estimated emissions, mg/yr (tons/yr)
Tread-end cementing .....	383 (422)
Undertread cement .....	187 (207)
Bead cementing .....	40 (44)
Green tire spray .....	191 (211)
Cement house .....	34 (37)
Tanks .....	5 (6)
Miscellaneous cement and solvent use.	439 (484)

3. Tire Cord Production

Tire cord is an integral sidewall component of rubber tires and is used primarily to provide resistance to sidewall flexing. In tire cord production, fibers or fabric are processed into a prepared fabric substrate which is subsequently used to prepare sidewall components. Tire cord production is a separate subcategory for purposes of this proposed rule because the process of tire cord production is significantly different from other tire component and tire manufacturing operations. The process of tire cord production also lends itself to separate and specific HAP controls.

Tire cord is produced by coating a continuous web of woven fabric by dipping it in an aqueous, latex-resin solution and then heating and drying the coated fabric. This is typically accomplished in a three-step production process. First, the fabric is dipped in the coating solution. Next, the coated fabric is typically heated and dried. Finally, the coated fabric is subjected to an

elevated temperature to heat set the fabric and polymerize the coating solution. The coating of the fabric ensures that a strong bond is formed between the tire cord fabric and a subsequently applied rubber compound in calendaring.

Tire cord production is an integral part of tire manufacturing because tire cord is a major sub-component of the sidewall component of the tire manufacturing process. Tire cord production may be, but is not typically, located at a tire production facility. Tire cord is manufactured at twelve facilities in the U.S.

Organic HAP emissions from tire cord production result from the coating solutions used to prepare the fabric. The coating solution used is an aqueous, latex-resin adhesive that typically consists of a mixture of resorcinol, formaldehyde, and latex. Actual HAP emissions associated with the tire cord production are estimated to be about 91 Mg/yr (100 tons/yr). However, depending on the formula of the coating solution and the type of fabric, HAP emissions for individual products can be minimal or even zero. The coating solution formulations used at each tire cord production facility are proprietary and have been developed to meet a company's specific requirements for the tires in which the tire cord will be used. In addition to limiting the amount of HAP in coatings, sources may control organic HAP emissions from tire cord production by using various add-on pollution control devices (e.g., thermal oxidizers, carbon adsorbers).

#### 4. Puncture Sealant Application

Emissions from puncture sealant application occur from the application of a mixture containing solvent constituents, rubber, and process oil to the inner liner of a completely manufactured tire. The puncture sealant mixture contains organic HAP that volatilize during the application process.

The 1997 RMA survey included one puncture sealant application process. The survey estimated HAP emissions from this puncture sealant application process to be approximately 15 Mg/yr (17 tons/yr). The main HAP emitted is hexane.

The application of the solvent mixture at the one facility occurs in a spray booth which is reported to meet the requirements of our definition of a permanent total enclosure (PTE) (40 CFR part 52, appendix A, Method 204). Approximately 56 percent of the applied puncture sealant mixture volatile composition is volatilized in the application booth and captured and sent

to the control device. The remaining 44 percent of the HAP and non-HAP volatile material remains in the tire. In order for the sealant to work properly over the life of the tire, nearly all of the volatile compound containing material remaining (89 percent or more of the remaining 44 percent) must be retained in the applied puncture sealant mixture. The sealant's purpose is to seal any future hole which might occur in the tread when an object penetrates the tire.

#### 5. Storage, Transfer and Mixing Vessels Containing Cements and Solvents

Storage, transfer and mixing vessels containing cements and solvents and coatings are a potential source of HAP emissions at rubber tire manufacturing facilities. Separate facilities are used (except in bulk chemical storage) by each of the affected categories and subcategories. The majority of these emissions come from the cement house at tire production facilities (the principle distribution center within a facility), from mixing and storage areas within the tire cord production process areas, and at the point of use for tire production processes. Organic HAP emissions result from evaporative losses from cement and solvent storage and transfer and mixing operations.

#### 6. Wastewater

Wastewater is another potential source of HAP emissions in the rubber tire manufacturing process. The HAP emissions from wastewater are generated during cooling and washing of various rubber tire manufacturing equipment and components.

#### 7. Research and Development Areas

Most tire manufacturing facilities have research and development areas, including laboratories, for the purpose of testing new manufacturing protocols or developing new and improved tire technology. These research and development areas may or may not be at the manufacturing site and may have pilot plants sized to do laboratory scale research. Research and development facilities would be covered by the emission limits in the proposed standards. Research and development areas may use and emit HAP from cements and solvents.

Typically, research and development operations resemble laboratories where formulations of rubber compounds and cements and solvents are analyzed for future applications. The research facilities may also use existing plant equipment to test these newly developed formulations. Typically, several tires (as many as 100) may be produced to evaluate various desired

qualities of the compound. The HAP emissions associated with research and development are a relatively small source in comparison to the HAP emissions from other sources at the facility. The majority of these emissions are produced during experimental tire building using the existing equipment normally used for production.

#### C. What Are the Affected Sources?

An affected source is a stationary source, group of stationary sources, or part of a stationary source regulated by the NESHAP. Within a source category or subcategory, we select the emission sources (emission points or groupings of emission points) that will make up the affected source. Each of these affected sources emits or has the potential to emit one or more of the HAP listed in section 112 of the CAA.

For purposes of this proposed rule, we have divided the rubber tire manufacturing source category into four source subcategories: (1) Rubber processing, (2) tire production, (3) tire cord production, and (4) puncture sealant application.

##### 1. Rubber Processing

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

##### 2. Tire Production

The affected source for the tire production source subcategory is the collection of all processes that use cements and solvents located at any rubber tire manufacturing facility. The affected source would include, but is not limited to: Storage and mixing vessels and the transfer equipment containing cements and/or solvents; wastewater handling and treatment operations; research and development operations; tread end cement operations; tire painting operations; ink and finish operations; undertread cement operations; general plant cleanup operations; bead cementing operations; tire building operations; green tire spray operations; extruding to the extent cements and solvents are used; cement house operations; marking operations; calendar operations to the extent solvents are used; tire stripping operations; tire repair operations; slab dip operations; other tire building operations to the extent that cements and solvents are used; balance pad operations; component production and

tire manufacturing machinery and plant cleaning; and other cement or solvent application operations in the tire manufacturing process. The tire production affected source does not include processes included in the rubber processing, the tire cord production, or the puncture sealant application source subcategories.

3. Tire Cord Production

The affected source for the tire cord production source subcategory is the collection of all processes engaged in the production of tire cord. The affected source includes, but is not limited to: dipping operations, drying ovens, heat-set ovens, bulk storage tanks, mixing facilities, general facility vents, air pollution control devices and warehouse storage vents.

4. Puncture Sealant Application

The affected source for the puncture sealant application source subcategory is the puncture sealant application booth operation used to apply puncture sealant to finished tires. For purposes of the proposed rule, we have defined puncture sealant to mean the mixture of solvent constituents, rubber, and process oil that is applied to the inner liner of a finished tire for the purpose of sealing a future hole in the tire.

D. What Are the Emission Limits, Operating Limits, and Other Standards?

1. Tire Production

For the tire production affected source, we are proposing to allow sources to choose one of two emission limitation options: (1) existing and new affected sources may choose to limit HAP emissions from the use of cements and solvents to no more than 1,000 grams per megagram of cement or solvent (2 pounds per ton) for each HAP listed in table 16 of the proposed rule, and 10,000 grams per megagram of cement or solvent (20 pounds per ton) for each HAP not listed in table 16; or, (2) existing and new affected sources may limit their total HAP emissions on a mass of total HAP per mass of rubber processed into tires. Specifically, if you own or operate an existing or new facility producing rubber tires, you must reduce the affected source emissions of HAP arising from cementing or solvent

application to less than 0.024 grams per megagram (0.00005 pounds per ton) of rubber processed into tires.

The tire production standard options (options 1 and 2) are emission limitations. The emission limitation in option 1 is based on the emissions projected if sources used only cements and solvents containing 0.1 mass percent of selected HAP (see table 16 in the proposed rule) and 1.0 mass percent for all other HAP. The projected emissions assume 100 percent of these HAP are emitted. The proposed rule provides three alternatives for showing compliance with the limitations in option 1:

- Use only cements and solvents that as purchased contain no more HAP than allowed by the specified emission limitations;
- Use cements and solvents such that the monthly average HAP emissions meet the specified emission limitations; or
- Use control devices to reduce HAP emissions such that the monthly average HAP emissions meet the specified emission limitations.

Option 2 provides the emission limitation corresponding to the emissions of total pounds of HAP (mass emitted) on a mass of rubber processed into tires (tons) over a monthly period. In other words, the emission standard is a monthly emission factor limitation associated with the production of tires. For each monthly period under option 2, you would be required to meet an emission limitation of 0.024 grams per megagram (0.00005 pounds per ton) of rubber processed into tires. Whereas option 1 limits individual HAP content (and therefore emissions), option 2 would limit total HAP content.

There are two compliance alternatives for meeting option 2, listed as follows:

- Use cements and solvents such that the monthly average HAP emissions meet the specified emissions limitations; or
- Use control devices to reduce HAP emissions such that the monthly average HAP emissions meet the specified emission limitations.

2. Tire Cord Production

For the tire cord production source subcategory, we are proposing that

existing major sources meet a 280 grams per megagram fabric processed (0.56 pounds per ton fabric processed) HAP emission limit. For new major sources, we are proposing a HAP emission limit of 220 grams per megagram fabric processed (0.43 pounds per ton fabric processed).

In order to meet the proposed emission limitations, we are proposing that you meet one of the following two compliance alternatives: (1) Use coating solutions such that the monthly average HAP emissions do not exceed the applicable emission limit; or (2) use a control device to reduce HAP emissions such that the monthly average HAP emissions do not exceed the applicable emission limitation.

3. Puncture Sealant Application

For existing sources in the puncture sealant application source subcategory, we are proposing that you reduce the total organic HAP emissions from all puncture sealant application booths by at least 86 percent by weight. For new sources, you would have to reduce emissions by 95 percent by weight. In addition, you would have to meet specified control and capture device operating limits to ensure the continued proper operation of the equipment.

You would have two compliance alternatives in meeting the proposed standards. The first is an overall control efficiency alternative. To comply with this alternative, you would use an emissions capture system and control device and demonstrate that the application booth emissions meet the specified emission limitations and operating limits. The second alternative is based on use of a permanent total enclosure. To comply with this alternative, you would use a permanent total enclosure that satisfies the Method 204 criteria in 40 CFR part 51 and demonstrate that the control device meets the specified operating limits and reduces at least 86 percent of emissions for existing sources and 95 percent of emissions for new sources.

Table 2 summarizes the emission limitations for the tire production, tire cord production, and puncture sealant application affected sources.

TABLE 2.—EMISSION LIMITATIONS FOR AFFECTED SOURCES

Affected sources	Pollutant	Limit <sup>a</sup>
Existing, new or reconstructed tire production facility—Option 1.	Selected organic HAP (See Table 16 of proposed rule).	Emissions must not exceed 1,000 grams per megagram (2 pounds per ton) of the total cements and solvents.

TABLE 2.—EMISSION LIMITATIONS FOR AFFECTED SOURCES—Continued

Affected sources	Pollutant	Limit <sup>a</sup>
Existing, new or reconstructed tire production facility—Option 2.	All other organic HAP .....	Emissions must not exceed 10,000 grams per megagram (20 pounds per ton) of the total cements and solvents.
	Total organic HAP .....	Emissions must not exceed 0.024 grams per megagram (0.00005 pounds per ton) of rubber processed into tires.
Existing tire cord production facility .....	Organic HAP .....	Emissions must not exceed 280 grams per megagram (0.56 pounds per ton) of fabric processed.
New or reconstructed tire cord production .....	Organic HAP .....	Emissions must not exceed 220 grams per megagram (0.43 pounds per ton) of fabric processed.
New or reconstructed puncture sealant application booth.	Organic HAP .....	Reduce booth emissions by at least 95 percent.
Existing puncture sealant application booth .....	Organic HAP .....	Reduce booth emissions by at least 86 percent.

<sup>a</sup>Emission limits are expressed as monthly average emission limits except for: (1) Tire production affected sources that comply by demonstrating that the cements and solvents that they use comply with the limit for every purchase; and (2) puncture sealant application affected sources must meet the emission reduction limit on a 3-hour average.

### E. What Are the Testing and Initial Compliance Requirements?

Under the proposed standards, we require that you demonstrate initial compliance with each emission limitation standard that applies to you not later than 3 years after the date of publication of the final rule in the **Federal Register** for existing sources, and no later than 180 days from the date of initial startup of a new or reconstructed source. Existing area sources that subsequently become major sources have 3 years from the date they become a major source to come into compliance.

#### 1. Tire Production

If you have not purchased any materials (cements, solvents, mixtures, etc.) containing individual HAP above the levels prescribed in the HAP constituent emission limitations for tire production, you would be required to demonstrate initial compliance by submitting a Notification of Compliance Status report with a statement certifying that all cements and solvents purchased for use in the production of rubber tires meet the composition requirements specified in the proposed rule. Although you are not required to submit records to substantiate your statement of compliance, you would be required to maintain records that demonstrate that you are in compliance with the composition requirements of the option 1 emission limitation.

Alternatively, if you have cements and solvents containing HAP above the levels prescribed in the emission limitations for tire production but meet the composition requirements specified in the proposed rule when you also consider cements and solvents used that

do not contain HAP, you would be required to demonstrate compliance differently. You would be required to demonstrate initial compliance by submitting the Notification of Compliance Status report with a statement certifying that all cements and solvents as applied in the production of rubber tires meet the composition requirements specified in the proposed rule for the monthly (30-consecutive-day) period immediately preceding the compliance date of this proposed rule. This certification must include a list of all cements and solvents and mixtures thereof purchased for use for tire production, their quantities, and their individual HAP constituent compositions for the monthly period.

If you use materials containing HAP above the levels prescribed in the emission limitations for tire production, and you use one or more add-on control devices to comply with the proposed rule, you would be required to demonstrate initial compliance by submitting the Notification of Compliance Status report that includes the information outlined in the preceding paragraph, along with a statement certifying that your capture systems and control devices are being operated within the parameter values established during the required performance test(s) for demonstrating compliance with the proposed rule for the 30-consecutive-day period immediately preceding the compliance date. This certification would be required to be accompanied with the performance test report(s) and parameter values established during the performance test(s) for continuous compliance monitoring.

If you choose to comply with the emission limitation specified in option 2, you would be required to demonstrate initial compliance by submitting the Notification of Compliance Status report with a statement certifying that the mass of HAP used per mass of rubber processed into tires over the monthly (30-consecutive operating day) period preceding the compliance date did not exceed the limits specified. Your records to demonstrate this certification would, at a minimum, include a description of the measures taken (e.g., purchase of low-HAP-content solvents or cements), the total amount of cements and solvents used, the amount of HAP-containing solvents and cements used, and the operational status of any control equipment used in achieving some reduction in the HAP emissions.

Depending on the option and compliance alternative selected, you would be required to perform the following tests to support your demonstrations of compliance:

- Determine the HAP quantity and concentration of your cements and solvents or mixtures thereof using EPA Method 311 or other methods approved by the Administrator. If there is a disagreement between such information and Method 311 results, then the Method 311 results will take precedence.

- Perform a material balance on your cements and solvents used that accounts for all HAP emissions at the affected source. Determine the percent by weight of the individual constituents of the total cements and solvents used. Emission points that must be included in the material balance include, but are not be limited to, bulk storage tanks, mixing facilities, points of use in tire



manufacturing, general facility vents, air pollution control devices, wastewater fugitive emissions, research and development area vents, and warehouse storage vents.

- If option 2 is used, determine the quantity of rubber processed into tires by accounting for the total mass of rubber that enters the tire component production processes.

- For option 2, calculate the material balance and emission factor for your HAP emissions (mass HAP emitted per mass rubber processed into tires) and your monthly HAP emissions average. When performing material balances to demonstrate compliance, if the storage of materials, exhaust, or the wastewater from more than one affected source are combined at the point where control systems are applied, any credit for emissions reductions needs to be prorated among the affected sources based on the ratio of their contribution to the uncontrolled emissions.

- Calculate your HAP emissions rate for the monthly operating period immediately preceding the compliance date.

## 2. Tire Cord Production

To demonstrate initial compliance with the proposed standards for tire cord production affected sources, you would be required to submit a Notification of Compliance Status report with a statement certifying that for the monthly (30-consecutive operating day) period immediately preceding the compliance date of this proposed rule, your affected sources met the emission limitations specified in the proposed rule. You would be required to perform the following tests to support your demonstration:

- Determine the HAP quantity and concentration of your coating mixture using EPA Method 311 or other methods approved by the Administrator. If there is a disagreement between such information and Method 311 results, then the Method 311 results will take precedence.

- Perform a material balance on your coating mixture use that accounts for all HAP emissions from all emission points located at your facility. Emission points that must be included in the material balance include, but are not limited to, bulk storage tanks, mixing facilities, points of use, general facility vents, air pollution control devices, wastewater, research and development areas, and warehouse storage vents. When performing material balances to demonstrate compliance, if the storage of materials, exhaust, or the wastewater from more than one affected source are combined at the point where control

systems are applied, any credit for emissions reductions needs to be prorated among the affected sources based on the ratio of their contribution to the uncontrolled emissions.

- Determine your quantity of fabric processed by accounting for the total mass of fabric that enters the fabric treating process.

- Calculate your HAP emissions (mass HAP emitted per mass fabric processed) and your monthly HAP emissions average.

- Calculate your average HAP emissions rate for the monthly period immediately preceding the compliance date.

## 3. Puncture Sealant Application

To demonstrate compliance with the puncture sealant application standard, you must demonstrate compliance in one of two ways. First, you may choose to demonstrate the overall control efficiency of your emissions reductions system. In this case, you would demonstrate that the emissions capture system efficiency multiplied by the control device efficiency meets the applicable emissions limitation for the application booth emissions, and that your equipment meets the specified operating limits. You would demonstrate these efficiencies by conducting a performance test of the capture system and control device to determine their individual efficiencies. You would also establish operating parameters that you would subsequently monitor to demonstrate continuous compliance with the operating limits.

Alternatively, you could use a permanent total enclosure that satisfies the Method 204 criteria in 40 CFR part 51. Use of a permanent total enclosure certifies 100 percent capture. Then, you would demonstrate that the control device reduces at least 86 percent of emissions for existing sources and 95 percent of emissions for new or reconstructed sources and meets the specified operating limits. As above, you would demonstrate the control device efficiency by conducting a performance test. You would also establish operating parameters that you would subsequently monitor to demonstrate compliance with the operating limits.

### *F. What Are the Continuous Compliance Provisions?*

The proposed standards require that you demonstrate continuous compliance with each emission limitation that applies to you. For the tire production, tire cord production, and puncture sealant application source subcategories, you would be required to

demonstrate continuous compliance by monitoring each of the following as applicable to the compliance plan of the affected source, in some instances, on a daily basis:

- Amounts of cements and solvents or coating mixtures used;
- HAP content of the cements and solvents or coating mixtures;
- Amount of fabric processed at tire cord production facilities;
- Amount of rubber processed into tires at tire production facilities; and
- Any add-on control equipment parameter values.

