

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

[OAR-2002-0080; FRL-7461-1]

RIN 2060-AH42

**National Emission Standards for Hazardous Air Pollutants: Flexible Polyurethane Foam Fabrication Operations****AGENCY:** Environmental Protection Agency (EPA).**ACTION:** Final rule.

**SUMMARY:** This action promulgates national emission standards for hazardous air pollutants (NESHAP) for new and existing sources at flexible polyurethane foam fabrication facilities. The EPA has identified flexible polyurethane foam fabrication facilities as major sources of hazardous air pollutants (HAP) emissions. These standards will implement section 112(d) of the Clean Air Act (CAA) by requiring all such major sources to meet HAP emission standards that reflect the application of maximum achievable control technology (MACT). The primary HAP that will be controlled with this action include hydrochloric acid (HCl), 2,4-toluene diisocyanate (TDI), and hydrogen cyanide (HCN). This action will also preclude the use of methylene chloride. Exposure to these substances has been demonstrated to cause adverse health effects such as irritation of the lung, eye, and mucous membranes, effects on the central nervous system, and cancer. We do not have the type of current detailed data on each of the facilities and the people living around the facilities covered by today's final rule for this source category that would be necessary to conduct an analysis to determine the actual population exposures to the HAP emitted from these facilities and the potential for resultant health effects.

Therefore, we do not know the extent to which the adverse health effects described above occur in the populations surrounding these facilities. However, to the extent the adverse effects do occur, and today's final rule reduces emissions, subsequent exposures will be reduced. This final rule will reduce HAP emissions by 6.5 tons per year (tpy) from each new or reconstructed affected source performing flame lamination.

**EFFECTIVE DATE:** April 14, 2003.

**ADDRESSES:** *Docket.* We have established an official public docket for this action under Docket ID No. OAR-2002-0080 or A-2000-43; available for public viewing at the Office of Air and Radiation Docket and Information Center (Air Docket) in the EPA Docket Center, (EPA/DC) EPA West, Room B102, 1301 Constitution Avenue, NW., Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** For information concerning applicability and rule determinations, contact your State or local regulatory agency representative or the appropriate EPA Regional Office representative. For information concerning analyses performed in developing this rule, contact Ms. Maria Noell, Organic Chemicals Group, Emission Standards Division (C504-04), U.S. EPA, Research Triangle Park, North Carolina, 27711; telephone number (919) 541-5607; fax number (919) 541-0942; electronic mail address: [noell.maria@epa.gov](mailto:noell.maria@epa.gov).

**SUPPLEMENTARY INFORMATION:**

*Docket.* The official public docket consists of the documents specifically referenced in this action, any public comments received, and other information related to this action. Although a part of the official docket, the public docket does not include Confidential Business Information or other information whose disclosure is restricted by statute. The official public docket is the collection of materials that

is available for public viewing. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the Air Docket is (202) 566-1742.

*Electronic Docket Access.* You may access the final rule electronically through the EPA Internet under the **Federal Register** listings at <http://www.epa.gov/fedrgstr/>.

An electronic version of the public docket is available through EPA's electronic public docket and comment system, EPA Dockets. You may use EPA Dockets at <http://www.epa.gov/edocket/> to view public comments, access the index listing of the contents of the official public docket, and to access those documents in the public docket that are available electronically.

Although not all docket materials may be available electronically, you may still access any of the publicly available docket materials through the docket facility in the above paragraph entitled "Docket." Once in the system, select "search," then key in the appropriate docket identification number.

*Judicial Review.* Under CAA section 307(b), judicial review of the final NESHAP is available only by filing a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit on or before June 13, 2003. Only those objections to the NESHAP which were raised with reasonable specificity during the period for public comment may be raised during judicial review. Under section 307(b)(2) of the CAA, the requirements established by today's final action may not be challenged separately in any civil or criminal proceeding we bring to enforce these requirements.

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

Category	SIC <sup>a</sup>	NAICS <sup>b</sup>	Regulated entities
Industry .....	3086	32615	Fabricators of flexible polyurethane foam.

<sup>a</sup> Standard Industrial Classification.<sup>b</sup> North American Information Classification System

This list 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 § 63.8782 of the rule. If you have questions regarding the applicability of this action to a

particular entity, consult your State or local agency (or EPA Regional Office) described in the preceding **FOR FURTHER INFORMATION CONTACT** section.

*Worldwide Web (WWW).* In addition to being available in the docket, an electronic copy of this final rule will also be available on the WWW through the Technology Transfer Network

(TTN). Following signature, a copy of the rule will be posted on the TTN's policy and guidance page for newly proposed or promulgated rules <http://www.epa.gov/ttn/oarpg>.

*Outline.* The information in this preamble is organized as follows:

## I. Introduction and Background

- A. What is the source of authority for development of NESHAP?
- B. What criteria are used in the development of NESHAP?
- C. How did the public participate in developing the rule?
- D. Description of Source Category
- II. Summary of Changes Since Proposal
- III. Summary of the Final Rule
  - A. What are the affected sources?
  - B. What are the emissions limitations and compliance dates?
  - C. What are the testing, initial compliance, and continuous compliance requirements?
  - D. What are the notification, recordkeeping, and reporting requirements?
- IV. Summary of Major Comments and Responses
  - A. What sources are subject to the rule?
  - B. What issues were raised regarding adhesive-use sources?
  - C. What issues were raised regarding flame lamination sources?
- V. What are the environmental, cost, and economic impacts of the final rule?
- VI. Statutory and Executive Order Reviews
  - A. Executive Order 12866—Regulatory Planning and Review
  - B. Paperwork Reduction Act
  - C. Regulatory Flexibility Act (RFA)
  - D. Unfunded Mandates Reform Act of 1995
  - E. Executive Order 13132—Federalism
  - F. Executive Order 13175—Consultation and Coordination with Indian Tribal Governments
  - G. Executive Order 13045—Protection of Children from Environmental Health Risks and Safety Risks
  - H. Executive Order 13211—Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use
  - I. National Technology Transfer and Advancement Act of 1995
  - J. Congressional Review Act

## I. Introduction and Background

### A. What Is the Source of Authority for 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 final rule was listed on July 16, 1992 (57 FR 31576). Major source under section 112 means any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit, considering controls, 10 tpy or more of any one HAP or 25 tpy or more of any combination of HAP.

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

Section 112 of the CAA requires that we establish NESHAP for the control of HAP from both new and existing major sources. The CAA requires the NESHAP

to reflect the maximum degree of reduction in emissions of HAP that is achievable. This level of control is commonly referred to as the MACT.

The minimum control level allowed for NESHAP, which we refer to as the "MACT floor," is defined under section 112(d)(3) of the CAA. In essence, the MACT floor ensures that standards are set at a level that assures that all major sources achieve the level of control at least as stringent as that already achieved by the better-controlled and lower-emitting sources in each source category or subcategory. For new sources, the MACT floor cannot be less stringent than the emission control that is achieved in practice by the best-controlled similar source. The MACT standards for existing sources can be less stringent than standards for new sources, but they cannot be less stringent than the average emission limitation achieved by the best-performing 12 percent of existing sources in the category or subcategory (or the best-performing five sources for categories or subcategories with fewer than 30 sources).

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

### C. How Did the Public Participate in Developing the Rule?

Prior to proposal, we met with industry representatives and State regulatory authorities several times to discuss the data and information used to develop the proposed standards. In addition, these and other potential stakeholders, including equipment vendors and environmental groups, had opportunity to comment on the proposed standards.

The proposed rule was published in the **Federal Register** on August 8, 2001 (66 FR 41718). The preamble to the proposed rule discussed the availability of technical support documents, which described in detail the information gathered during the standards development process. Public comments were solicited at proposal, including a specific request for comments with regard to the potential existence of non-slitter adhesive use by major sources.

We received eight public comment letters on the proposed rule. The commenters represent the following affiliations: foam fabricators (2 companies), industrial trade associations (5), and one private

research group. In the post-proposal period, we talked with commenters and other stakeholders to clarify comments and to assist in our analysis of the comments. Records of these contacts are found in Docket OAR-2000-0080 or Docket A-2000-43. All of the comments have been carefully considered, and, where appropriate, changes have been made for the final rule.

### D. Description of Source Category

Today's NESHAP apply to the Flexible Polyurethane Foam Fabrication Operations source category. This source category includes operations engaged in cutting, gluing, and/or laminating pieces of flexible polyurethane foam. This includes fabrication operations that are located at foam production plants, as well as those that are located off-site from foam production plants.

We have identified two subcategories under the Flexible Polyurethane Foam Fabrication Operations source category. These subcategories are loop slitter HAP-based adhesive use and flame lamination.

**Loop Slitter Adhesive Use:** A loop slitter is a large machine used to create thin sheets of foam from the large blocks of foam or "buns" created at a foam production plant. In order to comply with Occupational Health and Safety Administration (OSHA) regulations, loop slitters have converted from a reliance on methylene chloride-based adhesives to other non-HAP alternatives since the mid-1990's. As a result of the OSHA regulations, we believe that the foam fabrication industry has effectively discontinued the use of methylene chloride-based adhesives on loop slitters. Consequently, our estimate of current nationwide HAP emissions from loop slitter adhesive use prior to the development of the NESHAP (referred to as "baseline emissions") is zero.

**Flame Lamination:** In the flame lamination process, foam is scorched to adhere it to various substrates. This process releases particulates and HAP. We have identified HCN, TDI, and HCl as HAP emitted as a result of flame lamination. Specific HAP released are dependent on the contents of the foam being laminated at a given time. With the exception of HCl, these HAP are generally released in very small amounts.

## II. Summary of Changes Since Proposal

In response to comments received on the proposed NESHAP and further analysis, we made two significant changes for the final rule, and a small number of other changes for editorial purposes and clarification.

