

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[FRL-6854-7]

RIN 2060-AG58

National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: We are proposing a standard to limit hazardous air pollutant (HAP) emissions from facilities that coat paper and other web substrates and are major sources of HAP emissions. The standard is being proposed under section 112 of the Clean Air Act (CAA or Act), as amended on November 15, 1990, to protect public health and the environment by reducing HAP emissions from new and existing facilities. The CAA requires these sources to achieve the maximum degree of reduction in emissions of HAP that is achievable. The proposed standard would eliminate approximately 80 percent of nationwide HAP emissions from major sources.

DATES: *Comments.* Comments must be received on or before November 13, 2000.

Public Hearing. If anyone contacts us by September 27, 2000 to request to speak at a public hearing, we will hold a hearing at 10 a.m. on October 11, 2000.

ADDRESSES: *Comments.* Send comments (in duplicate if possible) to: Air and Radiation Docket and Information Center (6102), Attention Docket Number A-99-09, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW., Washington, DC 20460. You may also send comments and data by electronic mail (e-mail) to: a-and-r-docket@epamail.epa.gov. (See **SUPPLEMENTARY INFORMATION**, below, for more on file formats.) Be sure to include the docket number, A-99-09, on your comment.

Public Hearing. If anyone contacts us requesting a public hearing by the required date (see **DATES**), a public hearing will be held at our Office of Administration Auditorium in Research Triangle Park, North Carolina. You should contact Ms. Janet Eck, Coatings and Consumer Products Group, Emission Standards Division (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number (919) 541-7946 to request to speak at a public

hearing or to find out if a hearing will be held.

Docket. Docket No. A-99-09 contains information about the proposed rule. You can read and copy it between 8 a.m. and 5:30 p.m., Monday through Friday (except Federal holidays) at our Air and Radiation Docket and Information Center (6102), 401 M Street, SW., Washington, DC 20460; telephone (202) 260-7548. Go to Room M-1500, Waterside Mall (ground floor). The docket office may charge a reasonable fee for copying.

FOR FURTHER INFORMATION CONTACT: Mr. Paul Almodovar, Coatings and Consumer Products Group, Emission Standards Division (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number (919) 541-0283; facsimile number (919) 541-5689; e-mail address: almodovar.paul@epa.gov.

SUPPLEMENTARY INFORMATION:

Comments. Comments and data may be submitted by e-mail to: a-and-r-docket@epa.gov. Electronic comments must be submitted as an ASCII file to avoid the use of special characters and encryption problems and will also be accepted on disks in WordPerfect® version 5.1, 6.1, or Corel 8 file format. All comments and data submitted in electronic form must note the docket number: A-99-09. No confidential business information (CBI) should be submitted by e-mail. Electronic comments may be filed online at many Federal Depository Libraries.

Commenters wishing to submit proprietary information for consideration must clearly distinguish such information from other comments and clearly label it as CBI. Send submissions containing such proprietary information directly to the following address, and not to the public docket, to ensure that proprietary information is not inadvertently placed in the docket: Attention: Mr. Paul Almodovar, c/o OAQPS Document Control Officer (Room 740B), U.S. Environmental Protection Agency, 411 W. Chapel Hill Street, Durham, NC 27711. The EPA will disclose information identified as CBI only to the extent allowed by the procedures set forth in 40 CFR part 2. If no claim of confidentiality accompanies a submission when it is received by EPA, the information may be made available to the public without further notice to the commenter.

Public Hearing. Persons interested in presenting oral testimony or inquiring as to whether a hearing is to be held should contact Ms. Janet Eck (see

ADDRESSES above) at least 2 days in advance of the public hearing. Persons interested in attending the public hearing should also call Ms. Eck (see **ADDRESSES** above) to verify the time, date, and location of the hearing. The public hearing will provide interested parties the opportunity to present data, views, or arguments concerning these proposed emission standards.

Docket. The docket for this regulatory action is A-99-09. The docket is an organized and complete file of all the information we consider in developing this rule. It is a dynamic file because material is added throughout the rulemaking process. The docketing system allows you to readily identify and find documents so you can participate in rulemaking. Along with the proposed and promulgated standards and their preambles, contents of the docket will serve as the record in case of judicial review (see section 307(d)(7)(A) of the CAA). The regulatory text and other materials related to this rulemaking are available for review in the docket or copies may be mailed on request from the Air Docket by calling (202) 260-7548. A reasonable fee may be charged for copying docket materials.

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

Plain Language. In compliance with President Clinton's June 1, 1998 Executive Memorandum on plain language in government writing, this preamble is written using plain language. Thus, the use of "we" and "us" in this document refers to EPA. The use of "you" refers to the reader, and may include industry; State, local, and tribal governments; environmental groups; and other interested individuals.

Regulated Entities. Categories and entities potentially regulated by this action include those listed on the following table.

This table is not intended to be exhaustive, but is just a guide to entities likely to be regulated by final action on this proposal. It lists the types of entities that may be regulated, but you should examine the applicability criteria in section II of this preamble and in

§ 63.3290 of the proposed rule to decide whether your facility is likely to be regulated by final action on this

proposal. If you have any questions about whether your facility will be subject to the standard, call the person

listed in the preceeding **FOR FURTHER INFORMATION CONTACT** section.

REGULATED ENTITIES

Category	SIC codes	NAICS codes	Examples of potentially regulated entities
Paper and Other Web Coating	2653 2657 *2671 2672 *2673 *2674 2675 2679 *2754 2761 3074 3081 3083 3291 *3497 3861 3955 *3996	322211 322212 322221 322222 322223 322224 322225 322226 322299 323111 323116 325992 326111 326112 326113 32613 326192 32791 332999 339944	Those facilities with web coating operations ^b that coat substrate used in products including, but not limited to: corrugated and solid fiber boxes; folding paperboard boxes, including sanitary; flexible packaging (packing paper and plastics film, coated and laminated); pressure sensitive tape and labels, coated and laminated paper, not elsewhere classified (nec); plastics, foil, and coated paper bags; bags: uncoated paper and multiwall; die-cut paper and board; converted paper and paperboard products, nec (gift wrap, paper wall-paper, cigarette paper); commercial printing, gravure; manifold business forms; plastic aseptic packaging; unsupported plastics film and sheet; laminated plastics plate, sheet, and profile shapes; abrasive products; laminated aluminum (metal) foil and leaf, flexible packaging; photographic equipment and supplies; carbon paper and inked ribbons; linoleum, asphalted-felt base, and other hard surface floor coverings.

^aFacilities in these SIC codes are expected to be primarily covered under the printing and publishing national emission standards for hazardous air pollutants (NESHAP).

^bWeb coating operations refer to the continuous application of a layer of material across the entire length of the usable substrate to: provide a covering, finish, or protective layer to the substrate; provide adhesion between two substrates for lamination; and where the continuous web substrate is flexible enough to be wound or unwound as rolls.

Background Information Document. The Background Information Document (BID) for the proposed standard may be obtained from the TTN; the paper and other web coating docket (A-99-09); the U.S. Environmental Protection Agency Library (MD-35), Research Triangle Park, North Carolina 27711, telephone number (919) 541-2777; or the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161, telephone (703) 487-4650. Please refer to "National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating—Background Information for Proposed Standards" (EPA-453/R-00-002).

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

- I. What are the subject and purpose of this proposed rule?
- II. Does this proposed rule apply to me?
- III. What is the proposed emission standard?
- IV. When do I show initial compliance with the proposed rule?
- V. What testing and monitoring must I do?
- VI. What notification, recordkeeping, and reporting requirements must I follow?
- VII. What are the environmental, energy, and economic impacts of this proposed rule?
- VIII. What is the basis for selecting the level of the proposed standards?
- IX. What is the basis for selecting the format of the proposed standards?
- X. Administrative requirements

I. What Are the Subject and Purpose of This Proposed Rule?

The CAA requires us to establish standards to control HAP emissions from source categories identified under section 112(c) of the CAA. An initial source category list was published in the **Federal Register** on July 16, 1992 (57 FR 31576). The source category list identifies "Paper and Other Web Coating (Surface Coating)" as a source category because it contains major sources. Under the CAA, a major source is defined as " * * 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, in the aggregate, 10 tons per year (tpy) or more of any one HAP or 25 tpy or more of any combination of HAP." We have estimated that there are over 400 existing paper and other web coating facilities, with approximately 210 estimated to be major sources.

The purpose of the proposed rule is to reduce emissions of HAP from paper and other web coating major sources. The source category is for major sources only. Area sources are not included in this source category and therefore are not subject to the proposed standards. We estimate that annual baseline organic HAP emissions from this source category are approximately 35,000

megagrams per year (Mg/yr) (39,000 tpy). The proposed rule would eliminate approximately 29,000 Mg/yr (32,000 tpy) of these organic HAP emissions (about an 80 percent reduction).

The organic HAP emitted from the paper and other web coating process include toluene, methanol, methyl ethyl ketone, xylenes, phenol, methylene chloride, ethylene glycol, glycol ethers, hexane, methyl isobutyl ketone, cresols and cresylic acid, dimethylformamide, vinyl acetate, formaldehyde, and ethyl benzene. These pollutants can cause reversible or irreversible toxic effects following sufficient exposure. The potential toxic effects include eye, nose, throat, and skin irritation, and blood cell, heart, liver, and kidney damage.

The degree of adverse effects to human health from exposure to HAP can range from mild to severe. The extent and degree to which the human health effects may be experienced are dependent upon (1) The ambient concentration observed in the area (as influenced by emission rates, meteorological conditions, and terrain); (2) the frequency and duration of exposures; (3) characteristics of exposed individuals (genetics, age, preexisting health conditions, and lifestyle), which vary significantly with the population; and (4) pollutant-specific characteristics

(toxicity, half-life in the environment, bioaccumulation, and persistence).

II. Does This Proposed Rule Apply to Me?

A. What Facilities are subject to This Proposed Rule?

The paper and other web coating source category includes any facility located at a major source and engaged in the coating of paper, plastic film, metallic foil, and other web surfaces. The source category does not include printing operations covered under the printing and publishing national emission standards for hazardous air pollutants (NESHAP) (40 CFR part 63, subpart KK). The source category does not include coil coating, *i.e.*, the application of an organic coating to the surface of any metal strip at least 0.15 millimeter (0.006 inch) thick that is packaged in a roll or coil, which is being regulated as a separate source category. Fabric coating is also being regulated as a separate source category. However, we identified facilities in the paper and other web coating source category that also apply coatings to fabric, sometimes on the same coating lines. We are proposing that such coating lines be part of the paper and other web coating source category and not subject to the future fabric coating NESHAP. Paper and other web coating may be simply referred to as "web coating" since paper is one of several web substrates in the paper and other web coating source category.

The proposed rule applies to you if you own or operate any web coating lines at a facility that is a major source of HAP emissions. This means that the coating lines at a major source would be subject to the proposed standard without regard to the relative proportion of HAP emissions from the web coating lines to total HAP emissions at the source.

If your facility is a nonmajor (area) source, *i.e.*, actual and potential annual emissions are less than 10 tons of any single HAP and less than 25 tons of all HAP combined, you would not be subject to this proposed rule.

If your facility is a major source, you would be required to meet the proposed emission limits for all the web coating lines at your facility. We have defined a web to be a continuous substrate (*e.g.*, paper, plastic film, foil) that is capable of being rolled at any point during the coating process. We have defined a web coating line to be any number of work stations, of which one or more applies a layer of coating material along the length of a continuous web substrate, and any associated drying equipment

between an unwind (or feed station) and a rewind (or cutting station). Printing presses subject to the printing and publishing NESHAP are not web coating lines.

B. What Is the Affected Source?

We define an affected source as a stationary source, group of stationary sources, or part of a stationary source to which a specific NESHAP applies. Within a source category, we select the specific emission sources (emission points or groupings of emission points) that will make up the affected source for that category. To select these emission sources, we mainly consider the constituent HAP and quantity emitted from individual or groups of emission points.

For the paper and other web coating NESHAP, the affected source is proposed to be the collection of all the web coating lines at a facility. We are not proposing requirements for operations related to coating line and parts cleaning, coating mixing and storage, film formation, and wastewater.

Coating lines and equipment that are not in the source category, and thus, not in the affected source, include those that perform both coating and printing and comply with the national emission standards for the printing and publishing industry; those that coat coil, even if only part of the time, and therefore, are in the coil coating source category; and those that coat only fabric and are in the fabric coating, printing, and dyeing source category (but if both fabric and other web coating is performed on a coating line, the line is included in the paper and other web coating affected source).

Many industrial facilities perform both coating and printing operations. Within the printing industry, the product and packaging rotogravure and wide-web flexographic industry segment (that includes the flexible packaging industry as a major subsector) does the most coating, with material use distributed almost equally between inks and other types of coatings. Printing operations are covered under the NESHAP for the printing and publishing industry. The printing and publishing NESHAP also includes an option for facilities that perform both printing and coating to include certain coating operations. Therefore, many facilities that could potentially be subject to the proposed NESHAP for the paper and other web coating industry may have coating lines already subject to the printing and publishing NESHAP. Such web coating lines included in compliance demonstrations under the printing and publishing NESHAP are

not subject to this standard. A detailed discussion of the printing and publishing industry is included in the BID for that industry (Docket No. A-92-42, National Emission Standards for Hazardous Air Pollutants: Printing and Publishing Industry—Background Information for Proposed Standards (EPA-453/R-95-002a)).