The monitoring data would be used to calculate the monthly average limits. In the proposed rule, we have provided the necessary algorithms for calculating the monthly averages.

### *G. What Are the Notification, Recordkeeping, and Reporting Requirements?*

We have incorporated most of the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) into the proposed rule. Exceptions have been specified, as relevant.

You would be required to submit the following notifications and reports:

- An Initial Notification within 120 days after the effective date of the promulgated standards for existing sources and within 120 days after the date of initial startup for new and reconstructed sources.

- If you are required to conduct a performance test, you would be required to submit a Notification of Intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin.

- If you have conducted a performance test to meet the requirements of this proposed rule, you would be required to submit a Notification of Compliance Status report that includes the performance test report. This report would be submitted before the close of business on the 60th calendar day following the completion of the performance test.

- A compliance report that either contains a statement that there were no deviations from the emission limitations and operating limits (if applicable) during the reporting period or that reports any deviations from the emission limitations. This report would be submitted semiannually except where a tire production affected facility has demonstrated compliance with the HAP-constituent emission limitation by purchasing and using only complying materials. In this case, the semiannual report will be replaced with an annual report.

- A periodic report is required every 6 months if a change occurs at the affected facility, or within the process that affects the compliance status, or that such change would have resulted in a report in the Initial Notification.

You would be required to maintain records for at least 5 years from the date of each record. You must retain the records onsite for at least the first 2 years but may retain the records offsite for the remaining 3 years. In addition to the general recordkeeping requirements of the General Provisions, you would be required to keep the following records:

- A copy of each notification and report that you submitted to comply with the proposed rule, including documentation supporting the Initial Notification or Notification of Compliance Status reports that you submitted.

- Records of performance tests and performance evaluations.

- For all processes that use cements and solvents in the manufacture of tires, you would be required to keep a daily record of the composition of all cements and solvents used and a monthly record of the quantity of cements and solvents used, as well as the mass weight of rubber processed into tires for tire production.

- For each air pollution control device (e.g., thermal oxidizer) associated with a process or processes that use cements and solvents in the production of tires, you would be required to keep a daily record of the mass percent of HAP in cements and solvents used, and a daily record of parameter values that indicate proper operation of the control device as determined during the performance tests.

- For each process or facility that produces tire cord, you would be required to keep a daily record of the mass of HAP in all coating mixtures used, the mass of HAP in coating mixtures that are not emitted (i.e., controlled by a control device), the mass of fabric processed, and a calculated emission factor that indicates your emissions on a monthly average.

- For each air pollution control device (e.g., thermal oxidizer) associated with a process or facility that produces tire cord, you would be required to keep a daily record of the mass of HAP in all coating mixtures used, the mass of HAP in coating mixtures that are not emitted (i.e., controlled by a control device), the mass of fabric processed, a daily record of any parameters, as determined during the performance tests, that indicate actual operation of the control device, and a calculated emission factor that indicates your emissions on a monthly average.

- For each air pollution control device (e.g., carbon absorber) associated with a process or facility that applies puncture sealant to the interior of finished tires, you would be required to keep a daily record of the mass of HAP in all coating mixtures used and a daily record of any parameters, as determined during the performance tests, that indicate actual operation of the control device.

### III. Rationale for Selecting the Proposed Standards

#### A. How Did We Select the Source Category and Subcategories?

We listed tire manufacturing as a category of major sources of HAP on the initial list of major source categories (63 FR 7155). The primary HAP emitted are hexane, toluene, formaldehyde, methanol, and styrene. In gathering and evaluating more extensive information on tire manufacturing, we determined that tire manufacturing actually includes several distinct processes that are sources of HAP, and that some operations are often not located at the same site. Specifically, rubber compound mixing is a distinct process; however, we found that a particular facility only mixed rubber for later distribution to its satellite tire manufacturing facilities. In addition, tire cord production is predominantly conducted at facilities not located with tire production facilities. On November 8, 1999 (64 FR 63025), we revised the source category list to change the name to "rubber tire manufacturing." The new name better describes the operations we propose to regulate in this source category which includes more than just "tire production."

The CAA allows us to define subcategories, or subsets of similar emission sources within a source category, if technical differences in emissions characteristics, processes, control device applicability, or opportunities for pollution prevention exist within the source category (57 FR 31567). Specific examples of these differences include the types of products, process equipment differences, the type and level of emission control, emission sources, and any other factors that would affect the MACT determination for a given source category.

We reviewed and analyzed available information on the rubber tire manufacturing industry to determine if subcategorization was warranted. We considered information similar to that used in other MACT standard subcategorization decisions including:

- Similarity of products produced at different facilities;
- Any variations in the process due to the tire type produced;
- Variability of raw or input materials used at different facilities;
- Type of equipment used in the process;
- Control device applicability and costs; and
- Pollution prevention opportunities.

Based on our review, we determined that there are fundamentally different processes with differing operations and emissions within the rubber tire manufacturing industry that warranted subcategorization. We identified four separate operations within the tire manufacturing source category that are significant sources of HAP emissions: (1) Rubber processing, (2) tire production, (3) tire cord production, and (4) puncture sealant application. Rubber processing includes mixing, milling, and extrusion rubber compounding operations prior to the application of solvents and cements. Tire production emission sources are associated with the use of cements and solvents (including emissions that result from storage, wastewater, and research and development). Tire cord production is infrequently located at a rubber tire production facility, and emission sources are associated with the coating solutions used to treat the fabric (including emissions that result from storage, wastewater, and research and development). Puncture sealant application is a separate operation where emissions are associated with the mixture that is applied to the inner liner of a newly finished tire for the purpose of sealing future punctures. The mixture contains solvent constituents, rubber, and process oils. We have prepared a memorandum supporting this subcategorization that you can obtain from the docket for this proposed rulemaking.

#### B. How Did We Select the Affected Sources?

The affected source comprises the emission points to which a standard applies for a source category or subcategory. As discussed in section II.C, an affected source is a stationary source, group of stationary sources, or part of a stationary source regulated by the NESHAP. When selecting the affected source for a source category or subcategory, we need to select the HAP emission sources that will make up the affected source. Our rationale for the selection of the affected sources within the tire production, tire cord production, and puncture sealant

application source subcategories is presented in the following paragraphs.

#### 1. Rubber Processing

As described in earlier sections, emissions from the rubber processing source subcategory occur from the operations where rubber is being mixed and prepared, before it is processed into components of rubber tires, and before cements and solvents are applied.

#### 2. Tire Production

As noted above, emissions from the tire production source subcategory are generally associated with the operations following rubber processing that involve the use of cements and solvents to assemble the tire.

Emissions from cements and solvents use over the past 20 years in tire production operations have been significantly reduced. The EPA data base for 1996 HAP emissions estimates that 1,280 Mg/yr (1,411 tons/yr) of organic HAP are emitted from tire production operations due to the use of cements and solvents. Though no hard data have been gathered, the industry estimates that this amount may be half the 1970–1980 levels of emissions. Reductions in organic HAP emissions leading up to our 1996 data base have been gained by the industry through reducing or eliminating the amount of cements and solvents used, or by reformulating the cements and solvents to reduce or eliminate their volatile organic compounds (VOC), including HAP content.

For example, tread-end cementing is estimated to use approximately 383 Mg/yr (422 tons/yr) of cements and solvents or about 30 percent of the total cements and solvents used in the rubber tire production industry. An analysis of the information submitted by RMA, and the information collected during EPA site evaluations, indicated that several facilities use cements and mixtures containing no reportable quantity of HAP. In contrast, the use of add-on pollution control devices to control emissions from cements and solvents use is atypical. Of the 41 reporting facilities in RMA's survey, a total of seven used control devices directed toward HAP organic emissions from cementing and solvent operations. Therefore, based on current and historic emissions control practices at tire production sources, we concluded that, although emissions are controllable using add-on control devices, the prevalent means of emissions control is the use of air pollution prevention measures. In selecting the affected source, we considered this

controllability of emissions as a key criterion.

We also considered the potential impact of reconstruction when selecting the affected source for tire production. We do not believe it is appropriate to require a facility to meet new source standards because it reconstructs one small process, such as replacing one tire building station, especially when such replacement in itself would not significantly affect emissions from the facility. Therefore, we selected the tire production affected source to be the collection of all processes that use cements and solvents located at a rubber tire manufacturing facility. This definition of affected source includes all operations within the facility where cements and solvents are used. As a result, reconstruction, which is defined in 40 CFR 63.2, will be determined by looking at the capital costs for replacing the entire affected source. Modifications to individual processes or operations should be less likely to trigger treatment as a reconstructed source.

#### 3. Tire Cord Production

As described later in this preamble, emissions from tire cord production can be controlled by add-on control devices, pollution prevention measures, or a combination of these two. Although some add-on control devices are used and will continue to be used at tire cord production processes, emissions reductions can be achieved by reducing the VOC (including HAP) content in the coating solutions or eliminating the emissions of VOC (including HAP) through process changes and substitution of materials.

Tire cord production facilities may have several different production lines and may produce several different types of tire cord in one facility. Although the coating solutions differ depending on the types of cord being produced, they are basically the same solution, consisting of a mixture of resorcinol, formaldehyde, and latex, with some changes in the formulation that are considered proprietary among tire cord producers.

Process changes and material substitutions, though not as common as they are for operations using cements and solvents in tire production, are being pursued as a way of controlling HAP emissions from tire cord operations. Despite these efforts, however, we believe emissions from tire cord sources will continue to be controlled at least in part using add-on control devices. In selecting the affected source, we considered this choice of controllability of emissions as a key criterion. Therefore, the standard

reflects the alternative to address emissions reductions through traditional add-on control or reformulation or elimination of HAP in the coating solutions used to treat tire cord fabric.

In selecting the affected source for the tire cord subcategory, we also considered the need for flexibility at the facility to modify operations without triggering treatment as a reconstructed source. As with the tire production affected source, we did not believe it was appropriate to cause a facility to have to meet new source standards because it reconstructs one small process, such as replacing one component of a particular tire cord production process. Therefore, we selected the affected source to be the collection of all processes located at any rubber tire manufacturing facility that are engaged in the production of tire cord.

#### 4. Puncture Sealant Application

For the puncture sealant application source subcategory, HAP emissions are generated from the application of the puncture sealant mixture to the interior of the newly finished tire. The HAP emissions come from the solvent constituents used in the mixtures. The application takes place within an enclosed application booth. The captured air stream is passed through a control device such as a carbon adsorber. The puncture sealant operation is a distinct operation and accounts for approximately 15 Mg/yr (17 tons/yr) of actual HAP emissions.

Unlike our other subcategories, the puncture sealant subcategory is comprised of a physically definable, lone emission source which is the application booth. Therefore, we have designated the emission source as the affected source.

#### *C. How Did We Determine the Basis and Level of the Proposed Standards for Existing and New Sources?*

In establishing these proposed emission standards, we determined the MACT floor for each affected source. We evaluated add-on control technologies as well as work practices and pollution prevention techniques. We obtained data related to operating procedures and emissions for the rubber processing, tire production, tire cord production, and puncture sealant affected sources through a combination of site visits, the RMA surveys (see section I.D.) and discussions with the industry. Data from all these sources were considered in the selection of emission limits for individual emission points at rubber tire manufacturing facilities.

## 1. Rubber Processing

We determined that MACT for rubber processing is no control, and, therefore, there are no emission limitations or other requirements being proposed for the rubber processing affected source. In reaching the conclusion that MACT for rubber processing is no control, we first evaluated the floor and determined that the floor is no control. There are currently no organic emission add-on controls applied to these mixing and milling operations in the rubber tire industry. Based on the fact that some plants have lower emissions than others, we evaluated whether there is a MACT floor based on substitution of lower-HAP containing raw materials which could be used in the process. We learned that little or no HAP are added to the raw materials used to make the rubber compounds. The approximately 829 Mg/yr (914 tons/yr) of HAP emissions associated with rubber compound processing result from the physical breakdown of polymers during the mixing, and chemical reactions that occur when elevated temperatures in mixing and milling affect the individual rubber compounds. The rubber compounds used in tires must meet certain characteristic properties to ensure attainment of certain technical specifications such as high mileage and safety. There are no known substitutes for the basic ingredients used to make the individual rubber compounds that would result in lower HAP emissions. Thus, we concluded that there were no pollution prevention controls or procedures to form a basis for the MACT floor.

We also evaluated the possibility of going beyond the "no control" MACT floor in controlling the major emissions from the compounding and milling process. Specifically, we explored controlling the organic HAP emissions from rubber processing with add-on controls (*i.e.*, thermal oxidizers). We determined that, although feasible, such add-on controls were unreasonably expensive. Therefore, we concluded that the control of organic HAP beyond the floor would not be reasonable at this time.

## 2. Tire Production

Cements and solvents are widely used throughout the rubber tire manufacturing industry for many different purposes (see section II.B of this preamble for a description). The quantity of cements and solvents used annually varies significantly among facilities, from near zero at some facilities to nearly 300 tons at others. The emissions reported in the RMA

survey that comprise our data base reflect the total amount of volatile HAP used for the year. In other words, we assume that all of the volatile HAP contained in the cements and solvents used were emitted.

Emissions from the use of cements and solvents are controlled primarily through pollution prevention measures. These pollution prevention measures include reformulation to reduce or eliminate the HAP content of cements and solvents, reduction in the quantity of cements and solvents used, and elimination of cements and solvents use altogether. Some facilities change their process operations, which is another form of pollution prevention, to reduce their cementing needs. Specifically, they arrange and choreograph their component production processes, or time the production of components so that the delivery of components to tire building stations occurs within a short enough timeframe to avoid film build up on the uncured rubber compound. In some cases, component pre-cutting has been changed to on-demand cutting at the tire building station, eliminating the need to address film build up on the component material. These process changes eliminate the need for cements or solvents by ensuring that the rubber compound remains tacky and will stick to the other components.

Add-on control devices are also installed at tire production sources to reduce organic emissions from the application of cements and solvents, but their installation is sporadic. Typically, a capture system at the cement or solvent application area captures the immediate evaporation of the volatile HAP and directs the HAP to a thermal oxidation unit.

Because of the varying types and quantities of cements and solvents used in tire production, and the fact that emissions generated during their use are controlled primarily through pollution prevention measures, we believe that a process-by-process MACT floor based on a specific control technology would not be reasonable or appropriate for this affected source. Therefore, we decided to determine the MACT floor broadly to encompass the entire tire production affected source.

This approach for setting the MACT floor allows rubber tire production facilities greater flexibility for complying with the tire production standards by allowing facilities to consider total emissions from cements and solvents within the affected source rather than on a process-by-process basis. It also provides the facility the flexibility to mix and match the use of pollution prevention methods and the

use of add-on control devices to comply with the tire production standard.

Using a source-wide approach, we developed the MACT floor emission standards to reflect an individual HAP content emission limitation. We determined the MACT floor for tire production existing sources by calculating the average emission limitation achieved by the best performing 12 percent of the existing tire production sources for which we have data (41 facilities). Twelve percent of 41 is 4.92, so the MACT floor for the use of cements and solvents for the tire production affected source would be the average emission limitation of the best performing five sources.

In the 1997 RMA survey response, eleven rubber tire production facilities reported that they did not have reportable emissions or did not use HAP-containing cements and solvents or mixtures thereof in tire production. As a result, the average emission limitation of the top five facilities would initially appear to be zero HAP emissions. In the course of drafting this proposal, however, we discovered that the facilities reporting that they did not use HAP-containing cements and solvents were relying upon the de minimis reportable quantity thresholds for selected HAP (see section I.D. of preamble for discussion). We, therefore, interpret the facilities' reported "zero" HAP emissions from cements and solvents to mean that their cements and solvents may contain up to the reportable threshold quantities of HAP.

The MACT floor for new or reconstructed sources is set at the emissions achieved in practice by the best performing similar source. As discussed for the existing source MACT floor, several rubber tire production facilities reported that they did not have reportable HAP emissions from the use of cements and solvents. However, as explained above, we interpret the facilities' reported "zero" HAP emissions to mean that their cements and solvents may contain up to the de minimis reportable quantity levels. Thus, the MACT floor is the same for new and existing sources.

We also evaluated the possibility of going "beyond the MACT floor" for tire production sources. The floors for both existing and new sources, although not zero emissions, are very close to zero emissions. As a result, we evaluated the feasibility of eliminating all HAP emissions from tire production sources as an above-the-floor option for both existing and new sources. The estimated HAP emissions reductions associated with the tire production MACT floor is 949 Mg/yr (1,047 tons/yr). Total

elimination of all HAP in cements and solvents is estimated to reduce emissions by 946 Mg/yr (1,063 tons/yr). We, however, cannot assess the achievability of eliminating HAP emissions altogether because we lack information on the availability of adequate cements and solvents that truly contain no HAP at any concentration. We are seeking supporting information regarding an elimination of HAP in tire production by soliciting, through this proposal, any information regarding the elimination of HAP in cements and solvents used in tire production.

Based on the analysis described above, the standards for both existing and new tire production affected sources are based on the floor level of control and are expressed in terms of individual HAP content emission limitations. This emission limitation is identified as "option 1" in table 2.

Table 2 also includes a second emission limitation for tire production labeled as "option 2." Option 2 represents a second form of emission limitation based on the mass of HAP emitted per mass of rubber processed into tires. We have calculated the emission limit in option 2 to be at least as stringent as the MACT floor represented by option 1. In developing option 2, we concluded that, based on information available to us from the industry, there is a range of HAP constituents that may be present in the cement and solvent formulations but the typical formulation contains three HAP components. Assuming three components are used, under option 1, the typical cement/solvent formulation would contain approximately 3 percent HAP by weight. Using this figure, we calculated an emission limitation that we believe would be equivalent to option 1 for the source in the RMA data base with the lowest reported ratio of cement and solvent HAP content to rubber processed. Specifically, the reported annual HAP content for this facility was adjusted assuming a three component formulation (e.g., 800 pounds of HAP used  $\times$  0.03). As in option 1, we assume all HAP contained in the cements and solvents will be emitted. The resulting HAP emissions were then divided by annual rubber processed into tires, in tons, to achieve the mass of HAP per mass of rubber processed limitation.

We consider option 2 to be at least as stringent as option 1. For facilities other than the one used in our calculation, option 2 is arguably more stringent than the floor, but these other facilities are not forced to meet this limitation since option 1 is available and represents the

MACT floor. We are interested in comment on the reasonableness of this approach in establishing an option that is at least as stringent as the MACT floor and on alternative means of expressing option 2.

### 3. Tire Cord Production

The tire cord production process typically uses an aqueous solution containing a mixture of resorcinol, formaldehyde, and latex to coat a fabric, usually polyester or nylon. Heat is then used to set the fabric and polymerize the coating solution. The exact composition of the coating solutions are considered proprietary and vary between facilities. The composition of the coating solutions also varies with the type of fabric being coated.