The proposed rule included an emission limit for loop slitters of zero HAP emissions. Information subsequently supplied by commenters and industry contacts demonstrated that the widely used n-propyl bromide adhesives originally believed to be non-HAP actually contain small amounts of HAP.

In accordance with the definition of "HAP-based" in the Flexible Polyurethane Foam Production NESHAP (40 CFR part 63, subpart III), we have changed the definition of "HAP-based adhesive" to contain 5 percent (by weight) or more of HAP. We also changed the emission limit accordingly.

At post proposal, it came to our attention that the test methods specified for measurement of HCN emissions from process, storage tank, and transfer vents (EPA Methods 18, 25, and 25A) have not been validated for measurement of HCN. Test methods that have been used for measurement of HCN include the EPA Conditional Test Method CTM-033 "Draft Method for Sampling and Analysis of Hydrogen Cyanide Emissions from Stationary Sources" and California Air Resources Board Method 426 (<http://www.epa.gov/ttn/emc/ctm.html>) modified to use ion chromatography for sample analysis. However, neither of these methods have been fully validated at this time. Consequently, the final rule has been written to require that the data from any test method used to measure HCN emissions from flame lamination sources must be validated using EPA Method 301.

Another change made for the final rule was the addition of a definition for "research and development process" to clarify the provision in § 63.8782(d)(2) that such processes are not subject to the rule, and a change to § 63.8786(e) so that collection of compliance data prior to the compliance date is no longer required.

We proposed to exclude non-slitters from the source category based on our findings that there were no non-slitters using HAP-based adhesives located on the site of a major source, and solicited comment and supporting information regarding that issue. We received no comment or supporting information contrary to our findings, therefore, we are excluding the non-slitter adhesive use from the source category definition. Additional changes were insignificant and editorial in nature.

### III. Summary of Final Rule

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

The final rule defines two affected sources (units or collections of units to which a given standard or limit applies) corresponding to the two subcategories, loop slitter adhesive use and flame lamination. The loop slitter adhesive use affected source is the collection of loop slitters and associated adhesive application equipment used to apply HAP-based adhesives to bond foam to foam at a flexible polyurethane foam fabrication plant site. Loop slitter affected sources, located at plant sites that are major sources of HAP, that are using HAP-based adhesives on or after April 14, 2003, are subject to the NESHAP, including the applicable emission limit and reporting and recordkeeping requirements. However, loop slitter affected sources that have eliminated use of HAP-based adhesives by April 14, 2003, are not subject to the NESHAP. The flame lamination affected source is the collection of all flame laminators and associated rollers at a flexible polyurethane foam fabrication plant site associated with the flame lamination of foam to any substrate.

#### B. What Are the Emission Limitations and Compliance Dates?

If you own or operate an existing, new, or reconstructed loop slitter adhesive use affected source, the final rule prohibits you from using any HAP-based adhesives. We are defining HAP-based adhesives as adhesives containing 5 percent (by weight) or greater of HAP, where the concentration of HAP may be determined using EPA Method 311 (Analysis of Hazardous Air Pollutant Compounds in Paints and Coatings by Direct Injection Into a Gas Chromatograph) or other approved information. Existing affected sources must be in compliance by April 14, 2004. New or reconstructed sources must be in compliance by the date of startup of the affected source, or by April 14, 2003, whichever is later.

If you own or operate an existing flame lamination affected source, you are not required to meet any emission limitation; you are only subject to a requirement to submit an initial notification within 120 days after April 14, 2003. If you own or operate a new or reconstructed flame lamination affected source, the NESHAP requires that you reduce HAP emissions from the affected source by 90 percent. Your new or reconstructed flame lamination affected source must be in compliance with the emission limit upon startup or by April 14, 2003, whichever is later.

#### C. What Are the Testing, Initial Compliance, and Continuous Compliance Requirements?

If you own or operate a flexible polyurethane foam fabrication loop slitter adhesive use or flame lamination affected source, you must comply with the testing, initial compliance, and continuous compliance requirements in the following paragraphs.

##### Loop Slitter Adhesive Use

If you own or operate a loop slitter affected source, you must demonstrate initial and continuous compliance by certifying that no HAP-based adhesives are or will be used. You must submit this initial certification within 60 days of the compliance date. The certification must be accompanied by documentation stating what the facility will use for adhesives, along with supporting information to document the HAP content of adhesives used at the facility, such as Method 311 results or other approved information. Thereafter, on a yearly basis, you must recertify compliance, including HAP content information on any new adhesives used at the source.

The final rule allows you to use methods other than Method 311, including an approved alternative method or any other reasonable means to determine the HAP content of adhesives. Other reasonable means include a material safety data sheet (MSDS), a certified product data sheet (CPDS), or a manufacturer's hazardous air pollutant data sheet. However, if the results of an analysis by EPA Method 311 are different from the HAP content determined by another means, the EPA Method 311 results will govern compliance determinations. You are not required to test the materials used, but the Administrator may require a test using EPA Method 311 (or an approved alternative method) to confirm the reported HAP content.

##### Flame Lamination

If you own or operate a new or reconstructed flame lamination affected source, the final rule requires that you demonstrate initial compliance by conducting a performance test within 180 days after the compliance date that demonstrates that HAP emissions are being reduced by 90 percent. In order to demonstrate continuous compliance with this emissions limit, you must continuously monitor control device parameters. Specifically for venturi scrubbers, which we believe will be the control device of choice in most situations, you are required to continuously monitor the pH of the

scrubber effluent, the scrubber liquid flow rate, and the pressure drop across the venturi. You must demonstrate continuous compliance by these monitored parameters staying within the operating limits. Operating limits must be established for each parameter based on monitoring conducted during the initial performance test and reported in your facility's Notification of Compliance Status Report.

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

If you own or operate foam fabrication operations at major sources, you must submit several notifications and reports, which are listed and then briefly described in this section. First, you must submit an initial notification. In addition, if you own or operate a flexible polyurethane loop slitter adhesive use affected source or a new or reconstructed flame lamination affected source, you must also submit the following notification and reports:

- Notification of Intent to Conduct a Performance Test (new or reconstructed flame laminators only);
- Notification of Compliance Status reports;
- Periodic Compliance reports; and
- Startup, Shutdown, and Malfunction reports (new or reconstructed flame laminators only).

For the Initial Notification, you must notify us that your facility is subject to the Flexible Polyurethane Foam Fabrication Operations NESHAP, and provide specified basic information about your facility. You must submit this notification within 120 days after April 14, 2003, for existing affected sources. If you own or operate a new or reconstructed affected source, you are required to submit the application for construction or reconstruction required by § 63.9(b)(iii) of the 40 CFR part 63, subpart A, in lieu of the Initial Notification.

For the Notification of Intent report, for each new or reconstructed flame lamination affected source that you own or operate, you must notify us in writing of the intent to conduct a performance test at least 60 days before the performance test is scheduled to begin. You must submit the Notification of Compliance Status report within 60 days of completion of the performance test. As part of the Notification of Compliance Status, you must include a certified notification of compliance that states the compliance status of the facility, along with supporting information (e.g., performance test results and operating parameter values and ranges).

If you own or operate a source complying with the standards for loop slitter adhesive use, you must submit the Notification of Compliance Status within 60 days of the compliance date. In the Notification of Compliance Status, you must list each adhesive used at the affected source, the manufacturer or supplier of each, and the individual HAP content (percent by mass) of each adhesive that is used.

If you own or operate a facility that is subject to control requirements under these NESHAP, you must submit a Periodic Compliance report, which reports continued compliance with the flame lamination new source emission limit semiannually, and continued compliance with the loop slitter adhesive use HAP-based usage limit annually.

Finally, for the Startup, Shutdown, and Malfunction report, if you own or operate a new or reconstructed flame lamination affected source, you must report any startup, shutdown, or malfunction during the reporting period which does not meet the emission limitations set out in 40 CFR 63.8790 and is not in the facility's startup, shutdown, and malfunction plan.

If you own or operate a flame lamination or loop slitter adhesive use source, you must maintain records of reported information and other information necessary to document compliance (e.g., records related to malfunction, records that show continuous compliance with emission limits) for 5 years.

#### **IV. Summary of Major Comments and Responses**

This section includes discussion of significant comments on the proposed rule. For a complete summary of all the comments received on the proposed rule and our responses to them, refer to the "Background Information Document for Promulgation of National Emissions Standards for Hazardous Air Pollutant (NESHAP): Flexible Polyurethane Foam Fabrication" (hereafter called the "response to comments document") in Docket OAR-2002-0080 or A-2000-43. The docket also contains the actual comment letters and supporting documentation developed for the final rule.

##### *A. What Sources Are Subject to the Rule?*

*Comment:* We received one comment requesting that we regulate area sources in the flexible polyurethane foam fabrication industry. The commenter asserted that there are a large number of area sources in this source category and cited examples of other source

categories for which both area and major sources are regulated.

*Response:* According to section 112(c)(3) of the CAA, the Administrator must list area source categories separately from major source categories, and only if the Administrator finds that a category of area sources " \* \* \* presents a threat of adverse effects to human health or the environment (by such sources individually or in the aggregate) warranting regulation under this section." We have listed flexible foam fabrication operations as an area source category for further scrutiny and will address the emissions from area sources in this source category in a separate action (64 FR 38721, July 19, 1999).

##### *B. What Issues Were Raised Regarding Adhesive-Use Sources?*

*Comment:* The proposed rule included a provision that loop slitters could use no HAP-based adhesives, with HAP-based adhesives defined as "an adhesive containing detectable HAP, according to EPA Method 311 or another approved alternative." The data for existing loop slitters that were available to us during the development of the proposed rule indicated that 22 of 30 facilities use no HAP-based adhesives. Several commenters asserted that the adhesives commonly used by the industry on their loop slitters do contain small amounts of HAP. A survey conducted by one of the commenters indicated that 11 of the 20 loop slitter facilities surveyed use an n-propyl bromide adhesive which contains 0.32 to 1.0 percent 1,2-Epoxybutane by weight.