III. What Is the Proposed Emission Standard?

A. Proposed Limits

In the proposed rule, you would be able to choose any one of three options to limit organic HAP emissions at existing and new sources and meet the allowable level. The HAP emission limits are based on emission capture and control technology that can reduce total organic HAP emissions by 95 percent at existing sources and 98 percent at new sources. The emission limits reflect this level of control by limiting organic HAP emissions to no more than 5 percent and 2 percent of the organic HAP applied each month at existing and new sources, respectively; and by limiting emissions based on the weight of the solids part of your coating or the weight of your total coating. As discussed in section VIII of this preamble, we believe expressing emission limits in this way is appropriately based on the maximum achievable control technology (MACT) level of control and offers flexibility to reduce emissions through the use of control technology, pollution prevention, or a combination of the two.

The three HAP emission limits proposed for existing sources are: (1) Limit emissions to no more than 5 percent of the organic HAP applied for the month; (2) limit the total amount of organic HAP in your coatings, or the total amount of organic HAP emitted, to no more than 20 weight percent of the total solids applied to web substrates in a month; or (3) limit the total amount of organic HAP in your coatings, or the total amount of organic HAP emitted, to no more than 4 weight percent of the total mass of coating material applied to the web substrate in a month.

The three HAP emission limits proposed for new sources are: (1) Limit emissions to no more than 2 percent of the organic HAP applied for the month; (2) limit the total amount of organic HAP in your coatings, or the total amount of organic HAP emitted, to no more than 8 weight percent of the total solids applied to web substrates in a month; or (3) limit the total amount of organic HAP in your coatings, or the total amount of organic HAP emitted, to no more than 1.6 weight percent of the

total mass of coating material applied to the web substrate in a month.

In submitting comments, please specify whether the comment pertains to one or all of the emission limitation options of the proposed standard. We will further evaluate the proposed standard based on our review of public comments and other information we may receive. The final rule may reflect any one of the proposed options to limit organic HAP emissions, a combination of the proposed options, or all three options.

The General Provisions (40 CFR part 63, subpart A) would also apply to you. The General Provisions codify procedures and criteria we use to carry out all part 63 NESHAP promulgated under the CAA. The General Provisions contain administrative procedures, preconstruction review procedures, and procedures for conducting compliance-related activities such as notifications, recordkeeping and reporting, performance testing, and monitoring. The proposed rule refers to individual sections of the General Provisions that we believe will be of particular interest to you. However, unless specifically overridden in table 1 of the proposed rule, all of the General Provisions requirements would apply to you.

B. Interaction With Other Regulations

You may be subject to both the paper and other web coating NESHAP and other future or existing rules, such as new source performance standards (NSPS) and State rules requiring reasonably available control technology limits on volatile organic compounds (VOC) emissions. You must comply with all rules. Duplicative recordkeeping and reporting requirements and differences in emission limitations may be resolved through your title V permit.

C. What Pollutants Are Limited by This Proposal?

Today's proposed rule would limit total organic HAP emissions from coating lines. We did not identify inorganic HAP as pollutants emitted by this source category.

IV. When Do I Show Initial Compliance With the Proposed Rule?

Existing sources would have to comply with the final rule no later than 3 years after the effective date of the final rule. The effective date is the date of publication of the final rule in the **Federal Register**. New or reconstructed sources would have to comply upon start-up of the affected source or the effective date of the final rule, whichever is later. Details of

compliance requirements can be found in the General Provisions, as outlined in table 1 of the proposed rule.

Before your initial compliance demonstration, you would choose one of the three emission limit options for your affected source. In your initial compliance certification, you would notify the Administrator of your choice, and after that you would monitor and report compliance results accordingly. If you decide to change to another emission limitation option, you are also required to notify the Administrator, as with other changes at the facility, discussed in section VI.

V. What Testing and Monitoring Must I Do?

In addition to the specific testing and monitoring requirements specified below for the affected source, the proposed rule adopts the testing requirements specified in § 63.7 and specifies that performance tests at existing sources must be conducted by the compliance date.

A. Test Methods and Procedures

You may comply with the proposed standards by applying materials meeting the organic HAP emission rate limits, by using capture and control equipment to reduce organic HAP emissions by 95 percent at existing sources and by 98 percent at new sources, or by using a combination of low organic HAP materials and capture and control equipment to meet the organic HAP emission rate limits.

If you demonstrate compliance based on the coating materials applied on your coating lines, you must determine the organic HAP content of materials applied. To make this determination, you may either use EPA Method 311 of appendix A of 40 CFR part 63, use an alternative method for determining the organic HAP content (but only after obtaining EPA approval), or use the volatile organic content of the coating materials applied as the value for the organic HAP content. The volatile organic content must be determined by EPA Method 24 of appendix A of 40 CFR part 60 (or an approved alternative method). If you are demonstrating compliance by applying coating materials that meet the emission limit based on coating solids applied, the solids content of the materials must be determined using EPA Method 24. You may rely on manufacturer's data to determine the organic HAP content or volatile matter and solids content when these data are equivalent to those obtained from Method 311 (or an approved alternative method) and Method 24 (or an approved alternative

method), respectively. You must also determine the mass of each coating material applied using company records. You must calculate the organic HAP content and mass of all coating materials applied on the coating lines for each monthly period. However, only changes in a material formulation would require a redetermination of total organic HAP weight fraction for that material. To demonstrate compliance, you must calculate the average mass of organic HAP in coating materials applied and show that it is less than the organic HAP emission limits specified.

If you use an emission capture and control system to comply with the proposed standard, you must demonstrate that the overall control efficiency reduces total organic emissions by at least 95 percent at existing sources and 98 percent at new sources. Alternatively, you may use capture and control equipment in combination with low organic HAP materials and demonstrate you meet the organic HAP emission limit specified. To comply using the combined approach, you must determine the overall control efficiency of the equipment and the organic HAP and solids content of the materials applied. These values must be determined for each monthly period.

The overall control efficiency for a capture and control system would be demonstrated based on emission capture and reduction efficiency. To determine the capture efficiency, you would either verify the presence of a permanent total enclosure using EPA Method 204 of 40 CFR part 51, appendix M, in which case you could assume 100 percent capture; or use EPA Method 204A through F, or Appendix A of 40 CFR part 63, Subpart KK, to measure capture efficiency.

You must determine the emission reduction efficiency of a control device by conducting a performance test or using a continuous emission monitoring system (CEMS). If you use CEMS, you must determine the inlet and outlet concentration to calculate the control efficiency. The CEMS must comply with performance specification 8 or 9 in 40 CFR part 60, appendix B.

If you conduct a performance test, we are proposing that the removal efficiency of a control device be determined based on three runs, each run lasting 1 hour. Method 1 or 1A of 40 CFR part 60, appendix A, must be used for selection of the sampling sites. Method 2, 2A, 2C, 2D, 2F, or 2G of 40 CFR part 60, appendix A, must be used to determine the gas volumetric flow rate. Method 3, 3A or 3B, of 40 CFR part 60, appendix A, must be used for gas

analysis to determine dry molecular weight. Method 4 of 40 CFR part 60, appendix A, must be used to determine stack moisture. Method 25 or 25A of 40 CFR part 60, appendix A, must be used to determine organic volatile matter concentration. Alternatively, any other test method or data that have been validated according to the applicable procedures in Method 301 of 40 CFR part 63, appendix A, may be used if approved by the Administrator.

If you use a solvent recovery system, you may alternatively determine the overall control efficiency using a liquid-liquid material balance. If you demonstrate compliance with the material balance, you must measure the amount of all materials applied during each month and determine the volatile matter content of these materials. You must also measure the amount of volatile matter recovered by the solvent recovery system during the month and calculate the overall solvent recovery efficiency.

The test methods we propose to require, as discussed above, are existing EPA methods that are familiar to the industry, readily available, and appropriate to the device or the parameter being measured. The tests selected are expected to establish adequately whether the facility is complying with the standard.

B. Monitoring Requirements

According to paragraph (a)(3) of section 114 of the CAA, monitoring of stationary sources is required to determine the compliance status of the sources, and whether compliance is continuous or intermittent. For affected sources complying with the proposed standard with capture and control systems, initial compliance is determined through an initial performance test and ongoing compliance through continuous monitoring. We are proposing the parameters to be monitored for certain types of control devices now used in the industry. You must set the values of these parameters that correspond to compliance with the proposed standard during your initial performance test. These values are your "operating limits." If future monitoring shows that capture and control equipment is operating outside the range of values established during the initial performance test, then you are deviating from the operating limits.

If you use a capture and control system to meet the proposed standard, you are required to submit a plan identifying the operating limit and monitoring procedures for the capture system. You must monitor in

accordance with your plan unless we require an alternate monitoring procedure.

If you use a thermal or catalytic oxidizer, you must monitor temperature using a continuous parameter monitoring system. If you use a thermal oxidizer, you must establish the average combustion temperature recorded during the performance test as the operating limit. If you use a catalytic oxidizer, you must establish as the operating limits the average gas temperatures recorded during the performance test both upstream and downstream of the catalyst bed. The time-weighted average of the values recorded during the performance test shall be computed to establish the parameter value(s). For catalytic oxidizers, temperature monitors are placed immediately before and after the catalyst bed. For thermal oxidizers, the temperature monitor is placed in the firebox or in the duct immediately downstream of the firebox before any substantial heat exchange occurs.

If you use a solvent recovery system, you must conduct monthly mass balances or operate continuous emission monitors as described in the performance test section.

If you use a combination of capture and control devices and low-HAP materials, you are required to monitor the parameters of the capture and control devices as indicated above. In addition, you must record data on the HAP and solids content of the materials applied to determine the HAP emission rate as described in the performance test section.

The proposed rule specifies the types of parameters that must be monitored for common types of control devices: temperature monitoring for oxidizers and either continuous emission monitor systems or mass balance measurements for solvent recovery. These parameters were selected because they are good indicators of control device performance, and because continuous parameter monitoring instrumentation is available at a reasonable cost. You must install, calibrate, maintain, and operate all monitoring equipment as specified in the proposed rule. If you use control devices other than those identified in the proposed standard, you must submit the operating parameters to be monitored to the Administrator for approval. You could be approved, on a case-by-case basis, to monitor parameters not specifically listed in the proposed standards. The authority to approve the parameters to be monitored is retained by the Administrator and is not delegated.

VI. What Notification, Recordkeeping, and Reporting Requirements Must I Follow?

The proposed rule requires you to comply with notification, recordkeeping, and reporting requirements, generally as described in the General Provisions (see table 1 of the proposed rule) and specifically as designed to support demonstration of compliance with this proposed rule. We believe that these requirements are necessary and sufficient to ensure that you comply with the requirements in the proposed subpart JJJJ.

A. Initial Notification

If the NESHAP apply to you, you must send an initial notification to the EPA Regional Office in the region where your facility is located and to your State agency. If you have an existing source, you must submit the initial notification no later than 1 year before the required compliance date for the standard. If you have a new or reconstructed source, you must submit the notification no later than 120 days after either the date of initial start-up or the effective date of the final rule, whichever is later.

The Initial Notification Report notifies us and your State agency that you have an existing facility that is subject to the proposed standard or that you have constructed a new facility. Thus, it allows you and the Federal or State enforcement agency to plan for compliance activities. The General Provisions for NESHAP specifies the information you must include in the initial notification and other reporting requirements for new or reconstructed sources.

B. Notification of Performance Tests

If the NESHAP apply to you, you will have several options for demonstrating compliance. If you demonstrate compliance by using a capture and control system to reduce emissions of HAP, you must conduct a performance test as described above. Prior to conducting the performance test, you must notify us or the delegated State or local agency at least 60 calendar days before the performance test is scheduled to begin, as indicated in the General Provisions for NESHAP.

C. Notification of Compliance Status

You are required to send a notice of compliance status within 180 days after the compliance date as specified in the General Provisions for NESHAP. This report must include your compliance certification, the results of any performance tests and monitoring, and a description of how you will demonstrate continuing compliance.

The notification of compliance status must specifically identify whether low-HAP materials, emission capture and control systems, or a combination of low-HAP materials and capture and control systems were used to comply with this regulation. For capture and control systems, it must also identify the operating limits established during the performance test. Specific reporting requirements are dependent upon how you choose to comply with the proposed rule.

D. Recordkeeping Requirements

To comply with the proposed standard based on organic HAP content or organic HAP emissions on a weight basis, records must be maintained of the organic HAP, volatile organic content and solids content of each coating applied, and the amount of each coating applied on paper and other web coating lines each month.

If capture and control technology is used, you are required to keep records of the equipment monitoring parameter measurements specified in the proposed rule that are discussed in section V above. You must also develop a start-up, shutdown, and malfunction plan. You would have to make the plan available for inspection if the Administrator requests to see it. It would stay in your records for the life of the affected source or until the source no longer must meet the standard in the proposed rule.

E. Periodic Reports

Each reporting year is divided into two semiannual reporting periods. If no deviations occur during a semiannual reporting period, you would submit a semiannual compliance report stating that the affected source has been in compliance. A deviation is any instance in which you fail to meet any requirement or obligation of the proposed standard or any term or condition adopted to meet the proposed standard. The following semiannual compliance reports would be required under this proposal when deviations occur:

- If you are complying by using oxidizers, report all deviations from the oxidizer operating parameters.
- If you are complying by using solvent recovery systems and liquid-liquid mass balance, report mass balance calculations for all months when the material balances deviated from the emission limit.
- If you are complying by using oxidizers or solvent recovery systems with continuous emission monitors, report all deviations from the operating parameter values established for the

capture system and all deviations of the emission limit.

- If you are complying by using low-HAP coating materials, report all deviations from the emission limit.
- If you are complying by using a combination of capture and control systems with low-HAP coating materials, report all deviations from the emission limit and all deviations from operating parameters described above.