Emissions from the tire cord production affected source are often controlled by using pollution prevention measures. These measures include replacing non-aqueous coating mixtures with aqueous coating mixtures and reducing the amount of HAP in the coating mixtures. Add-on control devices, though less common, are also used to reduce organic emissions. These control devices, however, are generally only used to control HAP emissions from select individual processes within the affected source. In fact, within the 12 tire cord production facilities there are: 19 dipping operations, only one of which uses an add-on control device to control HAP emissions; 18 heater-drying operations, only two of which use add-on control devices to control HAP emissions; and 19 heat set operations, only four of which use add-on control devices to control HAP emissions.

During our review and analysis of the tire cord production affected source, we discovered significant process and operation variations among tire cord production facilities. The variations we identified include the following:

- When add-on controls are used, organic emissions are controlled from different operations of the process, and different combinations of processes are controlled;
- HAP emissions reporting is not consistent among facilities (*i.e.*, some facilities believe HAP are emitted from one process while other facilities believe the HAP are emitted from a different process);
- Equipment is configured differently among facilities to produce the same product; and
- There are commonly several process lines within a tire cord production facility, each of which may be producing different types of tire cord using different coating solutions, and

equipment dedication, as well as the product lines, vary through the year.

Because of the varying use of different types of coating solutions, the significant process and operation variations among tire cord production facilities, and the fact that emissions from tire cord production are controlled primarily by using pollution prevention measures, we do not believe a process-by-process MACT floor based on a specific control technology is reasonable for this industry. Therefore, we determined that the MACT floor should be based more broadly to encompass the entire tire cord production source subcategory affected source. Some of the other reasons we chose to determine the MACT floor broadly include the following: (1) It allows tire cord production facilities greater flexibility for complying with the standards by allowing facilities to consider total emissions from coating operations within the entire facility rather than on a process-by-process basis, and (2) it allows the facility flexibility to mix and match the use of pollution prevention methods and add-on control devices to comply with the standard.

We used HAP annual emissions data and the annual fabric production from the tire cord production facility RMA survey data base (see section I.D. of this preamble) to calculate an emission rate, in pounds HAP emitted per ton of fabric processed, for the entire tire cord affected source for each facility. Because there are fewer than 30 sources manufacturing tire cord, we determined the MACT floor based on the average emissions achieved by the best performing five sources. The average emission rate was calculated to be 280 grams HAP emitted per megagram fabric processed (0.56 pounds HAP emitted per ton fabric processed) for existing tire cord production facilities.

The MACT floor for new sources is based on the emissions reductions achieved in practice by the best performing similar source. The best performing tire cord production facility has an emission rate of 220 grams HAP emitted per megagram fabric processed (0.43 pounds HAP emitted per ton fabric processed), which equals the new source MACT floor for tire cord production.

We also evaluated going "beyond the floor" for the tire cord production source subcategory. We did not identify any tire cord production facility that has eliminated the use of HAP-bearing coatings in their production process. Greater emissions reductions would, therefore, likely require the use of add-on control devices. We estimated that the average facility cost of achieving the

MACT for tire cord sources using add-on control devices (e.g., regenerative oxidation) would be approximately \$70,000 per ton of total HAP emissions reductions. The incremental cost effectiveness of using add-on control devices to go beyond the floor is expected to be higher. Because of these costs we are not proposing to adopt standards that require reductions beyond the MACT floor.

#### 4. Puncture Sealant Application

During the development of this proposed rule, we identified one manufacturing plant where tires equipped with puncture sealant are manufactured. As discussed previously, the puncture sealant application process involves the application of a puncture sealant mixture containing solvent constituents, rubber and process oil to the inner liner of a tire. Since the puncture sealant application source subcategory consists of only one plant, the MACT floor for an existing source is the emissions control that is employed at that plant, which we believe is represented by an overall control efficiency of 86 percent.

The current overall control equipment efficiency at this facility, however, is not as efficient as what has been achievable for the type of equipment used in other similar capture and control systems for volatile organic emission sources. A new source puncture sealant application affected facility would have to meet a more stringent control equipment requirement reflecting a demonstrated and achievable capture and control system commonly applied in volatile organic emission control. The overall control efficiency for new sources is 95 percent based on the use of a permanent total enclosure and a properly sized and operated control device, such as a carbon adsorber.

We evaluated the feasibility of going "beyond the floor" to establish MACT for the existing facility but determined, based on a review of the data, site evaluations, and input from industry, that it would be unreasonable to go "beyond the floor" in establishing MACT. The puncture sealant mixture formulation serves a specific market niche for consumers who want a relatively low-cost tire that is resistant to road hazards. Reformulation of the mixtures would be an impractical above-the-floor option because no alternative formulations have been identified that can provide the desired sealant capability. Requiring add-on controls in addition to or in place of the use of the existing carbon adsorption system on the single application booth

would result in an additional estimated annual reduction of 0.5 tons of HAP. Thermal oxidation (incineration) is a viable control for the one existing facility; however, the incremental costs of requiring the existing facility to remove the current carbon adsorber and replace it with a more efficient control system such as a thermal oxidation unit are unreasonable considering the incremental emissions reductions that would be achieved (approximately \$28,500 per ton per year).

#### *D. How Did We Select the Format of the Standards?*

##### 1. Tire Production

We are proposing mass emission limitations in the form of two options for the tire production source subcategory. Option 1 is expressed as a mass emission limit based on the HAP content of cements and solvents. This option limits the level of any individual HAP constituent in cements and solvents used in the tire production source. Option 2 is a total HAP mass emission limit based the tons of rubber processed. We believe that both of these options are appropriate for the following reasons.

First, these formats are consistent with the data base and approach used to derive them. They are also consistent with the approaches used by the industry to report emissions. In proposing these standards, we recognize that 11 individual facilities have eliminated or reformulated their cements and solvents to either eliminate HAP or significantly reduce their use in tire production. We further recognize that reformulation and elimination of cements and solvents have resulted in greater HAP emissions reductions than the use of add-on control devices. As a result, we believe that both the individual HAP constituent limitation, as well as the total mass HAP per mass rubber processed limitation, encourage further pollution prevention initiatives in the rubber tire production industry.

##### 2. Tire Cord Production

For tire cord production facilities, the standard chosen is a production-based standard expressed in units of mass of HAP emitted per mass of fabric processed. Therefore, we chose a production-based format in order to ensure that all regulated sources, even those with variable processes, would meet uniform standards. A production-based format also enables control techniques based on pollution prevention. In this case, we know a production-based emission standard is workable for tire cord production

because sources are already complying with the proposed emission standard and currently use mass balance methods to measure emissions.

#### 3. Puncture Sealant Application

For puncture sealant application, the format of the standards proposed is expressed as percent reduction associated with the operation of a capture system and control device. Only one U.S.-based puncture sealant application affected source has been identified. Information and data supplied by the one affected source indicate that the puncture sealant operation is conducted within a puncture sealant application booth, and that emissions from the total enclosure are vented to a carbon adsorption control device. As explained in section III.B, information from the affected source indicates that other pollution prevention techniques such as reformulation of the puncture sealant mixture do not appear achievable. Therefore, a percent reduction standard was selected to reflect the operation of the source.

#### *E. How Did We Select the Compliance, Monitoring, Recordkeeping, and Reporting Requirements?*

We selected the compliance, monitoring, recordkeeping, and reporting requirements that would best demonstrate and document compliance with the proposed standards. The proposed procedures and methods have been used for similar sources and emission limit formats.

If you comply with the tire production emission limitation in option 1 by purchasing and using cements and solvents that comply with the limits, your recordkeeping and reporting are limited to using purchase records. You may also qualify for annual instead of semiannual compliance reports. You can choose this compliance alternative later even if you initially use one of the monthly averaging approaches to comply.

#### *F. What Is the Relationship of This Subpart to New Source Performance Standards (NSPS) for the Rubber Tire Manufacturing Industry?*

The NSPS (40 CFR part 60, subpart BBB) regulate the volatile organic emissions from new tire manufacturing sources constructed after January 20, 1983. For purposes of the NSPS, the term "tires" is defined as any agricultural, airplane, industrial, mobile home, light duty truck and/or passenger vehicle tire that has a bead diameter less than or equal to 0.5 meter (19.7 inches), a cross section dimension less than or

equal to 0.325 meter (12.8 inches), and that is mass produced in an assembly line. The proposed subpart XXXX would encompass these tires as well as any other tire manufacturing operation that falls within the affected source definition. This proposed subpart would only supercede the compliance requirements of the NSPS where the MACT is more stringent than the applicable NSPS.

The NSPS limit monthly volatile organic emissions for specific processes within the affected facility. In general terms, the VOC emissions for under-tread cementing, sidewall cementing, tread-end cementing, bead cementing, green tire spray and two specific Michelin® operations were established to limit the mass of VOC to the atmosphere on a process operation basis. To the extent the VOC emissions covered by the NSPS include volatile organic HAP, the proposed standards could be more restrictive than the NSPS. Tire manufacturing facilities will, therefore, need to consider the requirements of both today's proposed rule, once finalized, and the NSPS.

The NSPS compliance period (emission standard demonstration period) is a monthly time period. The proposed standard incorporates an emission cap as well as a mass of emission per tire, or average emission

per tire, during the month. For the NSPS, compliance is determined by adding up the usage of VOC and determining the total evaporated to the atmosphere and/or the average mass emission of VOC on a per tire basis for each affected process specified in the NSPS. The proposed NESHAP compliance period has been established to minimize the restructuring of the monitoring and recordkeeping requirements for the NSPS compliance determination period. Specifically, the proposed standard averaging period is a monthly average on a facilitywide basis.

The add-on control monitoring provisions of the NSPS and the proposed subpart are not inconsistent. Where the NSPS call for certain parameters to be monitored for control equipment, the NESHAP and the General Provisions to 40 CFR part 63 also call for the establishment of these parameters to the extent that add-on controls are used in the compliance plan for the affected source.

**IV. Summary of Environmental, Energy, and Economic Impacts**

*A. What Are the Air Quality Impacts?*

We estimate that the proposed rule would eliminate approximately 983 Mg/yr (1,084 tons/yr) (52 percent) of the baseline annual HAP emissions from this industry.

For the tire production source subcategory, we have estimated that the proposed standards would reduce HAP emissions by approximately 949 Mg/yr (1,047 tons/yr). For the tire cord production source subcategory, we have estimated that the proposed standards would reduce HAP emissions by approximately 34 Mg/yr (37 tons/yr). We have also estimated that the proposed standards for tire cord production would reduce emissions of VOC by the same amount.

For the one existing puncture sealant application source, we are not requiring different emissions control than what is currently done. Therefore, the proposed standards would not reduce HAP or other emissions from baseline emissions.

*B. What Are the Cost Impacts?*

Actual compliance costs will depend on each source's existing equipment and the modifications they make to comply with the proposed standards. Table 3 shows the total annual costs for affected sources to comply with the proposed standards. These costs include the estimated costs of reformulating cements, solvents, and coatings or installing of add-on control devices, as well as monitoring, reporting, and recordkeeping costs.

**TABLE 3.—TOTAL COSTS OF THE RUBBER TIRE MANUFACTURING MACT FOR TIRE PRODUCTION, TIRE CORD PRODUCTION, AND PUNCTURE SEALANT APPLICATION**

Cost	Tire production	Tire cord	Puncture sealant application <sup>a</sup>
Total nationwide control costs .....	\$21,359,000	\$2,477,000	\$0
Total annual monitoring costs .....	1,143,000	184,000	0
Annual average recordkeeping and reporting costs .....	579,000	102,000	0
Nationwide annual costs .....	23,081,000	2,763,000	0
Total nationwide costs .....	.....	.....	25,844,000

<sup>a</sup> Puncture sealant monitoring and reporting recordkeeping costs are included in the tire production costs.

*C. What Are the Economic Impacts?*

The economic impact analysis (EIA) provides an estimate of the anticipated regulatory impacts of the NESHAP for Rubber Tire Manufacturing. The information collected for this proposed rule from rubber tire manufacturers indicates that there are 14 manufacturers with 43 facilities that are potentially affected. States with the largest concentration of facilities are Alabama, Illinois, North Carolina, South Carolina and Ohio. None of the facilities manufacturing rubber tires are owned by companies that are classified as small businesses.

In general, the economic impacts of this proposed rule are expected to be

minimal. A market price increase of less than 1 percent, or \$0.03 per tire, is predicted. Domestic producer operating profits are projected to decrease by \$13.5 million. No rubber tire facility is expected to close as a result of this proposed rule. The EIA estimates that domestic tire output will decline by 144,000 tires (0.05 percent), while imports will increase by 22,000 tires (0.04 percent), resulting in a net decline of 122,000 tires, or 0.03 percent. For more information on the results of the EIA analysis, refer to the EIA in the docket.

*D. What Are the Non-Air Health, Environmental, and Energy Impacts?*

The standards proposed for the tire manufacturing and tire cord production source subcategories encourage the adoption of pollution prevention measures. As a result, we believe that most manufacturers will adopt these measures and expect minimal, if any, increases in energy consumption, and reductions in water pollution and solid waste.

The standards proposed for the puncture sealant application source subcategory do not impose any requirements above baseline, therefore, there would be no non-air health, environmental, and energy impacts

associated with the implementation of the proposed standards.

## V. Solicitation of Comments and Public Participation

We seek full public participation in arriving at our final decisions and encourage comments on all aspects of this proposal from all interested parties.

## VI. Administrative Requirements

### A. Executive Order 12866—Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), the Agency must determine whether the regulatory action is “significant” and therefore subject to review by the Office of Management and Budget (OMB) and the requirements of the Executive Order. The Executive Order defines

“significant regulatory action” as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs, or the rights and obligation of recipients thereof; or

(4) Raise novel legal or policy issues arising out of legal mandates, the President’s priorities, or the principles set forth in the Executive Order.

Pursuant to the terms of Executive Order 12866, it has been determined that this rule is not a “significant regulatory action” because none of the listed criteria apply to this action. Consequently, this action was not submitted to OMB for review under Executive Order 12866.

### B. Executive Order 13045—Protection of Children From Environmental Health Risks and Safety Risks

Executive Order 13045, “Protection of Children from Environmental Health Risks and Safety Risks” (62 FR 19885, April 23, 1997) applies to any rule that the EPA determines is: (1) “Economically significant” as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on

children and explain why the planned rule is preferable to other potentially effective and reasonable alternatives that we considered.

This proposed rule is not subject to Executive Order 13045 because it is not an economically significant regulatory action as defined by Executive Order 12866. In addition, EPA interprets Executive Order 13045 as applying only to those regulatory actions that are based on health and safety risks. This proposed rule is not subject to Executive Order 13045 because it is based on technology performance and not on health or safety risks.

### C. Executive Order 13084—Consultation and Coordination With Indian Tribal Governments

Under Executive Order 13084, Consultation and Coordination with Indian Tribal Governments, the EPA may not issue a regulation that is not required by statute, that significantly or uniquely affects the communities of Indian tribal governments, and that imposes substantial direct compliance costs on those communities, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by the tribal governments, or EPA consults with those governments. If EPA complies by consulting, Executive Order 13084 requires EPA to provide to OMB, in a separately identified section of the preamble to the rule, a description of the extent of EPA’s prior consultation with representatives of affected tribal governments, a summary of the nature of their concerns, and a statement supporting the need to issue the regulation. In addition, Executive Order 13084 requires EPA to develop an effective process permitting elected officials and other representatives of Indian tribal governments “to provide meaningful and timely input in the development of regulatory policies on matters that significantly or uniquely affect their communities.”

Today’s proposed rule is required by section 112(d) of the CAA and does not significantly or uniquely affect the communities of tribal governments. No tribal governments own or operate a rubber tire manufacturing facility. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this rule.

### D. Executive Order 13132—Federalism

Executive Order 13132, entitled “Federalism” (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure “meaningful and timely input by State and local officials in the development of

regulatory policies that have federalism implications.” Policies that have federalism implications is defined in the Executive Order to include regulations that 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.”

This proposed rule 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, as specified in Executive Order 13132. The standards apply only to rubber tire manufacturers and do not pre-exempt States from adopting more stringent standards. Thus, Executive Order 13132 does not apply to this proposed rule.

Although section 6 of Executive Order 13132 does not apply to this proposed rule, EPA did consult with State and local officials in developing this proposed rule. No concerns were raised by these officials during this consultation.

In the spirit of Executive Order 13132 and consistent with EPA policy to promote communications between EPA, State, and local governments, EPA specifically solicits comments on this proposed rule from State and local officials.

### E. Unfunded Mandates Reform Act of 1995

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104–4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, we generally must prepare a written statement, including cost-benefit analysis, for proposed and final rules with “Federal mandates” that may result in expenditures to State, local, and tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any 1 year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires us to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective, or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows us to adopt an alternative with other than the



least costly, most cost-effective, or least burdensome alternative if we publish with the final rule an explanation why that alternative was not adopted.

Before we establish any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, we must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of our regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

We have determined that this proposed rule does not contain a Federal mandate that may result in expenditures of \$100 million or more for State, local, or tribal governments, in the aggregate, or the private sector in any 1 year. Thus, today's proposed rule is not subject to the requirements of sections 202 and 205 of the UMRA. In addition, we have determined that this proposed rule contains no regulatory requirements that might significantly or uniquely affect small governments because it contains no regulatory requirements that apply to such governments or impose obligations upon them. Therefore, this proposed rule is not subject to the requirements of section 203 of the UMRA.

*F. Regulatory Flexibility Act (RFA), as Amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 U.S.C. 601 et seq.*

The RFA generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the Agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of today's proposed rule on small entities, small entity is defined as: (1) A small business that has fewer than 1,000 employees; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of today's proposed rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. This proposed rule will not impose any requirements on small entities. We have determined that none of the 43 facilities expected to be subject to the proposed rule are small entities, and that this proposed rule would not have a significant impact on a substantial number of small entities.

*G. Paperwork Reduction Act*

The information collection requirements in this proposed rule have been submitted for approval to OMB under the requirements of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* An Information Collection Request (ICR) document has been prepared by EPA (ICR No. 1982.01), and a copy may be obtained from Ms. Sandy Farmer by mail at the U.S. Environmental Protection Agency, Office of Environmental Information, Collection Strategies Division (2822), 1200 Pennsylvania Avenue, NW, Washington, DC 20460, by e-mail at farmer.sandy@epa.gov, or by calling (202) 260-2740. A copy may also be downloaded off the internet at <http://www.epa.gov/icr>. The information requirements are not effective until OMB approves them.

The proposed information requirements are based on notifications, records, and reports required by the NESHAP General Provisions (40 CFR part 63, subpart A), which are mandatory for all operators subject to national emission standards. These recordkeeping and reporting requirements are specifically authorized under section 114 of the CAA (42 U.S.C. 7414). All information submitted to the EPA pursuant to the recordkeeping and reporting requirements for which a claim of confidentiality is made will be safeguarded according to Agency policies in 40 CFR part 2, subpart B.