*Response:* The information supplied by commenters and industry contacts demonstrates that the widely-used n-propyl bromide adhesives, originally believed to be non-HAP, actually contain trace amounts of HAP, which we believe are present mostly as impurities. In accordance with the definition of "HAP-based" in the Flexible Polyurethane Foam Production NESHAP (40 CFR part 63, subpart III), we have written the definition of "HAP-based adhesive" in the final rule to contain 5 percent (by weight) or more of HAP.

*Comment:* Several commenters recommended that we set a numerical, technology-based emission limitation for loop slitters, rather than banning the use of HAP-based adhesives. The commenters explained that a numerical or technology-based MACT standard would allow industry to lower their emissions using control technologies that are currently available or being developed.

*Response:* Our determination that the MACT floor for loop slitter adhesive use is no HAP-based adhesives makes the use of a numerical or technology-based emission limitation inappropriate.

Although it may be possible to greatly reduce HAP emissions through use of technology, we believe that elimination of the use of HAP-based adhesives in loop slitter operations is required by section 112(d)(3) of the CAA because of the number of facilities using no HAP-based adhesives in their loop slitter operations. Accordingly, no changes were made for the final rule with regard to this issue.

*Comment:* Comments were received encouraging us to regulate non-slitter adhesive use applications in order to control emissions of methylene chloride. The commenter asserted that many major source facilities are still using methylene chloride-based adhesives in non-loop slitter applications.

*Response:* In the preamble to the proposed rule, we specifically requested comments on this issue. We stated that if comments demonstrated that "there are non-slitter adhesive sources using HAP-based adhesives that are located on the site of a major source, we would retain them in the source category and treat them as a third subcategory." Based on available information, we found no non-slitters on sites of major sources. Thus, there is no basis to retain non-slitter adhesive use sources in this category. We have listed flexible foam fabrication operations as an area source category for further scrutiny and will address the emissions from area sources under section 112(k) of the CAA.

*Comment:* Several comments were received expressing concerns regarding the adhesives being used as alternatives to HAP-based adhesives, for both loop slitter and non-slitter adhesive applications. Some commenters mentioned that n-propyl bromide has been the subject of a number of "substantial risk" notifications under the Toxic Substances Control Act and is also the subject of toxicity testing under the National Toxicology Program, and urged us to consider regulating n-propyl bromide emissions.

*Response:* We are aware of this situation, but have no authority under section 112 to regulate n-propyl bromide since it is not currently listed as a HAP.

*Comment:* Another commenter asked us to investigate and identify the secondary air impacts of HAP or volatile organic compounds (VOC) from the use of the adhesives being used as alternatives to methylene chloride. If they emit VOC, the commenter

recommended that we regulate those emissions so as not to exacerbate local efforts to comply with other air pollution regulations.

*Response:* The NESHAP for foam fabrication operations protects air quality and promotes the public health by reducing emissions of some of the HAP listed in section 112(b)(1) of the CAA. The mandate for the NESHAP program does not extend to control of VOC (unless they are HAP). Additionally, VOC emissions are addressed elsewhere in the CAA, both in section 110 which addresses State implementation plans for States with ozone nonattainment areas under the national ambient air quality standards; and in section 111, which includes new source performance standards. Moreover, the current record does not indicate that there are any significant secondary air impacts (*i.e.*, increased emissions of other HAP or VOC) from the use of alternatives to methylene chloride. Thus, the Agency finds that the investigation requested by the commenter is unwarranted. We believe that the reporting requirements that were proposed for loop slitter facilities are adequate, and they remain unchanged for the final rule.

#### *C. What Issues Were Raised Regarding Flame Lamination Sources?*

*Comment:* One commenter asserted that the proposed MACT for existing flame lamination sources (no additional control) is not the maximum degree of HAP reduction that could be achieved and requested that MACT for these sources be based on "the performance of the best two facilities," excluding consideration of uncontrolled sources.

*Response:* We are required to calculate the MACT floor for existing sources based on the central tendency of the emission limitation achieved by the best performing five major sources for a subcategory with less than 30 major sources (such as flame lamination). Evaluation of only the two best performing sources, as requested by the commenter, is not consistent with this statutory requirement.

The data for existing flame lamination sources that were available during the development of the proposed rule indicated that two of the top five major sources control HAP emissions using a scrubber and three do not control HAP emissions. We chose not to use the mean as the measure of central tendency because it would result in a MACT floor that does not represent the performance of an actual control device. In this case, using the median or the mode resulted in the same MACT floor (no additional control).

In addition to controls, we also investigated the possibility that materials substitution or work practice standards could represent the MACT floor.

The flame lamination of any foam generates HAP emissions, most notably HCN and TDI. These compounds are present in the foam as a result of the polyurethane foam manufacturing process, which is regulated under separate MACT standards. Changing the use of these compounds would change the inherent properties of the foam and, thus, we rejected this raw material substitution as a potential MACT floor control strategy.

In addition, the flame lamination of foams containing chlorinated fire retardants also results in emission of the HAP HCl. The frequency of use of chlorinated fire retardant foams varies considerably from one facility to another, and may also vary over time at any single facility. Although some facilities do not use fire retardant foams at all, most use them some of the time. The fire retardancy is a necessary characteristic of the foam where the customer requires fire retardancy as a product specification, *e.g.*, foam in automobiles and bedding.

The top two facilities on our list stated that they laminated fire retardant foam approximately 30 percent of the time for the years the data were gathered. As product mix and customer demands change, the percent of fire retardant foam flame laminated at a facility can vary considerably. Because there is no clear subdivision of the industry between facilities that use fire retardant foams and those that do not, we deemed any further subdivision of the industry because of this issue to be unreasonable.

Although there may be non-chlorinated fire retardant foams available to flame laminators, they are not currently in use by any of the lowest-emitting five flame lamination facilities. Thus, we determined that product substitution does not represent the MACT floor for the flame lamination subcategory.

We also considered the possibility that the MACT floor might be represented by work practices. The nature of the flame lamination process does not lend itself to any typical work practices used to minimize HAP emissions. There are no emissions related to transport and storage of raw materials, or to cleaning of the equipment, and there is no HAP-containing waste. In fact, the HAP emissions are created during the process by the physical act of scorching the foam. The scorching makes the foam

sticky so it will adhere to the other substrate, but also releases HAP. Because there are no emission-reducing work practice standards in use at flame lamination facilities we did not find that the MACT floor may be represented by any work practice standards.

We considered more stringent "above-the-floor" options for MACT, including 90 percent reduction of HCl and HCN, 95 percent reduction of HCN and TDI, and banning the flame lamination of chlorinated fire retardant foam. We rejected the first two options as unreasonably costly with respect to the incremental emission reduction that would be achieved (\$9,700 per ton for the first option and \$70,300 per ton for the second option). We rejected the third option as technically infeasible because no alternative fire retardant has been identified that would be adequate and appropriate for all flame lamination applications in which fire retardant foam is required. Discussions with industry suggest that alternative materials could present product quality issues and result in products that do not meet product specifications. We have received no further data or information which would lead to the selection of a different MACT for existing flame lamination sources. Therefore, we have not changed the emission limitation for existing flame lamination sources.

#### V. What Are the Environmental, Cost, and Economic Impacts of the Final Rule?

We estimate that current HAP emissions from loop slitter adhesive users are essentially zero because of changes in adhesive composition as a result of the OSHA permissible exposure limit (PEL) for methylene chloride. Therefore, we do not expect any decreases from this subcategory resulting from the NESHAP. Costs should be minimal as well, as most sources will already be maintaining the necessary records in order to comply with OSHA regulations regarding availability of MSDS.

We estimated baseline emissions for flame laminators from data obtained from individual facilities, as well as from State agencies to which facilities reported their annual emissions. Where reported emissions were not available, we calculated emission estimates using a HAP emission factor, the laminator's operating schedule, the number of flame lamination lines, and the percent of the operating time that fire retardant foam is laminated (used only when calculating HCl emissions).

Our estimates of nationwide baseline emissions from all existing facilities in the flame lamination subcategory are

58.8 tpy HCl, 10.3 tpy HCN, and 3.0 tpy TDI, for a total of 72.1 tpy HAP. We have not promulgated any emissions limitations for existing flame lamination sources; therefore, we do not expect any emissions reductions from the baseline. However, the NESHAP should result in a 90 percent reduction in HCl and HCN emissions from any new or reconstructed major sources. We calculate that a typical flame lamination operation emits 7.3 tpy of combined HCl and HCN, which would be reduced by 90 percent, for a total HAP emission reduction of 6.5 tpy from each new or reconstructed affected source. In addition, particulate matter emissions from flame lamination would also be reduced by any scrubber used to reduce the HAP emissions.

Based on our analysis, we calculate that 64,700 gallons per year of wastewater will be generated by a new or reconstructed flame lamination source. Our estimate of the annual cost to treat this wastewater is less than \$250 per year. We do not expect that there will be any significant adverse non-air health, environmental, or energy impacts associated with the NESHAP for flexible polyurethane foam fabrication operations.

There will be no capital costs for loop slitter adhesive users and existing flame laminators because the final rule states that these sources are only subject to reporting and recordkeeping costs. We estimate that up to three new flame laminators may be built in the next 3 years, but only one of these would be a major source subject to the NESHAP. That source would face capital costs of approximately \$65,000 associated with installation of a control device (e.g., scrubber) and monitoring equipment. We estimate that the average annualized cost for that source would be approximately \$63,000 per year, including annualized capital costs for a control device and monitoring equipment; labor costs associated with monitoring, reporting, and recordkeeping requirements; and the operation and maintenance of the required control equipment.