You would also have to send us reports for each semiannual reporting period in which the following occur:

- A change occurs at your facility or within your process that might affect its compliance status.
- A change from what was reported in the initial notice occurs at your facility or within your process.
- You decide to change to another emission limitation option.

VII. What Are the Environmental, Energy, and Economic Impacts of This Proposed Rule?

We developed model plant facilities to represent the industry based on the data we collected. We estimated environmental, energy, and economic impacts based upon what these facilities must do to meet the proposed rule. There are several options for demonstrating compliance with these standards, and each facility has flexibility to adopt the compliance option which has the least economic impact for their individual situation. Most of the existing major source facilities in this industry apply solvent-based coatings and utilize thermal oxidation to reduce emissions. Therefore, in estimating the impacts associated with the proposed rule, we assumed that most facilities would install a permanent total enclosure and either install a new thermal oxidizer or improve an existing one. If a facility complies with the proposed rule by applying coatings that meet the proposed emission limitation, the capital and operating costs and other impacts would be lower than estimated. Hence, the estimates presented below may overestimate the costs and other impacts as some facilities may comply with the proposed rule by applying low-HAP coatings.

A. Emission Reductions

For existing affected sources in the paper and other web coating industry (approximately 210 major sources), the nationwide baseline organic HAP emissions are estimated to be 35,000 Mg/yr (39,000 tpy). We estimate that implementation of the final rule would reduce emissions from major sources by

approximately 29,000 Mg/yr (32,000 tpy), or approximately 80 percent.

We have projected the growth of the paper and other web coating industry and anticipate 32 new affected sources will be constructed over the next 5 years. These sources will need to comply with NSPS in 40 CFR part 60 for VOC and, therefore, we estimated baseline emissions using a 90 percent reduction of organic HAP as the existing level of control. We estimated that nationwide organic HAP baseline emissions from new sources will be about 2,875 Mg/yr (3,170 tpy). We estimate that implementation of the final rule would reduce emissions from new affected sources by about 2,300 Mg/yr (2,535 tpy), or approximately 80 percent.

B. Secondary Environmental Impacts

Secondary environmental impacts are considered to be any air, water, or solid waste impacts, positive or negative, associated with the implementation of the final standard. These impacts are exclusive of the direct organic HAP air emissions reductions discussed in the previous section.

We estimate that more than 99 percent of the organic HAP emissions from paper and other web coating are VOC. Therefore, the capture and control of organic HAP that are presently emitted will result in a decrease in VOC emissions. Consequently, we estimate the current nationwide VOC emissions from the paper and other web coating source category to be at least 35,000 Mg/yr (39,000 tpy), the nationwide organic HAP estimate. The proposed emission controls for organic HAP will reduce non-HAP VOC emissions as well. Emissions of VOC have been associated with a variety of health and welfare impacts. The VOC emissions, together with nitrogen oxides, are precursors to the formation of ground-level ozone, or smog. Exposure to ambient ozone is responsible for a series of public health impacts, such as alterations in lung capacity and aggravation of existing respiratory disease. Ozone exposure can also damage forests and crops.

The use of newly installed or upgraded control devices to meet the proposed standard would result in greater electricity consumption (see section VII of this preamble). Increases in emissions of nitrogen oxides, sulfur dioxide, carbon monoxide, and carbon dioxide, as well as certain HAP, from electric utilities could result. The operation of newly installed or upgraded control devices would also require combustion of supplemental fuel, typically natural gas (see section VII of this preamble), resulting in

additional emissions of nitrogen oxides, carbon monoxide, and carbon dioxide.

It is expected that some paper and other web coating facilities will comply with the proposed standard by substituting non-HAP materials for organic HAP presently in use. In some cases, the non-HAP materials may be VOC, however, in other cases, non-VOC materials (e.g., water) may be used. Facilities converting to waterborne materials as a means or partial means of compliance may have reduced Resource Conservation and Recovery Act hazardous waste disposal if the status of the waste material changes from hazardous to nonhazardous. An increase in wastewater discharge may then occur if this waste material and waterborne wash up materials are discharged to publicly owned treatment works. However, we do not expect any significant increases in wastewater discharge to result from the proposed rule.

New and upgraded catalytic oxidizers will require catalysts. Catalyst life is estimated to be more than 10 years. Spent catalysts will represent a small amount of solid waste, and sometimes the spent catalyst will be regenerated by the manufacturer for reuse. Activated carbon used in solvent recovery systems is returned to the manufacturer at the end of its useful life and converted to other salable products. Little solid waste impact is expected from this source.

C. Energy Impacts

The operation of new and upgraded control devices will require additional energy. Capture of previously uncontrolled solvent-laden air will require fan horsepower. Operation of oxidizers, particularly thermal oxidizers, may require supplemental fuel (typically natural gas) to increase the combustion temperature and improve destruction efficiency.

The total additional electrical energy required to meet the proposed standard is estimated to be 313 million kilowatt-hours per year. Fuel requirements total 3.7 billion British thermal units per year. These fuel impacts are based on a "worst-case" scenario, that is the use of thermal oxidizers at all facilities, which is the control scenario expected to result in the highest energy impacts.

D. Cost Impacts

The total nationwide capital and annualized costs (1998 dollars) attributable to compliance with the proposed standard have been estimated for existing and new sources. Costs are based on the use of permanent total enclosures, thermal oxidizers, and monitoring equipment. The capital costs

with other methods of control (e.g., applying low-HAP coatings) are expected to be significantly lower.

It is expected that any new facility using solvent-based coatings will install control systems to comply with applicable State and Federal regulations for reducing VOC emissions from the various sectors of this source category (e.g., the standards of performance for new stationary sources in 40 CFR part 60). The data we gathered on this industry indicate that thermal oxidation is the most common control technology installed to meet the requirements of the existing regulations. Thermal oxidation is capable of achieving a 98 percent reduction of HAP emissions. Therefore, the additional costs to a new facility resulting from this proposed standard were estimated based on the costs of constructing a permanent total enclosure to deliver all HAP emissions to the existing thermal oxidizer.

Capital costs would be incurred by installing capture and control systems at existing facilities presently without capture and control systems, and upgrading capture and control systems at existing facilities that do not meet the proposed standard. Additionally, we estimated the cost for the purchase of monitoring equipment needed as a capital investment to meet the monitoring, recordkeeping, and reporting requirements of the proposed rule. Total nationwide capital costs are estimated to be \$210 million with the cost for existing sources and new sources estimated to be \$198 million and \$12 million, respectively.

Total nationwide annual costs of the proposed standard have been estimated at \$68 million with the annual cost for existing and new sources estimated to be \$63 million and \$5 million, respectively. These costs include capital recovery over a 10-year period, operating costs for the newly installed and upgraded capture and control systems, and costs for monitoring, recordkeeping, and reporting. These are net costs after taking into account the costs presently being incurred for the baseline control level.

E. Economic Impacts

The economic impact analysis (EIA) shows that the expected price increases for affected output would range from only 0.1 to 1.1 percent as a result of the proposed standard. The expected change in production of affected output is a reduction of 0.1 to 1.1 percent as a result of the proposed standard. There are three plant closures predicted out of 169 facilities included in the economic model. Although any facility closure is cause for concern, it should be noted

that the baseline economic condition of the facilities predicted to close affects the closure estimate provided by the economic model. Facilities which are already experiencing adverse economic conditions for reasons unconnected to this rule are more vulnerable to the impact of any new costs than those that are not. The facilities predicted to close appear to have low profitability levels currently. While the rule may adversely impact the three facilities predicted to close, we do not predict an adverse economic impact to the industry as a whole.

VIII. What Is the Basis for Selecting the Level of the Proposed Standards?

A. Source of Authority for Standards Development

Section 112(c) of the CAA directs us to develop a list of all categories of major sources and appropriate area sources that emit one or more of the 188 HAP listed under section 112(b) of the CAA. Paper and other web coating is a listed source category because of its organic HAP emissions that include, but are not limited to, toluene, methanol, methyl ethyl ketone, xylenes, phenol, methylene chloride, ethylene glycol and glycol ethers, hexane, methyl isobutyl ketone, cresols and cresylic acid, dimethylformamide, vinyl acetate, formaldehyde, and ethyl benzene. Section 112(d) of the CAA then directs us to promulgate regulations establishing standards for each category or subcategory of major and area sources of HAP listed pursuant to section 112(c). Those emission standards are to reflect the application of MACT.

B. What Is the Basis for Defining the Affected Source?

In selecting the affected source(s) for MACT standards, our primary goal is to ensure that MACT is applied to all the HAP-emitting equipment within the source category or subcategory being regulated. The affected source also defines where new source MACT applies under a particular standard. Specifically, the General Provisions define the terms "construction" and "reconstruction" with reference to the term "affected source" (§ 60.2) and provide that new source MACT applies when construction and reconstruction occur (§ 60.5). The collection of equipment evaluated in determining MACT (including the MACT floor) is usually the collection of equipment used in defining the affected source.

In defining the affected source for the paper and other web coating proposed NESHAP, we considered available information on HAP emissions, control

configurations, industry practices, products produced, and the impacts of other standards. In general, paper and other web coating facilities are covered by the SIC codes listed in the Regulated Entities table. However, facilities classified under other SIC codes may be subject to the proposed standard if the facility meets the definition of a major source and conducts paper and other web coating (see section II of this preamble).

Although the industry manufactures an extensive list of products, the coating processes used by the different segments of the industry are very similar. Typically, the web substrate is put on a web coating line where it is unwound, coated, rewound and/or cut to size, and packaged. Alternatively, a web may be unwound, coated, and combined with another material by lamination (either before or instead of being rewound). The web coating line may include one work station or multiple work stations which apply the coating to the web. Each work station typically uses a single type of coating applicator (e.g., reverse roll, knife roll, gravure cylinder, dip, and squeeze). When there are multiple work stations on a single web coating line, each station may use a different type of applicator depending on the needs of a specific product. Typically, a drying oven immediately follows each work station.

The primary organic HAP emission source in web coating is the solvent used in the coatings. The solvent acts as a vehicle for the material that is used to coat the web. Once the coating is on the web, the solvent is usually evaporated in dryers or otherwise converted to another material some time during the coating process.

In the various segments of the paper and other web coating industry, the same primary organic HAP emission sources can be found. Dryer organic HAP emissions can represent more than 90 percent of the total organic HAP emissions from coating operations. Some emitted organic HAP are not captured in the dryer exhaust. This uncaptured or fugitive organic HAP include that which evaporate from the coatings into the coating room during application, and that which evaporate from the web in the dryers but are then swept out of the dryer as the web travels toward the succeeding work station. Most, if not all, of the solvent emitted can be collected if capture equipment is installed to collect fugitive solvent vapors.

Dryer exhaust and fugitive emissions can be vented to control devices such as oxidizers or solvent recovery systems. Organic HAP may escape destruction or

recovery by the control system, as they may be retained in the coated web. Organic HAP that remains in the web after removal from the coating line may leave the facility in the coated web product or may evaporate during additional processing (e.g., slitting, folding, stitching, etc.).

Coating application and drying/curing are the largest emission sources of organic HAP emissions for all segments of the paper and other web coating industry. Because these emission points are on the web coating lines, the web coating lines are the largest emission source. Therefore, the proposed affected source is broadly defined as the collection of all web coating lines at a facility (see section II of this preamble). This broad definition was selected to provide sources with flexibility for compliance demonstrations, i.e., averaging emissions from all web coating lines rather than demonstrating compliance for each individual line.

C. What Is the MACT Floor That Is the Basis for the Proposed Standard?

Data were obtained from 268 paper and other web coating facilities. Facility data were obtained through survey instruments, facility visits, and data reported to EPA's Aerometric Information Retrieval System.

Of the 268 facilities, 210 were estimated to have the potential to be major sources. These 210 facilities were analyzed to identify the top performing facilities in terms of emission limitations from coating lines. The best controlled facilities used capture and control systems to reduce HAP emissions. Capture technology included work station hoods and total enclosures around the coating lines. Control technology included catalytic and thermal oxidation, as well as solvent recovery systems using carbon adsorption or condensation units.

In many cases, existing control devices were originally designed and operated to control VOC emissions. We assumed that the performance of these control devices with respect to VOC and organic HAP is equivalent because the organic HAP commonly used in this industry are also VOC.

Of the 210 facilities in the MACT floor database, 119 used capture and control systems. The same types of capture and control systems were used by these facilities even though the types of coatings, web-substrates and products varied widely. All of the facilities were ranked by the percent overall emissions reductions achieved for the collection of all the coating lines at each facility. The average reduction achieved by the best controlled 12 percent of the facilities

was 95 percent. Consequently, we identified 95 percent overall control of organic HAP emissions as the MACT floor for existing sources.

We also determined that new sources employing permanent total enclosures with new destruction or recovery systems can be designed to achieve 98 percent overall control of organic HAP emissions. This is the anticipated level of control for new sources using the emission capture and control technologies used by the best controlled sources in the category. Although some facilities reported more than 98 percent overall control of organic HAP emissions, this higher level of control may not be achievable on a continuous basis under all normal operating conditions applicable to new sources. Consequently, 98 percent overall control of organic HAP emissions is the MACT floor for new sources.

D. What Are the Control Options Beyond the MACT Floor?

We did not identify any control equipment capable of achieving emissions reductions beyond the MACT floor for new sources. We identified and considered one control level more stringent than the MACT floor for existing sources. The more stringent level for existing sources would require 98 percent overall control of organic HAP emissions from coating lines. In evaluating this control option to select the most appropriate MACT level, we calculated the additional costs and emissions reductions associated with requiring existing sources to achieve this more stringent level of control. While many existing sources can improve upon existing capture and control systems to achieve a 98 percent overall control of organic HAP emissions from coating lines, we believe that most of these same facilities would need to fully replace existing capture and control systems to achieve the more stringent level of control.