The annual public reporting and recordkeeping burden for this collection of information (averaged over the first 3 years after the effective date of the promulgated rule) is estimated to total 12,766 labor hours per year at a total annual cost of \$680,927. This estimate includes notifications, a performance test and report for sources using control devices to comply with the regulation, semiannual compliance reports, annual compliance certifications, records of cements and solvents composition, records of cements and solvents use, records of HAP use, and records of any required parameter monitoring.

The total estimated annual and capital monitoring, inspection, reporting and recordkeeping (MIRR) costs for existing and new major sources to comply with the proposed standard when an affected source opts to comply via the use of add-on control equipment are determined based on the estimated capital costs of equipment required for MIRR activities. For the rubber tire manufacturing industry, the total estimated installed capital costs of this equipment is \$2,983,912 for existing major sources and \$569,558 for new major sources. Annualized capital MIRR costs for existing and new major sources to comply with the proposed standard through the use of add-on controls were estimated to be \$1,137,025 and \$189,853, respectively.

The total annual estimated operating and maintenance costs (O&M) were calculated based on (1) the estimated storage, filing, photocopying, and postage costs for the estimated total annual responses associated with the provisions of the rubber tire NESHAP and (2) the O&M costs for the equipment required for compliance with this standard. The total storage, filing, photocopying, and postage cost per response was \$19.99, for an annual estimated average of \$1,865.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purpose of collecting, validating, and verifying information; process and maintain information and disclose and provide information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to respond to a collection of information; search existing data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

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 EPA's regulations are listed in 40 CFR part 9 and 48 CFR chapter 15.

Comments are requested on the EPA's need for this information, the accuracy of the burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques. Send comments on the ICR to the Director, Collection Strategies Division (2822), U.S. Environmental Protection Agency (2136), 1200

Pennsylvania Avenue, NW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, marked "Attention: Desk Office for EPA." Include the ICR number in any correspondence. Because OMB is required to make a decision concerning the ICR between 30 and 60 days after October 18, 2000, a comment to OMB is best assured of having its full effect if OMB receives it by November 17, 2000. The final rule will respond to any OMB or public comments on the information collection requirements contained in this proposal.

*H. National Technology Transfer and Advancement Act of 1995*

Section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) of 1995 (Publication L. No. 104-113) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in their regulatory and procurement activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, business practices) developed or adopted by one or more voluntary consensus bodies. The NTTAA directs EPA to provide Congress, through annual reports to the Office of Management and Budget (OMB), with explanations when an agency does not

use available and applicable voluntary consensus standards.

This proposed rulemaking involves technical standards. EPA proposes in this rule to use EPA Methods 1, 1a, 2, 2a, 2c, 2d, 2f, 2g, 3, 3a, 3b, 4, 25, 25a, 204, 204a-f, 311. Consistent with the NTTAA, the EPA conducted searches to identify voluntary consensus standards in addition to these EPA methods. No voluntary consensus standards were identified as applicable to this rule.

Five consensus standards: ASTM D4827-93, ASTM D4747-87, ASTM D1979-91, ASTM D3432-89 and ASTM PS9-94 are already incorporated by reference (IBR) in EPA Method 311. The search for emissions monitoring procedures identified 15 voluntary consensus standards. EPA determined that 11 of these 15 standards identified for measuring emissions of the HAPs or surrogates subject to emission standards in the proposed rule would not be practical due to lack of equivalency, detail, and/or quality assurance/quality control requirements. Therefore, we do not propose to use these voluntary consensus standards in this proposed rulemaking. These 11 standards are shown in Table X, along with the EPA review comments.

Four of the 15 remaining consensus standards identified are under development or under EPA review. Therefore, we do not propose to use these voluntary consensus standards in this proposed rulemaking. These four

standards are shown in Table Y, along with the EPA review comments.

For EPA Methods 1a, 2a, 2d, 2f, 2g, 204, and 204a-f, no applicable voluntary consensus standards were found at this time. The search and review results have been documented and are placed in the docket for this proposed rule.

EPA takes comment on proposed compliance demonstration requirements in this rulemaking and specifically invites the public to identify potentially-applicable voluntary consensus standards. Commentors should also explain why this regulation should adopt these voluntary consensus standards in lieu of or in addition to EPA's standards. Emission test methods and performance specifications submitted for evaluation should be accompanied with a basis for the recommendation, including method validation data and the procedure used to validate the candidate method (if method other than Method 301, 40 CFR Part 63, Appendix A was used).

Section 63.5993 of the proposed standard list the EPA testing methods and performance standards included in the proposed regulations. Most of the standards have been used by States and industry for more than 10 years. Nevertheless, the proposal also allows any State or source to apply to EPA for permission to use an alternative method in place of any of the EPA testing method or performance standards specified in this proposed rule.

TABLE X.—LIST OF VOLUNTARY CONSENSUS STANDARDS NOT APPLICABLE TO THE RUBBER TIRE MACT

Similar EPA standard reference method	Voluntary consensus standard	EPA'S comments on voluntary consensus standard
EPA Methods 1 and 2 .....	ISO 9096:1992 (in review 2000)—Determination of Concentration and Mass Flow Rate of Particulate Matter in Gas Carrying Ducts—Manual Gravimetric Method.	Some portions of this standard relate to EPA Methods 1 and 2. There is no EPA method to compare this to. EPA cannot approve this standard without supporting data.
EPA Methods 1, 2, 2c, 3, 3b, 4.	ASTM D3154-91 (1995)—Standard Method for Average Velocity in a Duct (Pitot Tube Method).	Appears to cover EPA's Part 60 Methods 1, 2, 2c, 3, 3b, and 4 but lacks in quality control and quality assurance requirements.
EPA Method 2 .....	ASTM D3464-96—Standard Test Method Average Velocity in a Duct Using a Thermal Anemometer.	There is no EPA method to compare this to. Applicability specifications are not clearly defined (example: range of gas composition, T limits). It appears to have the correct calibration procedures and specifications, but without supporting data. Some of the variability issues were not adequately addressed. EPA cannot call this equivalent to EPA Method 2 without supporting data.
EPA Method 2 .....	ISO 10780:1994—Stationary Source Emissions—Measurement of Velocity and Volume Flowrate of Gas Streams in Ducts.	This standard recommends the use of L-shaped pitots, although it contains procedures for the use of S-shaped pitots, as in EPA Method 2. ISO 10780 has good detail, but has significant deficiencies, e.g., 1) the distance between each leg of the pitot to its face-opening plane can be up to 10 times the external tubing diameter vs. 1.5 times as specified in EPA Method 2; and 2) no direct calibration procedures are provided for an S-shaped pitot.

TABLE X.—LIST OF VOLUNTARY CONSENSUS STANDARDS NOT APPLICABLE TO THE RUBBER TIRE MACT—Continued

Similar EPA standard reference method	Voluntary consensus standard	EPA'S comments on voluntary consensus standard
EPA Method 2 .....	ASTM D3796–90 (1998)—Standard Practice for Calibration of Type S Pitot Tubes.	This is a very good detailed procedure for calibrating Type S pitot tubes, but it is not a complete method alternative to EPA Method 2.
EPA Method 3a .....	ASTM D5835–95—Standard Practice for Sampling Stationary Source Emissions for Automated Determination of Gas Concentration.	Similar to Methods 3a, 6c, 7e, 10, ALT 004, CTM 022. Lacks in detail and quality assurance/quality control requirements. Very similar to ISO 10396.
EPA Method 3a .....	CAN/CSA Z223.2–M86 (1986)—Method for the Continuous Measurement of Oxygen, Carbon Dioxide, Carbon Monoxide, Sulphur Dioxide, and Oxides of Nitrogen in Enclosed Combustion Flue Gas Streams.	Too general. This standard lacks in detail and quality assurance/quality control requirements. Appendices with valid quality control information are not a required part of this standard.
EPA Method 3a .....	ISO 10396:1993—Stationary Source Emissions: Sampling for the Automated Determination of Gas Concentrations.	Similar to EPA Methods 3a, 6c, 7e, 10, ALT 004, CTM 022. Similar to ASTM D5835. Lacks in detail and quality assurance/quality control requirements.
EPA Method 4 .....	ASTM E337–84 (Reapproved 1996)—Standard Test Method for Measuring Humidity with a Psychrometer (the Measurement of Wet- and Dry- Bulb Temperatures).	This will only cover a small portion of what is acceptable for EPA Method 4.
EPA Method 25a .....	EN 12619 (1999)—Stationary Source Emissions—Determination of the Mass Concentration of Total Gaseous Organic Carbon at Low Concentrations in Flue Gases—Continuous Flame Ionization Detector Method.	This standard is limited because it doesn't apply to solvent-using processes vapors or concentrations >40 ppm carbon. Specifications for probe temperature are only 20°C above flue gas as compared to EPA Method 25a which specifies greater than or equal to 110°C.
EPA Method 311 .....	ASTM D3271–87 (1993)—Standard Practice for Direct Injection of Solvent-Reducible Paints into a Gas Chromatograph for Solvent Analysis.	This standard is not an acceptable alternative to EPA Method 311. Section 1.2 under scope reads "This practice is not designed to be quantitative." The purpose of EPA Method 311 is to quantitatively measure HAP's in coatings.

TABLE Y.—LIST OF VOLUNTARY CONSENSUS STANDARDS NOT FINAL AND/OR UNDER EPA REVIEW FOR THE RUBBER TIRE MACT

Similar EPA standard reference method	Voluntary consensus standard	EPA's comments on voluntary consensus standard
EPA Method 2 .....	ASME/BSR MFC 12M—Flow in Closed Conduits Using Multiport Averaging Pitot Primary Flowmeters.	Standard likely in development at the time the search was completed.
EPA Method 2 (possibly 1) .....	ASME/BSR MFC 13M—Flow Measurement by Velocity Traverse.	Under development when search was completed. Possibly similar to EPA Methods 1 and 2.
EPA Method 3a .....	ISO/DIS 12039—Stationary Source Emissions—Determination of Carbon Monoxide, Carbon Dioxide, and Oxygen—Automated Methods.	Under development when search was completed. Possibly similar to EPA Method 3a and 10.
EPA Methods 25, 25a .....	ISO/FDIS 14965—Air Quality—Determination of Total Nonmethane Organic Compounds—Cryogenic Preconcentration and Direct Flame Ionization Method.	Under development when search was completed. Possible improvement of EPA Method 25a, but will not cover all aspects of EPA Method 25. EPA will review the standard when it is final.

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

Environmental protection, Air pollution control, Hazardous air pollutants, Reporting and recordkeeping requirements, Rubber tire manufacturing, Tire cord production.

Dated: September 15, 2000.

**Carol M. Browner,**  
*Administrator.*

For the reasons stated in the preamble, title 40, chapter I, part 63, of the Code of the Federal Regulations is proposed to be amended as follows:

**PART 63—[AMENDED]**

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

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

2. Part 63 is amended by adding subpart XXXX to read as follows:

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

Sec.

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**Subpart XXXX—National Emission Standards for Hazardous Air Pollutants: Rubber Tire Manufacturing****What This Subpart Covers****§ 63.5980 What is the purpose of this subpart?**

This subpart establishes national emission standards for hazardous air pollutants emitted from rubber tire manufacturing. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.

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

You are subject to this subpart if you own or operate a rubber tire manufacturing facility that is located at, or is a part of, a major source of hazardous air pollutant (HAP) emissions.

(a) Rubber tire manufacturing includes the production of rubber tires and/or the production of components integral to rubber tires, the production of tire cord, and the application of puncture sealant. Components of rubber tires include, but are not limited to, rubber compounds, sidewalls, tread, tire beads, tire cord and liners. Other components often associated with rubber tires but not integral to the tire such as wheels, inner tubes, and valve stems are not components of rubber tires or tire cord and are not subject to this subpart.

(b) A major source of HAP emissions is any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit, considering controls, any single HAP at a rate of 9.07 megagrams (10 tons) or more per year or any combination of HAP at a rate of 22.68 megagrams (25 tons) or more per year.

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

(a) This subpart applies to each existing, new, or reconstructed affected source at facilities engaged in the manufacture of rubber tires or their components.

(b) The affected sources are defined in this section in paragraph (b)(1), tire production; paragraph (b)(2) of this section, tire cord production; paragraph (b)(3) of this section, puncture sealant application; and paragraph (b)(4) of this section, rubber processing.

(1) The tire production affected source is the collection of all processes that use cements and solvents as defined in § 63.6015, located at any rubber tire manufacturing facility. It includes, but is not limited to: storage and mixing vessels and the transfer equipment containing cements and/or solvents; wastewater handling and treatment operations; research and development operations; tread end cement operations; tire painting operations; ink and finish operations; undertread cement operations; general plant cleanup operations; bead cementing operations; tire building operations; green tire spray operations; extruding to the extent cements and solvents are used; cement house operations; marking operations; calendar operations to the extent solvents are used; tire stripping operations; tire repair operations; slab dip operations; other tire building operations to the extent that cements and solvents are used; and balance pad operations.

(2) The tire cord production affected source is the collection of all processes engaged in the production of tire cord. It includes, but is not limited to, dipping operations, drying ovens, heat-set ovens, bulk storage tanks, mixing facilities, general facility vents, air pollution control devices, and warehouse storage vents.

(3) The puncture sealant application affected source is the puncture sealant application booth operation used to apply puncture sealant to finished tires.

(4) The rubber processing affected source is the collection of all primary rubber mixing processes (e.g., banburys and associated drop mills) and mills that either mix compounds or warm rubber compound before the compound is processed into components of rubber tires. The mixed rubber compound itself is also included in the rubber processing affected source. There are no emission limitations or other requirements for the rubber processing affected source.

(c) An affected source is a new affected source if construction of the affected source commenced after October 18, 2000, and it met the

applicability criteria of § 63.5981 at the time construction commenced.

(d) An affected source is reconstructed if it meets the criteria as defined in § 63.2 of subpart A of this part.

(e) An affected source is existing if it is not new or reconstructed.

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

(a) If you have a new or reconstructed affected source, except as provided in § 63.5982(b)(4), you must comply with this subpart according to the requirements in paragraphs (a)(1) and (2) of this section.

(1) If you start up your affected source before the effective date of this subpart, then you must comply with the emission limitations for new and reconstructed sources in this subpart no later than the effective date of this subpart.

(2) If you start up your affected source after the effective date of this subpart, then you must comply with the emission limitations for new and reconstructed sources in this subpart upon startup of your affected source.

(b) If you have an existing affected source, you must comply with the emission limitations for existing sources no later than 3 years after the effective date of this subpart.

(c) If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the affected source(s) must be in compliance with existing source emission limitations no later than 3 years after the date on which the area source became a major source.

(d) You must meet the notification requirements in § 63.6009 according to the schedule in § 63.6009 and in subpart A of this part. Some of the notifications must be submitted before the date you are required to comply with the emission limitations in this subpart.

**Emission Limitations for Tire Production Affected Sources****§ 63.5984 What emission limitations must I meet for tire production affected sources?**

You must meet one of the two emission limitations in Table 1 of this subpart that applies to you.

**§ 63.5985 What are my alternatives for meeting the emission limitations for tire production affected sources?**

You must use one of the compliance alternatives in paragraphs (a) through (c) of this section to meet either of the emission limitations in § 63.5984.

(a) *Purchase alternative.* Use only cements and solvents that, as-purchased, contain no more HAP than

allowed by the emission limitations in Table 1, option 1 (HAP constituent option 1 only), of this subpart.

(b) *Monthly average alternative, without using an add-on control device.* Use cements and solvents such that the monthly average HAP emissions do not exceed the emission limitations in Table 1 of this subpart, option 1 or option 2.

(c) *Monthly average alternative, using an add-on control device.* Use a control device to reduce HAP emissions such that the monthly average HAP emissions do not exceed the emission limitations in Table 1 of this subpart, option 1 or option 2.

**Emission Limitations for Tire Cord Production Affected Sources****§ 63.5986 What emission limitations must I meet for tire cord production affected sources?**

You must meet each emission limitation in Table 2 of this subpart that applies to you.

**§ 63.5987 What are my alternatives for meeting the emission limitations for tire cord production affected sources?**

You must use one of the compliance alternatives in paragraph (a) or (b) of this section to meet the emission limitations in § 63.5986.

(a) *Monthly average alternative, without using an add-on control device.* Use coatings such that the monthly average HAP emissions do not exceed the emission limitations in Table 2 of this subpart.

(b) *Monthly average alternative, using an add-on control device.* Use a control device to reduce HAP emissions such that the monthly average HAP emissions do not exceed the emission limitations in Table 2 of this subpart.

**Emission Limitations for Puncture Sealant Application Affected Sources****§ 63.5988 What emission limitations must I meet for puncture sealant application affected sources?**

(a) You must meet each emission limitation in Table 3 of this subpart that applies to you.

(b) If you use an add-on control device to meet the emission limitations in Table 3 of this subpart, you must also meet each operating limit in Table 4 of this subpart that applies to you.

**§ 63.5989 What are my alternatives for meeting the emission limitations for puncture sealant application affected sources?**

You must use one of the compliance alternatives in paragraph (a) or (b) of this section to meet the emission limitations in § 63.5988.

(a) *Overall control efficiency alternative.* Use an emissions capture

system and control device and demonstrate that the application booth emissions meet the emission limitations in Table 3 of this subpart, and the control device and capture system meet the operating limits in Table 4 of this subpart.

(b) *Permanent total enclosure and control device efficiency alternative.* Use a permanent total enclosure that satisfies the Method 204 criteria in 40 CFR part 51. Demonstrate that the control device reduces at least 86 percent of emissions for existing sources and 95 percent of emissions for new or reconstructed sources. You must also show that the control device and capture system meet the operating limits in Table 4 of this subpart.

### General Compliance Requirements

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

(a) You must be in compliance with the applicable emission limitations specified in Tables 1 through 3 of this subpart at all times, including periods of startup, shutdown, and malfunction.

(b) Except as provided in § 63.5982(b)(4), you must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in § 63.6(e)(1)(i).

(c) During the period between the compliance date specified for your source in § 63.5983 and the date upon which continuous compliance monitoring systems have been installed and validated and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emission control equipment.

### General Testing and Initial Compliance Requirements

#### § 63.5991 By what date must I conduct an initial compliance demonstration or performance test?

(a) If you have a new or reconstructed affected source, you must conduct each required initial compliance demonstration or performance test within 180 calendar days after the compliance date that is specified for your new or reconstructed affected source in § 63.5983(a). If you are required to conduct a performance test, you must do so according to the provisions of § 63.7(a)(2).

(b) If you have an existing affected source, you must conduct each required initial compliance demonstration or performance test no later than the compliance date that is specified for your existing affected source in

§ 63.5983(b). If you are required to conduct a performance test, you must do so according to the provisions of § 63.7(a)(2).

(c) If you commenced construction or reconstruction between October 18, 2000, and the effective date of this subpart, you must demonstrate initial compliance with either the proposed emission limitations or the promulgated emission limitations no later than 180 calendar days after the effective date of this subpart or within 180 calendar days after startup of the source, whichever is later, according to § 63.7(a)(2)(ix).

