



# Federal Register

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**Thursday,  
October 4, 2001**

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**Part V**

## **Environmental Protection Agency**

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**40 CFR Part 63**

**National Emission Standards for  
Hazardous Air Pollutants for Friction  
Materials Manufacturing Facilities;  
Proposed Rule**

**ENVIRONMENTAL PROTECTION AGENCY****40 CFR Part 63**

[FRL-7074-5]

RIN 2060-AG87

**National Emission Standards for Hazardous Air Pollutants for Friction Materials Manufacturing Facilities****AGENCY:** Environmental Protection Agency (EPA).**ACTION:** Proposed rule.

**SUMMARY:** This action proposes national emission standards for hazardous air pollutants (NESHAP) for new and existing friction materials manufacturing facilities. Some of these facilities, specifically those that perform solvent mixing, have been identified as major sources of hazardous air pollutants (HAP) including n-hexane, toluene, and trichloroethylene. Exposure to these substances has been demonstrated to cause adverse health effects such as irritation of the lungs, skin, mucous membranes, and effects on the central nervous system, liver, and kidney.

These proposed standards would implement section 112(d) of the Clean Air Act (CAA) by requiring all major sources to meet HAP emission standards reflecting the application of the maximum achievable control technology (MACT). Implementation of these proposed standards will reduce HAP emissions by approximately 340 tons per year (tpy).

**DATES:** *Comments.* Submit comments on or before December 3, 2001.

*Public Hearing.* If anyone contacts the EPA requesting to speak at a public hearing by October 24, 2001, a public hearing will be held on November 5, 2001.

**ADDRESSES:** *Comments.* By U.S. Postal Service, send comments (in duplicate if possible) to: Air and Radiation Docket and Information Center (6102), Attention Docket Number A-97-57, U.S. EPA, 1200 Pennsylvania Avenue, NW, Washington DC 20460. In person or by courier, deliver comments (in duplicate if possible) to: Air and Radiation Docket and Information Center (6102), Attention Docket Number A-97-57, U.S. EPA, Room Number M1500, 401 M Street, SW, Washington, DC 20460. The EPA requests that a separate copy of each public comment be sent to the contact person listed below.

*Public Hearing.* If a public hearing is held, it will be held at the EPA Office of Administration Auditorium, Research Triangle Park, NC beginning at 10 a.m., or at an alternate site nearby.

*Docket.* Docket No. A-97-57 contains supporting information used in developing the standards. The docket is located at the U.S. EPA, 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 questions about the proposed rule, contact Kevin Cavender, Metals Group, Emission Standards Division (MD-13), U.S. EPA, Research Triangle Park, NC 27711, telephone number (919) 541-2364, electronic mail address: cavender.kevin@epa.gov. For questions about the public hearing, contact Cassie Posey, Metals Group, Emission Standards Division (MD-13), U.S. EPA, Research Triangle Park, NC 27711, telephone number (919) 541-0069, electronic mail address: posey.cassie@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: A-97-57. 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: Mr. Kevin Cavender, c/o OAQPS Document Control Officer (Room 740B), U.S. EPA, 411 W. Chapel Hill Street, 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 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. Cassie Posey at least 2 days in advance of the public hearing. Persons interested in attending the public hearing must also contact Ms. Posey to verify the time, date, and location of the hearing. The address, telephone number, and e-mail address for Ms. Posey are listed in the preceding **FOR FURTHER INFORMATION CONTACT** section. If a public hearing is held, it will provide interested parties the opportunity to present data, views, or arguments concerning these proposed emission standards.

*Docket.* The docket reflects the full administrative record for this action and includes all the information relied upon by EPA in the development of this proposed rule. 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.

*World Wide Web (WWW).* In addition to being available in the docket, an electronic copy of today's proposed rule will also be available on the WWW through the Technology Transfer Network (TTN). Following the Administrator's signature, a copy of the proposed rule will be posted on the TTN's policy and guidance page for newly proposed or promulgated rules at <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	NAICS	Examples of regulated entities
Industry .....	33634, 327999, 333613	Friction materials manufacturing facilities.

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 § 63.9485 of the proposed rule. If you have any 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 presented in this preamble is organized as follows:

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- G. Paperwork Reduction Act
- H. National Technology Transfer and Advancement Act of 1995
- I. Executive Order 13211 (Energy Effects)

**I. Background**

*A. What Is the Source of Authority for the Development of 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. The category of major sources covered by today's proposed NESHAP is friction materials manufacturing. Major sources are those that emit or have the potential to emit at least 10 tpy of any single HAP or 25 tpy of any combination of HAP.

*B. What Criteria Are Used in the Development of NESHAP?*

The NESHAP for new and existing sources developed under section 112 must reflect the maximum degree of reduction of HAP emissions that is achievable taking into consideration the cost of achieving the emission reduction, any non-air quality health and environmental benefits, and energy requirements. Emission reductions may be accomplished through promulgation of emission standards under section 112(d). These may include, but are not limited to:

- Reducing the volume of emissions of HAP, or eliminating the emissions through process changes, substitution of materials, or other modifications;
- Enclosing systems or processes to eliminate emissions;
- Collecting, capturing, or treating such pollutants when released from a process, stack, storage, or fugitive emissions point;
- Design, equipment, work practice, operational standards, or any combination thereof, if it is not feasible to prescribe or enforce an emission standard (including requirements for operator training or certification); or
- A combination of the above.

Section 112 requires us to establish a minimum baseline or "floor" for standards. For new sources, the

standards for a source category or subcategory cannot be less stringent than the emission control that is achieved in practice by the best-controlled similar source. The standards for existing sources can be less stringent than the 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 for categories and subcategories with 30 or more sources. For categories and subcategories with fewer than 30 sources, the standards cannot be less stringent than the average emission limitation achieved by the best-performing five sources.

Section 112(d) allows us to distinguish among classes, types, and sizes of sources within a category or subcategory. For example, we can establish two classes of sources within a category or subcategory based on size and establish a different emission standard for each class.

For NESHAP developed to date, we have used several different approaches to determine the MACT floor for individual source categories depending on the type, quality, and applicability of available data. These approaches include determining a MACT floor based on: (1) emissions test data that characterize actual HAP emissions from presently controlled sources included in the source category; (2) existing federally-enforceable emission limitations specified in air regulations and facility air permits applicable to the individual sources comprising the source category; and (3) application of a specific type of control technology for air emissions currently being used by sources in the source category or by sources with similar pollutant stream characteristics.

To select the MACT standard, we evaluate several alternatives (which may be different levels of emission control or different levels of applicability or both) to select the one that best reflects the appropriate MACT level. The selected alternative may be more stringent than the MACT floor, but the control level selected must be technically achievable. In selecting an alternative, we consider the achievable HAP emission reduction (and possibly other pollutants that are co-controlled), cost and economic impacts, energy impacts, and other environmental impacts. The objective is to achieve the maximum degree of emission reduction without

unreasonable economic or other impacts. The regulatory alternatives selected for new and existing sources may be different, and separate regulatory decisions may be made for new and existing sources.

We then translate the selected regulatory alternative into a proposed rule. The public is invited to comment on the proposal during the public comment period. Based on an evaluation of these comments, we reach a final decision and promulgate the standard.

### *C. What Source Category Is Affected by This Proposed Rule?*

Section 112 of the CAA requires us to list all categories of major HAP emitting sources and to promulgate regulations for their control. An initial list of source categories and accompanying schedules for regulation were published on December 3, 1993 (58 FR 63941). Friction materials manufacturing was not among the initially listed source categories. A subsequent notice published on June 4, 1996 (61 FR 28197) added friction products manufacturing to the list of major source categories scheduled for regulation by November 15, 2000. The listing was based on information obtained in a 1992 survey of the industry from which we concluded that some facilities that manufacture friction products have the potential to be major sources of HAP emissions. Friction products manufacturing includes facilities that manufacture, assemble, or rebuild friction products such as brakes or clutches. Based on additional information obtained during the development of this proposed rule, we have determined that only facilities that manufacture friction materials have the potential to emit HAP at major source levels. As such, this proposed rule will affect only friction materials manufacturers. The next revision to the source category list under section 112, which is published in the **Federal Register**, will remove the friction products manufacturing source category and add the friction material manufacturing source category.

### *D. What Is Friction Materials Manufacturing?*

Friction materials manufacturing is a subset of friction products manufacturing. Broadly speaking, the friction products manufacturing industry includes any facility that manufactures or re-manufactures friction products such as brakes and clutches. Friction products are used in a number of market segments, including automotive, aerospace, railroad, heavy

equipment, industrial, appliance, and lawn and garden. We know of 147 domestic friction products manufacturing facilities. Of these, 16 only assemble new products, 78 rebuild or otherwise recondition products, and 53 manufacture friction materials (e.g., brake and clutch linings). Assemblers purchase new friction materials from other manufacturers and attach it to new backing plates or shoes. Rebuilders purchase new friction materials from other manufacturers and attach it to reconditioned brake shoes or clutch plates. None of these facilities manufacture friction materials and none are major sources of HAP. Consequently, none of these facilities would be regulated under today's proposed rule.