We calculated the cost effectiveness (i.e., cost for each ton of HAP reduced) for reducing HAP emissions at existing sources meeting the MACT floor and the more stringent level of control. Requiring existing sources to meet the MACT floor level results in estimated emissions reductions of 28,700 Mg/yr (31,600 tpy) at an estimated cost of \$63 million per year or \$1,990 per ton of HAP reduced. We determined that the incremental cost for the more stringent level of control (\$84.5 million) compared to the incremental emissions reductions (3,766 tpy) (an incremental cost effectiveness of \$22,433 per ton of HAP reduced) did not warrant going beyond the MACT floor. Therefore, we

did not select the more stringent control option as the basis for the standard.

E. What Is the Proposed MACT Standard?

For reasons discussed above, we selected the MACT floors for existing and new paper and other web coating lines as the appropriate level of control for this source category. The proposed level of control for existing sources is 95 percent overall control of organic HAP emissions from coating lines, alternatively stated as limiting emissions to no more than 5 percent of the organic HAP applied. The proposed level of control for new sources is 98 percent overall control of organic HAP emissions from coating lines, alternatively stated as limiting emissions to no more than 2 percent of the organic HAP applied.

Paper and other web coating facilities may be able to reduce the HAP content of the coatings applied on their coating lines. We consider such HAP reductions as pollution prevention and believe pollution prevention is a desirable outcome. To encourage further pollution prevention, we are also proposing emission limitations in two formats that reflect the MACT level of control, but would not require sources to use add-on controls to achieve that level.

Coating formulations and organic HAP content vary depending on the coating characteristics required for the products being produced. We evaluated the coating data available to us to establish a baseline organic HAP content for the coatings currently used in this source category. For existing sources, we reduced the baseline organic HAP content of coatings by 95 percent to establish the emission limitations of 0.20 kilograms (kg) of HAP emitted per kg of coating solids applied and 0.04 kg of HAP emitted per kg of coating applied. Similarly, for new sources, we reduced the baseline organic HAP content by 98 percent to establish the emission limitations of 0.08 kg HAP emitted per kg of coating solids applied and 0.016 kg of HAP emitted per kg of coating applied.

We believe these emission limitations, expressed in the proposed standard as both a HAP content limit and a HAP emission limit, are appropriately based on the MACT level of control. Compliance with the HAP content limits and equivalent HAP emission limits must be determined using the monthly average HAP applied on a mass solids or mass coating basis. Sources operating capture and control systems can comply with these emission limitations by determining the organic HAP content of the coatings applied on

all their coating lines and factoring in the capture and control efficiency such that the monthly average controlled organic HAP emissions from the affected source meet these limits.

IX. What Is the Basis for Selecting the Format of the Proposed Standards?

The proposed format for the emission standard is an overall percent reduction of emissions, taking into account both capture and control system efficiencies. Data available to us regarding the efficiency of capture and control systems used in this industry indicate that overall efficiency is typically determined by a performance test for capture systems and oxidizers and liquid-liquid material balance for solvent recovery systems. The proposed standard allows for determining overall control efficiency through a variety of mechanisms to be consistent with industry practices. We selected this format because it reflects MACT at all facilities and allows flexibility in the method selected for achieving the percent reduction limit.

The use of an allowable concentration of emissions in the exhaust gases discharged to the atmosphere was also considered. The major disadvantage of this format is its inability to identify the overall control efficiency of the capture and control system, and thus, the overall percent reduction of organic HAP emissions. The concentration of emissions in exhaust gases could be decreased by increasing dilution air through the capture and control system. Thus, we do not believe an exhaust gas concentration limit is appropriate for demonstrating the overall percent reduction of emissions.

To encourage the use of low- and no-HAP materials, two additional formats are proposed. These formats limit emissions to either mass of HAP per mass of coating solids applied, or mass of HAP per mass of coating material applied (both solids and liquid). Affected sources can use either low- or no-HAP coating materials to meet these limits or capture and control systems, or a combination of the two. These formats do not establish any certain percent reduction requirement for capture and control systems but do accurately reflect application of MACT. Thus, they can provide flexibility for a source to combine add-on control with use of low-HAP materials to achieve the emissions reductions.

X. Administrative Requirements

A. Executive Order 12866, Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), EPA must determine whether the regulatory action is "significant" and therefore subject to review by the Office of Management and Budget (OMB) and the requirements of the Executive Order. The Executive Order defines "significant regulatory action" as one that is likely to result in a rule that may:

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

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

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

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

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

B. Executive Order 13132, Federalism

Executive Order 13132, entitled "Federalism" (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" is defined in the Executive Order to include regulations that have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government."

Under section 6 of Executive Order 13132, EPA may not issue a regulation that has federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, or EPA consults with State and local officials early in the

process of developing the proposed regulation. The EPA also may not issue a regulation that has federalism implications and that preempts State law, unless the Agency consults with State and local officials early in the process of developing the proposed regulation.

This proposed rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. Thus, the requirements of section 6 of the Executive Order do not apply to this proposed rule. Although section 6 of Executive Order 13132 does not apply to this proposed rule, EPA did consult with State and local officials to enable them to provide timely input in the development of this proposed rule.

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

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

Today's proposed rule does not significantly or uniquely affect the communities of Indian tribal governments. No tribal governments own or operate paper and other web coating lines. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this action.

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

Executive Order 13045 (62 FR 19885, April 23, 1997) applies to any rule that: (1) Is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the EPA must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that are based on health or safety risks, such that the analysis required under section 5-501 of the Executive Order has the potential to influence the regulation. This proposed rule is not subject to Executive Order 13045 because it is based on technology performance and not on an assessment of health or safety risks. Furthermore, this rule has been determined not to be "economically significant" as defined under Executive Order 12866.

E. Unfunded Mandates Reform Act of 1995

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

was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

The EPA has determined that this proposed rule does not contain a Federal mandate that may result in expenditures of \$100 million or more for State, local, and tribal governments, in the aggregate, or the private sector in any 1 year. The maximum total annual cost of this proposed rule for any year has been estimated to be about \$68 million. Thus, today's proposed rule is not subject to the requirements of sections 202 and 205 of the UMRA. In addition, the EPA has determined that this proposed rule contains no regulatory requirements that might significantly or uniquely affect small governments because it contains no requirements that apply to such governments or impose obligations upon them. Therefore, today's proposed rule is not subject to the requirements of section 203 of the UMRA.

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

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

For purposes of assessing the impacts of today's proposed rule on small entities, small entity is defined as: (1) A small business ranging from 500 to 750 employees; (2) a small governmental jurisdiction that is a government of a city, county, town, school district, or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of today's proposed rule on small entities, I certify that this action will not have a significant impact on a substantial number of small entities. In accordance with the RFA, EPA conducted an assessment of the proposed standard on small businesses within the paper and other web coating industry. Based on SBA size definitions for the affected industries and reported sales and employment data, EPA identified 50 of the 103 companies owning affected facilities as small businesses. Although small businesses represent 49 percent of the companies within the source category, they are expected to incur only 25 percent of the total industry compliance costs of \$63 million. There are only six small firms with compliance costs equal to or greater than 3 percent of their sales. In addition, there are only four small firms with cost-to-sales ratios between 1 and 3 percent.

The EPA performed an EIA to estimate the changes in product price and production quantities for the firms affected by this proposed rule. The analysis shows that of the 54 facilities owned by affected small firms, only one would be expected to shut down rather than incur the cost of compliance with the proposed rule. Although any facility closure is cause for concern, it should be noted that the baseline economic condition of the facility predicted to close affects the closure estimate provided by the economic model. Facilities which are already experiencing adverse economic conditions for reasons unconnected to this rule are more vulnerable to the impact of any new costs than those that are not. The facility predicted to close appears to have low profitability levels currently. The EPA also notes that, while economies of scale will require individual small firms to pay a somewhat higher proportion of revenues than large firms for compliance, the burden on most small firms is quite low nevertheless. The median compliance cost is well below 1 percent of sales for both small and large firms affected by the proposed standard (0.16 and 0.03 percent of sales for small and large firms, respectively).

In summary, this analysis supports today's certification under the RFA because, while a few small firms may experience significant impacts, there will not be a substantial number incurring such a burden. For more information, consult the docket for this project.

Although this proposed rule will not have a significant economic impact on a substantial number of small entities,

EPA has nonetheless worked aggressively to minimize the impact of this rule on small entities, consistent with our obligations under the CAA. We solicited input from small entities during the data-gathering phase of the proposed rulemaking. Section VIII of this preamble further describes the information we obtained. Many small entities, like other affected paper and other web coating sources, currently comply with regulations limiting emissions of VOC. These facilities currently limit VOC emissions using add-on control equipment or pollution prevention coatings (coatings with little VOC content). Some small entities raised concerns regarding potential overlap between VOC regulations and the NESHAP. To address these concerns and be consistent with the current VOC control techniques, our proposed compliance options, test methods, and recordkeeping and reporting requirements would allow small entities to comply with the proposed regulation using most of their existing VOC compliance procedures. We believe this will significantly reduce the compliance burden for small entities, thereby mitigating potential impacts and preventing any duplication of effort. In addition, we are proposing compliance options which give small entities flexibility in choosing the most cost-effective and least-burdensome alternative for their operation. For example, a facility could purchase and use low-HAP coatings (*i.e.*, pollution prevention) that meet the proposed standard instead of using add-on capture and control systems. This method of compliance can be demonstrated with minimum burden by using already-maintained purchase and usage records. No testing of materials would be required, as the facility owner could show that their coatings meet the emission limits by providing formulation data supplied by the manufacturer. We are also proposing that compliance demonstrations be conducted monthly, rather than on a daily basis. We believe this will reduce the amount of records needed to demonstrate compliance with the rule. Furthermore, we are proposing the minimum monitoring, recordkeeping, and reporting requirements specified in the general provisions (40 CFR part 63, subpart A). We continue to be interested in the potential impacts of the proposed rule on small entities and welcome comments on issues related to such impacts.

G. Paperwork Reduction Act

The information collection requirements in this proposed rule have

been submitted for approval to OMB under the Paperwork Reduction Act, 44 U.S.C. 3501, *et seq.* An Information Collection Request (ICR) document has been prepared by the EPA (ICR No. 1951) and a copy may be obtained from Sandy Farmer by mail at the Office of Environmental Information, Collection Strategies Division (2822), U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460, by e-mail at farmer.sandy@epa.gov, or by calling (202) 260-2740. A copy may also be downloaded off the internet at <http://www.epa.gov/icr>. The information requirements are not effective until OMB approves them.

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

The annual monitoring, recordkeeping, and reporting burden for this collection (averaged over the first 3 years after the effective date of the rule) for existing web coating facilities is estimated to be 155 labor hours per facility at a total annual cost of \$14,414 per facility. This estimate includes a one-time submission of a start-up, shutdown, and malfunction plan with semiannual reports for any event when the procedures in the plan were not followed; semiannual excess emission reports; notifications; and recordkeeping. The total capital/start-up cost component (including purchase of services component) annualized over its expected useful life is \$121,000. The operation and maintenance costs component is \$35,000 per year.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and

requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR part 9 and 48 CFR chapter 15.

Comments are requested on EPA's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques. Send comments on the ICR to the Director, Collection Strategies Division (2822), U.S. Environmental Protection Agency, 1200 Pennsylvania Ave., NW, Washington, DC 20460, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503 marked "Attention: Desk Officer for EPA." Include the ICR number in any correspondence. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after September 13, 2000, a comment to OMB is best assured of having its full effect if OMB receives it by October 13, 2000. The final rule will respond to any OMB or public comments on the information collection requirements contained in this proposal.

H. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Pub. L. No. 104-113, section 12(d) (15 U.S.C. 272 note), directs all Federal agencies to use voluntary consensus standards (VCS) instead of government-unique standards in their regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. The VCS are technical standards (e.g., material specifications, test methods, sampling and analytical procedures, business practices, etc.) that are developed or adopted by one or more VCS bodies. Examples of organizations generally regarded as VCS bodies include the American Society for Testing and Materials, the National Fire Protection Association, and the Society of Automotive Engineers. The NTTAA requires Federal agencies like EPA to provide Congress, through OMB, with explanations when an agency decides not to use available and applicable VCS.

This proposed rulemaking involves technical standards. Therefore, during the proposed rulemaking process, EPA searched for VCS that might be applicable. The search for emissions monitoring procedures identified 18 VCS that appeared to have possible use in lieu of EPA standard reference methods. However, after reviewing the available standards, EPA determined that ten of the candidate consensus standards (ASME C00031 or PTC 19-10-1981), ASTM D3154-91, ASTM 3271-87, ASTM D3464-96, ASTM D3796-90, ASTM E337-84, and EN 1093-4:1996, EN 12619:1999, ISO 9096:1992, and ISO 10780:1994) identified for measuring emissions of HAP or surrogates subject to emission standards in the proposed rule would not be practical due to lack of equivalency, documentation, and validation data. Seven of the remaining candidate consensus standards (ASME/BSR MFC 12m, ASME/BSR MFC 13m, ASTM Z6871Z, ISO PWI 17895, ISO/DIS 11890-1, ISO/DIS 11890-2 and ISO/FDIS 14965) are under development or under EPA review. The EPA plans to follow, review and consider adopting these standards after their development and further review by EPA are completed.