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

If you use a control system (add-on control device and capture system) to meet the emission limitations, you must also conduct a performance test at least once per year following your initial compliance demonstration to verify control system performance and reestablish operating parameters for control systems used to comply with the emissions limitations for tire production and tire cord production, and to verify control system performance and reestablish operating limits for control systems used to comply with the emissions limitations and operating limits for puncture sealant application.

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

(a) If you use a control system to meet the emission limitations, you must conduct each performance test in Table 5 of this subpart that applies to you.

(b) Each performance test must be conducted according to the requirements in § 63.7(e)(1) and under the specific conditions specified in Table 5 of this subpart.

(c) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in § 63.7(e)(1).

(d) You must conduct three separate test runs for each performance test required in this section, as specified in § 63.7(e)(1), unless otherwise specified in the test method. Each test run must last at least 1 hour.

(e) If you are complying with the emission limitations using a control system, you must also conduct performance tests according to the requirements in paragraphs (e)(1) through (3) of this section as they apply to you.

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

(2) *Capture efficiency by an alternative method.* As an alternative to

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

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

### Testing and Initial Compliance Requirements for Tire Production Affected Sources

#### § 63.5994 How do I conduct tests and procedures for tire production affected sources?

(a) *Methods to determine the mass percent of each HAP in cements and solvents.* You must obtain the following information from the in-house collection of information or from manufacturers or suppliers, as appropriate. Use one of the methods specified in paragraph (a)(1) or (2) of this section.

(1) *Method 311 (appendix A of this part).* Use Method 311 to determine the mass percent organic HAP in cements and solvents.

(2) *Alternative test method.* Instead of using Method 311, you may use an alternative test method once we have approved it. See § 63.7(f) for the procedure you must follow to submit an alternative test method to us for approval.

(b) *Methods to demonstrate compliance with the HAP constituent emission limitations in Table 1 of this subpart (option 1).* Use the method in paragraph (b)(1) of this section to demonstrate initial and continuous compliance with the applicable emission limitations for tire production affected sources using the compliance alternative described in § 63.5985(a), purchase alternative. Use the equations in paragraphs (b)(2) through (4) of this section to demonstrate initial and continuous compliance with the emission limitations for tire production affected sources using the monthly average compliance alternatives described in § 63.5985(b) and (c).

(1) Determine the mass percent of each HAP in each cement and solvent according to the procedures in paragraph (a) of this section.

(2) Use Equation 1 of this section to calculate the daily HAP emission rate when complying by using cements and solvents without using an add-on control device such that the monthly average HAP emissions do not exceed

the HAP constituent emission limits in Table 1 of this subpart (option 1).

$$E_{\text{day}} = \frac{\left( \sum_{i=1}^n (\text{HAP}_i)(\text{TMASS}_i) \right) (10,000)}{\sum_{i=1}^n \text{TMASS}_i} \quad [\text{Eq. 1}]$$

Where:

$E_{\text{day}}$  = mass of the specific HAP emitted per total mass cements and solvents from all cements and solvents used in tire production in the day, grams per megagram.

$\text{HAP}_i$  = mass percent of the specific HAP, as-purchased, in cement and

solvent  $i$ , determined in accordance with paragraph (a) of this section.

$\text{TMASS}_i$  = total mass of cement and solvent  $i$  used in the day, grams.

$n$  = number of cements and solvents used in the day.

(3) Use Equation 2 of this section to calculate the daily HAP emission rate

when complying by using a control device to reduce HAP emissions such that the monthly average HAP emissions do not exceed the HAP constituent emission limits in Table 1 of this subpart (option 1).

$$E_{\text{day}} = \frac{\left\{ \left( \sum_{i=1}^n (\text{HAP}_i)(\text{TMASS}_i) \right) + \left( \sum_{j=1}^m (\text{HAP}_j)(\text{TMASS}_j) \right) \left( 1 - \frac{\text{EFF}}{100} \right) + \sum_{k=1}^p (\text{HAP}_k)(\text{TMASS}_k) \right\} (10,000)}{\sum_{i=1}^n \text{TMASS}_i + \sum_{j=1}^m \text{TMASS}_j + \sum_{k=1}^p \text{TMASS}_k} \quad [\text{Eq. 2}]$$

Where:

$E_{\text{day}}$  = mass of the specific HAP emitted per total mass cements and solvents used in tire production in the day, grams per megagram.

$\text{HAP}_i$  = mass percent of the specific HAP in cement and solvent  $i$ , as purchased, determined in accordance with paragraph (a) of this section for cements and solvents used in the day in processes that are not routed to a control device.

$\text{TMASS}_i$  = total mass of cement and solvent  $i$  used in the day in processes that are not routed to a control device, gram.

$n$  = number of cements and solvents used in the day in processes that are not routed to a control device.

$\text{HAP}_j$  = mass percent of the specific HAP, in cement and solvent  $j$ , as-purchased, determined in accordance with paragraph (a) of this section, for cements and solvents used in the day in processes that are routed to a control device during one or more hourly periods when the control

system is operating within the operating range established during the performance test and when monitoring data are collected.

$\text{TMASS}_j$  = total mass of cement and solvent  $j$  used in the day in processes that are routed to a control device during all hourly periods when the control system is operating within the operating range established during the performance test and when monitoring data are collected, grams.

$\text{EFF}$  = efficiency of the control system (capture system efficiency x control device efficiency), percent.

$m$  = number of cements and solvents used in the day that are routed to a control device during hourly periods when the control device is operating within the operating range established during the performance test.

$\text{HAP}_k$  = mass percent of the specific HAP, as-purchased, in cement and solvent, as purchased, determined in accordance with paragraph (a) of this section, for cements and

solvents used during the day in processes that are routed to a control device during one or more hourly periods when either the control system is not operating within the operating range established during the performance test or when monitoring data are not collected.

$\text{TMASS}_k$  = total mass of cement or solvent  $k$  used in the day in processes that are routed to a control device during all hourly periods when either the control system is not operating within the operating range established during the performance test or when monitoring data are not collected, grams.

$p$  = number of cements and solvents used in the day that are routed to a control device during hourly periods when either the control system is not operating within the operating range established during the performance test or when monitoring data are not collected.

(4) Use Equation 3 of this section to calculate the monthly average.

$$E_{\text{avg}} = \frac{\sum_{i=1}^n (E_{\text{day}, i})(\text{TMASS}_{\text{day}, i})}{\sum_{i=1}^n \text{TMASS}_{\text{day}, i}} \quad [\text{Eq. 3}]$$

Where:

$E_{avg}$  = monthly average of the emission rate of the specific HAP, grams per megagram.

$E_{day,i}$  = emission rate of the specific HAP for day i, grams per megagram.

$TMASS_{day,i}$  = total mass of cements and solvents used in day i, megagrams.

n = number of operating days in the month.

(c) *Methods to demonstrate compliance with the production-based emission limitation in Table 1 of this subpart (option 2).* Use the methods and equations in paragraphs (c)(1) through (5) of this section to demonstrate initial and continuous compliance with the production-based emission limitations for tire production affected sources using the compliance alternatives described in § 63.5985(b) and (c).

(1) *Methods to determine the mass percent of each HAP in cements and solvents.* Determine the mass percent of each HAP in cements and solvents using the applicable methods specified in paragraph (a) of this section.

(2) *Quantity of rubber processed into tires.* Determine your quantity of rubber processed into tires (megagrams) by accounting for the total mass of rubber that enters all processes subsequent to the mixing process.

(3) *Compliance without use of an add-on control device.* If you do not use an add-on control device to meet the emission limitations, use Equation 1 of this section to calculate grams of HAP emitted per megagram of rubber processed into tires, using the quantity of rubber processed into tires per day (megagrams), RMASS, as determined in paragraph (c)(2) of this section in place of the TMASS variables in the denominator.

(4) *Compliance with use of an add-on control device.* If you use a control device to meet the emission limitations, use Equation 2 of this section to calculate grams of HAP emitted per megagram of rubber processed into tires, using the quantity of rubber processed into tires per day (megagrams), RMASS, as determined in paragraph (c)(2) of this section in place of the TMASS variables in the denominator.

(5) *Monthly average calculation.* Use Equation 3 of this section to calculate the monthly average grams of emissions per megagram of rubber processed into tires, except substitute the quantity of rubber process per day (megagrams), RMASS, for the TMASS variable in the denominator.

(d) *Specific performance test requirements for tire production affected sources.*

(1) Conduct any required performance tests according to the requirements in § 63.5993.

(2) If you are demonstrating compliance with the HAP constituent option in Table 1 of this subpart (option 1), conduct the performance tests using cements and solvents that are representative of cements and solvents typically used at your tire production affected source.

(3) Establish an operating range that corresponds to the control efficiency as described in Table 5 of this subpart.

(e) *How to take credit for HAP emissions reductions from add-on control devices.* If you want to take credit in Equation 2 of this section for HAP emissions reduced using a control system (EFF), you must meet the requirements in paragraphs (e)(1) and (2) of this section.

(1) Monitor the established operating parameters as appropriate.

(i) If you use a thermal oxidizer, monitor the firebox secondary chamber temperature.

(ii) If you use a carbon adsorber, monitor the total regeneration stream mass or volumetric flow for each regeneration cycle and the carbon bed temperature after each regeneration and within 15 minutes of completing any cooling cycle.

(iii) If you use a control device other than a thermal oxidizer or a regenerative carbon adsorber, install and operate a continuous parameter monitoring system according to your site-specific performance test plan submitted according to § 63.7(c)(2)(i).

(iv) If you use a permanent total enclosure, monitor the face velocity across the natural draft openings (NDOs) in the enclosure. Also, if you use an enclosure, monitor to ensure that the sizes of the NDOs have not changed, that there are no new NDOs, and that a HAP emission source has not been moved closer to an NDO since the last performance test was conducted.

(v) If you use other capture systems, monitor the parameters identified in your monitoring plan.

(2) Maintain the operating parameters within the operating range established during the performance test.

(f) *How to take credit for HAP emissions reductions when streams are combined.* When performing material balances to demonstrate compliance, if the storage of materials, exhaust, or the wastewater from more than one affected source are combined at the point where control systems are applied, any credit for emissions reductions needs to be prorated among the affected sources based on the a ratio of their contribution to the uncontrolled emissions.

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

(a) For each operating parameter that you are required by § 63.5994(e)(1) to monitor, you must install, operate, and maintain a continuous parameter monitoring system (CPMS) according to the requirements in paragraphs (a)(1) through (5) of this section.

(1) The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period.

(2) Determine the hourly average of all recorded readings.

(3) Determine the daily average of all recorded readings for each operating day.

(4) Determine the monthly average for each monthly period during the semiannual reporting period described in Table 15 of this subpart.

(5) You must record the results of each inspection, calibration, and validation check of the CPMS.

(b) For each temperature monitoring device, you must meet the requirements in paragraph (a) and in paragraphs (b)(1) through (8) of this section.

(1) Locate the temperature sensor in a position that provides a representative temperature.

(2) For a non-cryogenic temperature range, use a temperature sensor with a minimum tolerance of 2.2 degrees centigrade or 0.75 percent of the temperature value, whichever is larger.

(3) For a cryogenic temperature range, use a temperature sensor with a minimum tolerance of 2.2 degrees centigrade or 2 percent of the temperature value, whichever is larger.

(4) Shield the temperature sensor system from electromagnetic interference and chemical contaminants.

(5) If a chart recorder is used, it must have a sensitivity in the minor division of at least 20 degrees Fahrenheit.

(6) Perform an electronic calibration at least semiannually according to the procedures in the manufacturer's owners manual. Following the electronic calibration, you must conduct a temperature sensor validation check in which a second or redundant temperature sensor placed near the process temperature sensor must yield a reading within 16.7 degrees centigrade of the process temperature sensor's reading.

(7) Conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor.

(8) At least monthly, inspect all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion.



(c) For each integrating regeneration stream flow monitoring device associated with a carbon adsorber, you must meet the requirements in paragraph (a) and in paragraphs (c)(1) and (2) of this section.

(1) Use a device that has an accuracy of  $\pm 10$  percent or better.

(2) Use a device that is capable of recording the total regeneration stream mass or volumetric flow for each regeneration cycle.

(d) For any other control device, or for other capture systems, ensure that the CPMS is operated according to a monitoring plan submitted to the Administrator with the compliance status report required by § 63.9(h). The monitoring plan must meet the requirements in paragraphs (a) and (d)(1) through (3) of this section.

Conduct monitoring in accordance with the plan submitted to the Administrator unless comments received from the Administrator require an alternate monitoring scheme.

(1) Identify the operating parameter to be monitored to ensure that the control or capture efficiency measured during the initial compliance test is maintained.

(2) Discuss why this parameter is appropriate for demonstrating ongoing compliance.

(3) Identify the specific monitoring procedures.

(e) For each pressure differential monitoring device, you must meet the requirements in paragraph (a) and in paragraphs (e)(1) and (2) of this section.

(1) Conduct a quarterly Method 2 procedure on the applicable NDOs and

use the results to calibrate the pressure monitor if the difference in results are greater than 10 percent.

(2) Inspect the NDOs monthly to ensure that their size has not changed, that there are no new NDOs, and that no HAP sources have been moved closer to the NDOs than when the last performance test was conducted.

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

(a) You must demonstrate initial compliance with each emission limitation that applies to you according to Table 6 of this subpart.

(b) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.6009(e).

**Testing and Initial Compliance Requirements for Tire Cord Production Affected Sources**

**§ 63.5997 How do I conduct tests and procedures for tire cord production affected sources?**

(a) *Methods to determine the mass percent of each HAP in coatings.* You must obtain the following information from the in-house collection of information or from manufacturers or suppliers, as appropriate. Use the methods specified in paragraph (a)(1) or (2) of this section.

(1) *Method 311 (appendix A of the part).* Use Method 311 to determine the mass percent organic HAP in coatings.

(2) *Alternative test method.* Instead of using Method 311, you may use an alternative test method once we have

approved it. See § 63.7(f) for the procedure you must follow to submit an alternative method to us for approval.

(b) *Methods to determine compliance with the emission limitations in Table 2 of this subpart.* Use the following equations to demonstrate initial and continuous compliance with the emission limitations for tire cord production sources using the compliance alternatives described in § 63.5987(a) and (b).

(1) Use Equation 1 of this section to calculate the daily HAP emission rate when complying by using coatings without using an add-on control device such that the monthly average HAP emissions do not exceed the emission limits in Table 2 of this subpart.

$$E_{\text{day}} = \frac{\sum_{i=1}^n (\text{HAP}_i)(\text{TCOAT}_i)}{\text{TFAB}} \quad [\text{Eq. 1}]$$

Where:

$E_{\text{day}}$  = mass of the specific HAP emitted per total mass of fabric processed in the day, grams per megagram.

$\text{HAP}_i$  = mass percent of the specific HAP, as-purchased, in the coating  $i$ , determined in accordance with paragraph (a) of this section.

$\text{TCOAT}_i$  = total mass of coating  $i$  used in the day, grams.

$n$  = number of coatings used in the day.

TFAB = total mass of fabric processed in the day, megagrams.

(2) Use Equation 2 of this section to calculate the HAP emission rate when complying by using an add-on control device.

$$E_{\text{day}} = \frac{\left\{ \sum_{i=1}^n (\text{HAP}_i)(\text{TCOAT}_i) + \left( \sum_{j=1}^m (\text{HAP}_j)(\text{TCOAT}_j) \right) \left( 1 - \frac{\text{EFF}}{100} \right) + \sum_{k=1}^p (\text{HAP}_k)(\text{TCOAT}_k) \right\}}{\text{TFAB}} \quad [\text{Eq. 2}]$$

Where:

$E_{\text{day}}$  = mass of the specific HAP emitted per total mass of fabric processed in the day, grams per megagram.

$\text{HAP}_i$  = mass percent of the specific HAP in coating  $i$ , as-purchased, determined in accordance with paragraph (a) of this section, for coatings used in the day in processes that are not routed to a control device.

$\text{TCOAT}_i$  = total mass of coating  $i$  used in the day in processes that are not routed to a control device, grams.

$n$  = number of coatings used in the day in processes that are not routed to a control device.

$\text{HAP}_j$  = mass percent of the specific HAP in coating  $j$ , as-purchased, determined in accordance with paragraph (a) of this section, for coatings used in the day in processes that are routed to a control device during one or more hourly periods when the control system is operating within the operating range established during the performance test and when monitoring data are collected.

$\text{TCOAT}_j$  = total mass of coating  $j$  used in the day in processes that are routed to a control device during all hourly periods when the control system is operating within the operating range established during

the performance test and when monitoring data are not collected, grams.

EFF = efficiency of the control system (capture system efficiency \* control device efficiency), percent.

$m$  = number of coatings used in the day that are routed to a control device during hourly periods when the control device is operating within the operating range established during the performance test.

$\text{HAP}_k$  = mass percent of the specific HAP in coating  $k$ , as-purchased, determined in accordance with paragraph (a) of this section, for coatings used in the day in processes that are routed to a

control device during one or more hourly periods when either the control system is not operating within the operating range established during the performance test or when monitoring data are not collected.

TCOAT<sub>k</sub> = total mass of coating k used in the day in processes that are routed to a control device during all hourly periods when either the control system is not operating within the operating range established during the performance test or when monitoring data are collected, grams.

p = number of coatings used in the day that are routed to a control device during all hourly periods when either the control system is not operating within the operating range established during the performance test or when monitoring data are not collected.

TFAB = total mass of fabric processed in the day, megagrams.

(3) Use Equation 3 of this section to calculate the monthly average.

$$E_{\text{avg}} = \frac{\sum_{i=1}^n (E_{\text{day},i})(\text{TFAB}_{\text{day},i})}{\sum_{i=1}^n \text{TFAB}_{\text{day},i}} \quad [\text{Eq. 3}]$$

Where:

E<sub>avg</sub> = monthly average of the emission rate of the specific HAP, grams per megagram.

E<sub>day,i</sub> = emission rate of the specific HAP for day i, grams per megagram.

TFAB<sub>day,i</sub> = total mass of fabric processed during day i, megagrams.

n = number of operating days in the month.

(c) *Specific performance test requirements for tire cord production affected sources.*

(1) Conduct any required performance tests according to the requirements in § 63.5993.

(2) Conduct the performance test using a coating from the list of coatings described in § 63.6011(c)(7), with average mass percent HAP that is representative of the coatings typically used at your tire cord production affected source.

(3) Establish an operating range that corresponds to the control efficiency as described in Table 5 of this subpart.

(d) *How to take credit for HAP emissions reductions from add-on control devices.* If you want to take credit in Equation 2 of this section for HAP emissions reduced using a control system (EFF), you must meet the requirements in paragraphs (d)(1) and (2) of this section.

(1) Monitor the established operating parameters as appropriate.

(i) If you use a thermal oxidizer, monitor continuously the firebox secondary chamber temperature.