In summary, we do not expect any emissions reductions from existing foam fabrication sources, and we estimate HAP emission reductions of 6.5 tpy from the single new flame lamination source we assume will be constructed during the three years following the promulgation of this rule. The total annualized cost of the final rule has been estimated at \$64,000, including \$63,000 annually for the single new flame lamination facility subject to the provisions of the final rule, and additional one-time labor costs for

existing facilities to read the rule. Given that only one source will need to install new controls as a result of the rule, and cost of control is a very small portion of industry revenues, we consider the economic impacts associated with the final rule to be minimal.

#### VI. Statutory and Executive Order Reviews

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

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

It has been determined that the final rule is not a "significant regulatory action" under the terms of Executive Order 12866 and is therefore not subject to OMB review.

##### B. Paperwork Reduction Act

The information collection requirements in the final rule have been submitted for approval to OMB under the requirements of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* An Information Collection Request (ICR) document has been prepared by EPA (ICR No. 2027.02), and a copy may be obtained from Susan Auby by mail at the Office of Environmental Information, Collection Strategies Division (2822), U.S. EPA, 1200 Pennsylvania Avenue, NW., Washington, DC 20460, by e-mail at "auby.susan@epa.gov," or by calling (202) 566-1672. A copy may also be downloaded from the internet at <http://www.epa.gov/icr>. The information requirements are not effective until OMB approves them.

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

According to the ICR, the total 3-year monitoring, reporting, and recordkeeping burden for this collection is 3,634 labor hours, and the annual average burden is 1,211 labor hours. The total annualized cost of monitoring, reporting, and recordkeeping is approximately \$54,124. The labor cost over the 3-year period is \$154,399 or \$51,466 per year. The annualized capital cost for monitoring equipment is \$997. Annual operation and maintenance costs are \$4,982 over 3 years, averaging \$1,661 per year. This estimate includes a one-time plan for demonstrating compliance, annual compliance certificate reports, notifications, and recordkeeping.

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

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR part 9 and 48 CFR chapter 15. The OMB control number(s) for the information collection requirements in the final rule will be listed in an amendment to 40 CFR part 9 or 48 CFR chapter 15 in a subsequent **Federal Register** document after OMB approves the ICR.

### C. Regulatory Flexibility Analysis

EPA has determined that it is not necessary to prepare a regulatory flexibility analysis in connection with this final rule. EPA has also determined that this rule will not have a significant economic impact on a substantial number of small entities. For purposes of assessing the impacts of today's final rule on small entities, small entity is defined as: (1) a small business according to the Small Business Administration (SBA) size standards by NAICS code (a maximum of 500 employees for the polyurethane foam fabrication industry); (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 final rule on small entities, EPA has concluded that this action will not have a significant economic impact on a substantial number of small entities. We have determined that one of approximately 48 affected sources is a small entity, and that the impact will consist primarily of recordkeeping and reporting requirements.

### D. Unfunded Mandates Reform Act of 1995

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

with the final rule an explanation why that alternative was not adopted.

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

We have determined that the final rule does not contain a Federal mandate that may result in expenditures of \$100 million or more for State, local, or tribal governments, in the aggregate, or the private sector in any 1 year. The total annualized cost of the final rule has been estimated at \$64,000. This figure includes the \$63,000 annually for the single new flame lamination facility subject to the provisions of the final rule, and additional labor costs for existing facilities. Thus, today's final rule is not subject to the requirements of sections 202 and 205 of the UMRA. In addition, we have determined that the final rule contains no regulatory requirements that might significantly or uniquely affect small governments because it contains no regulatory requirements that apply to such governments or impose obligations upon them. Therefore, the final rule is not subject to the requirements of section 203 of the UMRA.

### E. 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" are 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."

The final rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of Government, as specified in

Executive Order 13132. The standards apply only to flexible polyurethane foam fabricators and do not pre-exempt States from adopting more stringent standards or otherwise regulate State or local governments. Thus, Executive Order 13132 does not apply to the final rule.

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

#### *F. 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.”

The final 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. This is because no tribal governments own or operate a flexible polyurethane foam fabrication facility. Thus, Executive Order 13175 does not apply to the final rule.

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

Executive Order 13045, “Protection of Children from Environmental Health Risks and Safety Risks” (62 FR 19885, April 23, 1997) applies to any rule that (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, the Agency must evaluate the environmental health or safety effects of the planned rule on children and explain why the planned rule is

preferable to other potentially effective and reasonably feasible alternatives that we considered.

The final rule is not subject to Executive Order 13045 because it is not an economically significant regulatory action as defined by Executive Order 12866. In addition, EPA interprets Executive Order 13045 as applying only to those regulatory actions that are based on health and safety risks, such that the analysis required under section 5–501 of the Executive Order has the potential to influence the regulation. The final rule is not subject to Executive Order 13045 because it is based on technology performance and not on health or safety risks.

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

The final 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.

#### *I. National Technology Transfer and Advancement Act of 1995*

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

This rulemaking involves technical standards. The EPA cites in the final rule the EPA Methods 1, 1A, 2, 2A, 2C, 2D, 2F, 2G, 4, 26A, 311, and any method to measure hydrogen cyanide from flame lamination sources (validated with EPA Method 301). Consistent with the NTTAA, EPA conducted searches to identify voluntary consensus standards in addition to these EPA methods. No applicable voluntary consensus standards were identified for EPA Methods 1A, 2A, 2D, 2F, 2G, 311, and a method to measure hydrogen cyanide.

The search and review results have been documented and are placed in the docket (OAR–2002–0080 or A–2000–43) for the final rule.

Five voluntary consensus standards: ASTM D1979–91, ASTM D3432–89, ASTM D4747–87, ASTM D4827–93, and ASTM PS9–94 are incorporated by reference in EPA Method 311.

The search for emission measurement procedures identified seven voluntary consensus standards potentially applicable to the final rule. The EPA determined that five of these seven standards were impractical alternatives to EPA test methods for the purposes of this rulemaking. Therefore, EPA will not adopt these standards today. The reasons for this determination for the five methods are in the docket.

The following two voluntary consensus standards identified in this search were not available at the time the review was conducted for the purposes of this rulemaking because they are under development by a voluntary consensus body: ASME/BSR MFC 13M, “Flow Measurement by Velocity Traverse,” for EPA Method 2 (and possibly 1); and ASME/BSR MFC 12M, “Flow in Closed Conduits Using Multiport Averaging Pitot Primary Flowmeters,” for EPA Method 2.

Sections 63.8800 and 63.8802 and Table 3 to subpart M list the EPA testing methods included in the final rule. Under 40 CFR 63.7(f) and 63.8(f), a source may apply to EPA for permission to use alternative test methods or alternative monitoring requirements in place of any of the EPA testing methods, performance specifications, or procedures.

#### *J. Congressional Review Act*

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. The EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. This action is not a “major rule” as defined by 5 U.S.C. 804(2). The final rule will be effective on April 14, 2003.

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

Environmental protection, Administrative practice and procedure,

Air pollution control, Hazardous substances, Intergovernmental relations, Recordkeeping and reporting requirements.

Dated: February 28, 2003.

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

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

## **PART 63—[AMENDED]**

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

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

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

### **Subpart MMMMM—National Emission Standards for Hazardous Air Pollutants: Flexible Polyurethane Foam Fabrication Operations**

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

- 63.8780 What is the purpose of this subpart?  
63.8782 Am I subject to this subpart?  
63.8784 What parts of my plant does this subpart cover?  
63.8786 When do I have to comply with this subpart?

#### **Emission Limitations**

- 63.8790 What emission limitations must I meet?

#### **General Compliance Requirements**

- 63.8794 What are my general requirements for complying with this subpart?

#### **Testing and Initial Compliance Requirements**

- 63.8798 By what date must I conduct performance tests or other initial compliance demonstrations?  
63.8800 What performance tests and other procedures must I use to demonstrate compliance with the emission limit for flame lamination?  
63.8802 What methods must I use to demonstrate compliance with the emission limitation for loop slitter adhesive use?  
63.8806 How do I demonstrate initial compliance with the emission limitations?

#### **Continuous Compliance Requirements**

- 63.8810 How do I monitor and collect data to demonstrate continuous compliance?  
63.8812 How do I demonstrate continuous compliance with the emission limitations?

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

- 63.8816 What notifications must I submit and when?  
63.8818 What reports must I submit and when?  
63.8820 What records must I keep?  
63.8822 In what form and how long must I keep my records?

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

- 63.8826 What parts of the General Provisions apply to me?  
63.8828 Who implements and enforces this subpart?  
63.8830 What definitions apply to this subpart?

#### **Tables to Subpart MMMMM of Part 63**

- Table 1 to Subpart MMMMM of Part 63—Emission Limits  
Table 2 to Subpart MMMMM of Part 63—Operating Limits for New or Reconstructed Flame Lamination Affected Sources  
Table 3 to Subpart MMMMM of Part 63—Performance Test Requirements for New or Reconstructed Flame Lamination Affected Sources  
Table 4 to Subpart MMMMM of Part 63—Initial Compliance With Emission Limits  
Table 5 to Subpart MMMMM of Part 63—Continuous Compliance with Emission Limits and Operating Limits  
Table 6 to Subpart MMMMM of Part 63—Requirements for Reports  
Table 7 to Subpart MMMMM of Part 63—Applicability of General Provisions to Subpart MMMMM

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

##### **§ 63.8780 What is the purpose of this subpart?**

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) emitted from flexible polyurethane foam fabrication operations. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission standards.