The ASTM 3960-98 is practical for use in measuring the VOC content of surface coatings for this proposal. This standard uses the same techniques, equipment, and procedures as Method 24. Since this proposal allows the measurement of VOC content as a surrogate for HAP using Method 24, this is an acceptable method alternative to EPA Method 24 for VOC. Therefore, ASTM 3960-98 will be incorporated by reference into 40 CFR 63.14 by the EPA.

Six consensus standards: ASTM D1475-90, ASTM D2369-95, ASTM D3792-91, ASTM D4017-96a, ASTM D4457-85 (Reapproved 91), and ASTM D5403-93 are already incorporated by reference in EPA Method 24 and five consensus standards: ASTM D1979-91, ASTM D3432-89, ASTM D4747-87, ASTM D4827-93, and ASTM PS 9-94 are incorporated by reference in EPA Method 311.

The EPA takes comment on proposed compliance demonstration requirements proposed in this rulemaking and specifically invites the public to identify potentially-applicable voluntary consensus standards. Commentors should also explain why this proposed rule should adopt these VCS in lieu of EPA's standards. Emission test methods and performance specifications submitted for evaluation should be accompanied with a basis for the recommendation, including method

validation data and the procedure used to validate the candidate method (if method other than Method 301, 40 CFR part 63, appendix A was used).

Section 63.3360 of the proposed standard lists the EPA's testing methods and performance standards included in the proposed rule. Most of the standards have been used by States and industry for more than 10 years. Nevertheless, § 63.3360 allows for any State or source to apply to EPA for permission to use an alternative method in place of any of the EPA testing methods or performance standards listed in § 63.3360.

List of Subjects in 40 CFR Part 63

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

Dated: August 14, 2000.

Carol M. Browner,
Administrator.

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

PART 63—[AMENDED]

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

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

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

Subpart JJJJ—National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating

Sec.

What This Subpart Covers

- 63.3280 What is in this subpart?
- 63.3290 Does this subpart apply to me?
- 63.3300 Which of my emission sources are affected?
- 63.3310 What definitions are used in this subpart?

Emission Standards and Compliance Dates

- 63.3320 What emission standards must I meet?
- 63.3330 When must I comply?

General Requirements for Compliance with the Emission Standards and for Monitoring and Performance Tests

- 63.3340 What general requirements must I meet?
- 63.3350 If I have a control device, what monitoring must I do?
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- 63.3370 How do I demonstrate compliance with the emission standards?

Reports and Records

63.3400 What reports must I submit?

63.3410 What records must I keep?

Delegation of Authority

63.3420 What authorities may be delegated to the States?

63.3420—63.3479 [Reserved]

Tables

Table 1 to Subpart JJJJ—Applicability of 40 CFR Part 63 General Provisions to Subpart JJJJ

What This Subpart Covers**§ 63.3280 What is in this subpart?**

This subpart describes the actions you must take to reduce emissions of hazardous air pollutants (HAP) from paper and other web coating. Paper is one of several web substrates to which coatings are applied using a web coating line. This subpart establishes emission standards for web coating lines and specifies what you must do to comply if you own or operate a facility with web coating lines that is a major source of HAP. Certain requirements apply to all who must follow the subpart; others depend on the means you use to comply with an emission standard.

§ 63.3290 Does this subpart apply to me?

The provisions of this subpart apply to each new and existing facility that is a major source of HAP, as defined in § 63.2, at which web coating lines are operated.

§ 63.3300 Which of my emission sources are affected?

(a) The affected source subject to this subpart is the collection of all web coating lines at your facility, except:

(1) Web coating lines that are stand-alone coating equipment under 40 CFR part 63, subpart KK, and the owner or operator includes such coating lines in its compliance demonstration under subpart KK.

(2) Web coating lines which are used for coating coil.

(3) Web coating lines which are research or laboratory equipment as defined in § 63.3310.

(b) [Reserved]

§ 63.3310 What definitions are used in this subpart?

(a) All terms used in this subpart that are not defined below have the meaning given to them in the Clean Air Act (CAA or Act) and in subpart A of this part.

Always-controlled work station means a work station associated with a dryer from which the exhaust is delivered to a control device with no provision for the dryer exhaust to bypass the control device. Sampling lines for analyzers and relief valves needed for safety purposes are not considered bypass lines.

As-applied means the condition of a coating at the time of application to a substrate, including any added solvent.

As-purchased means the condition of a coating as delivered to the user.

Capture efficiency means the fraction of all organic HAP emissions generated by a process that is introduced to a control device, expressed as a percentage.

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

Car-seal means a seal that is placed on a device that is used to change the position of a valve or damper (e.g., from open to closed) in such a way that the position of the valve or damper cannot be changed without breaking the seal.

Coating materials means all inks, varnishes, adhesives, primers, solvents, reducers, and other solids-containing materials applied to a substrate via a web coating line. Materials used to form a substrate are not considered coating materials.

Coil means a continuous metal substrate where the metal is greater than 0.006 inch thick.

Control device means a device such as a solvent recovery device or oxidizer which reduces the organic HAP in an exhaust gas by recovery or by destruction.

Control device efficiency means the ratio of organic HAP emissions recovered or destroyed by a control device to the total organic HAP emissions that are introduced into the control device, expressed as a percentage.

Day means a 24-consecutive-hour period.

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

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

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

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

Fabric means any of the substrates knotted, woven and nonwoven yarn, thread, and textiles; fiberglass; cord; and carpet.

Facility means all contiguous or adjoining property that is under common ownership or control, including properties that are separated only by a road or other public right-of-way.

Formulation data means data on the organic HAP weight fraction, volatile matter weight fraction, or solids weight fraction of a material that is generated by the manufacturer or means other than a test method specified in this subpart or an approved alternative method.

HAP means hazardous air pollutants.

HAP applied means the organic HAP content of all coating materials applied to a substrate by a coating line affected source.

Intermittently-controllable work station means a work station associated with a dryer with provisions for the dryer exhaust to be delivered to or diverted from a control device depending on the position of a valve or damper. Sampling lines for analyzers and relief valves needed for safety purposes are not considered bypass lines.

Month means a calendar month or a pre-specified period of 28 days to 35 days to allow for flexibility in recordkeeping when data are based on a business accounting period.

Never-controlled work station means a work station which is not equipped with provisions by which any emissions, including those in the exhaust from any associated dryer, may be delivered to a control device.

New source means any affected source the construction or reconstruction of which is commenced after September 13, 2000.

Overall organic HAP control efficiency means the total efficiency of a capture and control system.

Research or laboratory equipment means any equipment for which the primary purpose is to conduct research and development into new processes and products, where such equipment is operated under the close supervision of technically trained personnel and is not engaged in the manufacture of products for commercial sale in commerce, except in a de minimis manner.

Uncontrolled coating line means a coating line consisting of only never controlled work stations.

Unwind or feed station means a unit from which substrate is fed to a web coating line.

Web means a continuous substrate (e.g., paper, film, foil) which is flexible

enough to be wound or unwound as rolls. Fabric and coil are not considered web substrates for purposes of this subpart.

Web coating line means any number of work stations, of which one or more applies a layer of coating material along the length of a continuous web substrate, and any associated drying equipment between an unwind or feed station and a rewind or cutting station. Printing presses subject to subpart KK of this part are not web coating lines.

Work station means a unit on a web coating line where material is deposited onto a web substrate.

(b) The symbols used in equations in this subpart are defined as follows:

(1) C_{ahi} = the monthly average, as-applied, organic HAP content of coating material, i, expressed as a weight fraction, kilogram (kg)/kg.

(2) C_{asi} = the monthly average, as-applied, solids content, of coating material, i, expressed as a weight fraction, kg/kg.

(3) C_{avi} = the monthly average, as-applied, volatile organic content of coating material, i, expressed as a weight fraction, kg/kg.

(4) C_c = the concentration of organic compounds as carbon, parts per million by volume (ppmv).

(5) C_{hi} = the organic HAP content of coating material, i, as-purchased, expressed as a weight fraction, kg/kg.

(6) C_{hij} = the organic HAP content of material, j, added to as-purchased coating material, i, expressed as a weight fraction, kg/kg.

(7) C_{si} = the solids content of coating material, i, expressed as a weight fraction, kg/kg.

(8) C_{sij} = the solids content of material, j, added to as-purchased coating material, i, expressed as a weight fraction, kg/kg.

(9) C_{vi} = the volatile organic content of coating material, i, expressed as a weight fraction, kg/kg.

(10) C_{vij} = the volatile organic content of material, j, added to as-purchased coating material, i, expressed as a weight fraction, kg/kg.

(11) E = the organic volatile matter control efficiency of the control device, percent.

(12) CE = the organic volatile matter capture efficiency of the capture system, percent.

(13) G_i = the mass fraction of each coating material, i, which was applied at 20 weight percent or greater solids content, on an as-applied basis, kg/kg.

(14) H_a = the monthly allowable organic HAP emissions, kg.

(15) H_e = the total monthly organic HAP emitted, kg.

(16) H_L = the monthly average, as-applied, organic HAP content of all

coating materials applied, expressed as kg organic HAP per kg of coating material applied, kg/kg.

(17) H_m = the total monthly organic HAP applied, kg.

(18) H_s = the monthly average, as-applied, organic HAP to solids ratio, kg organic HAP/kg solids applied.

(19) H_{si} = the as-applied, organic HAP to solids ratio of coating material, i.

(20) L = the mass organic HAP emitted per mass of solids applied, kg/kg.

(21) M_{Bi} = the sum of the mass of coating material, i, as-applied on intermittently-controllable work stations operating in bypass mode and the mass of coating material, i, as-applied on never-controlled work stations, in a month, kg.

(22) M_{ci} = the sum of the mass of coating material, i, as-applied on intermittently-controllable work stations operating in controlled mode and the mass of coating material, i, as-applied on always-controlled work stations, in a month, kg.

(23) M_f = the total organic volatile matter mass flow rate, kg/hour (h).

(24) M_{fi} = the organic volatile matter mass flow rate at the inlet to the control device, kg/h.

(25) M_{fo} = the organic volatile matter mass flow rate at the outlet of the control device, kg/h.

(26) M_i = the mass of as-purchased coating material, i, applied in a month, kg.

(27) M_{ij} = the mass of material, j, added to as-purchased coating material, i, in a month, kg.

(28) M_{Lj} = the mass of non-solids-containing coating material, j, added to solids-containing coating materials which were applied at less than 20 weight percent solids content, on an as-applied basis, in a month, kg.

(29) M_{vr} = the mass of volatile matter recovered in a month, kg.

(30) n = the number of organic compounds in the vent gas.

(31) p = the number of different coating materials applied in a month.

(32) q = the number of different materials added to the coating material.

(33) Q_{sd} = the volumetric flow rate of gases entering or exiting the control device, as determined by Method 2, 2A, 2C, 2D, 2F, or 2G, dry standard cubic meters/hour (dscm)/h.

(34) R = the overall organic HAP control efficiency, percent.

(35) R_v = the organic volatile matter collection and recovery efficiency, percent.

(36) S = the mass organic HAP emitted per mass of material applied, kg/kg.

(37) 0.0416 = conversion factor for molar volume, kg-moles per cubic meter

(mol/m³) (@ 293 Kelvin (K) and 760 millimeters of mercury (mmHg)).

(38) 12.0 = the molecular weight of carbon.

Emission Standards and Compliance Dates

§ 63.3320 What emission standards must I meet?

(a) If you own or operate any paper and other web coating affected source that is subject to the requirements of this subpart, you must comply with these requirements on and after the compliance dates as specified in § 63.3330.

(b) You must limit emissions to:

(1) No more than 5 percent of the organic HAP applied for the month at existing sources, and no more than 2 percent of the organic HAP applied for the month at new sources; or

(2) No more than 4 percent of the mass of coating materials applied for the month at existing sources, and no more than 1.6 percent of the mass of coating materials applied for the month at new sources; or

(3) No more than 20 percent of the mass of solids applied for the month at existing sources, and no more than 8 percent of the solids applied for the month at new sources.

(c) You must demonstrate compliance with this standard by following one of the procedures in § 63.3370.

§ 63.3330 When must I comply?

(a) If you own or operate an existing affected source subject to the provisions of this subpart, you must comply by the compliance date. The compliance date is [3 years after publication of the final rule in the **Federal Register**]. You must complete any performance test required in § 63.3360 prior to the compliance date.

(b) If you own or operate a new affected source subject to the provisions of this subpart, you must comply immediately upon start-up of the affected source, or after [the date of publication of the final rule in the **Federal Register**], whichever is later.

(c) If you own or operate a reconstructed affected source subject to the provisions of this subpart, you must comply immediately upon start-up of the affected source, or after [the date of publication of the final rule in the **Federal Register**], whichever is later. Affected sources which have undergone reconstruction as defined in § 63.2 are subject to the requirements for new affected sources. The costs associated with the purchase and installation of air pollution control equipment are not considered in determining whether the affected source has been reconstructed.

Additionally, the costs of retrofitting and replacing of equipment that is installed specifically to comply with this subpart are not considered reconstruction costs.

General Requirements for Compliance With the Emission Standards and for Monitoring and Performance Tests

§ 63.3340 What general requirements must I meet?

Table 1 of this subpart specifies the provisions of subpart A of this part that

apply to you if you are subject to this subpart.

§ 63.3350 If I have a control device, what monitoring must I do?

(a) A summary of monitoring you must do follows:

If you operate a web coating line, and have the following:	Then you must:
(1) Intermittently-controlled work stations.	Record parameters related to possible exhaust flow bypass of control device and coating use (paragraph (c) of this section).
(2) Solvent recovery unit	Operate continuous emission monitoring system (CEMS) and perform quarterly audits or measure volatile matter recovered and conduct a liquid-liquid material balance (paragraph (d) of this section).
(3) Oxidizer	Operate continuous parameter monitoring system (CPMS) (paragraph (e) of this section).
(4) Capture system	Monitor capture system operating parameter (paragraph (f) of this section).