(ii) If you use a carbon adsorber, monitor the total regeneration stream mass or volumetric flow for each regeneration cycle and the carbon bed temperature after each regeneration and within 15 minutes of completing any cooling cycle.

(iii) If you use a control device other than a thermal oxidizer or a regenerative carbon adsorber, install and operate a continuous parameter monitoring system according to your site-specific performance test plan submitted according to § 63.7(c)(2)(i).

(iv) If you use a permanent total enclosure, monitor the face velocity across the NDOs in the enclosure. Also, if you use an enclosure, monitor to ensure that the sizes of the NDOs have not changed, that there are no new NDOs, and that a HAP emission source has not been moved closer to an NDO since the last performance test was conducted.

(v) If you use other capture systems, monitor the parameters identified in your monitoring plan.

(2) Maintain the operating parameter within the operating range established during the performance test.

(e) *How to take credit for HAP emissions reductions when streams are combined.* When performing material balances to demonstrate compliance, if the storage of materials, exhaust, or the wastewater from more than one affected source are combined at the point where control systems are applied, any credit for emissions reductions needs to be prorated among the affected sources based on the a ratio of their contribution to the uncontrolled emissions.

#### § 63.5998 What are my monitoring installation, operation, and maintenance requirements?

For each operating parameter that you are required by § 63.5997(d) to monitor, you must install, operate, and maintain a continuous parameter monitoring system according to the provisions in § 63.5995(a) through (e).

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

(a) You must demonstrate initial compliance with each emission limitation that applies to you according to Table 7 of this subpart.

(b) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.6009(e).

#### Testing and Initial Compliance Requirements for Puncture Sealant Application Affected Sources

##### § 63.6000 How do I conduct tests and procedures for puncture sealant application affected sources?

(a) Follow the test procedures described in § 63.5993 to determine the overall control efficiency of your system.

(b) You must also meet the requirements in paragraphs (b)(1) and (2) of this section.

(1) Conduct the performance test using a puncture sealant with an average mass percent HAP that is representative of the puncture sealants typically used at your puncture sealant application affected source.

(2) Establish all applicable operating limit ranges that correspond to the control system efficiency as described in Table 5 of this subpart.

(c) Use Equation 1 of this section to calculate the overall efficiency of the control system. If you have a permanent total enclosure that satisfies EPA Method 204 criteria, assume 100 percent capture efficiency for variable F.

$$R = \left( \frac{F}{100} \right) \left( 1 - \frac{E}{100} \right) \quad [\text{Eq. 1}]$$

Where:

R = overall control system efficiency.

F = capture efficiency of the capture system on add-on control device, percent.

E = control efficiency of add-on control device k, percent.

(d) Monitor the established operating limits as appropriate.

(1) If you use a thermal oxidizer, monitor the firebox secondary chamber temperature.

(2) If you use a carbon adsorber, monitor the total regeneration stream mass or volumetric flow for each regeneration cycle and the carbon bed temperature after each regeneration and within 15 minutes of completing any cooling cycle.

(3) For each control device used other than a thermal oxidizer or a regenerative carbon adsorber, install and operate a continuous parameter monitoring system according to your site-specific performance test plan submitted according to § 63.7(c)(2)(i).

(4) If you use a permanent total enclosure, monitor the face velocity across the NDOs in the enclosure. Also, if you use an enclosure, monitor to ensure that the sizes of the NDOs have not changed, that there are no new NDOs, and that a HAP emission source has not been moved closer to an NDO since the last performance test was conducted.

(5) If you use other capture systems, monitor the parameters identified in your monitoring plan.

(e) Maintain the operating parameter within the operating range established during the performance test.

**§ 63.6001 What are my monitoring installation, operation, and maintenance requirements?**

(a) For each operating limit that you are required by § 63.6000(b)(2) to monitor, you must install, operate, and maintain a continuous parameter monitoring system according to the provisions in § 63.5995(a) through (e).

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

(a) You must demonstrate initial compliance with each emission limitation that applies to you according to Table 8 of this subpart.

(b) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.6009(e).

**Continuous Compliance Requirements for Tire Production Affected Sources**

**§ 63.6003 How do I monitor and collect data to demonstrate continuous compliance with the emission limitations for tire production affected sources?**

(a) You must monitor and collect data as specified in Table 9 of this subpart.

(b) Except for periods of monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) while the affected source is operating.

(c) In data average calculations and calculations used to report emission or operating levels, you may not use data recorded during periods of monitoring malfunctions or associated repairs, or recorded during required quality assurance or control activities. Nor may such data be used in fulfilling any applicable minimum data availability requirement. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system.

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

(a) You must demonstrate continuous compliance with each applicable limitation in Table 1 of this subpart

using the methods specified in Table 10 of this subpart.

(b) You must report each instance in which you did not meet an emission limitation in Table 1 of this subpart. You must also report each instance in which you did not meet the applicable requirements in Table 10 of this subpart. These instances are deviations from the emission limitations in this subpart. The deviations must be reported in accordance with the requirements in § 63.6010(e).

(c) You also must meet the following requirements if you are complying with the purchase alternative for tire production sources described in § 63.5984(a).

(1) If, after you submit the Notification of Compliance Status, you use a cement or solvent for which you have not previously verified percent HAP mass using the methods in § 63.5994(a), you must verify that each cement and solvent used in the affected source meets the emission limit, using any of the methods in § 63.5994(a).

(2) You must update the list of all the cements and solvents used at the affected source.

(3) With the compliance report for the reporting period during which you used the new cement or solvent, you must submit the updated list of all cements and solvents and a statement certifying that, as purchased, each cement and solvent used at the affected source during the reporting period met the emission limitations in Table 1 of this subpart.

**Continuous Compliance Requirements for Tire Cord Production Affected Sources**

**§ 63.6005 How do I monitor and collect data to demonstrate continuous compliance with the emission limitations for tire cord production affected sources?**

(a) You must monitor and collect data as specified in Table 11 of this subpart.

(b) You must monitor and collect data according to the requirements in § 63.6003(b) and (c).

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

(a) You must demonstrate continuous compliance with each applicable emission limitation in Table 2 of this subpart using the methods specified in Table 12 of this subpart.

(b) You must report each instance in which you did not meet an applicable emission limitation in Table 2 of this subpart. You must also report each instance in which you did not meet the applicable requirements in Table 12 of

this subpart. These instances are deviations from the emission limitations in this subpart. The deviations must be reported in accordance with the requirements in § 63.6010(e).

**Continuous Compliance Requirements for Puncture Sealant Application Affected Sources**

**§ 63.6007 How do I monitor and collect data to demonstrate continuous compliance with the emission limitations for puncture sealant application affected sources?**

(a) You must monitor and collect data as specified in Table 13 of this subpart.

(b) You must monitor and collect data according to the requirements in § 63.6003(b) and (c).

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

(a) You must demonstrate continuous compliance with each applicable emission limitation in Tables 3 and 4 of this subpart using the methods specified in Table 14 of this subpart.

(b) You must report each instance in which you did not meet an applicable emission limitation in Table 3 of this subpart. You must also report each instance in which you did not meet the applicable requirements in Table 14 of this subpart. These instances are deviations from the emission limitations in this subpart. The deviations must be reported in accordance with the requirements in § 63.6010(e).

**Notifications, Reports, and Records**

**§ 63.6009 What notifications must I submit and when?**

(a) You must submit all of the notifications in §§ 63.7(b) and (c), 63.8(f)(4) and (6), and 63.9 (b) through (e) and (h) that apply to you by the dates specified.

(b) As specified in § 63.9(b)(2), if you startup your affected source before the effective date of this subpart, you must submit an Initial Notification not later than 120 calendar days after the effective date of this subpart.

(c) As specified in § 63.9(b)(3), if you startup your new or reconstructed affected source on or after the effective date, you must submit an Initial Notification not later than 120 calendar days after you become subject to this subpart.

(d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in § 63.7(b)(1).

(e) If you are required to conduct a performance test, design evaluation, or other initial compliance demonstration as specified in Tables 5 through 8 of this subpart, you must submit a Notification of Compliance Status according to § 63.9(h)(2)(ii). The Notification must contain the information listed in Table 15 of this subpart for compliance reports.

(1) For each initial compliance demonstration required in Table 6 or 7 of this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th calendar day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration required in Tables 6 through 8 of this subpart that includes a performance test conducted according to the requirements in Table 5 of this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to § 63.10(d)(2).

(f) For each tire production affected source, the Notification of Compliance Status must also identify the emission limitation option in § 63.5984 and the compliance alternative in § 63.5985 that you have chosen to meet.

(g) For each tire production affected source complying with the purchase compliance alternative in § 63.5985(a), the Notification of Compliance Status must also include the information listed in paragraphs (g)(1) and (2) of this section.

(1) A list of each cement and solvent, as-purchased, that is used at the affected source and the manufacturer or supplier of each.

(2) The individual HAP content (percent by mass) of each cement and solvent as applied that is used.

(h) For each tire production or tire cord production affected source using a control device, the Notification of Compliance Status must also include the information in paragraphs (h)(1) and (2) of this section for each operating parameter in §§ 63.5994(e)(1) and 63.5997(d)(1) that applies to you.

(1) The operating parameter value averaged over the full period of the performance test (for example, average secondary chamber firebox temperature over the period of the performance test was 1,500 degrees Fahrenheit).

(2) The operating parameter range within which HAP emissions are reduced to the level corresponding to meeting the applicable emission

limitations in Tables 1 and 2 of this subpart.

(i) For each puncture sealant application affected source, the Notification of Compliance Status must include the information listed in paragraphs (i)(1) and (2) of this section.

(1) For each applicable operating parameter in Table 4 of this subpart, the operating parameter value averaged over the full period of the performance test.

(2) For each applicable operating parameter in Table 4 of this subpart, the operating parameter range within which HAP emissions do not exceed the levels in Table 3 of this subpart.

#### **§ 63.6010 What reports must I submit and when?**

(a) You must submit each applicable report in Table 15 of this subpart.

(b) Unless the Administrator has approved a different schedule for submission of reports under § 63.10(a), you must submit each report by the date in Table 15 of this subpart and according to the requirements in paragraphs (b)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in § 63.5983 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in § 63.5983.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in § 63.5983.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting subparts pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of

according to the dates in paragraphs (b)(1) through (4) of this section.

(c) The compliance report must contain information specified in paragraphs (c)(1) through (7) of this section.

(1) Company name and address.  
(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If there are no deviations from any emission limitations (emission limit or operating limit) that applies to you, a statement that there were no deviations from the emission limitations during the reporting period.

(5) If there were no periods during which the operating parameter monitoring systems were out-of-control as specified in § 63.8(c)(7), a statement that there were no periods during which the operating parameter monitoring systems or CPMS were out-of-control during the reporting period.

(6) For each tire production affected source, the emission limitation option in § 63.5984 and the compliance alternative in § 63.5985 that you have chosen to meet.

(7) For each tire production affected source complying with the purchase compliance alternative in § 63.5985(a), for each annual reporting period during which you use a cement and solvent that, as-purchased, was not included in the list submitted with the Notification of Compliance Status in § 63.6009(e)(1), an updated list of all cements and solvents used, as-purchased, at the affected source. You must also include a statement certifying that each cement and solvent, as-purchased, that was used at the affected source during the reporting period, met the HAP constituent limits (option 1) in Table 1 of this subpart.

(d) For each deviation from an emission limitation (emission limit or operating limit) that occurs at an affected source where you are not using a CPMS to comply with the emission limitations in this subpart, the compliance report must contain the information in paragraphs (c)(1) through (3) of this section and the information specified in paragraphs (d)(1) and (2) of this section.

(1) The total operating time of each affected source during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable) and the corrective action taken.

(e) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a compliance report pursuant to Table 10 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), or work practice requirement in this subpart, submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report.

However, submission of a compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(f) Upon notification to the Administrator that a tire production affected source has eliminated or reformulated cement and solvent such that the source can demonstrate compliance using the purchase alternative in § 63.5985(a), future compliance reports for this affected source may be submitted annually as specified in paragraph § 63.6010(c)(7).

#### **§ 63.6011 What records must I keep?**

(a) You must keep the records specified in paragraphs (a)(1) and (2) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirements in § 63.10(b)(2)(xiv).

(2) Records of performance tests as required in § 63.10(b)(2)(viii).

(b) For each tire production affected source, you must keep the records specified in Table 9 of this subpart to show continuous compliance with each emission limitation that applies to you.

(c) For each tire cord production affected source, you must keep the records specified in Table 11 of this subpart to show continuous compliance with each emission limitation that applies to you.

(d) For each puncture sealant application affected source, you must keep the records specified in Table 13 of this subpart to show continuous

compliance with each emission limitation that applies to you.

#### **§ 63.6012 In what form and how long must I keep my records?**

(a) Your records must be in a form suitable and readily available for expeditious review, according to § 63.10(b)(1).

(b) As specified in § 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to § 63.10(b)(1). You can keep the records offsite for the remaining 3 years.

#### **Other Requirements and Information**

##### **§ 63.6013 What parts of the General Provisions apply to me?**

Table 17 of this subpart shows which parts of the General Provisions in §§ 63.1 through 63.13 apply to you.

##### **§ 63.6014 Who implements and enforces this subpart?**

(a) This subpart can be implemented and enforced by us, the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. You should contact your U.S. EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are listed in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to the emissions standards in §§ 63.5984, 63.5986, and 63.5988 under 63.6(g).

(2) Approval of major alternatives to test methods under §§ 63.7(e)(2)(ii) and 63.7(f) and as defined in § 63.90.

(3) Approval of major alternatives to monitoring under § 63.8(f) and as defined in § 63.90.

(4) Approval of major alternatives to recordkeeping and reporting under § 63.10(f) and as defined in § 63.90.

##### **§ 63.6015 What definitions apply to this subpart?**

Terms used in this subpart are defined in the Clean Air Act, in 40 CFR 63.2, the General Provisions, and in this section.

*As-purchased* means the condition of a cement and solvent as delivered to the user, prior to any mixing, blending, or dilution.

*Capture system* means a hood, enclosed room, or other means of collecting organic HAP emissions into a closed-vent system that conveys these emissions to a control device.

*Cements and solvents* means the collection of all organic chemicals, mixtures of chemicals, and compounds used in the production of rubber tires, including cements, solvents, and mixtures thereof as process aides in storage tanks, wastewater, and research and development areas. Cements and solvents include, but are not limited to, tread end cements, undertread cements, bead cements, tire building cements and solvents, green tire spray, blemish repair paints, side wall protective paints, marking inks, general cleaning solvents, and slab dip mixtures. Cements and solvents do not include coatings used in tire cord production, puncture sealant application, or chemicals and compounds that are not used in the tire production process such as restroom cleaning compounds, office supplies (e.g., dry-erase markers, correction fluid), architectural paint, or any substance to the extent it is used for personal, family, or household purposes, or is present in the same form and concentration as a product packaged for distribution to and use by the general public.

*Coating* means a compound or mixture of compounds that is applied to a fabric substrate in the tire cord production operation that allows the fabric to be prepared (e.g., by heating, setting, curing) for incorporation into a rubber tire.

*Components of rubber tires* means any piece or part used in the manufacture of rubber tires that becomes an integral portion of the rubber tire when manufacture is complete and includes rubber compounds, sidewalls, tread, tire beads, and liners. Other components often associated with rubber tires such as wheels, valve stems, and inner tubes are not considered components of rubber tires for the purposes of these standards. Tire cord and puncture sealant, although components of rubber tires, are considered as separate affected sources in these standards and are defined separately.

*Control device* means a combustion device, recovery device, recapture device, or any combination of these devices used for recovering or oxidizing organic hazardous air pollutant vapors. Such equipment includes, but is not limited to, absorbers, carbon adsorbers,

condensers, incinerators (oxidizers), flares, boilers, and process heaters.

*Control system efficiency* means the product of the organic HAP emissions recovered or destroyed by a control device (in percent) and the total organic HAP emissions that are captured and conveyed to the control device (as a percent).

*Deviation* means any instance in which an affected source, subject to this subpart, or an owner or operator of such a source:

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

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

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

*Emission limitation* means any emission limit, opacity limit, operating limit, or visible emission limit.

*Mixed rubber compound* means the material, commonly referred to as rubber, from which rubber tires and components of rubber tires are manufactured. For the purposes of this definition, mixed rubber compound refers to the compound that leaves the primary rubber mixing process (for example, banburys) and is then processed into components from which rubber tires are manufactured.

*Operating day* means the period defined in the Notification of Compliance Status. It may be from midnight to midnight or a portion of a 24-hour period.

*Monthly operating period* means the period in the Notification of Compliance Status comprised of the number of operating days in the month.

*Primary rubber mixing* means the physical process of combining components to make mixed rubber compound. Internal process mixing may occur at a facility that produces rubber tires or components of rubber tires or at a stand-alone facility that then transfers the mixed rubber compound to a facility that produces rubber tires or components of rubber tires.

*Puncture sealant* means a mixture that may include solvent constituents, rubber, and process oil that is applied to the inner liner of a finished tire for

the purpose of sealing any future hole which might occur in the tread when an object penetrates the tire.

*Responsible official* means responsible official as defined in 40 CFR 70.2.

*Rubber* means the compound of components (for example, natural rubber, synthetic rubber, carbon black, oils, sulfur) that are combined in specific formulations for the sole purpose of making rubber tires or components of rubber tires.

*Rubber processed* means the amount in pounds of rubber delivered to the tire component and tire processing operations in a tire manufacturing facility (e.g., warm-up mills, extruders, calendars, or other tire component and tire manufacturing equipment).

*Rubber tire* means a continuous solid or pneumatic cushion typically encircling a wheel and usually consisting, when pneumatic, of an external rubber covering.

*Tire cord* means any fabric (for example, polyester, cotton, steel) that is treated with a coating mixture that allows the fabric to more readily accept impregnation with rubber to become an integral part of a rubber tire.

**Tables to Subpart XXXX of Part 63**

TABLE 1 TO SUBPART XXXX—EMISSION LIMITATIONS FOR TIRE PRODUCTION AFFECTED SOURCES

Option*	Emission limitation
Option 1—HAP Constituent Option .....	1. Emissions of each HAP in Table 16 of this subpart must not exceed 1,000 grams HAP per megagram (2 pounds per ton) of total cements and solvents used at the tire production affected source, and 2. Emissions of each HAP not in Table 16 of this subpart must not exceed 10,000 grams HAP per megagram (20 pounds per ton) of total cements and solvents used at the tire production affected source.
Option 2—Production-based Option .....	Emissions of HAP must not exceed 0.024 grams per megagram (0.00005 pounds per ton) of rubber processed into tires at the tire production affected source.

\* For each new, reconstructed, or existing tire production affected source, you must meet either the emission limitations in option 1 or the emission limitation in option 2.