Friction materials manufacturers make brake and clutch linings and, in most cases, assemble finished products. They can be classified into three classes based on the friction materials manufactured: sintered material, carbon-based material, and resin-based material.

Two facilities manufacture sintered friction materials. Both use high temperature processes to fuse non-HAP metal and mineral ingredients into a consolidated product. Neither facility is believed to be a major source of HAP, and, therefore, neither would be regulated under today's proposal.

Four facilities manufacture carbon-based friction products in which carbon is impregnated into a synthetic mesh to create a friction material. Hydrogen cyanide is the only HAP known to be emitted in the process. All four existing facilities have federally enforceable control requirements that limit hydrogen cyanide emissions to well below the major source threshold of 10 tpy. In addition, we do not anticipate that any new carbon-based facilities will be built. As a result, manufacturers of carbon-based friction products will not be regulated under today's proposed rule.

Forty-seven facilities manufacture resin-based friction materials. At these facilities, friction ingredients are mixed with resins which, when cured, bind the friction ingredients together. In most cases, mixing can be done without the aid of a solvent. However, for some friction materials, solvents are needed to enhance mixing and as a process aid in later stages. Of the 47 facilities that manufacture resin-based friction materials, only four use solvents to mix friction materials. All four are believed to be major sources of HAP due to air releases of the solvents used. The HAP-containing solvents used include n-hexane, toluene, and trichloroethylene.

Based on our review, we believe that solvent mixing is the only significant HAP emission source associated with friction material manufacturing.<sup>1</sup> As such, today's proposed rule establishes emission limitations for HAP emissions only for solvent mixers at new and existing sources that manufacture resin-based friction materials.

The principal operations used in the manufacture of resin-based friction materials can be classified into four general areas: raw material preparation, forming, curing, and assembling and finishing.

In the raw material preparation area, raw materials (reinforcement material, property modifiers, resins, solvents, and other additives) are blended and made ready for subsequent processing. Process units in the raw material preparation area include mixers, granulators, and dryers. Mixing is accomplished in discrete batches. Double-arm mixers are the most common type of mixer used. A typical batch includes between 300 to 1000 pounds of friction ingredients and takes between 20 minutes and 1 hour to mix. Batches of mixed friction material may then be processed further through a granulator which extrudes the material through a ¼ to ½ inch die, and then cuts the extruded material into ½ to 1 inch lengths. Some facilities also dry the friction material after mixing, but before the forming step, to remove any remaining solvent from the material mix. The dryer is typically an indirect type which dries the material mix by contact and heat transfer through the dryer wall. Typical drying temperatures are on the order of 150 °F.

The blended and prepared friction material is then transferred from the raw material preparation area to the forming area, where the material is formed into shapes. Forming equipment includes extruders, roll machines, and hot presses. Extruders are used to form tapes and pellets of friction material. Pellets are formed by forcing the moist friction material through perforations in a metal die and cutting the continuously formed strands to a predetermined length. Tapes are formed by forcing the friction material through a metal die with an appropriately-shaped slot in a heated extruder head. Roll machines are used to form flat, pliable tapes, similar

<sup>1</sup> Two additional resin-based manufacturers are believed to be major sources. However, both are major due primarily to HAP emissions from ancillary surface coating and degreasing operations, which either are or will be regulated under other NESHAP. These two resin-based manufacturers have no solvent mixers, and as such, are not included in the MACT floor analysis for solvent mixers.

to those produced by an extruder, and are also used to produce wider sheets of friction material. The moist friction material is metered between a series of rollers which form a continuous strip of friction material with a preset width and thickness. Hot presses are used to form disc brake pucks, integrally-molded disc brake pads, brake segments, and brake blocks. Hot presses apply heat and pressure over time to consolidate the friction mix into a solid product. Pre-measured quantities of friction mix are poured into each press cavity. As heat and pressure are applied, the material is partially cured.

After the friction shapes are formed, they are cured in a curing oven or post bake oven. Curing times and temperatures vary with product size and composition. Curing times range from 1 hour to 2 days, but typically run about 12 hours. Oven temperatures ramp up and then down over the curing cycle and range from 180 to 500 °F. Once the friction material is formed and cured, it is finished and subsequently assembled with some type of metal backing. Finishing operations bring the friction product to final specifications. These operations include machining, painting, and edge coding. Assembly operations include steel preparation (i.e., degreasing), adhesive application, oven bonding, riveting, and attachment of hardware (e.g., mounting brackets, wear sensors, and noise suppressors).

#### *E. What HAP Are Emitted From Friction Materials Manufacturing Facilities?*

The nature and quantity of HAP emissions from the manufacturing of friction materials is driven almost entirely by whether HAP containing solvents are used in mixing. The primary HAP emitted from the major source friction materials manufacturing facilities are HAP solvents from mixing operations. Currently, these include n-hexane, toluene, and trichloroethylene. The main sources of these HAP emissions are the solvent mixers themselves. Other potential sources of HAP solvent emissions include granulators, dryers, extruders, roll machines, hot presses, and ovens.

Emissions from mixers can occur as solvent is added to the mixer, during the mixing cycle, and as fugitive emissions when the mixed material is transferred from the mixer to the next and subsequent process operations. The type and quantity of organic HAP emissions from solvent mixers varies depending on the type of solvent used, the amount of solvent used per batch, the configuration of the mixer, and the presence or absence of a solvent recovery system. Three of the seven

solvent mixers are equipped with solvent recovery systems designed to minimize HAP emissions and to reclaim solvent for reuse. For these mixers, the solvent is removed from the mixed material by vacuum evaporation and collected in either a condenser or a carbon adsorber. The reclaimed solvent is recycled and reused in the process or sold as reclaimed solvent.

Residual solvent that is not recovered or emitted at the solvent mixer can be emitted in subsequent processes as the friction material is processed through extruders, roll machines, granulators, dryers, hot presses, and ovens. The potential for emissions from these downstream processes is proportional to the quantity of residual solvent retained in the friction material after mixing.

Small amounts of phenol and formaldehyde (HAP components of phenolic resins) are emitted from hot presses and curing ovens or otherwise subject to methods of emission reductions. At the four major HAP sources, phenol and formaldehyde emissions account for less than 5 percent of the total HAP emitted. None of the existing hot presses or curing ovens at the four major sources are equipped with HAP emission controls. Available test data indicate that the phenol and formaldehyde emissions are on the order of 5 parts per million (ppm) or less, which is well below the level which can effectively be controlled by add on controls or any other methods of emissions reductions.

#### *F. What Are the Health Effects Associated With Emissions From Friction Materials Manufacturing Facilities?*

The primary HAP that would be addressed by this proposed rule include n-hexane, toluene, and trichloroethylene. Each are associated with a variety of adverse health effects, including chronic health disorders (e.g., reproductive and developmental effects, and effects on the central nervous system (CNS)), and acute health disorders (e.g., irritation of the lung, skin, and mucus membranes and effects on the CNS, liver, and kidneys).

Acute inhalation exposure of humans to high levels of hexane causes mild CNS effects, including dizziness, giddiness, slight nausea, and headache. Chronic exposure to hexane in air causes numbness in the extremities, muscular weakness, blurred vision, headache, and fatigue. One study reported testicular damage in rats exposed to hexane through inhalation. No information is available on the carcinogenic effects of hexane in humans or animals. We have classified

hexane in Group D, not classifiable as to human carcinogenicity.

Acute and chronic inhalation exposure to trichloroethylene can affect the human CNS, producing symptoms such as dizziness, headache, confusion, euphoria, facial numbness, and weakness. High, short-term exposures to humans by inhalation have also been associated with effects on the liver, kidneys, gastrointestinal system, and skin. Human evidence is not adequate to establish a causal link between trichloroethylene exposure and cancer, but animal inhalation studies have reported increases in lung, liver, and testicular tumors. We have classified trichloroethylene as intermediate between probable and possible human carcinogen (Group B/C). We are currently reassessing its potential carcinogenicity.

Acute inhalation of toluene by humans may cause effects to the CNS, such as fatigue, sleepiness, headache, and nausea, as well as irregular heartbeat. Adverse CNS effects have been reported in chronic abusers exposed to high levels of toluene. Symptoms include tremors, decreased brain size, involuntary eye movements, and impaired speech, hearing, and vision. Chronic (long-term) inhalation exposure of humans to lower levels of toluene also causes irritation of the upper respiratory tract, eye irritation, sore throat, nausea, dizziness, headaches, and difficulty with sleep. Studies of children whose mothers were exposed to toluene by inhalation or mixed solvents during pregnancy have reported CNS problems, facial and limb abnormalities, and delayed development. However, these effects may not be attributable to toluene alone. We have classified toluene in Group D, not classifiable as to human carcinogenicity.