##### **§ 63.8782 Am I subject to this subpart?**

(a) You are subject to this subpart if you own or operate a flexible polyurethane foam fabrication plant site that operates a flame lamination affected source, as defined at § 63.8784(b)(2), and that is located at, or is part of a major emission source of hazardous air pollutants (HAP) or that operates a loop slitter affected source, as defined at § 63.8784(b)(1), that meets the criteria in paragraphs (a)(1) and (2) of this section.

(1) The loop slitter affected source uses one or more HAP-based adhesives at any time on or after April 14, 2003.

(2) The loop slitter affected source is located at or is part of a major source of HAP.

(b) A flexible polyurethane foam fabrication plant site is a plant site where pieces of flexible polyurethane foam are bonded together or to other substrates using HAP-based adhesives or flame lamination.

(c) A major source of HAP is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

(d) This subpart does not apply to the following processes in paragraphs (d)(1) and (2) of this section:

(1) Processes that produce flexible polyurethane or rebond foam as defined in subpart III of this part.

(2) A research and development facility, as defined in section 112(c)(7) of the Clean Air Act (CAA).

##### **§ 63.8784 What parts of my plant does this subpart cover?**

(a) This subpart applies to each existing, new, or reconstructed affected source at facilities engaged in flexible polyurethane foam fabrication.

(b) The affected sources are defined in this section in paragraphs (b)(1) and (2) of this section.

(1) The loop slitter adhesive use affected source is the collection of all loop slitters and associated adhesive application equipment used to apply HAP-based adhesives to bond foam to foam at a flexible polyurethane foam fabrication plant site.

(2) The flame lamination affected source is the collection of all flame lamination lines associated with the flame lamination of foam to any substrate at a flexible polyurethane foam fabrication plant site.

(c)(1) A new affected source is one that commences construction after August 8, 2001 and meets the applicability criteria of § 63.8782 at the time construction commences.

(2) If you add one or more flame lamination lines at a plant site where flame lamination lines already exist, the added line(s) shall be a new affected source and meet new source requirements if the added line(s) has the potential to emit 10 tons per year or more of any HAP or 25 tons or more per year of any combination of HAP.

(d) A reconstructed affected source is one that commences reconstruction after August 8, 2001 and meets the criteria for reconstruction as defined in § 63.2.

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

##### **§ 63.8786 When do I have to comply with this subpart?**

(a) If you have a new or reconstructed affected source, you must comply with this subpart according to paragraphs (a)(1) and (2) of this section.

(1) If you start up your new or reconstructed affected source before April 14, 2003, then you must comply with the emission standards for new or reconstructed sources in this subpart no later than April 14, 2003.

(2) If you start up your new or reconstructed affected source on or after April 14, 2003, then you must comply with the emission standards for new or

reconstructed sources in this subpart upon startup of your affected source.

(b) If you have an existing loop splitter affected source, you must comply with the emission standards for existing sources no later than 1 year after April 14, 2003.

(c) If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP and an affected source subject to this subpart, the provisions in paragraphs (c)(1) and (2) of this section apply.

(1) A new affected source as specified at § 63.8784(c) or a reconstructed affected source as specified at § 63.8784(d) must be in compliance with this subpart upon startup.

(2) An existing affected source as specified at § 63.8784(e) must be in compliance with this subpart no later than 1 year after the date on which the area source became a major source.

(d) You must meet the notification requirements in § 63.8816 according to the schedule in § 63.8816 and in subpart A of this part. Some of the notifications must be submitted before you are required to comply with the emission standards in this subpart.

(e) If you have a loop splitter affected source, you must have data on hand beginning on the compliance date specified in paragraph (b) of this section as necessary to demonstrate that your adhesives are not HAP-based. The types of data necessary are described in §§ 63.8802 and 63.8810.

### Emission Limitations

#### § 63.8790 What emission limitations must I meet?

(a) You must meet each emission limit in Table 1 to this subpart that applies to you.

(b) You must meet each operating limit in Table 2 to this subpart that applies to you.

### General Compliance Requirements

#### § 63.8794 What are my general requirements for complying with this subpart?

(a) For each loop splitter adhesive use affected source, you must be in compliance with the requirements in this subpart at all times.

(b) For each new or reconstructed flame lamination affected source, you must be in compliance with the requirements in this subpart at all times, except during periods of startup, shutdown, and malfunction.

(c) 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).

(d) During the period between the compliance date specified for your new or reconstructed flame lamination affected source in § 63.8786, and the date upon which continuous compliance monitoring systems have been installed and verified and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.

(e) For each new or reconstructed flame lamination affected source, you must develop and implement a written startup, shutdown, and malfunction plan according to the provisions in § 63.6(e)(3).

(f) For each monitoring system required in this section for new or reconstructed flame lamination sources, you must develop and submit for approval a site-specific monitoring plan that addresses the requirements in paragraphs (f)(1) through (3) of this section.

(1) Installation of the continuous monitoring system (CMS) sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (*e.g.*, on or downstream of the last control device);

(2) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system; and

(3) Performance evaluation procedures and acceptance criteria (*e.g.*, calibrations).

(g) In your site-specific monitoring plan, you must also address the ongoing procedures specified in paragraphs (g)(1) through (3) of this section.

(1) Ongoing operation and maintenance procedures in accordance with the general requirements of §§ 63.8(c)(1), (3), (4)(ii), (7), and (8), and 63.8804;

(2) Ongoing data quality assurance procedures in accordance with the general requirements of § 63.8(d); and

(3) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of § 63.10(c), (e)(1), and (e)(2)(i).

### Testing and Initial Compliance Requirements

#### § 63.8798 By what date must I conduct performance tests or other initial compliance demonstrations?

(a) For each loop splitter affected source, you must conduct the initial compliance demonstration by the

compliance date that is specified for your source in § 63.8786.

(b) For each new or reconstructed flame lamination affected source, you must conduct performance tests within 180 calendar days after the compliance date that is specified for your source in § 63.8786 and according to the provisions in § 63.7(a)(2).

#### § 63.8800 What performance tests and other procedures must I use to demonstrate compliance with the emission limit for flame lamination?

(a) You must conduct each performance test in Table 3 to this subpart that applies to you.

(b) Each performance test must be conducted according to the requirements in § 63.7(e)(1) and under the specific conditions in Table 3 to this subpart.

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

(d) You must conduct at least three separate test runs for each performance test required in this section, as specified in § 63.7(e)(3). Each test run must last at least 1 hour.

(e) You must determine the percent reduction of HAP emissions during the performance test according to paragraphs (e)(1) through (3) of this section.

(1) If you use chlorinated fire retardant foams, determine the percent reduction of HCl to represent HAP emissions from the source. If you do not use chlorinated fire retardant foams, determine the percent reduction of HCN to represent HAP emissions from the source.

(2) Calculate the concentration of HAP at the control device inlet and at the control device outlet using the procedures in the specified test method.

(3) Compare the calculated HAP concentration at the control device inlet to the calculated HAP concentration at the control device outlet to determine the percent reduction over the period of the performance test, using Equation 1 of this section:

$$R = \frac{\sum_{i=1}^n E_{\text{inlet}, i} - \sum_{i=1}^n E_{\text{outlet}, i}}{\sum_{i=1}^n E_{\text{inlet}, i}} \quad (100) \quad [\text{Eq. 1}]$$

Where:

R=Efficiency of control device, percent.

$E_{\text{inlet}, i}$ =HAP concentration of control device inlet stream for test run *i*, mg/dscm.

$E_{\text{outlet}, i}$ =HAP concentration of control device outlet stream for test run *i*, mg/dscm.

n=Number of runs conducted for the performance test.

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

(1) Conduct the performance tests using foams that are representative of foams typically used at your flame lamination affected source. If you use foams containing chlorinated fire retardants, you must conduct the performance tests using these foams.

(2) Establish all applicable operating limits that correspond to the control system efficiency as described in Table 3 to this subpart.

**§ 63.8802 What methods must I use to demonstrate compliance with the emission limitation for loop splitter adhesive use?**

(a) *Determine the HAP content for each material used.* To determine the HAP content for each material used in your foam fabrication operations, you must use one of the options in paragraphs (a)(1) through (3) of this section. If you use the option in paragraph (a)(3) of this section, you are subject to the provisions of paragraph (a)(4) of this section.

(1) *Method 311 (appendix A to 40 CFR part 63).* You may use Method 311 for determining the mass fraction of HAP. Use the procedures specified in paragraphs (a)(1)(i) and (ii) of this section when determining HAP content by Method 311.

(i) Include in the HAP total each HAP that is measured to be present at 0.1 percent by mass or more for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is measured to be 0.5 percent of the material by mass, you do not need to include it in the HAP total. Express the mass fraction of each HAP you measure as a value truncated to four places after the decimal point (for example, 0.1234).

(ii) Calculate the total HAP content in the test material by adding up the individual HAP contents and truncating the result to three places after the decimal point (for example, 0.123).

(2) *Alternative method.* You may use an alternative test method for determining mass fraction of HAP if you obtain prior approval by the Administrator. You must follow the procedure in § 63.7(f) to submit an alternative test method for approval.

(3) *Information from the supplier or manufacturer of the material.* You may rely on information other than that generated by the test methods specified

in paragraphs (a)(1) and (2) of this section to determine the mass fraction of HAP according to paragraphs (a)(3)(i) and (ii) of this section. This information may include, but is not limited to, a material safety data sheet (MSDS), a certified product data sheet (CPDS), or a manufacturer's hazardous air pollutant data sheet.

(i) Include in the HAP total each HAP that is present at 0.1 percent by mass or more for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is 0.5 percent of the material by mass, you do not have to include it in the HAP total.

(ii) If the HAP content is provided by the material supplier or manufacturer as a range, then you must use the upper limit of the range for determining compliance.