(b) Following the date on which the initial performance test of a control device is completed, to demonstrate continuing compliance with the standard, you must monitor and inspect each capture system and each control device used to comply with § 63.3320. You must install and operate the monitoring equipment as specified in paragraphs (c) through (f) of this section.

(c) *Bypass and coating use monitoring.* If you own or operate coating lines with intermittently-controlled work stations, you must monitor bypasses of the control device and the mass of each coating material applied at the work station during any such bypass. You must demonstrate that any coating material applied on an uncontrolled-work station or an intermittently-controlled work station operated in bypass mode is allowed in your compliance demonstration according to § 63.3370(n) through (o). The bypass monitoring must be conducted using at least one of the procedures in paragraphs (c)(1) through (4) of this section for each work station and associated dryer.

(1) *Flow control position indicator.* Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow control position indicator that provides a record indicating whether the exhaust stream from the dryer was directed to the control device or was diverted from the control device. The time and flow control position must be recorded at least once per hour, as well as every time the flow direction is changed. A flow control position indicator must be installed at the entrance to any bypass

line that could divert the exhaust stream away from the control device to the atmosphere.

(2) *Car-seal or lock-and-key valve closures.* Secure any bypass line valve in the closed position with a car-seal or a lock-and-key type configuration; a visual inspection of the seal or closure mechanism must be performed at least once every month to ensure that the valve or damper is maintained in the closed position, and the exhaust stream is not diverted through the bypass line.

(3) *Valve closure continuous monitoring.* Ensure that any bypass line valve or damper is in the closed position through continuous monitoring of valve position when the control device is in operation. The monitoring system must be inspected at least once every month to verify that the monitor will indicate valve position.

(4) *Automatic shutdown system.* Use an automatic shutdown system in which the coating line is stopped when flow is diverted away from the control device to any bypass line when the control device is in operation. The automatic system must be inspected at least once every month to verify that it will detect diversions of flow and will shut down operations.

(d) *Solvent recovery unit.* If you own or operate a solvent recovery unit to comply with § 63.3320, you must meet the requirements in either paragraph (d)(1) or (2) of this section depending on how control efficiency is determined.

(1) *Continuous emission monitoring system (CEMS).* If you are demonstrating compliance with the standard in § 63.3320 through continuous emission monitoring of a control device, you must install, calibrate, operate, and

maintain CEMS to measure the total organic volatile matter concentration at both the control device inlet and the outlet such that the reduction efficiency can be determined. Each continuous emission monitor must comply with performance specification 8 or 9 of 40 CFR part 60, appendix B, as appropriate. The requirements of procedure 1, appendix F, of 40 CFR part 60 must also be followed. In conducting the quarterly audits of the monitors as required by procedure 1, appendix F, you must use compounds representative of the gaseous emission stream being controlled.

(2) *Liquid-liquid material balance.* If you are demonstrating compliance with the standard in § 63.3320 through liquid-liquid material balance, you must install, calibrate, maintain, and operate according to the manufacturer's specifications a device that indicates the cumulative amount of volatile matter recovered by the solvent recovery device on a monthly basis. The device must be certified by the manufacturer to be accurate to within ± 2.0 percent by mass.

(e) *Continuous parameter monitoring system (CPMS).* If you are using an oxidizer to comply with the standard in § 63.3320, you must install and operate CPMS according to paragraphs (e)(1) through (6)(vii) of this section:

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

(2) You must have valid data from at least 90 percent of the hours during which the process operated.

(3) You must determine the hourly average of all recorded readings. Provided all of the recorded readings clearly demonstrate continuous compliance with the standard that applies to you, then you are not required to determine the hourly average of all recorded readings.

(4) You must determine the rolling 3-hour average of all recorded readings for each operating period.

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

(6) For each temperature monitoring device, you must also:

(i) Locate the temperature sensor as specified in § 63.3360(e)(3).

(ii) Use a temperature sensor with a minimum tolerance of 2.2 degrees Celsius or 0.75 percent of the temperature value, whichever is larger.

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

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

(v) Perform an electronic calibration at least semiannually according to the

procedures in the manufacturer's owners manual. Following the electronic calibration, you must conduct a temperature sensor validation check in which a second or redundant temperature sensor placed nearby the process temperature sensor must yield a reading within 16.7 degrees Celsius of the process temperature sensor's reading.

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

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

(f) *Capture system monitoring.* If you are complying with the standard in § 63.3320 through the use of a capture system and control device, you must submit a monitoring plan containing the information specified in paragraphs (f)(1) and (2) of this section. You must monitor the capture system in accordance with paragraph (f)(3) of this section. You must submit the monitoring plan to the Administrator

with the compliance status report required by § 63.9(h).

(1) The monitoring plan must:

(i) Identify the operating parameter to be monitored to ensure that the capture efficiency measured during the initial compliance test is maintained; and

(ii) Discuss why this parameter is appropriate for demonstrating ongoing compliance; and

(iii) Identify the specific monitoring procedures.

(2) The monitoring plan must specify the operating parameter value, or range of values, that demonstrate compliance with the standards in § 63.3320. The specified operating parameter, or range of values, must represent the conditions present when the capture system is being properly operated and maintained.

(3) You must conduct monitoring in accordance with the plan submitted to the Administrator unless comments received from the Administrator require an alternate monitoring scheme.

§ 63.3360 What performance test methods must I conduct?

(a) The performance test methods you must conduct are as follows:

If you control organic HAP on your web coating lines by:

You must:

(1) Limiting organic HAP or volatile matter content of coatings.

Determine the organic HAP or volatile matter and weight solids content of coating materials according to procedures in paragraphs (c) and (d) of this section.

(2) Using a capture and control system.

Conduct performance tests to determine: (i) the destruction efficiency of oxidizers according to paragraph (e) of this section; and (ii) the capture efficiency of capture systems according to paragraph (f) of this section.

(b) If you are using a control device to comply with the requirements of § 63.3320, you are not required to conduct a performance test to demonstrate compliance if one or more of the criteria in paragraphs (b)(1) through (3) of this section are met.

(1) The control device is equipped with continuous emission monitors for determining inlet and outlet total organic volatile matter concentration, and capture efficiency has been determined in accordance with the requirements of this subpart, such that an overall organic HAP control efficiency can be calculated, and the continuous emission monitors are used to demonstrate continuous compliance in accordance with § 63.3350; or

(2) You have met the requirements of § 63.7(h) (for waiver of performance testing); or

(3) The control device is a solvent recovery system, and you comply by

means of a monthly liquid-liquid material balance.

(c) *Organic HAP content.* If you own or operate a paper and other web coating facility, you must determine the organic HAP weight fraction of each coating material "as-purchased," C_{hi} , by following one of the procedures in paragraphs (c)(1) through (3) of this section, and determine the organic HAP weight fraction of each coating material "as-applied," C_{ahi} , by following the procedures in paragraph (c)(4) of this section.

(1) *Method 311.* You may test the coating material in accordance with Method 311 of appendix A of part 63. The Method 311 determination may be performed by the manufacturer of the coating material and the results provided to the owner or operator. The organic HAP content must be calculated according to the criteria and procedures in paragraphs (c)(1)(i) through (iii) of this section. If the HAP content values

are not determined using Method 311, the owner or operator must submit an alternative test method for determining their values for approval by the Administrator. The recovery efficiency of the test method must be determined for all of the target organic HAP and a correction factor, if necessary, must be determined and applied.

(i) Count each organic HAP measured to be present at greater than or equal to 0.1 weight percent for carcinogens and greater than or equal to 1.0 weight percent for noncarcinogens.

(ii) The weight fraction of each organic HAP shall be expressed as a value truncated four places after the decimal point.

(iii) Calculate the weight fraction of organic HAP in the tested material by summing the counted individual organic HAP weight fractions. The total HAP content shall be expressed as a value truncated three places after the decimal point.

(2) *Method 24.* The owner or operator may determine the volatile organic content (i.e., the weight fraction of nonaqueous volatile matter) of the coating material in accordance with § 63.3360(d)(1) and use this value for the organic HAP content for all compliance purposes.

(3) *Formulation data.* The owner or operator may use formulation data to calculate the organic HAP weight fraction of a coating material. Formulation data may be provided to the owner or operator by the manufacturer of the material. In the event of an inconsistency between Method 311 of appendix A of part 63 test data and a facility's formulation data and the Method 311 test value is higher, the Method 311 data will govern. Formulation data may be used provided that the information represents all organic HAP present at a level equal to or greater than 0.1 percent for carcinogens and equal to or greater than 1.0 percent for noncarcinogens in any raw material used, weighted by the mass fraction of each raw material used in the coating material's formulation.

(4) *As-applied organic HAP weight fraction, C_{ahi} .* If the as-purchased coating material is applied to the web without any solvent or other material added, then the as-applied organic HAP weight fraction, C_{ahi} , is equal to the as-purchased organic HAP weight fraction, C_{hi} . Otherwise, the as-applied organic HAP weight fraction, C_{ahi} , must be calculated using Equation 3a of § 63.3370.

(d) *Volatile organic and solids content.* If you own or operate a paper and other web coating facility, you must determine the as-purchased volatile organic content, C_{vi} , and solids content, C_{si} , of each coating material applied by following the procedures in paragraph (d)(1) or (2) of this section, and the as-applied volatile organic content, C_{avi} , and solids content, C_{asi} , of each coating material by following the procedures in paragraph (d)(3) of this section.

(1) *Method 24.* You must determine the volatile organic and solids weight fraction of each coating material applied using Method 24 of 40 CFR part 60, appendix A. The Method 24 determination may be performed by the manufacturer of the material and the

results provided to the owner or operator. If these values cannot be determined using Method 24, the owner or operator must submit an alternative technique for determining their values for approval by the Administrator.

(2) *Formulation data.* You may determine the volatile organic content of materials based on formulation data and may rely on volatile organic content data provided by material suppliers. In the event of any inconsistency between the formulation data and the results of Test Method 24 of 40 CFR part 60, appendix A, the results of Test Method 24 will govern.

(3) *As-applied volatile organic content, C_{avi} , and solids content, C_{asi} .* If the as-purchased coating material is applied to the web without any solvent or other material added, then the as-applied volatile organic content, C_{avi} , is equal to the as-purchased volatile content, C_{vi} , and the as-applied solids content, C_{asi} , is equal to the as-purchased solids content, C_{si} . Otherwise, the as-applied volatile organic content, C_{avi} , must be calculated using Equation 3b of § 63.3370 and the as-applied solids content, C_{asi} , must be calculated using Equation 4 of § 63.3370.

(e) *Destruction efficiency of oxidizer.* If you are using an oxidizer to comply with the standard in § 63.3320, you must conduct a performance test to establish the destruction efficiency of the oxidizer according to the methods and procedures in paragraphs (e)(1) and (2) of this section. You must establish the associated combustion zone temperature for a thermal oxidizer and the associated catalyst bed inlet and outlet temperatures for a catalytic oxidizer according to the procedures in paragraph (e)(3) of this section.

(1) An initial performance test to establish the destruction efficiency of an oxidizer must be conducted such that oxidizer inlet and outlet testing is conducted simultaneously, and the data are reduced in accordance with the reference methods and procedures in paragraphs (e)(1)(i) through (ix):

(i) Method 1 or 1A of 40 CFR part 60, appendix A, must be used for sample and velocity traverses to determine sampling locations.

(ii) Method 2, 2A, 2C, 2D, 2F, or 2G of 40 CFR part 60, appendix A, must be used to determine gas volumetric flow rate.

(iii) Method 3, 3A, or 3B of 40 CFR part 60, appendix A, must be used for gas analysis to determine dry molecular weight.

(iv) Method 4 of 40 CFR part 60, appendix A, must be used to determine stack gas moisture.

(v) The gas volumetric flow rate, dry molecular weight, and stack gas moisture must be determined for each run specified in paragraph (e)(1)(vii) of this section.

(vi) Method 25 of 40 CFR part 60, appendix A, must be used to determine volatile organic compound concentration, except as provided in paragraphs (e)(1)(vi)(A) through (C) of this section. You must submit notice of the intended test method to the Administrator for approval along with notice of the performance test required under § 63.7(c). You may use Method 25A of 40 CFR part 60, appendix A; if

(A) An exhaust gas volatile organic compound concentration of 50 ppmv or less is required to comply with the standards of § 63.3320; or

(B) The volatile organic compound concentration at the inlet to the control system and the required level of control are such that result in exhaust gas volatile organic compound concentrations of 50 ppmv or less; or

(C) Because of the high efficiency of the control device, the anticipated volatile organic compound concentration at the control device exhaust is 50 ppmv or less, regardless of inlet concentration.

(vii) Except as provided in § 63.7(e)(3), each performance test must consist of three separate runs; each run conducted for at least 1 hour under the conditions that exist when the affected source is operating under normal operating conditions. For the purpose of determining volatile organic compound concentrations and mass flow rates, the average of the results of all the runs will apply.

(viii) Organic volatile matter mass flow rates must be determined for each run specified in paragraph (e)(1)(vii) of this section using Equation 1:

$$M_f = Q_{sd} C_c [12] [0.0416] [10^{-6}] \quad \text{Eq 1}$$

(ix) Emission control device efficiency must be determined using Equation 2:

$$E = \frac{M_{fi} - M_{fo}}{M_{fi}} \quad \text{Eq 2}$$

(2) You must record such process information as may be necessary to determine the conditions in existence at the time of the performance test. Operations during periods of start-up, shutdown, and malfunction will not constitute representative conditions for the purpose of a performance test.