## **II. Summary of the Proposed Rule**

### *A. What Is the Affected Source?*

The affected source is each existing and new solvent mixer at a friction materials manufacturing facility that is, or is part of, a major source of HAP emissions. A new affected source is one constructed or reconstructed after October 4, 2001. An existing affected source is one constructed or reconstructed on or before October 4, 2001.

### *B. What Is the Emission Limitation?*

The proposed rule would require owners and operators of both new and existing affected solvent mixers to limit emissions of total organic HAP discharged to the atmosphere to 15

percent or less of that loaded into an affected solvent mixer, based on a 7-day block average.

*C. What Are the Initial and Continuous Compliance Requirements?*

Initial compliance would be determined by measuring and recording the weight of solvent added to each affected mixer and the weight of solvent recovered for each mix batch over the first 7 consecutive days after the compliance date. Initial compliance is demonstrated if the average amount of solvent discharged to the atmosphere recorded for each mix batch over the 7-day period does not exceed 15 percent. The proposed rule also includes performance specifications for the weight measurement device as well as procedures for conducting the measurements and computing the results. To demonstrate continuous compliance, owners and operators would be required to continue to weigh and record the percent of solvent emitted for each mix batch and to maintain each 7-day block average at or below 15 percent.

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

The proposed notification, recordkeeping, and reporting requirements rely on the NESHAP General Provisions in 40 CFR part 63, subpart A. Table 1 in the proposed rule shows each of the requirements in the General Provisions (§§ 63.2 through 63.15) and whether they apply.

Under today's proposed rule, owners or operators subject to these standards must submit each of the notifications contained in the General Provisions that applies to them. These include an initial notification of applicability, which for existing sources is required within 120 days of the promulgation date; and a notification of compliance status, which must be submitted before the close of business on the 30th calendar day following the completion of the initial compliance demonstration.

In addition, owners or operators subject to these standards would need to prepare and maintain all records required by the General Provisions to document compliance with each enforceable provision of the proposed rule. Records needed to show continuous compliance with the emission limitation in the proposed rule are to be kept for 5 years.

We are also requiring owners and operators of all affected sources to submit semiannual compliance reports which highlight any deviations from the emission limitation and other

provisions of the proposed rule. Each report would be due no later than 30 days after the end of the reporting period. If no deviations occurred, owners and operators are only required to submit a statement that there were no deviations from the emission limitation during the reporting period. More detailed information would be required, as specified in the proposed rule, if a deviation occurred or there was a startup, shutdown, or malfunction event. Owners and operators must submit an immediate report if they undertake actions during a startup, shutdown, or malfunction that are inconsistent with the procedures in their approved startup, shutdown, and malfunction plan, required by § 63.6(e)(3) of the General Provisions. Deviations that occur during a period of startup, shutdown, or malfunction are not violations if the owner or operator demonstrates to our satisfaction that the affected source was operating in accordance with the startup, shutdown, and malfunction plan.

*E. What Are the Compliance Deadlines?*

Existing sources must comply within 2 years of the date of publication of the final rule. New or reconstructed sources must comply at startup, or upon the date of publication of the final rule, depending on their startup date.

**III. Rationale for Selecting the Proposed Standards**

*A. How Did We Select the Source Category?*

We added the friction products manufacturing source category to the list of major sources to be regulated under Title III on June 4, 1996 (61 FR 28197) because we believed that a number of friction products manufacturers had the potential to emit HAP at major source levels. Friction products manufacturing includes facilities that manufacture, assemble, or rebuild friction products such as brakes or clutches. Based on additional information obtained during the development of this proposed rule, we have determined that only facilities that manufacture friction materials have the potential to emit HAP at major source levels. As such, we have selected friction materials manufacturing as the source category to regulate.

*B. How Did We Select the Affected Source?*

Affected source means the collection of equipment and processes in the source category or subcategory to which the emission limitation and other regulatory requirements apply. The

affected source may be the same collection of equipment and processes as the source category or it may be a subset of the source category. For each rule, we must decide which individual pieces of equipment and processes warrant separate standards in the context of the CAA section 112 requirements and the industry operating practices.

We considered two approaches for designating the affected source for friction materials manufacturing—the entire facility or individual emission sources. We concluded that designating individual solvent mixers as the affected source is the most appropriate approach. The solvent mixer is the only significant source of HAP emissions at the four major sources, and controlling individual solvent mixers is consistent with the approach to control applied at all four major sources. The affected source definition we selected is the same for both new and existing sources. We decided not to identify hot presses and curing ovens as affected sources because HAP emissions from these sources are very low, none of the existing hot presses and curing ovens are equipped with HAP controls, and we do not believe that hot presses and curing ovens at friction materials manufacturers can effectively be controlled by add on controls.

*C. How Did We Select the Pollutants?*

The HAP solvents currently used at the friction materials manufacturing facilities estimated to be major sources include n-hexane, toluene, and trichloroethylene. Whether these specific solvents will continue to be used or whether they might in the future be replaced with other HAP solvents is uncertain. As such, we believe that establishing separate standards for individual solvents would be unwise. Consequently, we have selected HAP solvent emissions as a surrogate for the individual HAP compounds n-hexane, toluene, and trichloroethylene.

*D. How Did We Determine the Basis and Level of the Proposed Emission Limitation for Solvent Mixers?*

As reported previously, we surveyed the entire friction materials manufacturing industry and determined that four facilities with solvent mixers emit HAP in excess of the major source levels. Combined, these four facilities (referred to here as Plants A, B, C, and D) operate a total of seven solvent mixers, of which three are equipped with air pollution controls, and four have no control.

Plant A operates one solvent mixer and uses toluene as the solvent.

According to information on air releases reported by the plant to the 1998 Toxics Release Inventory (TRI), air emissions of toluene are on the order of 45 tons per year. After mixing, solvent is drawn out of the mixer under a strong vacuum. Data collected by plant personnel indicate that typically more than 95 percent of the solvent is removed from the mixed material, with less than 5 percent remaining in the mix. The evacuated solvent vapors are then condensed in a non-contact condenser, which cools the vapors to 32 °F. Liquid condensate is collected and recycled to the process, and uncondensed vapor is exhausted to the atmosphere through a stack.

Plant A has a State operating permit which requires that the facility collect at least 85 percent (by weight) of the solvent that is added to the mixer, averaged over a calendar week. The percent solvent recovery is determined for each individual mix batch by weighing the amount of solvent loaded into the mixer and weighing the amount of solvent recovered by the condenser. Plant A began collecting solvent recovery data for each batch in January 1999. We reviewed the solvent recovery records from January 1999 through October 1999 and found that the 85 percent solvent recovery limit has been consistently achieved on a weekly, or 7-day block average, basis.

Plant B has four solvent mixers that use n-hexane as the solvent. Again, based on self-reported emissions data to TRI for 1998, Plant B emits approximately 450 tons of hexane annually. Three of the four mixers have no air pollution controls. All of the solvent added to these mixers is emitted to the atmosphere. The fourth mixer has a solvent recovery system similar to the one described for Plant A. Solvent is drawn out of the mixed material by vacuum. The solvent vapors are then collected by a non-contact condenser, which cools the solvent vapor to 60°F. Once a quarter, Plant B performs a solvent mass balance for one batch to evaluate the performance of the solvent recovery system. The amount of solvent added to the mixer is measured using a calibrated flow meter and the amount of solvent recovered by the condenser is weighed. The results of these measurements indicate that approximately 70 percent of the solvent is recovered by the solvent recovery system on average. A moisture analysis is also performed on a sample of the mixed material to determine how much solvent remains in the mix. Using these data and the overall system efficiency, plant personnel have determined that approximately 90 percent of the solvent

is removed from the mix by the solvent recovery system, and that the condenser removes approximately 80 percent of the solvent vapors.

Plant C has one solvent mixer that uses trichloroethylene as the solvent. Based on the self-reported emissions data to TRI for 1998, Plant C emits approximately 30 tons of trichloroethylene per year. As with the other two controlled mixers, solvent is removed from the mixer under vacuum. No data are available on how much of the solvent is removed from the mixed friction material by the vacuum system. The solvent vapors are combined with the emissions from a solvent degreaser, and the comingled vapors are collected in an activated-carbon adsorber. The adsorbed solvent is recovered daily by steam stripping the adsorber bed, and the recovered solvent is sold. Performance data based on a single inlet/outlet emissions test conducted in 1996 indicate that the subject adsorber is capable of achieving 94 percent control. It should be noted that control efficiency does not equate to solvent recovery since it does not account for the residual solvent content remaining in the mixed material. If one assumes that the residual solvent content is similar to that achieved at Plants A and B (i.e., between 5 and 10 percent), the corresponding percent of solvent recovered would be on the order of 85 and 90 percent.

Plant D operates one solvent mixer that uses toluene as the solvent. Based on the self-reported emissions data to TRI for 1998, Plant D emits about 40 tons of toluene annually. Plant D has no air pollution controls on its mixer, and 100 percent of the solvent used is emitted to the atmosphere.