(4) *Verification of supplier or manufacturer information.* Although you are not required to perform testing to verify the information obtained according to paragraph (a)(3) of this section, the Administrator may require a separate measurement of the total HAP content using the methods specified in paragraph (a)(1) or (2) of this section. If this measurement exceeds the total HAP content provided by the material supplier or manufacturer, then you must use the measured HAP content to determine compliance.

(b) [Reserved]

**§ 63.8806 How do I demonstrate initial compliance with the emission limitations?**

(a) You must demonstrate initial compliance with each emission limit that applies to you according to Table 4 to this subpart.

(b) You must establish each site-specific operating limit in Table 2 to this subpart that applies to you according to the requirements in § 63.8800 and Table 3 to this subpart.

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.8816(e) through (h).

**Continuous Compliance Requirements**

**§ 63.8810 How do I monitor and collect data to demonstrate continuous compliance?**

(a) If you own or operate a loop splitter adhesive use affected source, you must meet the requirements in paragraphs (a)(1) and (2) of this section.

(1) Maintain a list of each adhesive and the manufacturer or supplier of each.

(2) Maintain a record of EPA Method 311 (appendix A to 40 CFR part 63), approved alternative method, or other reasonable means of HAP content determinations indicating the mass percent of each HAP for each adhesive.

(b) If you own or operate a new or reconstructed flame lamination affected source, you must meet the requirements in paragraphs (b)(1) through (3) of this section if you use a scrubber, or paragraph (b)(4) of this section if you use any other control device.

(1) Keep records of the daily average scrubber inlet liquid flow rate.

(2) Keep records of the daily average scrubber effluent pH.

(3) If you use a venturi scrubber, keep records of daily average pressure drop across the venturi.

(4) Keep records of operating parameter values for each operating parameter that applies to you.

(c) If you own or operate a new or reconstructed flame lamination affected source, you must meet the requirements in paragraphs (c)(1) through (4) of this section.

(1) Except for periods of monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times that the affected source is operating. This includes periods of startup, shutdown, and malfunction when the affected source is operating. A monitoring malfunction includes, but is not limited to, any sudden, infrequent, not reasonably preventable failure of the monitoring device to provide valid data. Monitoring failures that are caused by poor maintenance or careless operation are not malfunctions.

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

(3) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.

(4) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

**§ 63.8812 How do I demonstrate continuous compliance with the emission limitations?**

(a) You must demonstrate continuous compliance with each emission limit and operating limit in Tables 1 and 2 to this subpart that applies to you according to the methods specified in Table 5 to this subpart.

(b) You must report each instance in which you did not meet each emission limit and each operating limit in Tables 1 and 2 to this subpart that apply to you. For new or reconstructed flame lamination affected sources, this includes periods of startup, shutdown, and malfunction. These instances are deviations from the operating limits in this subpart. These deviations must be reported according to the requirements in § 63.8818.

(c) For each new or reconstructed flame lamination affected source, you must operate in accordance with the startup, shutdown, and malfunction plan during periods of startup, shutdown, and malfunction.

(d) Consistent with §§ 63.6(e) and 63.7(e)(1), deviations that occur at a new or reconstructed flame lamination affected source 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 at a new or reconstructed flame lamination affected source during a period of startup, shutdown, or malfunction are violations, according to the provisions in § 63.6(e).

(e) You also must meet the following requirements if you are complying with the adhesive use ban for loop slitter adhesive use described in § 63.8790(a).

(1) If, after you submit the Notification of Compliance Status, you use an adhesive for which you have not previously verified percent HAP mass using the methods in § 63.8802, you must verify that each adhesive used in the affected source meets the emission limit, using any of the methods in § 63.8802.

(2) You must update the list of all the adhesives used at the affected source.

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

**Notification, Reports, and Records****§ 63.8816 What notifications must I submit and when?**

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

(b) If you own or operate an existing loop slitter or flame lamination affected source, submit an initial notification no later than 120 days after April 14, 2003.

(c) If you own or operate a new or reconstructed loop slitter or flame lamination affected source, submit the application for construction or reconstruction required by § 63.9(b)(1)(iii) in lieu of the initial notification.

(d) If you own or operate a new or reconstructed flame lamination affected source, submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin, as required in § 63.7(b)(1).

(e) If you own or operate a loop slitter affected source, submit a Notification of Compliance Status according to § 63.9(h)(2)(ii) within 60 days of the compliance date specified in § 63.8786.

(f) If you own or operate a new or reconstructed flame lamination affected source, submit a Notification of Compliance Status according to § 63.9(h)(2)(ii) that includes the results of the performance test conducted according to the requirements in Table 3 to this subpart. You must submit the notification before the close of business on the 60th calendar day following the completion of the performance test according to § 63.10(d)(2).

(g) For each new or reconstructed flame lamination affected source, the Notification of Compliance Status must also include the information in paragraphs (g)(1) and (2) that applies to you.

(1) The operating parameter value averaged over the full period of the performance test (for example, average pH).

(2) The operating parameter range within which HAP emissions are reduced to the level corresponding to meeting the applicable emission limits in Table 1 to this subpart.

(h) For each loop slitter adhesive use affected source, the Notification of Compliance Status must also include the information listed in paragraphs (h)(1) and (2) of this section.

(1) A list of each adhesive used at the affected source, its HAP content (percent by mass), and the manufacturer or supplier of each.

(2) A statement certifying that each adhesive that was used at the affected

source during the reporting period met the emission limit in Table 1 to this subpart.

**§ 63.8818 What reports must I submit and when?**

(a) You must submit each report in Table 6 to this subpart that applies to you.

(b) Unless the Administrator has approved a different schedule for submission of reports under § 63.10(a), you must submit each compliance report for new or reconstructed flame lamination affected sources semiannually according to paragraphs (b)(1) through (4) 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 § 63.8786 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in § 63.8786.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in § 63.8786.

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

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

(c) For each loop slitter adhesive use affected source, you may submit annual compliance reports in place of semiannual reports.

(d) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (4) of this section.

(e) The compliance report must contain the information in paragraphs (e)(1) through (5) of this section.

(1) Company name and address.

(2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy

and completeness of the content of the report.

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

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

(5) For each deviation from an emission limitation that occurs, the compliance report must contain the information specified in paragraphs (e)(5)(i) through (iii) of this section.

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

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

(iii) Information on the number, duration, and cause for continuous parameter monitoring system (CPMS) downtime incidents, if applicable, other than downtime associated with zero and span and other daily calibration checks.

(f) The compliance report for a new or reconstructed flame lamination affected source must also contain the following information in paragraphs (f)(1) through (3) of this section.

(1) If you had a startup, shutdown or malfunction at your new or reconstructed flame lamination affected source 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).

(2) If there were no periods during which the CPMS was out-of-control in accordance with the monitoring plan, a statement that there were no periods during which the CPMS was out-of-control during the reporting period.

(3) If there were periods during which the CPMS was out-of-control in accordance with the monitoring plan, the date, time, and duration of each out-of-control period.

(g) The compliance report for a loop splitter adhesive use affected source must also contain the following information in paragraphs (g)(1) and (2) of this section.

(1) For each annual reporting period during which you use an adhesive that was not included in the list submitted with the Notification of Compliance Status in § 63.8816(h) (1), an updated list of all adhesives used at the affected source.

(2) A statement certifying that each adhesive that was used at the affected source during the reporting period met

the emission limit in Table 1 to this subpart.

(h) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a compliance report pursuant to Table 6 to this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit) in this subpart, submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(i) For each startup, shutdown, or malfunction during the reporting period where the source does not meet the emission limitations set out in § 63.8790 that occurs at a new or reconstructed flame lamination affected source and that is not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown and malfunction report.

(1) An initial report containing a description of the actions taken for the event must be submitted by fax or telephone within 2 working days after starting actions inconsistent with the plan.

(2) A followup report containing the information listed in § 63.10(d)(5)(ii) must be submitted within 7 working days after the end of the event unless you have made alternative reporting arrangements with the permitting authority.

#### **§ 63.8820 What records must I keep?**

(a) You must keep a copy of each notification and report that you submit 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).

(b) For each new or reconstructed flame lamination affected source, you must also keep the following records specified in paragraphs (b)(1) through (4) of this section.

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

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

(3) Records of operating parameter values.

(4) Records of the date and time that each deviation started and stopped and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(c) For each loop splitter adhesive use affected source, you must keep the following records specified in paragraphs (c)(1) and (2) of this section.

(1) A list of each adhesive and the manufacturer or supplier of each.

(2) A record of EPA Method 311 (appendix A to 40 CFR part 63), approved alternative method, or other reasonable means of determining the mass percent of total HAP for each adhesive used at the affected source.

#### **§ 63.8822 In what form and how long must I keep my records?**

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

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

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

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

##### **§ 63.8826 What parts of the General Provisions apply to me?**

Table 7 to this subpart shows which sections of the General Provisions in §§ 63.1 through 63.15 apply to you.

##### **§ 63.8828 Who implements and enforces this subpart?**

(a) This subpart can be implemented and enforced by us, the U.S. Environmental Protection Agency (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 implementation and enforcement of 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 paragraph (c) of this section are retained by the Administrator of U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities in paragraphs (c)(1) through (4) that cannot be delegated to State, local, or tribal agencies are as follows:

(1) Approval of alternatives to requirements in §§ 63.8780, 63.8782, 63.8784, 63.8786, and 63.8790.

(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.

#### **§ 63.8830 What definitions apply to this subpart?**

Terms used in this subpart are defined in the CAA, in 40 CFR 63.2, and in this section as follows:

*Adhesive* means any chemical substance that is applied for the purpose of bonding foam to foam, foam to fabric,

or foam to any other substrate, other than by mechanical means. Products used on humans and animals, adhesive tape, contact paper, or any other product with an adhesive incorporated onto it in an inert substrate shall not be considered adhesives under this subpart.

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

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

(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 of whether or not such failure is permitted by this subpart.