(3) For the purpose of determining the value of the oxidizer operating parameter that must demonstrate continuing compliance, the average of the values recorded during the performance test must be computed according to the procedures in this paragraph (e)(3). For an oxidizer other than catalytic oxidizer, the owner or operator must establish as the operating parameter the minimum combustion temperature in the combustion chamber. This must be accomplished by locating the temperature sensor in the combustion zone. For a catalytic oxidizer, the owner or operator must establish as the operating parameters the minimum gas temperature at the inlet

and the temperature rise across the catalyst bed. This must be accomplished by locating temperature sensors at both the inlet and outlet of the catalyst bed. You must collect temperature data every 15 minutes during the entire period of the 3-hour performance test and determine the average temperature over the 3-hour performance test by computing the average of all of the 15-minute readings.

(f) *Capture efficiency.* If you are using an oxidizer to comply with the standard in § 63.3320, you must determine capture efficiency of the capture system using the procedures in paragraph (f)(1), (2), or (3) of this section, as applicable.

(1) You may assume your capture efficiency, CE, equals 100 percent if your capture system is a permanent total enclosure. You must confirm that your capture system is a permanent total enclosure by demonstrating that it meets the requirements of section 6 of EPA Method 204 of 40 CFR part 51, appendix M, and that all exhaust gases from the

enclosure are delivered to a control device.

(2) You may determine capture efficiency, CE, according to the protocols for testing temporary total enclosures that are specified in Methods 204 and 204A through F of 40 CFR part 51, appendix M. You may exclude never-controlled work stations from such capture efficiency determinations.

(3) You may use any capture efficiency protocol and test methods that satisfy the criteria of either the Data Quality Objective or the Lower Confidence Limit approach as described in appendix A of subpart KK of this part. The owner or operator may exclude never-controlled work stations from such capture efficiency determinations.

Requirements for Showing Compliance

§ 63.3370 How do I demonstrate compliance with the emission standards?

(a) A summary of how you must demonstrate compliance follows:

If you choose to demonstrate compliance by:

Then you must demonstrate that:

(1) Use of "as-purchased" compliant coating materials.

(i) Each coating material used at an existing source does not exceed 0.04 kg organic HAP per kg coating material (*i.e.*, 4 weight percent) and each coating material used at a new source does not exceed 0.016 kg organic HAP per kg coating material (*i.e.*, 1.6 weight percent) as-purchased (paragraph (b) of this section); or

(ii) Each coating material used at an existing source does not exceed 0.2 kg organic HAP per kg solids (*i.e.*, 20 weight percent solids) and each coating material used at a new source does not exceed 0.08 kg organic HAP per kg solids (*i.e.*, 8 weight-percent solids) as-purchased (paragraph (b) of this section).

(2) Use of "as-applied" compliant coating materials.

(i) Each coating material used at an existing source does not exceed 0.04 kg organic HAP per kg coating material (*i.e.*, 4 weight percent) and each coating material used at a new source does not exceed 0.016 kg organic HAP per kg coating material (*i.e.*, 1.6 weight percent) as-applied on a monthly average basis (paragraph (c)(1) of this section); or

(ii) Each coating material used at an existing source does not exceed 0.2 kg organic HAP per kg solids (*i.e.*, 20 weight-percent solids) and each coating material used at a new source does not exceed 0.08 kg organic HAP per kg solids (*i.e.*, 8 weight percent) as-applied on a monthly average basis (paragraph (c)(2) of this section); or

(iii) Monthly average of all materials used at an existing source does not exceed 0.04 kg organic HAP per kg coating material (*i.e.*, 4 weight percent) and monthly average of all materials used at a new source does not exceed 0.016 kg organic HAP per kg coating material (*i.e.*, 1.6 weight percent) as-applied on a monthly average basis (paragraph (c)(3) of this section); or

(iv) Monthly average of all coating material used at an existing source does not exceed 0.2 kg organic HAP per kg solids and monthly average of all coating materials used at a new source does not exceed 0.08 kg organic HAP per kg solids as-applied on a monthly average basis (paragraph (c)(4) of this section).

(3) Tracking total monthly HAP applied

Total monthly organic HAP applied does not exceed the calculated limit based on emission limitations (paragraph (d) of this section).

If you choose to demonstrate compliance by:

Then you must demonstrate that:

- | | |
|--|--|
| (4) Use of a control device | Overall organic HAP control efficiency is equal to 95 percent at an existing source and 98 percent at a new source, on a monthly basis (paragraph (e) of this section). |
| (5) Use of a combination of compliant coatings and control devices, and maintain an acceptable equivalent emission rate. | <p>(i) Average equivalent emission rate does not exceed 0.2 kg organic HAP per kg solids at an existing source and 0.08 kg organic HAP per kg solids at a new source on a monthly average as-applied basis (paragraph (f) of this section); or</p> <p>(ii) Average equivalent emission rate does not exceed 0.04 kg organic HAP per kg coating material at an existing source and 0.016 kg organic HAP per kg coating material at a new source on a monthly average as-applied basis (paragraph (g) of this section); or</p> <p>(iii) Average equivalent emission rate does not exceed the calculated limit based on emission limitations (paragraph (h) of this section).</p> |

(b) *As-purchased "compliant" coating materials.* (1) If you comply by using coatings that individually meet the limits in § 63.3320(b)(2) or (3), you must demonstrate that each coating material applied during the month at an existing source contains no more than 0.04 weight fraction organic HAP or 0.2 kg organic HAP per kg solids, and that each coating material applied during the month at a new source contains no more than 0.016 weight fraction organic HAP or 0.08 kg organic HAP per kg solids, on an as-purchased basis, as determined in accordance with § 63.3360(c).

(2) You are in compliance with emission limits in § 63.3320(b)(2) and (3) if each coating material applied at an existing source is applied as-purchased and contains no more than 0.04 kg organic HAP per kg coating material or

0.2 kg organic HAP per kg solids, and each coating material applied at a new source is applied as-purchased and contains no more than 0.016 kg organic HAP per kg coating material or 0.08 kg organic HAP per kg solids.

(c) *As-applied "compliant" coating materials.* If you comply by using coatings that meet the limits in § 63.3320(b)(2) or (3) as-applied, you must demonstrate compliance by following one of the procedures in paragraph (c)(1) through (4) of this section. Compliance is determined in accordance with paragraph (c)(5) of this section.

(1) *Each coating material as-applied meets the weight fraction of coating standard (§ 63.3320(b)(2)).* You must demonstrate that each coating material applied at an existing source during the

month contains no more than 0.04 kg organic HAP per kg coating material applied, and each coating material applied at a new source contains no more than 0.016 kg organic HAP per kg coating material applied on a monthly average as-applied basis as determined in accordance with paragraphs (c)(1)(i) through (ii) of this section. You must calculate the as-applied organic HAP content of as-purchased materials which are reduced, thinned, or diluted prior to application.

(i) Determine the organic HAP content or volatile organic content of each coating material applied on an as-purchased basis in accordance with § 63.3360(c).

(ii) Calculate the monthly average as-applied organic HAP content, C_{ahi} , of each coating material using Equation 3a:

$$C_{ahi} = \frac{(C_{hi}M_i + \sum_{j=1}^q C_{hij}M_{ij})}{M_i + \sum_{j=1}^q M_{ij}} \quad \text{Eq 3a}$$

or calculate the monthly average as-applied volatile organic content, C_{avi} , of each coating material using Equation 3b:

$$C_{avi} = \frac{(C_{vi}M_i + \sum_{j=1}^q C_{vij}M_{ij})}{M_i + \sum_{j=1}^q M_{ij}} \quad \text{Eq 3b}$$

(2) *Each coating material as-applied meets the weight fraction of solids standard (§ 63.3320(b)(3)).* You must

demonstrate that each coating material applied at an existing source contains no more than 0.20 kg of organic HAP

per kg of solids applied, and each coating material applied at a new source contains no more than 0.08 kg of organic

HAP per kg of solids applied on a monthly average as-applied basis. You must demonstrate compliance in accordance with paragraphs (c)(2)(i) and (ii) of this section.

(i) Determine the as-applied solids content of each coating material following the procedure in § 63.3360(d). You must calculate the monthly average as-applied solids content of materials

which are reduced, thinned, or diluted prior to application, using Equation 4:

$$C_{asi} = \frac{(C_{si}M_i + \sum_{j=1}^q C_{sij}M_{ij})}{M_i + \sum_{j=1}^q M_{ij}} \quad \text{Eq 4}$$

(ii) Calculate the as-applied organic HAP to solids ratio, H_{si} , using Equation 5:

$$H_{si} = \frac{C_{ahi}}{C_{asi}} \quad \text{Eq 5}$$

(3) *Monthly average organic HAP content of all coating materials as-applied is less than weight percent limit (§ 63.3320(b)(2)).* Demonstrate that the

monthly average as-applied organic HAP content, H_L , of all coating materials applied at an existing source is less than 0.04 kg organic HAP per kg of material

applied, and all coating materials applied at a new source are less than 0.016 kg organic HAP per kg of material applied, as determined by Equation 6:

$$H_L = \frac{\sum_{i=1}^p (M_i C_{hi} + \sum_{j=1}^q M_{ij} C_{hij})}{\sum_{i=1}^p (M_i + \sum_{j=1}^q M_{ij})} \quad \text{Eq 6}$$

(4) *Monthly average HAP content of all coating materials, as-applied, is less than weight fraction of solids limit (§ 63.3320(b)(3)).* Demonstrate that the monthly average as-applied organic

HAP content on the basis of solids applied, H_S , of all coating materials applied at an existing source is less than 0.20 kg organic HAP per kg solids applied, and all coating materials

applied at a new source are less than 0.08 kg organic HAP per kg solids applied, as determined by Equation 7:

$$H_S = \frac{\sum_{i=1}^p (M_i C_{hi} + \sum_{j=1}^q M_{ij} C_{hij})}{\sum_{i=1}^p (M_i C_{si} + \sum_{j=1}^q M_{ij} C_{sij})} \quad \text{Eq 7}$$

(5) The affected source is in compliance with emission limits in § 63.3320(b)(2) and (3) if:

(i) The organic HAP content of each coating material as-applied at an existing source is no more than 0.04 kg organic HAP per kg coating material or 0.2 kg organic HAP per kg solids, and the organic HAP content of each coating material as-applied at a new source contains no more than 0.016 kg organic

HAP per kg coating material or 0.08 kg organic HAP per kg solids; or
(ii) The monthly average organic HAP content of all as-applied coating materials at an existing source are no more than 0.04 kg organic HAP per kg coating material or 0.2 kg organic HAP per kg solids, and the monthly average organic HAP content of all as-applied coating materials at a new source are no more than 0.016 kg organic HAP per kg

coating material or 0.08 kg organic HAP per kg solids.

(d) *Monthly allowable HAP mass.* Demonstrate that the total monthly organic HAP applied, H_m , as determined by Equation 8, is less than the calculated equivalent allowable organic HAP, H_a , as determined by paragraph (l) of this section:

$$H_m = \sum_{i=1}^p (M_i C_{hi} + \sum_{j=1}^q M_{ij} C_{hij})$$

Eq 8

(e) *Capture and control to reduce emissions to no more than allowable limit (§ 63.3320(b)(1)).* Operate a capture system and control device and demonstrate an overall organic HAP control efficiency of at least 95 percent at an existing source and at least 98 percent at a new source for each month. Unless either of the cases described in paragraph (e)(1) or (2) of this section applies to the affected facility, you must demonstrate compliance in accordance with the procedure in paragraph (i) of this section when emissions from the affected source are controlled by a solvent recovery device, or the procedure in paragraph (k) of this section when emissions are controlled by an oxidizer.

(1) If the affected source has only always-controlled work stations and operates more than one capture system or more than one control device, you must demonstrate compliance in accordance with the provisions of either paragraph (n) or (p) of this section.

(2) If the affected source operates one or more never-controlled work stations or one or more intermittently-controllable work stations, you must demonstrate compliance in accordance with the provisions of paragraph (n) of this section.

(f) *Capture and control to achieve weight fraction of solids applied limit (§ 63.3320(b)(3)).* Operate a capture system and control device and limit the organic HAP emission rate from an existing source to no more than 0.20 kg organic HAP emitted per kg solids applied, and from a new source to no more than 0.08 kg organic HAP emitted per kg solids applied as determined on a monthly average as-applied basis. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations, then you must demonstrate compliance in accordance with the provisions of paragraph (n) of this section. Otherwise, you must demonstrate compliance following the procedure in paragraph (i) of this section when emissions from the

affected source are controlled by a solvent recovery device, or the procedure in paragraph (k) of this section when emissions are controlled by an oxidizer.

(g) *Capture and control to achieve weight fraction limit (§ 63.3320(b)(2)).* Operate a capture system and control device and limit the organic HAP emission rate to no more than 0.04 kg organic HAP emitted per kg coating material applied at an existing source, and no more than 0.016 kg organic HAP emitted per kg coating material applied at new sources as determined on a monthly average as-applied basis. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations, then you must demonstrate compliance in accordance with the provisions of paragraph (n) of this section. Otherwise, you must demonstrate compliance following the procedure in paragraph (i) of this section when emissions from the affected source are controlled by a solvent recovery device, or the procedure in paragraph (k) of this section when emissions are controlled by an oxidizer.