#### Selection of MACT

We have determined that the MACT floor for existing mixers is a solvent recovery system with a 70 percent solvent recovery efficiency, and the MACT floor for new mixers is a solvent recovery system with a 85 percent solvent recovery efficiency. We have also determined that it is both technically and economically feasible for existing mixers to achieve better than the floor level of control and are, therefore, establishing MACT for both new and existing solvent mixers at 85 percent solvent recovery efficiency. The following paragraphs describe how we determined the MACT floors, and our rationale for going beyond the floor for existing mixers.

Because there are only seven solvent mixers (fewer than 30 sources), the MACT floor for existing solvent mixers is based on the best performing five

sources. The available information does not allow for a floor calculation based on actual emissions data or State limits. However, ranking the sources by the estimated performance of the control technology applied allows for a floor determination based on the median of the best performing five sources, i.e., the third best performing source.

Each of the three mixers with control is equipped with a solvent recovery system comprised of two components: a vacuum system to remove the solvent from the mixed material, and a control device that recovers the solvent from the exhaust. The overall performance of these systems is determined by the performances of the individual components, i.e., the efficiency of the vacuum system at removing solvent from the mixed material, and the efficiency of the control device in removing the solvent vapors from the vacuum exhaust.

Plants A and B both use a condenser to recover the solvent vapors. Based on the available data, Plant A's recovery system performs better than the recovery system used at Plant B. Plant A's vacuum system removes 95 percent of the toluene from the mixer, and the condenser removes 90 percent of the solvent vapor, resulting in an overall solvent recovery efficiency of 85 percent. Plant B's vacuum system is estimated to remove 90 percent of the hexane from the mixer, and the condenser removes 80 percent of the hexane vapors from the vacuum exhaust, resulting in an overall solvent recovery efficiency of 70 percent.

Plant C uses a carbon adsorber to recover the trichloroethylene solvent vapors contained in the vacuum exhaust coming from the mixer. The 94 percent control efficiency estimated for the carbon adsorber is the highest of the three control devices applied. However, as stated previously, we have no information from which to assess the effectiveness of the vacuum system at removing the solvent from the mixed material. Without this information, we cannot determine the overall solvent recovery efficiency achieved by the vacuum system and carbon adsorber at Plant C. However, we believe that it is reasonable to assume that the vacuum system at Plant C is comparable to the systems at Plants A and B. Therefore, for the purpose of determining the MACT floor, we have assumed that the vacuum system at Plant C is 90 percent efficient at removing the solvent from the mixed material (the lesser of the two known efficiencies), and have assigned an 85 percent solvent recovery efficiency for the overall system (vacuum system and carbon adsorber). Our assumption

regarding Plant C's vacuum system efficiency does not impact the MACT determination for existing sources since the floor, as selected below, is ultimately based on Plant B, and since we have decided to establish MACT at a level beyond the floor.

The ranking of the five best sources for purposes of the floor determination is as follows: 85 percent for Plants A and C, 70 percent for Plant B, and zero percent recovery for any two of the remaining mixers. The third best performing source and, thus, the MACT floor for existing solvent mixers is the mixer at Plant B with 70 percent solvent recovery. The MACT floor for new mixers is based on the best performing solvent recovery system. We have determined that Plant A has the best performing solvent recovery system and have set the MACT floor for new mixers at an 85 percent solvent recovery efficiency.

Next we evaluated options that would be more stringent than the floor. Clearly requiring existing mixers to meet an 85 percent solvent recovery efficiency is an option for existing mixers. We looked at the volatility of the three different solvents used at the existing solvent mixers to determine if the volatility of the solvents could limit the vacuum system efficiency such that for certain solvents an 85 percent solvent recovery efficiency could not be achieved. Vacuum systems remove solvent from the mixed material by evaporation at low pressure. Consequently, the higher the volatility of the solvent, the more easily it can be removed by a vacuum system. Of the three solvents used, hexane is the most volatile, while toluene is the least volatile. Based on the available data, Plant A's vacuum system efficiency of 95 percent is the best of the existing systems. Since Plant A also uses the least volatile solvent (i.e., toluene) it is clear that a vacuum system efficiency of 95 percent can be achieved for all three of the solvents used at the existing plants.

We then evaluated the condenser used at Plant B, the poorer performer of the sources with condensers, to determine if improvements to condenser efficiency are possible. The key parameter that determines condenser performance for a given solvent is the outlet temperature of the condenser. The lower the outlet temperature of the condenser, the more solvent will be condensed, and the higher the condenser efficiency will be. For Plant B, the condenser outlet temperature is 60°F. This compares to an outlet temperature of 32°F at Plant A. Condenser outlet temperatures of 32°F can be obtained with either a glycol-

cooled condenser, or a Freon-cooled condenser. The vapor pressure of hexane, the solvent used at Plant B, is estimated to be approximately 100 millimeters of mercury (mm of Hg) at 60°F. At 32°F, the vapor pressure of hexane is estimated to be approximately 50 mm of Hg. This indicates that the penetration (the amount of solvent that is not condensed) would be halved by lowering the condenser outlet temperature at Plant B from 60°F degrees to 32°F. Since the current condenser is estimated to be 80 percent efficient, we would predict that a condenser with a 32°F outlet temperature would achieve 90 percent efficiency for this gas stream. If Plant B were to install both an improved vacuum system and an improved condenser, we predict the overall solvent recovery would be 85 percent ( $0.95 \times 0.90 \times 100$  percent = 85 percent). Based on the above analysis, we believe that it is technically feasible to achieve 85 percent solvent recovery on each existing solvent mixer used at friction materials manufacturing facilities.

We also believe it is economically feasible to achieve 85 percent solvent recovery on each existing solvent mixer. The incremental costs to install and operate a solvent recovery system that achieves 85 percent over that of a system that would achieve 70 percent are minimal. Nationwide capital for the above-the-floor alternative increases by \$92,000 over the floor level. However, because more solvent is recovered under the above-the-floor alternative, the annual costs decrease by \$29,000 per year.

We also evaluated and rejected an option that would prohibit the use of HAP solvents altogether. The HAP solvent usage has declined significantly as friction materials manufacturers develop formulations and processes that either use non-HAP solvents or need no solvents in the mixing process (i.e., dry mixing). Personnel at Plants B and C are actively working to identify alternatives to the HAP solvent they currently use. Plant B uses a dry mixer to mix many of the formulations it currently makes, but must use hexane to mix those formulations where the dry mixing process cannot meet the performance characteristics needed. They have also investigated several non-HAP solvents, but have not yet identified an acceptable alternative to hexane. Plant C uses non-HAP solvents to mix many of the friction materials they manufacture, but still have a number of formulations that require the use of trichloroethylene to achieve the necessary characteristics. While it may be possible in the future to eliminate the use of HAP solvents

from all friction materials manufacturing, we believe it is not feasible currently to eliminate HAP solvent usage from all friction materials manufacturing.

#### Selection of the Standards

The CAA requires us to set numerical emission limitations unless the setting or enforcement of a numerical emission limitation is infeasible, in which case a design, equipment, work practice, or operational standard can be set. Consequently, we have selected a format for the standards that expresses the goal of 85 percent solvent recovery as an emission limit based on the amount of solvent loaded into the mixer and the amount recovered. Specifically, the proposed standards would limit the HAP solvent emissions to the atmosphere to no more than 15 percent of that loaded into the solvent mixer.

We also evaluated several averaging times to determine an appropriate averaging time for the standards. We determined that a long averaging time (such as a 30-day or annual average) would not be appropriate because it would allow for long periods of under performance by the solvent recovery system. In addition, one deviation from a 30-day or annual average would put the plant at risk of being determined to be out of compliance for the entire period. We determined that requiring compliance on a per batch basis (i.e. no averaging) would also be inappropriate since it would not accommodate normal variability in the residual solvent requirements for different product mixes. The use of a 7-day block average provides time to detect and correct problems (e.g., individual mix batches not achieving the emission limitation) without the risk of the longer averaging periods. A 7-day block average is also consistent with the existing State operating permit requirements for Plant A.

#### *E. How Did We Select the Initial and Continuous Compliance Requirements?*

We selected the initial and continuous compliance requirements based on a combination of the generic requirements in the General Provisions (subpart A, 40 CFR part 63) and specific requirements tailored to the friction materials manufacturing source category.

We are requiring owners or operators of all affected sources to demonstrate initial compliance with the emission limitation for solvent mixers within 2 years of the date of publication of the final rule. We feel that 2 years should provide sufficient time for the affected facilities to purchase and install control



equipment capable of meeting the standards. We feel that a compliance date of less than 2 years may not be long enough due to the potential need for process modifications and product testing to accommodate solvent recovery.

To demonstrate initial compliance with the emission limitation for solvent mixers, owners or operators would be required to demonstrate that the percent of HAP solvent discharged to the atmosphere during the first 7 days after the compliance date, expressed as a 7-day block average, does not exceed 15 percent of that loaded into an affected solvent mixer. In order to demonstrate continuous compliance, owners and operators would be required to show on an ongoing basis that the percent of HAP solvent discharged to the atmosphere for each successive 7-day period does not average more than 15 percent of that loaded into an affected mixer. We selected a 7-day block averaging period as part of the standards to accommodate necessary variations in residual solvent in some product mixes.