You must comply with the emission limitations for tire cord production affected sources in the following table:

TABLE 2 TO SUBPART XXXX—EMISSION LIMITATIONS FOR TIRE CORD PRODUCTION AFFECTED SOURCES

For each. . .	You must meet the following emission limitations
1. Existing tire cord production affected source .....	Emissions must not exceed 280 grams HAP per megagram (0.56 pounds per ton) of fabric processed at the tire cord production affected source.
2. New or reconstructed tire cord production affected source .....	Emissions must not exceed 220 grams HAP per megagram (0.43 pounds per ton) of fabric processed at the tire cord production affected source.

You must comply with the emission limitations for puncture sealant application affected sources in the following table:

TABLE 3 TO SUBPART XXXX—EMISSION LIMITATIONS FOR PUNCTURE SEALANT APPLICATION AFFECTED SOURCES

For each. . .	You must meet the following emission limitation
1. Existing puncture sealant application spray booth .....	Reduce spray booth emissions by at least 86 percent by weight.
2. New or reconstructed puncture sealant application spray booth .....	Reduce spray booth emissions by at least 95 percent by weight.

You must comply with the operating limits for puncture sealant application affected sources in the following table:

TABLE 4 TO SUBPART XXXX—OPERATING LIMITS FOR PUNCTURE SEALANT APPLICATION CONTROL DEVICES

For each. . .	You must. . .
1. Thermal oxidizer to which puncture sealant application spray booth emissions are ducted.	Maintain the daily average firebox secondary chamber temperature within the operating range established during the performance test.
2. Carbon adsorber (regenerative) to which puncture sealant application spray booth emissions are ducted.	a. Maintain the total regeneration mass, volumetric flow, and carbon bed temperature at the operating range established during the performance test. b. Reestablish the carbon bed temperature to the levels established during the performance test within 15 minutes of each cooling cycle.
3. Other type of control device to which puncture sealant application spray booth emissions are ducted.	Maintain your operating parameter(s) within the range(s) established during the performance test.
4. Permanent total enclosure capture system .....	a. Maintain the face velocity across any natural draft openings (NDOs) at least at the levels established during the performance test. b. Maintain the size of NDOs, the number of NDOs, and their proximity to HAP emission sources consistent with the parameters established during the performance test.
5. Other capture system .....	Maintain the operating parameters identified in the monitoring plan and established during the performance test.

You must comply with the requirements for performance tests for existing, new, or reconstructed affected sources in the following table:

TABLE 5 TO SUBPART XXXX.—REQUIREMENTS FOR PERFORMANCE TESTS FOR EXISTING, NEW, OR RECONSTRUCTED AFFECTED SOURCES

If you are using . . .	You must . . .	Using . . .	According to the following requirements . . .
1. A thermal oxidizer	Measure total HAP emissions, determine destruction efficiency of the control device, and establish a site-specific firebox secondary chamber temperature limit at which the emission limit that applies to the affected source is achieved.	Method 25 or 25A performance test and data from the temperature monitoring system.	a. Measure total HAP emissions and determine the destruction efficiency of the control device using Method 25. You may use method 25A, if (i) an exhaust gas volatile organic matter concentration of 50 parts per million (ppmv) or less is required to comply with the standard, (ii) the volatile organic matter concentration at the inlet to the control system and the required level of control are such to result in exhaust volatile organic matter concentration of 50 ppmv or less, or (iii) because of the high efficiency of the control device exhaust is 50 ppmv or less, regardless of the inlet concentration. b. Collect firebox secondary chamber temperature data every 15 minutes during the entire period of the initial 3-hour performance test, and determine the average firebox temperature over the 3-hour performance test by computing the average of all of the 15-minute readings.

TABLE 5 TO SUBPART XXXX.—REQUIREMENTS FOR PERFORMANCE TESTS FOR EXISTING, NEW, OR RECONSTRUCTED AFFECTED SOURCES—Continued

If you are using . . .	You must . . .	Using . . .	According to the following requirements . . .
2. A carbon adsorber (regenerative).	Measure total organic HAP emissions, establish the total regeneration mass or volumetric flow, and establish the temperature of the carbon bed within 15 minutes of completing any cooling cycles. The total regeneration mass, volumetric flow, and carbon bed temperature must be those at which the emission limit that applies to the affected source is achieved.	Method 25 or Method 25A performance test and data from the carbon bed temperature monitoring device.	<p>a. Measure total HAP emissions using Method 25. You may use Method 25A, if (i) an exhaust gas volatile organic matter concentration of 50 parts per million (ppmv) or less is required to comply with the standard, (ii) the volatile organic matter concentration at the inlet to the control system and the required level of control are such to result in exhaust volatile organic matter concentrations of 50 ppmv or less, or (iii) because of the high efficiency of the control device exhaust is 50 ppmv or less, regardless of the inlet concentration.</p> <p>b. Collect carbon bed total regeneration mass or volumetric flow for each carbon bed regeneration cycle during the performance test.</p> <p>c. Record the maximum carbon bed temperature data for each carbon bed regeneration cycle during the performance test.</p> <p>d. Record the carbon bed temperature within 15 minutes of each cooling cycle during the performance test.</p> <p>e. Determine the average total regeneration mass or the volumetric flow over the 3-hour performance test by computing the average of all of the readings.</p> <p>f. Determine the average maximum carbon bed temperature over the 3-hour performance test by computing the average of all of the readings.</p> <p>g. Determine the average carbon bed temperature within 15 minutes of the cooling cycle over the 3-hour performance test by computing the average of all of the readings.</p>
3. Any control device other than a thermal oxidizer or carbon adsorber.	Determine control device efficiency and establish operating parameter limits with which you will demonstrate continuous compliance with the emission limit that applies to the affect source.	EPA-approved methods and data from the continuous parameter monitoring system.	Conduct the performance test according to the site-specific plan submitted according to § 63.7(c)(2)(i).
4. All control devices	<p>a. Select sampling port's location and the number of traverse ports.</p> <p>b. Determine velocity and volumetric flow rate.</p> <p>c. Conduct gas analysis .....</p> <p>d. Measure Method 4 of moisture 40 CFR 60, appendix A.</p>	<p>Method 1 or 1A of 40 CFR 60, appendix A.</p> <p>Method 2, 2A, 2C, 2D, 2F, or 2G of 40 CFR 60, appendix A.</p> <p>Method 3, 3A, or 3B of 40 CFR 60, appendix A.</p>	Locate sampling sites at the inlet and outlet of the control device and prior to any releases to the atmosphere.
5. A permanent total enclosure (PTE).	Measure the face velocity across natural draft openings and document the design features of the enclosure.	Method 204, CFR part 51, Appendix M	Capture efficiency is assumed to be 100 percent if the criteria are met.
6. Temporary total enclosure (TTE).	Construct a temporarily installed enclosure that allows you to determine the efficiency of your capture system and establish operating parameter limits.	Method 204 and the appropriate combination of Methods 204A–204F, 40 CFR part 51, Appendix M.	



You must show initial compliance with the emission limitations for tire production affected sources according to the following table:

TABLE 6 TO SUBPART XXXX.—INITIAL COMPLIANCE WITH THE EMISSION LIMITATIONS FOR TIRE PRODUCTION AFFECTED SOURCES

For . . .	For the following emission limitation . . .	You have demonstrated initial compliance if . . .
1. Sources complying with the purchase compliance alternative in § 63.5985(a).	The HAP constituent option in Table 1 of this subpart (option 1).	You demonstrate for each monthly period that no cements and solvents were purchased and used at the affected source containing HAP in amounts above the composition limits in Table 1 of this subpart, option 1, determined according to the procedures in § 63.5994(a) and (b)(1).
2. Sources complying with the monthly average compliance alternative without using a control device in § 63.5985(b).	The HAP constituent option in Table 1 of this subpart (option 1).	You demonstrate that the monthly average HAP emissions for each monthly operating period do not exceed the emission limits in Table 1 of this subpart, option 1, determined according to the applicable procedures in § 63.5994(a), (b)(2) and (4).
3. Sources complying with the monthly average compliance alternative using a control device in § 63.5985(c).	The HAP constituent option in Table 1 of this subpart (option 1).	You demonstrate that the monthly average HAP emissions for each monthly operating period do not exceed the emission limits in Table 1 of this subpart, option 1, determined according to the applicable procedures in § 63.5994(a), (b)(3) and (4), (d) and (e).
4. Sources complying with the monthly average compliance alternative without use of a control device in § 63.5985(b).	The production-based option in Table 1 of this subpart (option 2).	You demonstrate that the monthly average HAP emissions for each monthly operating period do not exceed the emission limits in Table 1 of this subpart, option 2, determined according to the applicable procedures in § 63.5994(c)(1) through (3) and (5).
5. Sources complying with the monthly average compliance alternative using a control device in § 63.5985(c).	The production-based option in Table 1 of this subpart (option 2).	You demonstrate that the monthly average HAP emissions for each monthly operating period do not exceed the emission limits in Table 1 of this subpart, option 2, determined according to the applicable procedures in § 63.5994(c)(1) and (2) through (5), (d), and (e).

You must show initial compliance with the emission limitations for tire cord production affected sources according to the following table:

TABLE 7 TO SUBPART XXXX.—INITIAL COMPLIANCE WITH THE EMISSION LIMITATIONS FOR TIRE CORD PRODUCTION AFFECTED SOURCES

For . . .	For the following emission limitation . . .	You have demonstrated initial compliance if . . .
1. Sources complying with the monthly average alternative without using an add-on control device according to § 63.5987(a).	In Table 2 of this subpart .....	You demonstrate that the monthly average HAP emissions for each monthly operating period do not exceed the emission limits in Table 2 of this subpart, determined according to the procedures in § 63.5997(a), (b)(1) and (3).
2. Sources complying with the monthly average alternative using an add-on control device according to § 63.5987(b).	In Table 2 of this subpart .....	You demonstrate that the monthly average HAP emissions for each monthly operating period do not exceed the emission limits in Table 2 of this subpart, determined according to the procedures in § 63.5997(a), (b)(2) and (3), (c) and (d).

You must show initial compliance with the emission limitations for puncture sealant application affected sources according to the following table:

TABLE 8 TO SUBPART XXXX.—INITIAL COMPLIANCE WITH THE EMISSION LIMITATIONS FOR PUNCTURE SEALANT APPLICATION AFFECTED SOURCES

For . . .	For the following emission limitation . . .	You have demonstrated initial compliance if . . .
1. Sources complying with the overall control efficiency alternative in § 63.5989(a).	In Table 3 of this subpart .....	You demonstrate that you conducted the performance tests required by § 63.6000, determined the overall efficiency of your control system, demonstrated that the applicable limits have been achieved, and established the operating limits for your equipment.
2. Sources complying with the permanent total enclosure and control device efficiency alternative in § 63.5989(b).	In Table 3 of this subpart .....	You demonstrate that you conducted the performance tests required by § 63.6000, determined the individual efficiencies of your capture and control systems, demonstrated that the applicable limits have been achieved, and established the operating limits for your equipment.

You must maintain minimum data to show continuous compliance with the emission limitations for tire production affected sources according to the following table:

TABLE 9 TO SUBPART XXXX—MINIMUM DATA FOR CONTINUOUS COMPLIANCE WITH THE EMISSION LIMITATIONS FOR TIRE PRODUCTION AFFECTED SOURCES

For . . .	You must maintain . . .
1. Sources complying with purchase compliance alternative in § 63.5985(a) that are meeting the HAP constituent emission limitation (option 1) in Table 1 of this subpart.	<ul style="list-style-type: none"> <li>a. A list of each cement and solvent as-purchased and the manufacturer or supplier of each.</li> <li>b. A record of Method 311, or approved alternative method, test results indicating the mass percent of each HAP for each compliance cement and solvent as-purchased.</li> </ul>
2. Sources complying with the monthly average compliance alternative without using a control device in § 63.5985(b) that are meeting emission limitations in Table 1 of this subpart.	<ul style="list-style-type: none"> <li>a. A record of the Method 311, or approved alternative method, test results, indicating the mass percent of each HAP for each cement and solvent, as-purchased.</li> <li>b. The mass of each cement and solvent used each operating day.</li> <li>c. The total mass of rubber processed into tires each operating day (if complying with the production-based emission limitation, option 2, in Table 1 of this subpart).</li> <li>d. All data and calculations used to determine the monthly average mass percent for each HAP for each operating month.</li> <li>e. Monthly averages of emissions in the appropriate emission limitation format.</li> </ul>
3. Sources complying with the monthly average compliance alternative using a control device in § 63.5985(c) that are meeting emission limitations in Table 1 of this subpart.	The same information as sources complying with the monthly average alternative that are not using a control device, except add records of operating parameter values for each monthly operating parameter that applies to you.

You must show continuous compliance with the emission limitations for tire production affected sources according to the following table:

TABLE 10 TO SUBPART XXXX. —CONTINUOUS COMPLIANCE WITH THE EMISSION LIMITATIONS FOR TIRE PRODUCTION AFFECTED SOURCES

For . . .	For the following emission limitation . . .	You must demonstrate continuous compliance by . . .
1. Sources complying with purchase compliance alternative in § 63.5985(a).	The HAP constituent option in Table 1 of this subpart (option 1).	Demonstrating for each monthly period that no cements and solvents were purchased and used at the affected source containing HAP in amounts above the composition limits in Table 1 of this subpart, option 1, determined according to the procedures in § 63.5994(a) and (b)(1).

TABLE 10 TO SUBPART XXXX. —CONTINUOUS COMPLIANCE WITH THE EMISSION LIMITATIONS FOR TIRE PRODUCTION AFFECTED SOURCES—Continued

For . . .	For the following emission limitation . . .	You must demonstrate continuous compliance by . . .
2. Sources complying with the monthly average compliance alternative without using a control device in § 63.5985(b).	The HAP constituent option in Table 1 of this subpart (option 1).	Demonstrating that the monthly average HAP emissions for each monthly operating period do not exceed the emission limits in Table 1 of this subpart, option 1, determined according to the applicable procedures in § 63.5994(a), (b)(2) and (4).
3. Sources complying with the monthly average compliance alternative using a control device in § 63.5985(c).	The HAP constituent option in Table 1 of this subpart (option 1).	Demonstrating that the monthly average HAP emissions for each monthly operating period do not exceed the emission limits in Table 1 of this subpart, option 1, determined according to the applicable procedures in § 63.5994(a), (b)(3) and (4), (d) and (e).
4. Sources complying with the monthly average compliance alternative without using a control device in § 63.5985(b).	The production-based option in Table 1 of this subpart (option 2).	Demonstrating that the monthly average HAP emissions for each monthly operating period do not exceed the emission limits in Table 1 of this subpart, option 2, determined according to the applicable procedures in § 63.5994(c)(1) through (3) and (5).
5. Sources complying with the monthly average compliance alternative using a control device in § 63.5985(c).	The production-based option in Table 1 of this subpart (option 2).	Demonstrating that the monthly average HAP emissions for each monthly operating period do not exceed the emission limits in Table 1 of this subpart, option 2, determined according to the applicable procedures in § 63.5994(c)(1) and (2) through (5), (d), and (e).

You must maintain minimum data to show continuous compliance with the emission limitations for tire cord production affected sources according to the following table:

TABLE 11 TO SUBPART XXXX. —MINIMUM DATA FOR CONTINUOUS COMPLIANCE WITH THE EMISSION LIMITATIONS FOR TIRE CORD PRODUCTION AFFECTED SOURCES

For . . .	You must maintain . . .
1. Sources complying with the monthly average alternative without using an add-on control device according to § 63.5987(a) that are meeting emission limitations in Table 2 of this subpart.	a. A record of the Method 311, or approved alternative method, test results, indicating the mass percent of each HAP for coating used. b. The mass of each coating used each operating day. c. The total mass of fabric processed each operating day. d. All data and calculations used to determine the monthly average mass percent for each HAP for each operating month. e. Monthly averages of emissions in the appropriate emission limitation format.
2. Sources complying with the monthly average alternative using an add-on control device according to § 63.5987(b) that are meeting emission limitations in Table 2 of this subpart.	The same information as sources complying with the monthly average alternative that are not using a control device, except add records of operating parameter values for each operating parameter that applies to you.

You must show continuous compliance with the emission limitations for tire cord production affected sources according to the following table:

TABLE 12 TO SUBPART XXXX. —CONTINUOUS COMPLIANCE WITH THE EMISSION LIMITS FOR TIRE CORD PRODUCTION AFFECTED SOURCES

For . . .	For the following emission limit . . .	You must demonstrate continuous compliance by . . .
1. Sources complying with the monthly average compliance alternative without use of a control device in § 63.5987(a).	In Table 2 of this subpart .....	Demonstrating that the monthly average HAP emissions for each monthly operating period do not exceed the emission limits in Table 2 of this subpart, determined according to the applicable procedures in § 63.5997(a), (b)(1) and (3).

TABLE 12 TO SUBPART XXXX.—CONTINUOUS COMPLIANCE WITH THE EMISSION LIMITS FOR TIRE CORD PRODUCTION AFFECTED SOURCES—Continued

For . . .	For the following emission limit . . .	You must demonstrate continuous compliance by . . .
2. Sources complying with the monthly average compliance alternative using a control device in §63.5987(b).	In Table 2 of this subpart .....	Demonstrating that the monthly average HAP emissions for each monthly operating period do not exceed the emission limits in Table 1 of this subpart, option 2, determined according to the applicable procedures in §63.5997(a), (b)(2) and (3), (c), and (d).

You must maintain minimum data to show continuous compliance with the emission limitations for puncture sealant application affected sources according to the following table:

TABLE 13 TO SUBPART XXXX.—MINIMUM DATA FOR CONTINUOUS COMPLIANCE WITH THE EMISSION LIMITS FOR PUNCTURE SEALANT APPLICATION AFFECTED SOURCES

For . . .	You must maintain . . .
1. Each thermal oxidizer used to reduce HAP emissions so that they do not exceed the operating limits in Table 4 of this subpart.	Records of the secondary chamber firebox temperature for 100 percent of the hours during which the process was operated.
2. Each carbon adsorber used to reduce HAP emissions so that they do not exceed the operating limits in Table 4 of this subpart.	Records of the total regeneration stream mass or volumetric flow for each regeneration cycle for 100 percent of the hours during which the process was operated, and a record of the carbon bed temperature after each regeneration, and within 15 minutes of completing any cooling cycle for 100 percent of the hours during which the process was operated.
3. Other type of control device to which puncture sealant application spray booth HAP emissions are ducted so that they do not exceed the operating limits in Table 4 of this subpart.	Records of operating parameter values for each operating parameter that applies to you.
4. Permanent total enclosure capture system used to capture HAP emissions so that they do not exceed the operating limits in Table 4 of this subpart.	Records of the face velocity across any natural draft openings (NDOs), the size of NDOs, the number of NDOs, and their proximity to HAP emission sources.
5. Other capture system used to capture HAP emissions so that they do not exceed the operating limits in Table 4 of this subpart.	Records of operating parameter values for each operating parameter that applies to you.