*Emission limitation* means any emission limit or operating limit.

*Flame lamination* means the process of bonding flexible foam to one or more layers of material by heating the foam surface with an open flame.

*Flame lamination line* means the flame laminator and associated rollers.

*HAP-based adhesive* means an adhesive containing 5 percent (by weight) or more of HAP, according to EPA Method 311 (appendix A to 40 CFR part 63) or another approved alternative.

*Loop splitter* means a machine used to create thin sheets of foam from the large blocks of foam or “buns” created at a slabstock flexible polyurethane foam production plant.

*Research and development process* means a laboratory or pilot plant operation whose primary purpose is to conduct research and development into new processes and products where the operations are under the close supervision of technically trained personnel, and which is not engaged in the manufacture of products for commercial sale, except in a *de minimis* manner.

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

#### **Tables to Subpart M of Part 63**

**TABLE 1 TO SUBPART M OF PART 63.—EMISSION LIMITS**  
[As stated in § 63.8790(a), you must comply with the emission limits in the following table:]

For . . .	You must . . .
1. Each existing, new, or reconstructed loop splitter adhesive use affected source.	Not use any HAP-based adhesives.
2. Each new or reconstructed flame lamination affected source .....	Reduce HAP emissions by 90 percent.
3. Each existing flame lamination affected sources .....	There are no emission limits for existing flame lamination sources. However, you must submit an initial notification per § 63.8816(b).

**TABLE 2 TO SUBPART M OF PART 63.—OPERATING LIMITS FOR NEW OR RECONSTRUCTED FLAME LAMINATION AFFECTED SOURCES**

[As stated in § 63.8790(b), you must comply with the operating limits in the following table:]

For each . . .	You must . . .
1. Scrubber .....	<p>a. Maintain the daily average scrubber inlet liquid flow rate above the minimum value established during the performance test.</p> <p>b. Maintain the daily average scrubber effluent pH within the operating range value established during the performance test.</p> <p>c. If you use a venturi scrubber, maintain the daily average pressure drop across the venturi within the operating range value established during the performance test.</p>
2. Other type of control device to which flame lamination emissions are ducted .....	Maintain your operating parameter(s) within the ranges established during the performance test and according to your monitoring plan.

TABLE 3 TO SUBPART M M M M M OF PART 63.—PERFORMANCE TEST REQUIREMENTS FOR NEW OR RECONSTRUCTED FLAME LAMINATION AFFECTED SOURCES

[As stated in § 63.8800, you must comply with the requirements for performance tests for new or reconstructed flame lamination affected sources in the following table using the requirements in rows 1 through 5 of the table if you are measuring HCl and using a scrubber, row 6 if you are measuring HCN and using a scrubber, and row 7 if you are using any other control device:]

For each new or reconstructed flame lamination affected source, you must . . .	Using . . .	According to the following requirements . . .
1. Select sampling port's location and the number of traverse ports.	Method 1 or 1A in appendix A to part 60 of this chapter.	Sampling sites must be located at the inlet and outlet of the scrubber and prior to any releases to the atmosphere.
2. Determine velocity .....	Method 2, 2A, 2C, 2D, 2F, or 2G in appendix A to part 60 of this chapter.	
3. Determine gas molecular weight ..	Not applicable .....	Assume a molecular weight of 29 (after moisture correction) for calculation purposes.
4. Measure moisture content of the stack gas.	Method 4 in appendix A to part 60 of this chapter.	
5. Measure HCl concentration if you use chlorinated fire retardants in the laminated foam.	a. Method 26A in appendix A to part 60 of this chapter.	i. Measure total HCl emissions and determine the reduction efficiency of the control device using Method 26A. ii. Collect scrubber liquid flow rate, scrubber effluent pH, and pressure drop (pressure drop data only required for venturi scrubbers) every 15 minutes during the entire duration of each 1-hour test run, and determine the average scrubber liquid flow rate, scrubber effluent pH, and pressure drop (pressure drop data only required for Venturi scrubbers) over the period of the performance test by computing the average of all of the 15-minute readings.
6. Measure HCN concentration if you do not use chlorinated fire retardants in the laminated foam.	a. A method approved by the Administrator.	i. Conduct the performance test according to the site-specific test plan submitted according to § 63.7(c)(2)(i). Measure total HCN emissions and determine the reduction efficiency of the control device. Any performance test which measures HCN concentrations must be submitted for the administrator's approval prior to testing. You must use EPA Method 301 (40 CFR part 63, Appendix A) to validate your method. ii. Collect scrubber liquid flow rate, scrubber effluent pH, and pressure drop (pressure drop data only required for venturi scrubbers) every 15 minutes during the entire duration of each 1-hour test run, and determine the average scrubber liquid flow rate, scrubber effluent pH, and pressure drop (pressure drop data only required for venturi scrubbers) over the period of the performance test by computing the average of all of the 15-minute readings.
7. Determine control device efficiency and establish operating parameter limits with which you will demonstrate continuous compliance with the emission limit that applies to the source if you use any control device other than a scrubber.	a. EPA-approved methods and data from the continuous parameter monitoring system.	i. Conduct the performance test according to the site-specific test plan submitted according to § 63.7(c)(2)(i). ii. Collect operating parameter data as specified in the site-specific test plan.

TABLE 4 TO SUBPART M M M M M OF PART 63.—INITIAL COMPLIANCE WITH EMISSION LIMITS

[As stated in § 63.8806, you must comply with the requirements to demonstrate initial compliance with the applicable emission limits in the following table:]

For . . .	For the following emission limit . . .	You have demonstrated initial compliance if . . .
1. Each new, reconstructed, or existing loop slitter adhesive use affected source.	Eliminate use of HAP-based adhesives .....	You do not use HAP-based adhesives.
2. Each new or reconstructed flame lamination affected source using a scrubber.	Reduce HAP emissions by 90 percent .....	The average HAP emissions, measured over the period of the performance test(s), are reduced by 90 percent.
3. Each new or reconstructed flame lamination affected source using any other control device emissions by.	Reduce HAP emissions by 90 percent .....	The average HAP emissions, measured over the period of the performance test(s), are reduced by 90 percent.

**TABLE 5 TO SUBPART MMMMM OF PART 63.—CONTINUOUS COMPLIANCE WITH EMISSION LIMITS AND OPERATING LIMITS**  
[As stated in § 63.8812(a), you must comply with the requirements to demonstrate continuous compliance with the applicable emission limits or operating limits in the following table:]

For . . .	For the following emission limits or operating limits . . .	You must demonstrate continuous compliance by . . .
1. Each new, reconstructed, or existing loop slitter affected source.	Eliminate use of HAP-based adhesives .....	Not using HAP-based adhesives.
2. Each new or reconstructed flame lamination affected source using a scrubber.	a. Maintain the daily average scrubber inlet liquid flow rate above the minimum value established during the performance. b. Maintain the daily average scrubber effluent pH within the operating range established during the performance test. c. Maintain the daily average pressure drop across the venturi within the operating range established during the performance test. If you use another type of scrubber (e.g., packed bed or spray tower scrubber), monitoring pressure drop is not required.	i. Collecting the scrubber inlet liquid flow rate and effluent pH monitoring data according to § 63.8804(a) through (c). ii. Reducing the data to 1-hour and daily block averages according to the requirements in § 63.8804(a). iii. Maintaining each daily average scrubber inlet liquid flow rate above the minimum value established during the performance test. iv. Maintaining the daily average scrubber effluent pH within the operating range established during the performance test. v. If you use a venturi scrubber, maintaining the daily average pressure drop across the venturi within the operating range established during the performance test.
3. Each new or reconstructed flame lamination affected source using any other control device.	a. Maintain the daily average operating parameters above the minimum value established during the performance test, or within the range established during the performance test, as applicable.	i. Collecting the operating parameter data according to the site-specific test plan. ii. Reducing the data to one-hour averages according to the requirements in § 63.8804(a). iii. Maintaining the daily average during the rate above the minimum value established during the performance test, or within the range established during the performance test, as applicable.

**TABLE 6 TO SUBPART MMMMM OF PART 63.—REQUIREMENTS FOR REPORTS**

[As stated in § 63.8818(a), you must submit a compliance report that includes the information in § 63.8818(e) through (g) as well as the information in the following table. Rows 1 and 3 of the following table apply to loop slitter affected sources. Rows 1 through 5 apply to flame lamination affected sources. You must also submit startup, shutdown, and malfunction reports according to the requirements in the following table if you own or operate a new or reconstructed flame lamination affected source:]

If . . .	Then you must submit a report or statement that . . .
1. There are no deviations from any emission limitations that apply to you.	There were no deviations from the emission limitations during the reporting period.
2. There were no periods during which the operating parameter monitoring systems were out-of-control in accordance with the monitoring plan.	There were no periods during which the CPMS were out-of-control during the reporting period.
3. There was a deviation from any emission limitation during the reporting period.	Contains the information in § 63.8818(e)(5).
4. There were periods during which the operating parameter monitoring systems were out-of-control in information in accordance with the monitoring plan.	Contains the information in § 63.8818(f)(3).
5. There was a startup, shutdown, or malfunction where the source did not meet the emission limitations set out in § 63.8790 at a new or reconstructed flame lamination affected source during the reporting period that is not consistent with your startup, shutdown, and malfunction plan..	Contains the information in § 63.8818(i).

**TABLE 7 TO SUBPART MMMMM OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART MMMMM**

[As stated in § 63.8826, you must comply with the applicable General Provisions requirements according to the following table:]

Citation	Requirement	Applies to subpart MMMMM	Explanation
§ 63.1 .....	Initial applicability determination; applicability after standard established; permit requirements; extensions; notifications.	Yes.	
§ 63.2 .....	Definitions .....	Yes .....	Additional definitions are found in § 63.8830.