Testing requirements include the weighing of solvent loaded into each affected solvent mixer and the weighing of solvent recovered for each mix batch. Compliance is then determined against the average recovery achieved for each mix batch over each 7-day block period. Requirements of the weight measurement device include a minimum accuracy and requirements for calibration and inspection.

We selected weighing as the means for determining compliance based on our strong belief that each affected facility will elect to comply with the HAP solvent emission limit by installing and operating a condenser-based solvent recovery system over other control measures such as carbon adsorption or incineration. Weighing precludes the need for costly emissions testing and provides continuing compliance assurance on a weekly basis. If an owner or operator elects to use a control device other than a condenser-based solvent recovery system, they would be allowed to petition the Administrator for approval to use an alternative means of demonstrating initial and continuous compliance with the emission limitation for solvent mixers.

#### *F. How Did We Select the Notification, Recordkeeping, and Reporting Requirements?*

Generally, we selected the notification, recordkeeping, and reporting requirements consistent with those contained in the subpart A General Provisions. We deleted, however, notifications, records, and

reports that relate to performance tests, continuous emissions monitoring systems (CEMS), continuous opacity monitoring systems (COMS), opacity observations or other visible emission (VE) observations since none of these requirements are relevant to the proposed rule. The records and reports required by the proposed rule are the minimum needed to demonstrate continuous compliance.

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

##### *A. What Are the Air Emission Impacts?*

Estimates of organic HAP emissions from the use of solvents are based on a mass balance using solvent usage data collected during the industry survey, estimates of solvent recovery efficiencies for existing controls, and the proposed solvent emission limitation of 15 percent or 85 percent recovery. Four currently uncontrolled mixers will need to be fitted with a solvent recovery system, and the solvent recovery system on one existing mixer will need to be upgraded. The remaining two mixers currently meet the proposed standards and as such should require no additional upgrades. We estimate that the proposed rule would reduce organic HAP emissions by approximately 340 tpy from a baseline level of about 670 tpy. Emissions of volatile organic compounds (VOC) would also be reduced by 340 tpy because these HAP are also VOC.

##### *B. What Are the Cost Impacts?*

We obtained process and emissions data from the facilities with the best-controlled solvent mixers and incorporated these data into the control cost algorithms for condensers in the "OAQPS Control Cost Manual" (EPA 450/3-90-006). We then applied these costs to those facilities that we project would be impacted by the proposed standards. As stated above, we project that five mixers located at two facilities would be impacted by the proposed rule. Four existing mixers would need to be equipped with solvent recovery systems, and the existing solvent recovery system on a fifth mixer would need to be upgraded to meet the proposed standards. Both facilities would incur capital costs to install condensers to meet the proposed standards, as well as annual costs to operate and maintain the condensers. Monitoring is also an important component of MACT and the cost estimate. We expect that all four facilities affected by today's proposed rule will incur some additional yearly costs due to the monitoring,

recordkeeping, and reporting requirements of this proposed rule.

Implementation of the control and monitoring requirements is expected to result in a nationwide capital cost of about \$253,000, with a total annualized cost (without recovery credits) of approximately \$206,000 per year. Nationwide total annualized cost, including credits for recovered solvent, is estimated to be about \$43,000 per year.

##### *C. What Are the Economic Impacts?*

Based on the control cost estimates provided above, we believe the economic impacts associated with this proposed rule will be negligible. In 1992, there were 53 facilities manufacturing friction materials. Of these 53 facilities, four are affected by the proposed rule and will incur control and monitoring costs. The total annualized cost of \$206,000 per year (without recovery credits) is much less than 1 percent of industry revenues. When we consider the solvent recovery credits along with control technology costs, the total economic impact of this proposed rule is a cost to the industry of \$43,000 per year. As a result, the impacts of this rule are substantively less than 1 percent of total revenues and is not significant enough to alter the market price for friction materials.

##### *D. What Are the Non-Air Quality Environmental and Energy Impacts?*

Indirect air impacts of today's proposed rule would result from increased electricity usage associated with operation of control devices (i.e., condensers) installed to meet the proposed emission limitation. Assuming that plants will purchase electricity from a power plant, we estimate that the proposed rule would increase secondary emissions of criteria pollutants from power plants by less than 0.5 tpy. These criteria pollutants include particulate matter, sulfur dioxide, nitrogen oxides, and carbon monoxide. The overall energy demand is expected to increase by about 340 million British thermal units per year (MMBtu/yr) nationwide under the proposed rule. This increase in energy demand is based on the electricity required to operate the vacuum and condenser systems needed to comply with the proposed rule.

Because impacted facilities are expected to reuse or sell the solvent recovered by the condensers, we do not anticipate any significant wastewater or solid waste impacts as a result of today's proposed rule.

## V. Solicitation of Comments and Public Participation

We seek full public participation in arriving at final decisions and encourage comments on all aspects of this proposal from all interested parties. You need to submit full supporting data and detailed analyses with your comments to allow us to make the best use of them. Be sure to direct your comments to the Air and Radiation Docket and Information Center, Docket No. A-97-57 (see ADDRESSES).

## VI. Administrative Requirements

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

Under Executive Order 12866 (58 FR 51735, October 4, 1993), EPA 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 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. None of the affected facilities are owned or operated by State governments, and the rule requirements will not supercede State regulations that are more stringent. Thus, Executive Order 13132 does not apply to this proposed rule.

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

### C. Executive Order 13175, Consultation and Coordination with Indian Tribal Governments

Executive Order 13175, entitled "Consultation and Coordination with Indian Tribal Governments" (65 FR 67249, November 6, 2000), requires EPA to develop an accountable process to ensure "meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications." "Policies that have tribal implications" is defined in the Executive Order to include regulations that have "substantial direct effects on one or more Indian tribes, on the relationship between the Federal government and the Indian tribes, or on the distribution of power and responsibilities between the federal government and Indian tribes."

This proposed rule does not have tribal implications. It will not have substantial direct effects on tribal governments, on the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes, as specified in Executive Order 13175. No tribal governments own or operate friction material manufacturing facilities. Thus, Executive Order 13175 does not apply to this proposed rule.

### D. Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks

Executive Order 13045 (62 FR 19885, April 23, 1997) applies to any rule that: (1) is determined to be "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, EPA 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 reasonably feasible alternatives that EPA considered.

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that are based on health or safety risks, such that the analysis required under section 5-501 of the Executive Order has the potential to influence the rule. This proposed rule is not subject to Executive Order 13045 because it is based on technology performance and not on health or safety risks. No children's risk analysis was performed because no alternative technologies exist that would provide greater stringency at a reasonable cost. Furthermore, this proposed rule has been determined not to be "economically significant" as defined under Executive Order 12866.

### 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, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures by State, local, and tribal governments, in the aggregate, or by 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 EPA 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 EPA to adopt an alternative other than the least costly, most cost-effective, or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal

governments, it 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 EPA's regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

The EPA has determined that this proposed rule does not contain a Federal mandate that may result in estimated costs of \$100 million or more for State, local, and tribal governments, in the aggregate, or the private sector in any 1 year. The maximum total annual cost of this proposed rule for any year has been estimated to be less than \$206,000. Thus, today's proposed rule is not subject to the requirements of sections 202 and 205 of the UMRA. In addition, EPA has determined that this proposed rule contains no regulatory requirements that might significantly or uniquely affect small governments because it contains no requirements that apply to such governments or impose obligations upon them. Therefore, today's 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 for 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 no more than 500 employees for NAICS codes 327999 and 333613 or no more than 750 employees for SIC code 33634; (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. We have determined that only one company meets one of the definitions of small entity—a small business that has no more than 500 employees for NAICS code 333613. This company owns only one of the four facilities subject to today's proposed rule. The mixer at this facility is equipped with a solvent recovery system capable of meeting the requirements of this proposed rule. As such, the additional burden to this facility as a result of this proposed rule would be \$21,000 per year for recordkeeping and reporting costs associated with demonstrating continued compliance with the proposed rule. There are several firms subject to today's proposed rule whose costs will be a greater percentage of sales than this small business.

Although this proposed rule will not have a significant impact on a substantial number of small entities, EPA nonetheless has tried to reduce the impact of this proposed rule on small entities. We held a number of meetings with industry in which the one small business participated, and we visited the one small business impacted by this proposed rule. The EPA continues to be interested in the potential impacts of the proposed rule on small entities and welcomes comments on issues related to such impacts.

*G. Paperwork Reduction Act*

The information collection requirements in this proposed rule have been submitted for approval to OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* The EPA has prepared an Information Collection Request (ICR) document (ICR No. 2025.01), and you may obtain a copy from Sandy Farmer by mail at the Office of Environmental Information, Collection Strategies Division, U.S. EPA (2822), 1200 Pennsylvania Avenue NW, Washington, DC 20460; by email at [farmer.sandy@epa.gov](mailto:farmer.sandy@epa.gov); or by calling (202) 260-2740. You may also download a copy off the Internet at <http://www.epa.gov/icr>. The information requirements are not effective until OMB approves them.