You must show continuous compliance with the emission limitations for puncture sealant application affected sources according to the following table:

TABLE 14 TO SUBPART XXXX.—CONTINUOUS COMPLIANCE WITH THE EMISSION LIMITS FOR PUNCTURE SEALANT APPLICATION AFFECTED SOURCES

For . . .	You must demonstrate continuous compliance by . . .
1. Each carbon adsorber used to comply with the emission limits in Table 3 of this subpart.	a. Monitoring and recording every 15 minutes the total regeneration stream mass OR volumetric flow, and the carbon bed temperature after each regeneration, and within 15 minutes of completing any cooling cycle, and b. Maintaining the total regeneration stream mass OR the volumetric flow, and the carbon bed temperature after each regeneration, and within 15 minutes of completing any cooling cycle within the operating levels established during your performance test.
2. Each thermal oxidizer used to comply with the emission limits in Table 3 of this subpart.	a. Continuously monitoring and recording the firebox temperature every 15 minutes, and b. Maintaining the daily average firebox temperature within the operating level established during your performance test.
3. Other “add-on” control or capture system hardware used to comply with the emission limits in Table 3 of this subpart.	Continuously monitoring and recording specified parameters identified through compliance testing and identified in the Notification of Compliance Status.

You must submit a compliance report semiannually according to the requirements in §63.6010(b), unless you meet the requirements for annual reporting in §63.6010(c)(7). The report must also include the information in §63.6010(c)(1) through (8). The report must include the following:

TABLE 15 TO SUBPART XXXX.—REQUIREMENTS FOR REPORTS

If . . .	Then you must submit a report or statement that:
1. There are no deviations from any emission limitations that apply to you.	There were no deviations from the emission limitations during the reporting period.
2. There were no periods during which the operating parameter monitoring systems were out-of-control as specified in § 63.8(c)(7).	There were no periods during the which the CPMS were out- of-control during the reporting period.
3. There was a deviation from any emission limitation during the reporting period.	Contains the information in § 63.6010(c).
4. There were periods during which the operating parameter monitoring systems were out-of-control, as specified in § 63.8(c)(7).	Contains the information in § 63.6010(e).

You must use the information listed in the following table to determine which emission limitation in Table 1 of this subpart is applicable to you if own or operate a tire production affected source:

TABLE 16 TO SUBPART XXXX.—SELECTED HAZARDOUS AIR POLLUTANTS

CAS No.	Selected hazardous air pollutants
50000	Formaldehyde.
51796	Ethyl carbamate (Urethane).
53963	2-Acetylaminofluorene.
56235	Carbon tetrachloride.
57147	1,1-Dimethyl hydrazine.
57578	beta-Propiolactone.
58899	Lindane (all isomers).
59892	N-Nitrosomorpholine.
60117	Dimethyl aminoazobenzene.
62759	N-Nitrosodimethylamine.
64675	Diethyl sulfate.
67663	Chloroform.
67721	Hexachloroethane.
71432	Benzene (including benzene from gasoline).
75014	Vinyl chloride.
75070	Acetaldehyde.
75092	Methylene chloride (Dichloromethane).
75218	Ethylene oxide.
75558	1,2-Propylenimine (2-Methyl aziridine).
75569	Propylene oxide.
77781	Dimethyl sulfate.
79061	Acrylamide.
79447	Dimethyl carbamoyl chloride.
79469	2-Nitropropane.
88062	2,4,6-Trichlorophenol.
91941	3,3-Dichlorobenzidine.
92671	4-Aminobiphenyl.
92875	Benzidine.
95534	o-Toluidine.
95807	2,4-Toluene diamine.
96128	1,2-Dibromo-3-chloropropane.
96457	Ethylene thiourea.
98077	Benzotrichloride.
101144	4,4-Methylene bis(2-chloroaniline).
101779	4,4-Methylenedianiline.
106467	1,4-Dichlorobenzene(p).
106898	Epichlorohydrin (1-Chloro-2,3-epoxypropane).
106934	Ethylene dibromide (Dibromoethane).
106990	1,3-Butadiene.
107062	Ethylene dichloride (1,2-Dichloroethane).
107131	Acrylonitrile.
107302	Chloromethyl methyl ether.
117817	Bis(2-ethylhexyl)phthalate (DEHP).
118741	Hexachlorobenzene.
119904	3,3-Dimethoxybenzidine.
119937	3,3-Dimethyl benzidine.
122667	1,2-Diphenylhydrazine.
123911	1,4-Dioxane (1,4-Diethyleneoxide).
127184	Tetrachloroethylene (Perchloroethylene).
140885	Ethyl acrylate.
302012	Hydrazine.
542756	1,3-Dichloropropene.
542881	Bis(chloromethyl)ether.

TABLE 16 TO SUBPART XXXX.—SELECTED HAZARDOUS AIR POLLUTANTS—Continued

CAS No.	Selected hazardous air pollutants
680319 .....	Hexamethylphosphoramide.
684935 .....	N-Nitroso-N-methylurea.
1120714 .....	1,3-Propane sultone.
1332214 .....	Asbestos.
1336363 .....	Polychlorinated biphenyls (Aroclors).
1746016 .....	2,3,7,8-Tetrachlorodibenzo-p-dioxin.
8001352 .....	Toxaphene (chlorinated camphene).
	Arsenic Compounds.
	Chromium Compounds.
	Coke Oven Emissions.

You must comply with the applicable General Provisions requirements according to the following table:

TABLE 17 TO SUBPART XXXX.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART XXXX

Citation	Subject	Brief description of applicable sections	Applicable to Subpart XXXX?	
			Using a control device	Not using a control device
§ 63.1 .....	Applicability .....	Initial applicability determination, applicability after standard established, permit requirements, extensions, notifications.	Yes .....	Yes.
§ 63.2 .....	Definitions .....	Definitions for part 63 standards .....	Yes .....	Yes.
§ 63.3 .....	Units and Abbreviations .....	Units and abbreviations for part 63 standards .....	Yes .....	Yes.
§ 63.4 .....	Prohibited Activities .....	Prohibited activities, compliance date, circumvention, severability.	Yes .....	Yes.
§ 63.5 .....	Construction/ Reconstruction .....	Applicability; applications; approvals .....	Yes .....	Yes.
§ 63.6(a) .....	Applicability .....	GP apply unless compliance extension; GP apply to area sources that become major.	Yes .....	Yes.
§ 63.6(b)(1)–(4) .....	Compliance Dates for New and Reconstructed Sources.	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for section 112(f).	Yes .....	Yes.
§ 63.6(b)(5) .....	Notification .....	Must notify if commenced construction or reconstruction after proposal.	Yes .....	Yes.
§ 63.6(b)(6) .....	[Reserved] .....	.....	Yes .....	Yes.
§ 63.6(b)(7) .....	Compliance Dates for New and Reconstructed Area Sources that Become Major.	.....	No .....	No.
§ 63.6(c)(1)–(2) .....	Compliance Dates for Existing Sources.	1. Comply according to date in subpart, which must be no later than 3 years after effective date. 2. For section 112(f) standards, comply within 90 days of effective date unless compliance extension.	Yes .....	Yes.
§ 63.6(c)(3)–(4) .....	[Reserved] .....	.....	Yes .....	Yes.
§ 63.6(c)(5) .....	Compliance Dates for Existing Area Sources that Become Major.	Area sources that become major must comply with major source standards by date indicated in subpart or by equivalent time period (for example, 3 years).	Yes .....	Yes.
§ 63.6(d) .....	[Reserved] .....	.....	Yes .....	Yes.
§ 63.6(e)(1)–(2) .....	Operation & Maintenance .....	1. Operate to minimize emissions at all times ..... 2. Correct malfunctions as soon as practicable ..... 3. Operation and maintenance requirements independently enforceable; information Administrator will use to determine if operation and maintenance requirements were met.	Yes ..... Yes ..... Yes .....	Yes Yes. Yes.

TABLE 17 TO SUBPART XXXX.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART XXXX—Continued

Citation	Subject	Brief description of applicable sections	Applicable to Subpart XXXX?	
			Using a control device	Not using a control device
§ 63.6(e)(3) .....	Startup, Shutdown, and Malfunction Plan (SSMP).	.....	No .....	No.
§ 63.6(f)(1) .....	Compliance Except During SSM ....	.....	No .....	No.
§ 63.6(f)(2)–(3) .....	Methods for Determining Compliance.	Compliance based on performance test, operation and maintenance plans, records, inspection.	Yes .....	Yes.
§ 63.6(g)(1)–(3) .....	Alternative Standard .....	Procedures for getting an alternative standard .....	Yes .....	Yes.
§ 63.6(h) .....	Opacity/Visible Emission (VE) Standards.	.....	No .....	No.
§ 63.6(i) .....	Compliance Extension .....	Procedures and criteria for Administrator to grant compliance extension.	Yes .....	Yes.
§ 63.6(j) .....	Presidential Compliance Exemption	President may exempt source category from requirement to comply with rule.	Yes .....	Yes.
§ 63.7(a)(1)–(2) .....	Performance Test Dates .....	.....	No .....	No.
§ 63.7(a)(3) .....	Section 114 Authority .....	Administrator may require a performance test under CAA section 114 at any time.	Yes .....	No.
§ 63.7(b)(1) .....	Notification of Performance Test ....	Must notify Administrator 60 days before the test .....	Yes .....	No.
§ 63.7(b)(2) .....	Notification of Rescheduling .....	If rescheduling a performance test is necessary, must notify Administrator 5 days before scheduled date of rescheduled date.	Yes .....	No.
§ 63.7(c) .....	Quality Assurance/Test Plan .....	Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with: 1. Test plan approval procedures .....	Yes .....	No.
		2. Performance audit requirements .....	Yes .....	No.
		3. Internal and External quality assurance procedures for testing.	Yes .....	No.
§ 63.7(d) .....	Testing Facilities .....	Requirements for testing facilities .....	Yes .....	No.
§ 63.7(e)(1) .....	Conditions for Conducting Performance Tests.	1. Performance tests must be conducted under representative conditions.	Yes .....	No.
		2. Cannot conduct performance tests during SSM .....	Yes .....	No.
		3. Not a violation to exceed standard during SSM .....	Yes .....	No.
§ 63.7(e)(2) .....	Conditions for Conducting Performance Tests.	Must conduct according to rule and EPA test methods unless Administrator approves alternative.	Yes .....	No.
§ 63.7(e)(3) .....	Test Run Duration .....	1. Must have three test runs of at least 1 hour each 2. Compliance is based on arithmetic mean of three runs. 3. Conditions when data from an additional test run can be used.	Yes .....	No.
			Yes .....	No.
§ 63.7(f) .....	Alternative Test Method .....	Procedures by which Administrator can grant approval to use an alternative test method.	Yes .....	No.
§ 63.7(g) .....	Performance Test Data Analysis ....	1. Must include raw data in performance test report .. 2. Must submit performance test data 60 days after end of test with the Notification of Compliance Status. 3. Keep data for 5 years .....	Yes .....	No.
			Yes .....	No.
			Yes .....	Yes.
§ 63.7(h) .....	Waiver of Tests .....	Procedures for Administrator to waive performance test.	Yes .....	No.
§ 63.8(a)(1) .....	Applicability of Monitoring Requirements.	Subject to all monitoring requirements in standard ....	Yes .....	Yes.

TABLE 17 TO SUBPART XXXX.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART XXXX—Continued

Citation	Subject	Brief description of applicable sections	Applicable to Subpart XXXX?	
			Using a control device	Not using a control device
§ 63.8(a)(2) .....	Performance Specifications .....	Performance Specifications in appendix B of part 60 apply.	Yes .....	No.
§ 63.8(a)(3) .....	[Reserved] .....	.....	Yes .....	Yes.
§ 63.8(a)(4) .....	Monitoring with Flares .....	.....	No .....	No.
§ 63.8(b)(1) .....	Monitoring .....	Must conduct monitoring according to standard unless Administrator approves alternative.	Yes .....	Yes.
§ 63.8(b)(2)–(3) .....	Multiple Effluents and Multiple Monitoring Systems.	1. Specific requirements for installing monitoring systems. 2. Must install on each effluent before it is combined and before it is released to the atmosphere unless Administrator approves otherwise. 3. If more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup.	Yes .....	Yes.
§ 63.8(c)(1) .....	Monitoring System Operation and Maintenance.	Maintain monitoring system in a manner consistent with good air pollution control practices.	Yes .....	No.
§ 63.8(c)(1)(i) .....	Routine and Predictable SSM .....	.....	No .....	No.
§ 63.8(c)(1)(ii) .....	SSM not in SSMP .....	.....	No .....	No.
§ 63.8(c)(1)(iii) .....	Compliance with Operation and Maintenance Requirements.	1. How Administrator determines if source complying with operation and maintenance requirements. 2. Review of source operation and maintenance procedures, records, manufacturer's instructions, recommendations, and inspection of monitoring system.	Yes .....	Yes.
§ 63.8(c)(2)–(3) .....	Monitoring System Installation .....	1. Must install to get representative emission and parameter measurements. 2. Must verify operational status before or at performance test.	Yes .....	No.
§ 63.8(c)(4) .....	Continuous Monitoring System (CMS) Requirements.	.....	No .....	No.
§ 63.8(c)(5) .....	Continuous Opacity Monitoring Systems (COMS) Minimum Procedures.	.....	No .....	No.
§ 63.8(c)(6) .....	CMS Requirements .....	.....	No .....	No.
§ 63.8(c)(7)–(8) .....	CMS Requirements .....	Out-of-control periods, including reporting: 1. If you are a puncture sealant application affected source. 2. If you are a tire production or tire cord production affected source.	Yes .....	No.
§ 63.8(d) .....	CMS Quality Control .....	.....	No .....	No.
§ 63.8(e) .....	CMS Performance Evaluation .....	.....	No .....	No.
§ 63.8(f)(1)–(5) .....	Alternative Monitoring Method .....	Procedures for Administrator to approve alternative monitoring.	Yes .....	Yes.
§ 63.8(f)(6) .....	Alternative to Relative Accuracy Test.	.....	No .....	No.
§ 63.8(g) .....	Data Reduction .....	.....	No .....	No.
§ 63.9(a) .....	Notification Requirements .....	Applicability and state delegation .....	Yes .....	Yes.
§ 63.9(b)(1)–(5) .....	Initial Notifications .....	1. Submit notification 120 days after effective date ....	Yes .....	Yes.



TABLE 17 TO SUBPART XXXX.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART XXXX—Continued

Citation	Subject	Brief description of applicable sections	Applicable to Subpart XXXX?	
			Using a control device	Not using a control device
		2. Notification of intent to construct/reconstruct, notification of commencement of construct/reconstruct, notification of startup. 3. Contents of each .....	Yes .....	Yes.
§ 63.9(c) .....	Request for Compliance Extension	Can request if cannot comply by date or if installed best available control technology or lowest achievable emission rate.	Yes .....	Yes.
§ 63.9(d) .....	Notification of Special Compliance Requirements for New Source.	For sources that commence construction between proposal and promulgation and want for to comply 3 years after effective date.	Yes .....	Yes.
§ 63.9(e) .....	Notification of Performance Test ....	Notify Administrator 60 days prior .....	Yes .....	No.
§ 63.9(f) .....	Notification of VE/Opacity Test .....	.....	No .....	No.
§ 63.9(g) .....	Additional Notifications When Using CMS.	.....	No .....	No.
§ 63.9(h) .....	Notification of Compliance Status.	1. Contents .....	Yes .....	Yes.
		2. Due 60 days after Status end of performance test or other compliance demonstration, except for opacity/VE, which are due 30 days after.	Yes .....	Yes.
		3. When to submit to Federal vs. Sate authority. ....	Yes .....	Yes.
§ 63.9(i) .....	Adjustment of Submittal Deadlines	Procedures for Administrator to approve change in when notifications must be submitted.	Yes .....	Yes.
§ 63.9(j) .....	Change in Previous Information .....	Must submit within 15 days after the change .....	Yes .....	Yes.
§ 63.10(a) .....	Recordkeeping/Reporting .....	1. Applies to all, unless compliance extension .....	Yes .....	Yes.
		2. When to submit to Federal vs. State authority .....	Yes .....	Yes
		3. Procedures for owners of more than 1 source .....	Yes .....	Yes
§ 63.10(b)(1) .....	Recordkeeping/Reporting .....	1. General Requirements .....	Yes .....	Yes
		2. Keep all records readily available .....	Yes .....	Yes
		3. Keep for 5 years .....	Yes .....	Yes
§ 63.10(b)(2)(i)–(iv) .....	Records related to Startup, Shut-down, and Malfunction.	.....	No .....	No.
§ 63.10(b)(2)(vi) and (x)–(xi).	CMS Records .....	1. Malfunctions, inoperative, out-of-control: a. If you are a puncture sealant application affected source. b. If you are a tire production or tire cord production affected source. 2. Calibration checks: a. If you are a puncture sealant application affected source. b. If you are a tire production or tire cord production affected source. 3. Adjustments, maintenance: a. If you are a puncture sealant application affected source. b. If you are a tire production or tire cord production affected source.	Yes .....	No.
			No .....	No.
			Yes .....	No.
			No .....	No.
			Yes .....	No.
			No .....	No.
§ 63.10(b)(2)(vii)–(ix) ....	Records .....	1. Measurements to demonstrate compliance with emission limitations. 2. Performance test, performance evaluation, and visible emission observation results. 3. Measurements to determine conditions of performance tests and performance evaluations.	Yes .....	Yes.
			Yes .....	Yes.
			Yes .....	Yes.
§ 63.10(b)(2)(xii) .....	Records .....	Records when under waiver .....	Yes .....	Yes.

TABLE 17 TO SUBPART XXXX.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART XXXX—Continued

Citation	Subject	Brief description of applicable sections	Applicable to Subpart XXXX?	
			Using a control device	Not using a control device
§ 63.10(b)(3) .....	Records .....	Applicability Determinations .....	Yes .....	Yes.
§ 63.10(c) .....	Records .....	.....	No .....	No.
§ 63.10(d)(1) .....	General Reporting Requirements ...	Requirement to report .....	Yes .....	Yes.
§ 63.10(d)(2) .....	Report of Performance Test Results.	When to submit to Federal or State authority .....	Yes .....	No.
§ 63.10(d)(3) .....	Reporting Opacity or VE Observations.	.....	No .....	No.
§ 63.10(d)(4) .....	Progress Reports .....	Must submit progress reports on schedule if under compliance extension.	Yes .....	Yes.
§ 63.10(d)(5) .....	Startup, Shutdown, and Malfunction Reports.	.....	No .....	No.
§ 63.10(e) .....	Additional CMS Reports .....	.....	No .....	No.
§ 63.10(f) .....	Waiver for Recordkeeping/Reporting.	Procedures for Administrator to waive .....	Yes .....	Yes.
§ 63.11 .....	Flares .....	.....	No .....	No.
§ 63.12 .....	Delegation .....	State authority to enforce standards .....	Yes .....	Yes.
§ 63.13 .....	Addresses .....	Addresses where reports, notifications, and requests are sent.	Yes .....	Yes.
§ 63.14 .....	Incorporation by Reference .....	Test methods incorporated by reference .....	Yes .....	Yes.
§ 63.15 .....	Availability of Information .....	Public and confidential information .....	Yes .....	Yes.

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