TABLE 7 TO SUBPART M M M M M OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART M M M M M—  
Continued

[As stated in § 63.8826, you must comply with the applicable General Provisions requirements according to the following table:]

Citation	Requirement	Applies to subpart M M M M M	Explanation
§ 63.3 .....	Units and abbreviations .....	Yes.	
§ 63.4 .....	Prohibited activities; compliance date; circumvention, severability.	Yes.	
§ 63.5 .....	Construction/reconstruction applicability; applications; approvals.	Yes.	
§ 63.6(a) .....	Compliance with standards and maintenance requirements-applicability.	Yes.	
§ 63.6(b)(1)–(4) .....	Compliance dates for new or reconstructed sources.	Yes .....	§ 63.8786 specifies compliance dates.
§ 63.6(b)(5) .....	Notification if commenced construction or reconstruction after proposal.	Yes.	
§ 63.6(b)(6) .....	[Reserved] .....	Yes.	
§ 63.6(b)(7) .....	Compliance dates for new or reconstructed area sources that become major.	Yes .....	§ 63.8786 specifies compliance dates.
§ 63.6(c)(1)–(2) .....	Compliance dates for existing sources ...	Yes .....	§ 63.8786 specifies compliance dates.
§ 63.6(c)(3)–(4) .....	[Reserved] .....	Yes.	
§ 63.6(c)(5) .....	Compliance dates for existing area sources that become major.	Yes .....	§ 63.8786 specifies compliance dates.
§ 63.6(d) .....	[Reserved] .....	Yes.	
§ 63.6(e)(1) .....	Operation and maintenance requirements.	Yes.	
§ 63.6(e)(2) .....	[Reserved] .....	Yes.	
§ 63.6(e)(3) .....	Startup, shutdown, and malfunction plans.	Yes .....	Only applies to new or reconstructed flame lamination affected sources.
§ 63.6(f)(1) .....	Compliance except during SSM .....	Yes .....	Only applies to new or reconstructed flame lamination affected sources.
§ 63.6(f)(2)–(3) .....	Methods for determining compliance .....	Yes.	
§ 63.6(g) .....	Use of an alternative nonopacity emission standard.	Yes.	
§ 63.6(h) .....	Compliance with opacity/visible emission standards.	No .....	Subpart M M M M M does not specify opacity or visible emission standards.
§ 63.6(i) .....	Extension of compliance with emission standards.	Yes.	
§ 63.6(j) .....	Presidential compliance exemption .....	Yes.	
§ 63.7(a)(1)–(2) .....	Performance test dates .....	Yes .....	Except for loop splitter affected sources as specified in in § 63.8798(a).
§ 63.7(a)(3) .....	Administrator's section 114 authority to require a performance test.	Yes.	
§ 63.7(b) .....	Notification of performance test and rescheduling.	Yes.	
§ 63.7(c) .....	Quality assurance program and site-specific test plans.	Yes.	
§ 63.7(d) .....	Performance testing facilities .....	Yes.	
§ 63.7(e)(1) .....	Conditions for conducting performance tests.	Yes.	
§ 63.7(f) .....	Use of an alternative test method .....	Yes.	
§ 63.7(g) .....	Performance test data analysis, record-keeping, and reporting.	Yes.	
§ 63.7(h) .....	Waiver of performance tests .....	Yes.	
§ 63.8(a)(1)–(2) .....	Applicability of monitoring requirements	Yes .....	Unless otherwise specified, all of § 63.8 applies only to new or reconstructed flame lamination sources. Additional monitoring requirements for these sources are found in §§ 63.8794(f) and (g) and 63.8804.
§ 63.8(a)(3) .....	[Reserved] .....	Yes.	
§ 63.8(a)(4) .....	Monitoring with flares .....	No .....	Subpart M M M M M does not refer directly or indirectly to § 63.11.
§ 63.8(b) .....	Conduct of monitoring and procedures when there are multiple effluents and multiple monitoring systems.	Yes.	
§ 63.8(c)(1)–(3) .....	Continuous monitoring system (CMS) operation and maintenance.	Yes .....	Applies as modified by § 63.8794(f) and (g).
§ 63.8(c)(4) .....	Continuous monitoring system requirements during breakdown, out-of-control, repair, maintenance, and high-level calibration drifts.	Yes .....	Applies as modified by § 63.8794(g).

TABLE 7 TO SUBPART M M M M M OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART M M M M M—  
Continued

[As stated in § 63.8826, you must comply with the applicable General Provisions requirements according to the following table:]

Citation	Requirement	Applies to subpart M M M M M	Explanation
§ 63.8(c)(5) .....	Continuous opacity monitoring system (COMS) minimum procedures.	No .....	Subpart M M M M M does not have opacity or visible emission standards. Applies as modified by § 63.8794(f).
§ 63.8(c)(6) .....	Zero and high level calibration checks ...	Yes .....	
§ 63.8(c)(7)–(8) .....	Out-of-control periods, including reporting.	Yes.	
§ 63.8(d)–(e) .....	Quality control program and CMS performance evaluation.	No .....	Applies as modified by § 63.8794(f) and (g).
§ 63.8(f)(1)–(5) .....	Use of an alternative monitoring method	Yes.	Only applies to sources that use continuous emissions monitoring systems (CEMS). Applies as modified by § 63.8794(g).
§ 63.8(f)(6) .....	Alternative to relative accuracy test .....	No .....	
§ 63.8(g) .....	Data reduction .....	Yes .....	
§ 63.9(a) .....	Notification requirements—applicability ..	Yes.	Except § 63.8816(c) requires new or reconstructed affected sources to submit the application for construction or reconstruction required by § 63.9(b)(1)(iii) in lieu of the initial notification.
§ 63.9(b) .....	Initial notifications .....	Yes .....	
§ 63.9(c) .....	Request for compliance extension .....	Yes.	
§ 63.9(d) .....	Notification that a new source is subject to special compliance requirements.	Yes.	Subpart M M M M M does not have opacity or visible emission standards.
§ 63.9(e) .....	Notification of performance test .....	Yes.	
§ 63.9(f) .....	Notification of visible emissions/opacity test.	No .....	
§ 63.9(g)(1) .....	Additional CMS notifications—date of CMS performance evaluation.	Yes.	Subpart M M M M M does not require the use of COMS. Applies only to sources with CEMS.
§ 63.9(g)(2) .....	Use of COMS data .....	No .....	
§ 63.9(g)(3) .....	Alternative to relative accuracy testing ...	No .....	
§ 63.9(h) .....	Notification of compliance status .....	Yes.	§§ 63.8820 and 63.8822 specify additional recordkeeping requirements. Only applies to new or reconstructed flame lamination affected sources.
§ 63.9(i) .....	Adjustment of submittal deadlines .....	Yes.	
§ 63.9(j) .....	Change in previous information .....	Yes.	
§ 63.10(a) .....	Recordkeeping/reporting applicability ....	Yes.	Applies only to sources with CEMS.
§ 63.10(b)(1) .....	General recordkeeping requirements ....	Yes .....	
§ 63.10(b)(2)(i)–(xi) .....	Records related to startup, shutdown, and malfunction periods and CMS.	Yes .....	
§ 63.10(b)(2)(xii) .....	Records when under waiver .....	Yes.	Applies as modified by § 63.8794(g).
§ 63.10(b)(2)(xiii) .....	Records when using alternative to relative accuracy test.	No .....	
§ 63.10(b)(2)(xiv) .....	All documentation supporting initial notification and notification of compliance status.	Yes	
§ 63.10(b)(3) .....	Recordkeeping requirements for applicability determinations.	Yes.	§ 63.8818 specifies additional reporting requirements.
§ 63.10(c) .....	Additional recordkeeping requirements for sources with CMS.	Yes .....	
§ 63.10(d)(1) .....	General reporting requirements .....	Yes .....	
§ 63.10(d)(2) .....	Performance test results .....	Yes	Subpart M M M M M does not specify opacity or visible emission standards.
§ 63.10(d)(3) .....	Opacity or visible emissions observations.	No .....	
§ 63.10(d)(4) .....	Progress reports for sources with compliance extensions.	Yes.	
§ 63.10(d)(5) .....	Startup, shutdown, and malfunction reports.	Yes .....	Only applies to new or reconstructed flame lamination affected sources. Applies as modified by § 63.8794(g).
§ 63.10(e)(1) .....	Additional CMS reports—general .....	Yes .....	
§ 63.10(e)(2)(i) .....	Results of CMS performance evaluations.	Yes .....	
§ 63.10(e)(2) .....	Results of continuous opacity monitoring systems performance evaluations.	No .....	Subpart M M M M M does require the use of COMS. Only applies to new or reconstructed flame lamination affected sources.
§ 63.10(e)(3) .....	Excess emissions/CMS performance reports.	Yes .....	
§ 63.10(e)(4) .....	Continuous opacity monitoring system data reports.	No .....	
§ 63.10(f) .....	Recordkeeping/reporting waiver .....	Yes	Subpart M M M M M does not require the use of COMS.

TABLE 7 TO SUBPART M M M M M OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART M M M M M—

Continued

[As stated in § 63.8826, you must comply with the applicable General Provisions requirements according to the following table:]

Citation	Requirement	Applies to subpart M M M M M	Explanation
§ 63.11. ....	Control device requirements—applica- bility.	No .....	Facilities subject to subpart M M M M M do not use flares as control devices. § 63.8828 lists those sections of sub- parts M M M M M and A that are not del- egated.
§ 63.12 .....	State authority and delegations .....	Yes .....	
§ 63.13 .....	Addresses .....	Yes.	Subpart M M M M M does not incorporate any material by reference.
§ 63.14 .....	Incorporation by reference .....	Yes .....	
§ 63.15 .....	Availability of information/confidentiality.	Yes.	