The information requirements are based on notification, recordkeeping, and reporting requirements in the NESHAP General Provisions (40 CFR part 63, subpart A), which are mandatory for all operators subject to NESHAP. These recordkeeping and reporting requirements are specifically authorized by section 114 of the CAA (42 U.S.C. 7414). All information

submitted to EPA pursuant to the recordkeeping and reporting requirements for which a claim of confidentiality is made is safeguarded according to EPA's policies set forth in 40 CFR part 2, subpart B.

The proposed rule would require maintenance inspections of the control devices but would not require any notifications or reports beyond those required by the NESHAP General Provisions. The recordkeeping requirements require only the specific information needed to determine compliance.

The annual public reporting and recordkeeping burden for this collection of information (averaged over the first 3 years after the effective date of the final rule) is estimated to be 577 labor hours per year, at a total annual cost of \$26,657. This burden estimate includes the cost to install and operate the weight measurement device; one-time submission of a startup, shutdown, and malfunction plan, with semiannual reports for any event when the procedures in the plan were not followed; semiannual compliance reports; maintenance inspections; notifications; and recordkeeping. Total capital/startup costs associated with the monitoring requirements over the 3-year period of the ICR are estimated at \$15,913, with operation and maintenance costs of \$261/yr.

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 purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able 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 provided 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, U.S. EPA (2822), 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 Officer for EPA." Include the ICR number in any correspondence. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after October 4, 2001, a comment to OMB is best assured of having its full effect if OMB receives it by November 5, 2001. 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 of 1995 (NTTAA) Public Law No. 104-113 (15 U.S.C. 272 note) directs the EPA to use voluntary consensus standards in its regulatory and procurement activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical (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 OMB, with explanations when an agency does not use available and applicable voluntary consensus standards.

This rulemaking involves a technical standard. The EPA is proposing test methods based on the weighing portion of EPA Method 28 (section 7.1) for weighing of recovered solvent. Consistent with the NTTAA, EPA conducted searches to identify voluntary consensus standards that could be used in addition to this EPA method.

The search for emissions measurement procedures identified two voluntary consensus standards potentially applicable to this proposed rule. The EPA determined these two standards identified for measuring recovered solvent on a scale were impractical alternatives to the EPA test methods for the purposes of this proposed rule. Therefore, EPA does not intend to adopt these standards for this purpose.

The voluntary consensus standard ASTM E319-85 (Reapproved 1997), "Standard Practice for the Evaluation of Single-Pan Mechanical Balances," is impractical for the purposes of this

rulemaking primarily because this standard is not a complete weighing procedure since it does not include a pretest procedure.

The voluntary consensus standard ASME Power Test Codes, "Supplement on Instruments and Apparatus, Part 5, Measurement of Quantity of Materials, Chapter 1, Weighing Scales," is impractical for the purposes of this rulemaking because it does not specify the number of initial calibration weights to be used nor a specific pretest weight procedure.

Section 63.9525 to proposed subpart QQQQ lists the testing procedures included in this proposed rule. Under § 63.8 of the General Provisions, a source may apply to EPA for permission to use alternative monitoring in place of any of the EPA testing methods.

#### *I. Executive Order 13211 (Energy Effects)*

This rule is not subject to Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355 (May 22, 2001)) because it is not a significant regulatory action under Executive Order 12866.

We welcome comment on this aspect of the proposed rulemaking and, specifically, invite the public to identify potentially applicable voluntary consensus standards and to explain why such standards should be used in this proposed rule.

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

Environmental protection, Administrative practice and procedure, Air pollution control, Friction products manufacturing, Hazardous substances, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: September 28, 2001.

**Christine Todd Whitman,**  
*Administrator.*

For the reasons stated in the preamble, title 40, chapter I, part 63 of the Code of 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 proposed to be amended by adding subpart QQQQ to read as follows:

**Subpart QQQQ—National Emission Standards for Hazardous Air Pollutants for Friction Materials Manufacturing Facilities**  
Sec.

#### **What This Subpart Covers**

- 63.9480 What is the purpose of this subpart?  
63.9485 Am I subject to this subpart?  
63.9490 What parts of my plant does this subpart cover?  
63.9495 When do I have to comply with this subpart?

#### **Emission Limitation**

- 63.9500 What emission limitation must I meet?

#### **General Compliance Requirements**

- 63.9505 What are my general requirements for complying with this subpart?

#### **Initial Compliance Demonstration Requirements**

- 63.9510 By what date must I conduct my initial compliance demonstration?  
63.9515 How do I demonstrate initial compliance with the emission limitation that applies to me?  
63.9520 What procedures must I use to demonstrate initial compliance?  
63.9525 What are the installation, operation, and maintenance requirements for my weight measurement device?

#### **Continuous Compliance Requirements**

- 63.9530 How do I demonstrate continuous compliance with the emission limitation that applies to me?

#### **Notifications, Reports, and Records**

- 63.9535 What notifications must I submit and when?  
63.9540 What reports must I submit and when?  
63.9545 What records must I keep?  
63.9550 In what form and how long must I keep my records?

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

- 63.9555 What parts of the General Provisions apply to me?  
63.9560 Who implements and enforces this subpart?  
63.9565 What definitions apply to this subpart?  
63.9570 How do I apply for alternative compliance requirements?  
63.9571–63.9579 [Reserved]

#### **Table**

Table 1 to Subpart QQQQ—Applicability of General Provisions to Subpart QQQQ

#### **Subpart QQQQ—National Emission Standards for Hazardous Air Pollutants for Friction Materials Manufacturing Facilities**

#### **What This Subpart Covers**

##### **§ 63.9480 What is the purpose of this subpart?**

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for friction materials manufacturing facilities that use a solvent-based process. This subpart also establishes requirements to demonstrate initial and continuous

compliance with all applicable emission limitations in this subpart.

**§ 63.9485 Am I subject to this subpart?**

(a) You are subject to this subpart if you own or operate a friction materials manufacturing facility (as defined in § 63.9565) that is (or is part of) a major source of hazardous air pollutants (HAP) emissions on the first compliance date that applies to you. Your friction materials manufacturing facility is a major source of HAP if it emits or has the potential to emit 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.

(b) The requirements in this subpart do not apply to research and development facilities, as defined in section 112(c)(7) of the Clean Air Act.

**§ 63.9490 What parts of my plant does this subpart cover?**

(a) This subpart applies to each new, reconstructed, or existing affected source at your friction materials manufacturing facility.

(b) The affected source covered by this subpart is each new, reconstructed, or existing solvent mixer (as defined in § 63.9565) at your friction materials manufacturing facility.

(c) A solvent mixer at your friction materials manufacturing facility is new if you commence construction of the solvent mixer after [DATE OF PUBLICATION OF THE FINAL RULE IN THE **Federal Register**]. An affected source is reconstructed if it meets the definition of "reconstruction" in § 63.2, and reconstruction is commenced after [DATE OF PUBLICATION OF THE FINAL RULE IN THE **Federal Register**].

(d) A solvent mixer at your friction materials manufacturing facility is existing if it is not new or reconstructed.

**§ 63.9495 When do I have to comply with this subpart?**

(a) If you have an existing solvent mixer, you must comply with each of the requirements for existing sources no later than 2 years after [DATE OF PUBLICATION OF THE FINAL RULE IN THE **Federal Register**].

(b) If you have a new or reconstructed solvent mixer and its initial startup date is on or before [DATE OF PUBLICATION OF THE FINAL RULE IN THE **Federal Register**], you must comply with the requirements for new and reconstructed sources by [DATE OF PUBLICATION OF THE FINAL RULE IN THE **Federal Register**].

(c) If you have a new or reconstructed solvent mixer and its initial startup date is after [DATE OF PUBLICATION OF

THE FINAL RULE IN THE **Federal Register**], you must comply with the requirements for new and reconstructed sources upon initial startup.

(d) If your friction materials manufacturing facility is an area source that increases its emissions or its potential to emit such that it becomes a (or part of a) major source of HAP emissions, then paragraphs (d)(1) and (2) of this section apply.

(1) For any portion of the area source that becomes a new or reconstructed affected source, you must comply with the requirements for new and reconstructed upon startup or no later than [DATE OF PUBLICATION OF THE FINAL RULE IN THE **Federal Register**], whichever is later.

(2) For any portion of the area source that becomes an existing affected source, you must comply with the requirements for existing sources no later than 1 year after the area source becomes a major source or [DATE 2 YEARS FROM PUBLICATION OF THE FINAL RULE IN THE **Federal Register**], whichever is later.

(e) You must meet the notification and schedule requirements in § 63.9535. Several of the notifications must be submitted before the compliance date for your affected source.

**Emission Limitation**

**§ 63.9500 What emission limitation must I meet?**

For each new, reconstructed, or existing solvent mixer at your friction materials manufacturing facility, you must limit HAP solvent emissions to the atmosphere to no more than 15 percent of that loaded into an affected solvent mixer, based on a 7-day block average.

**General Compliance Requirements**

**§ 63.9505 What are my general requirements for complying with this subpart?**

(a) You must be in compliance with the emission limitation in this subpart at all times, except during periods of startup, shutdown, or malfunction.

(b) 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) You must develop and implement a written startup, shutdown, and malfunction plan according to the provisions in § 63.6(e)(3).

**Initial Compliance Demonstration Requirements**

**§ 63.9510 By what date must I conduct my initial compliance demonstration?**

(a) If you use a solvent recovery system, you must conduct your initial

compliance demonstration within 7 calendar days after the compliance date that is specified for your source in § 63.9495.

(b) If you use a control device other than a solvent recovery system, you must comply with the provisions in § 63.9570.

**§ 63.9515 How do I demonstrate initial compliance with the emission limitation that applies to me?**

(a) You have demonstrated initial compliance for each solvent mixer subject to the emission limitation in § 63.9500 if the HAP solvent discharged to the atmosphere during the first 7 days after the compliance date, determined according to the provisions in § 63.9520, does not exceed a 7-day block average of 15 percent.

(b) You must submit a notification of compliance status containing the results of the initial compliance demonstration according to § 63.9535(d).

**§ 63.9520 What procedures must I use to demonstrate initial compliance?**

(a) If you use a solvent recovery system, you must use the procedures in paragraphs (a)(1) through (7) of this section to demonstrate initial compliance with the emission limitation in § 63.9500.

(1) Record the date and time of each mix batch.

(2) Record the identity of each mix batch using a unique batch ID, as defined in § 63.9565.

(3) Measure and record the weight of HAP solvent loaded into the solvent mixer for each mix batch.

(4) Measure and record the weight of HAP solvent recovered for each mix batch.

(5) Determine the percent of HAP solvent discharged to the atmosphere for each mix batch according to Equation 1 of this section as follows:

$$\%D_b = 100\% - \frac{S_{rec}}{S_{mix}} (100\%) \quad (\text{Eq. 1})$$

Where:

$\%D_b$  = Percent of HAP solvent discharged to the atmosphere for each mix batch, percent;

$S_{rec}$  = Weight of HAP solvent recovered for each mix batch, lb;

$S_{mix}$  = Weight of HAP solvent loaded into the solvent mixer for each mix batch, lb.

(6) Determine the 7-day block average percent of HAP solvent discharged to the atmosphere according to Equation 2 of this section as follows:

$$\%D_7 = \frac{1}{n} \sum_{i=1}^n \%D_b \quad (\text{Eq. 2})$$

Where:

$\%D_7$  = 7-day block average percent of HAP solvent discharged to the atmosphere, percent

$i$  = mix batch

$n$  = number of mix batches in 7-day block average

(7) Have valid data for at least 90 percent of the mix batches over the 7-day averaging period.

(b) If you use a control device other than a solvent recovery system, you may apply to EPA for approval to use an alternative method of demonstrating compliance with the emission limitation for solvent mixers in § 63.9500, as provided in § 63.9570.

**§ 63.9525 What are the installation, operation, and maintenance requirements for my weight measurement device?**

(a) If you use a solvent recovery system, you must install, operate, and maintain a weight measurement device to measure the weight of HAP solvent loaded into the solvent mixer and the weight of HAP solvent recovered for each mix batch.

(b) For each weight measurement device required by this section, you must develop and submit for approval a site-specific monitoring plan that addresses the requirements of paragraphs (b)(1) through (6) of this section:

(1) Installation of the weight measurement device;

(2) The minimum accuracy of the weight measurement device in pounds and as a percent of the average weight of solvent to be loaded into the solvent mixer;

(3) Site-specific procedures for how the measurements will be made;

(4) How the measurement data will be recorded, reduced, and stored;

(5) Procedures and acceptance criteria for calibration of the weight measurement device; and

(6) How the measurement device will be maintained including a routine maintenance schedule and spare parts inventory list.

(c) The site-specific monitoring plan required in paragraph (b) of this section must include, at a minimum, the requirements of paragraphs (c)(1) through (3) of this section:

(1) The weight measurement device must have a minimum accuracy of  $\pm 0.05$  kilograms ( $\pm 0.1$  pounds) or  $\pm 1$  percent of the average weight of solvent to be loaded into the solvent mixer, whichever is greater.

(2) An initial multi-point calibration of the weight measurement device must

be made using 5 points spanning the expected range of weight measurements before the weight measurement device can be used. The manufacturer's calibration results can be used to meet this requirement.

(3) Once per day, a calibration audit must be made using a single Class F calibration weight that corresponds to 20 to 80 percent of the average weight of solvent to be loaded into the solvent mixer. If the weight measurement device cannot reproduce the value of the calibration weight within  $\pm 0.05$  kilograms (0.1 pounds) or  $\pm 1$  percent of the average weight of solvent to be loaded into the solvent mixer, whichever is greater, the scale must be recalibrated before use with at least five Class F calibration weights spanning the expected range of weight measurements.

(d) You must operate and maintain the weight measurement device according to the site-specific monitoring plan.

(e) You must maintain records of all maintenance activities, calibrations, and calibration audits.

**Continuous Compliance Requirements**

**§ 63.9530 How do I demonstrate continuous compliance with the emission limitation that applies to me?**

(a) If you use a solvent recovery system, you must demonstrate continuous compliance with the emission limitation for solvent mixers in § 63.9500 according to the provisions in paragraphs (a)(1) and (2) of this section.

(1) Except for during malfunctions of your weight measurement device and associated repairs, you must collect and reduce the information required in § 63.9520(a)(1) through (7) at all times that the affected source is operating and record all information needed to document conformance with these requirements.

(2) Maintain the 7-day block average percent of HAP solvent discharged to the atmosphere at or below 15 percent.

(b) If you use a control device other than a solvent recovery system, you must demonstrate continuous compliance with the emission limitation for solvent mixers in § 63.9500 according to the provisions in § 63.9570.

(c) You must report each instance in which you did not meet the emission limitation for solvent mixers in § 63.9500. This includes periods of startup, shutdown, or malfunction. These instances are deviations from the emission limitations in this subpart. These deviations must be reported according to the requirements in § 63.9540.

(d) During periods of startup, shutdown, or malfunction, you must operate in accordance with your startup, shutdown, and malfunction plan.

(e) Consistent with §§ 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with the startup, shutdown, and malfunction plan. The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in § 63.6(e).

**Notifications, Reports, and Records**

**§ 63.9535 What notifications must I submit and when?**

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

(b) If you use a control device other than a solvent recovery system, you must comply with the provisions in § 63.9570.

(c) As specified in § 63.9(b)(2), if you start up your affected source before [DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], you must submit your initial notification no later than 120 calendar days after [DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER].

(d) As specified in § 63.9(b)(3), if you start up your new affected source on or after [DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], you must submit your initial notification no later than 120 calendar days after you become subject to this subpart.

(e) You must submit a notification of compliance status according to § 63.9(h)(2)(ii). 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.

**§ 63.9540 What reports must I submit and when?**

(a) Unless the Administrator has approved a different schedule, you must submit each semiannual compliance report according to the requirements in paragraphs (a)(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 § 63.9495 and ending on June 30 or December 31, whichever date comes first after the

compliance date that is specified for your source in § 63.9495.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after your first compliance report is due.

(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 comes first after the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 71 of this chapter, 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) of this chapter, 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 (a)(1) through (4) of this section.

(b) Each compliance report must include the information in paragraphs (b)(1) through (3) of this section, and if applicable, paragraphs (b)(4) through (6) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with the official's name, title, and signature, certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

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

(4) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in § 63.10(d)(5)(i).

(5) If there were no deviations from the emission limitation for solvent mixers in § 63.9500, a statement that there were no deviations from the emission limitation during the reporting period.

(6) If there were no periods during which a monitoring system was out-of-control as specified in § 63.8(c)(7), a statement that there were no periods during which a monitoring system was out-of-control during the reporting period.

(c) For each deviation from an emission limitation occurring at an

affected source, you must include the information in paragraphs (b)(1) through (4) and (c)(1) and (2) of this section. This includes periods of startup, shutdown, or malfunction.

(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), as applicable, and the corrective action taken.

(d) If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report according to the requirements in § 63.10(d)(5)(ii).

(e) If you have obtained a title V operating permit for an affected source pursuant to 40 CFR part 70 or 71 of this chapter, you 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) of this chapter. If you submit a compliance report for an affected source 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) of this chapter, and the compliance report includes all the required information concerning deviations from any emission limitation in this subpart, then submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation you may have to report deviations from permit requirements to your permitting authority.

#### § 63.9545 What records must I keep?

(a) You must keep the records in paragraphs (a)(1) and (2) of this section that apply to you.

(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) The records in § 63.6(e)(3)(iii) through (v) related to startup, shutdown, or malfunction.

(b) You must keep the records required in § 63.9525 to show proper operation and maintenance of the weight measurement device.

(c) You must keep the records required in § 63.9530 to show continuous compliance with the

emission limitation for solvent mixers in § 63.9500.

#### § 63.9550 In what form and how long must I keep my records?

(a) You must keep your records 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

##### § 63.9555 What parts of the General Provisions apply to me?

Table 1 to this subpart shows which parts of the General Provisions in §§ 63.1 through 63.15 apply to you.

##### § 63.9560 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. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. 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 40 CFR part 63, subpart E, the authorities contained in paragraphs (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 cannot be delegated to State, local or tribal agencies are as follows:

(1) Approval of alternatives to the emission limitation in § 63.9500 under § 63.6(g).

(2) Approval of major alternatives to test methods under § 63.7(e)(2)(ii) and (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.

**§ 63.9565 What definitions apply to this subpart?**

Terms used in this subpart are defined in the Clean Air Act, in § 63.2, and in this section as follows:

*Batch ID* means a unique identifier used to differentiate each individual mix batch.

*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);

(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) in this subpart during startup, shutdown, or malfunction, regardless or whether or not such failure is permitted by this subpart.

*Friction ingredients* means any of the components used in the manufacture of friction material, excluding the HAP solvent. Friction ingredients include, but are not limited to, reinforcement materials, property modifiers, resins, and other additives.

*Friction materials manufacturing facility* means a facility that manufactures friction materials using a solvent-based process. Friction materials are used in the manufacture of products used to accelerate or decelerate objects. Products that use friction materials include, but are not limited to, disc brake pucks, disc brake pads, brake linings, brake shoes, brake segments, brake blocks, brake discs, clutch facings, and clutches.

*HAP solvent* means a solvent that contains 10 percent or more of any one HAP, as listed in section 112(b) of the

Clean Air Act, or any combination of HAP that is added to a solvent mixer. Examples include hexane, toluene, and trichloroethylene.

*Initial startup* means the first time that equipment is put into operation. Initial startup does not include operation solely for testing equipment. Initial startup does not include subsequent startups (as defined in this section) following malfunction or shutdowns or following changes in product or between batch operations.

*Mix batch* means the process of manufacturing each batch of friction materials in a solvent mixer.

*Responsible official* means responsible official as defined in § 63.2.

*7-day block average* means an averaging technique for a weekly compliance determination where the calculated values for percent HAP solvent discharged to the atmosphere are averaged together for all mix batches (for which there are valid data) in a 7-day block period according to the equation provided in § 63.9520(a)(6).

*Solvent mixer* means a mixer used in the friction materials manufacturing process in which HAP solvent is used as one of the ingredients. Trace amounts of HAP solvents in resins or other friction ingredients do not qualify mixers as solvent mixers.

*Solvent recovery system* means equipment used for the purpose of recovering the HAP solvent from the exhaust stream. An example of a solvent recovery system is a condenser.

*Startup* means bringing equipment online and starting the production process.

*Startup, shutdown, and malfunction plan* means a plan developed according to the provisions of § 63.6(e)(3).

**§ 63.9570 How do I apply for alternative compliance requirements?**

(a) If you use a control device other than a solvent recovery system, you may request approval to use an alternative

method of demonstrating compliance with the emission limitation in § 63.9500 according to the procedures in this section.

(b) You can request approval to use an alternative method of demonstrating compliance in the initial notification for existing sources, the notification of construction or reconstruction for new sources, or at any time.

(c) You must submit a description of the proposed testing, monitoring, recordkeeping, and reporting that will be used and the proposed basis for demonstrating compliance.

(1) If you have not previously performed testing, you must submit a proposed test plan. If you are seeking permission to use an alternative method of compliance based on previously performed testing, you must submit the results of testing, a description of the procedures followed in testing, and a description of pertinent conditions during testing.

(2) You must submit a monitoring plan that includes a description of the control device, test results verifying the performance of the control device, the appropriate operating parameters that will be monitored, and the frequency of measuring and recording to establish continuous compliance with the emission limitation in § 63.9500. You must also include the proposed performance specifications and quality assurance procedures for the monitors. The monitoring plan is subject to the Administrator's approval. You must install, calibrate, operate, and maintain the monitors in accordance with the monitoring plan approved by the Administrator.

(d) Use of the alternative method of demonstrating compliance must not begin until approval is granted by the Administrator.

**§§ 63.9571–63.9579 [Reserved]**

**Tables**

**TABLE 1 TO SUBPART QQQQQ.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART QQQQQ**  
[As required in § 63.9505, you must comply with each applicable General Provisions requirements according to the following table]

Citation	Subject	Applies to subpart QQQQQ?	Explanation
§ 63.1 .....	Applicability .....	Yes.	
§ 63.2 .....	Definitions .....	Yes.	
§ 63.3 .....	Units and Abbreviations .....	Yes.	
§ 63.4 .....	Prohibited Activities .....	Yes.	
§ 63.5 .....	Construction/Reconstruction .....	Yes.	
§ 63.6(a)–(c), (e)–(f), (i)–(j) .....	Compliance with Standards and Maintenance Requirements.	Yes.	
§ 63.6(d) .....	[Reserved]		



TABLE 1 TO SUBPART QQQQQ.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART QQQQQ—Continued  
 [As required in § 63.9505, you must comply with each applicable General Provisions requirements according to the following table]

Citation	Subject	Applies to subpart QQQQQ?	Explanation
§ 63.6(g)	Use of an Alternative Nonopacity Emission Standard.	No	Subpart QQQQQ contains no work practice standards.
§ 63.6(h)	Compliance with Opacity and Visible Emission Standards.	No	Subpart QQQQQ contains no opacity or VE limits.
§ 63.7(a)(1)–(2)	Applicability and Performance Test Dates	No	Subpart QQQQQ includes dates for initial compliance demonstrations.
§ 63.7(a)(3), (b)–(h)	Performance Testing Requirements	No	Subpart QQQQQ does not require performance tests.
§ 63.8(a)(1)–(2), (b), (c)(1)–(3), (f)(1)–(5)	Monitoring Requirements	Yes.	
§ 63.8(a)(3)	[Reserved].		
§ 63.8(a)(4)	Additional Monitoring Requirements for Control Devices in 63.11.	No	Subpart QQQQQ does not require flares.
§ 63.8(c)(4)	Continuous Monitoring System (CMS) Requirements.	No	Subpart QQQQQ specifies requirements for operation of monitoring systems.
§ 63.8(c)(5)	Continuous Opacity Monitoring System (COMS) Minimum Procedures.	No	Subpart QQQQQ does not require COMS.
§ 63.8(c)(6)	Zero and High Level Calibration Check Requirements.	No	Subpart QQQQQ specifies calibration requirements.
§ 63.8(c)(7)–(8)	Out-of-Control Periods	No	Subpart QQQQQ specifies out-of-control periods and reporting requirements.
§ 63.8(d)	CMS Quality Control	No	Subpart QQQQQ requires a monitoring plan that specifies CMS quality control procedures.
§ 63.8(e)	CMS Performance Evaluation	No	Subpart QQQQQ does not require performance evaluations.
§ 63.8(f)(6)	Relative Accuracy Test Audit (RATA) Alternative.	No	Subpart QQQQQ does not require continuous emissions monitoring systems (CEMS).
§ 63.8(g)(1)–(5)	Data Reduction	No	Subpart QQQQQ specifies data reduction requirements.
§ 63.9(a)–(d), (h)–(j)	Notification Requirements	Yes	Except that subpart QQQQQ does not require performance tests or performance evaluations.
§ 63.9(e)	Notification of Performance Test	No	Subpart QQQQQ does not require performance tests.
§ 63.9(f)	Notification of VE/Opacity Test	No	Subpart QQQQQ contains no opacity or VE limits.
§ 63.9(g)	Additional Notifications When Using CMS	No	Subpart QQQQQ does not require performance evaluations.
§ 63.10(a),(b), (d)(1), (d)(4)–(5), (e)(3), (f)	Recordkeeping and Reporting Requirements.	Yes.	
§ 63.10(c)(1)–(6), (9)–(15)	Additional Records for CMS	No	Subpart QQQQQ specifies record requirements.
§ 63.10(c)(7)–(8)	Records of Excess Emissions and Parameter Monitoring Exceedances for CMS.	No	Subpart QQQQQ specifies record requirements.
§ 63.10(d)(2)	Reporting Results of Performance Tests	No	Subpart QQQQQ does not require performance tests.
§ 63.10(d)(3)	Reporting Opacity or VE Observations	No	Subpart QQQQQ contains no opacity or VE limits.
§ 63.10(e)(1)–(2)	Additional CMS Reports	No	Subpart QQQQQ does not require CEMS.
§ 63.10(e)(4)	Reporting COMS Data	No	Subpart QQQQQ does not require COMS.
§ 63.11	Control Device Requirements	No	Subpart QQQQQ does not require flares.
§ 63.12–63.15	Delegation, Addresses, Incorporation by Reference Availability of Information.	Yes.	