(h) *Capture and control to achieve allowable emission rate, H_a .* Operate a capture system and control device and limit the monthly organic HAP emissions to less than the allowable emissions as calculated in accordance with paragraph (l) of this section. If the affected source operates more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations, then you must demonstrate compliance in accordance with the provisions of paragraph (n) of this section. Otherwise, the owner or operator must demonstrate compliance following the procedure in paragraph (i) of this section when emissions from the affected source are controlled by a solvent recovery device, or the procedure in paragraph (k) of this

section when emissions are controlled by an oxidizer.

(i) *Solvent recovery device compliance demonstration.* If you use a solvent recovery device to control emissions, you must show compliance by following the procedures in either paragraph (i)(1) or (2) of this section:

(1) *Liquid-liquid material balance.* Perform a liquid-liquid material balance for each and every month as specified in paragraphs (i)(1)(i) through (v) of this section and use the applicable equations in paragraphs (i)(1)(vi) through (ix) of this section to convert the data to units of the selected compliance option in paragraphs (e) through (h) of this section. Compliance is determined in accordance with paragraph (i)(1)(x) of this section.

(i) Measure the mass of each coating material applied on the coating line or group of coating lines controlled by a common solvent recovery device during the month.

(ii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied, or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each coating material as-applied, C_{ahi} , during the month following the procedure in § 63.3360(c).

(iii) Determine the volatile organic content, C_{avi} , of each coating material as-applied during the month following the procedure in § 63.3360(d).

(iv) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, determine the solids content of each coating material applied during the month following the procedure in § 63.3360(d).

(v) Measure and monitor the amount of volatile organic matter recovered for the month according to the procedures in § 63.3350(d)(2).

(vi) *Recovery efficiency, R_v .* Calculate the volatile organic matter collection and recovery efficiency, R_v , using Equation 9:

$$R_v = 100 \frac{M_{vr}}{\sum_{i=1}^p (M_i C_{vi}) + \sum_{j=1}^q (M_{ij} C_{vij})} \quad \text{Eq 9}$$

(vii) *Organic HAP emitted, H_e .* Calculate the organic HAP emitted during the month, H_e , using Equation 10:

$$H_e = [1 - \frac{R_v}{100}] [\sum_{i=1}^p (C_{hi} M_i) + \sum_{j=1}^q (C_{hij} M_{ij})] \quad \text{Eq 10}$$

(viii) *Organic HAP emission rate based on solids applied, L .* Calculate the organic HAP emission rate based on solids applied, L , using Equation 11:

$$L = \frac{H_e}{\sum_{i=1}^p (C_{si} M_i) + \sum_{j=1}^q (C_{sij} M_{ij})} \quad \text{Eq 11}$$

(ix) *Organic HAP based on materials applied, S .* Calculate the organic HAP emission rate based on material applied, S , using Equation 12:

$$S = \frac{H_e}{\sum_{i=1}^p [M_i] + \sum_{j=1}^q [M_{ij}]} \quad \text{Eq 12}$$

(x) You are in compliance with the emission limitations in § 63.3320(b) if:

(A) The volatile organic matter collection and recovery efficiency, R_v , is 95 percent or greater at an existing source and 98 percent or greater at a new source; or

(B) The organic HAP emission rate based on solids applied, L , is no more than 0.20 kg organic HAP per kg solids applied at an existing source and no more than 0.08 kg organic HAP per kg solids applied at a new source; or

(C) The organic HAP emission rate based on material applied, S , is no more than 0.04 kg organic HAP per kg material applied at an existing source and no more than 0.016 kg organic HAP per kg material applied at a new source; or

(D) The organic HAP emitted during the month, H_e , is less than the calculated allowable organic HAP, H_a , as determined using paragraph (l) of this section.

(2) *Continuous emission monitoring of capture system and control device performance.* Demonstrate initial compliance through a performance test on capture efficiency and continuing compliance through continuous emission monitors and continuous monitoring of capture system operating parameters following the procedures in paragraphs (i)(2)(i) through (vii) of this section. Use the applicable equations specified in paragraphs (i)(2)(viii) through (x) of this section to convert the monitoring and other data into units of the selected compliance option in paragraphs (e) through (h) of this section. Compliance is determined in accordance with paragraph (i)(2)(xi) of this section.

(i) *Recovery efficiency, E .* Continuously monitor the gas stream entering and exiting the control device to determine the total organic volatile matter mass flow rate (e.g., by

determining the concentration of the vent gas in grams per cubic meter, and the volumetric flow rate in cubic meters per second, such that the total organic volatile matter mass flow rate in grams per second can be calculated), such that the percent control efficiency, E , of the control device can be calculated for each month using Equation 2 of § 63.3360.

(ii) *Capture efficiency monitoring.* Whenever a coating line is operated, continuously monitor the operating parameter established in accordance with § 63.3350(f) to ensure capture efficiency.

(iii) Determine the percent capture efficiency, CE , in accordance with § 63.3360(f).

(iv) *Control efficiency, R .* Calculate the overall organic HAP control efficiency, R , achieved for each month using Equation 13:

$$R = \frac{(E)(CE)}{100} \quad \text{Eq 13}$$

(v) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP

emission rate based on materials applied, or emission of less than the calculated allowable organic HAP,

measure the mass of each coating material applied on the coating line or group of coating lines controlled by a

common control device during the month.

(vi) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied or emission of less than the calculated allowable organic HAP, determine the

organic HAP content of each coating material as-applied, C_{ahi} , during the month following the procedure in § 63.3360(c).

(vii) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable

organic HAP, determine the solids content of each coating material as-applied, C_{asi} , during the month following the procedure in § 63.3360(d).

(viii) *Organic HAP emitted, H_e .* Calculate the organic HAP emitted during the month, H_e , for each month using Equation 14:

$$H_e = \left[1 - \left(\frac{E}{100} \frac{CE}{100} \right) \right] \left[\sum_{i=1}^P C_{ahi} M_i \right]$$

Eq 14

(ix) *Organic HAP emission rate based on solids applied, L.* Calculate the organic HAP emission rate based on solids applied, L, using Equation 11 of this section.

(x) *Organic HAP based on materials applied, S.* Calculate the organic HAP emission rate based on material applied, S, using Equation 12 of this section.

(xi) *Compare actual performance to performance required by compliance option.* The affected source is in compliance with the emission limitations in § 63.3320(b) if the capture system operating parameter is operated at an average value greater than or less than (as appropriate) the operating parameter value established in accordance with § 63.3350(f); and

(A) The organic volatile matter collection and recovery efficiency, R_v , is 95 percent or greater at an existing source and 98 percent or greater at a new source; or

(B) The organic HAP emission rate based on solids applied, L, is no more than 0.20 kg organic HAP per kg solids applied at an existing source and no more than 0.08 kg organic HAP per kg solids applied at a new source; or

(C) The organic HAP emission rate based on material applied, S, is no more than 0.04 kg organic HAP per kg material applied at an existing source and no more than 0.016 kg organic HAP per kg material applied at a new source; or

(D) The organic HAP emitted during the month, H_e , is less than the calculated allowable organic HAP, H_a , as determined using paragraph (l) of this section.

(j) [Reserved]

(k) *Oxidizer compliance demonstration procedures.* If you use an oxidizer to control emissions, you must show compliance by following the procedures in paragraph (k)(1) of this section. Use the applicable equations specified in paragraph (k)(2) of this section to convert the monitoring and other data into units of the selected compliance option in paragraph (e)

through (h) of this section. Compliance is determined in accordance with paragraph (k)(3) of this section.

(1) Demonstrate initial compliance through performance tests of capture efficiency and control device efficiency and continuing compliance through continuous monitoring of capture system and control device operating parameters as specified in paragraphs (k)(1)(i) through (vi) of this section:

(i) Determine the oxidizer destruction efficiency, E, using the procedure in § 63.3360(e).

(ii) Determine the capture system capture efficiency, CE, in accordance with § 63.3360(f).

(iii) *Capture and control efficiency monitoring.* Whenever a coating line is operated, continuously monitor the operating parameters established in accordance with § 63.3350(e) and (f) to ensure capture and control efficiency.

(iv) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on materials applied, or emission of less than the calculated allowable organic HAP, measure the mass of each coating material applied on the coating line or group of coating lines controlled by a common oxidizer during the month.

(v) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied, organic HAP emission rate based on material applied, or emission of less than the calculated allowable organic HAP, determine the organic HAP content of each coating material as-applied, C_{asi} , during the month following the procedure in § 63.3360(c).

(vi) If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, determine the solids content of each coating material applied during the month following the procedure in § 63.3360(d).

(2) Convert the information obtained under paragraph (k)(1) of this section

into the units of the selected compliance option using the calculation procedures specified in paragraphs (k)(2)(i) through (iv) of this section.

(i) *Control efficiency, R.* Calculate the overall organic HAP control efficiency, R, achieved using Equation 13 of this section.

(ii) *Organic HAP emitted, H_e .* Calculate the organic HAP emitted during the month, H_e , using Equation 14 of this section.

(iii) *Organic HAP emission rate based on solids applied, L.* Calculate the organic HAP emission rate based on solids applied, L, for each month using Equation 11 of this section.

(iv) *Organic HAP based on materials applied, S.* Calculate the organic HAP emission rate based on material applied, S, using Equation 12 of this section.

(3) You are in compliance with the emission limitations in § 63.3320(b) if the oxidizer is operated such that the average operating parameter value is greater than the operating parameter value established in accordance with § 63.3360(e) for each 3-hour period, and the capture system operating parameter is operated at an average value greater than or less than (as appropriate) the operating parameter value established in accordance with § 63.3350(f); and

(i) The overall organic HAP control efficiency, R, is 95 percent or greater at an existing source and 98 percent or greater at a new source; or

(ii) The organic HAP emission rate based on solids applied, L, is no more than 0.20 kg organic HAP per kg solids applied at an existing source and no more than 0.08 kg organic HAP per kg solids applied at a new source; or

(iii) The organic HAP emission rate based on material applied, S, is no more than 0.04 kg organic HAP per kg material applied at an existing source and no more than 0.016 kg organic HAP per kg material applied at a new source; or

(iv) The organic HAP emitted during the month, H_e , is less than the calculated allowable organic HAP, H_a ,

as determined using paragraph (l) of this section.

(l) *Monthly allowable HAP emissions.* This paragraph (l) provides the procedures and calculations for determining monthly allowable organic HAP emissions, H_a , for use in demonstrating compliance in accordance with paragraph (d), (h), (i)(1)(xi)(D), (i)(2)(xi)(D), or (k)(1)(xi)(D) of this section. You will need to determine the amount of material applied at ≥ 20 weight percent solids and the amount of material applied at < 20 weight percent solids. The allowable organic HAP limit is then calculated

based on material applied at ≥ 20 weight percent solids complying with 0.2 kg organic HAP per kg solids at existing sources or 0.08 kg organic HAP per kg solids at new sources, and material applied at < 20 weight percent solids complying with 4 weight percent organic HAP at existing sources and 1.6 weight-percent organic HAP at new sources, as follows:

(1) Determine the as-purchased mass of each coating material applied each month, M_i .

(2) Determine the as-purchased solids content of each coating material applied

each month, in accordance with § 63.3360(d)(1), C_{si} .

(3) Determine the as-purchased mass fraction of each coating material which was applied at 20 weight percent or greater solids content, on an as-applied basis, G_i .

(4) Determine the total mass of each solvent, diluent, thinner, or reducer added to coating materials which were applied at less than 20 weight percent solids content on an as-applied basis each month, M_{Lj} .

(5) Calculate the monthly allowable organic HAP emissions, H_a , using Equation 15a for existing sources:

$$H_a = 0.20 \left[\sum_{i=1}^p M_i G_i C_{si} \right] + 0.04 \left[\sum_{i=1}^p M_i (1 - G_i) + \sum_{j=1}^q M_{Lj} \right] \quad \text{Eq 15a}$$

or Equation 15b for new sources:

$$H_a = 0.08 \left[\sum_{i=1}^p M_i G_i C_{si} \right] + 0.016 \left[\sum_{i=1}^p M_i (1 - G_i) + \sum_{j=1}^q M_{Lj} \right] \quad \text{Eq 15b}$$

(m) [Reserved]

(n) *Combinations of capture and control.* If you operate more than one capture system, more than one control device, one or more never-controlled work stations, or one or more intermittently-controllable work stations, you must calculate HAP emissions according to the procedures in paragraphs (n)(1) through (4) of this section, and use the calculation procedures specified in paragraph (n)(5) of this section to convert the monitoring and other data into units of the selected control option in paragraphs (e) through (h) of this section. Use the procedures specified in paragraph (n)(7) of this section to demonstrate compliance.

(1) *Solvent recovery system using liquid-liquid balance compliance demonstration.* If you choose to comply by means of a liquid-liquid mass balance for each solvent recovery system used to control one or more coating lines, you must determine the organic HAP emissions for those coating lines controlled by that solvent recovery system either:

(i) In accordance with paragraphs (i)(1)(i) through (iii) and (v) through (vii) of this section if the coating lines controlled by that solvent recovery system have only always-controlled work stations; or

(ii) In accordance with paragraphs (i)(1)(ii) and (iii), (v) and (vi), and (o) of this section if the coating lines

controlled by that solvent recovery system have one or more never-controlled or intermittently-controllable work stations.

(2) *Solvent recovery system using performance test compliance demonstration and CEMS.* To demonstrate compliance through an initial test of capture efficiency, continuous monitoring of a capture system operating parameter, and a CEMS on each solvent recovery system used to control one or more coating lines, you must:

(i) For each capture system delivering emissions to that solvent recovery system, monitor the operating parameter established in accordance with § 63.3350(f) to ensure capture system efficiency; and

(ii) Determine the organic HAP emissions for those coating lines served by each capture system delivering emissions to that solvent recovery system either:

(A) In accordance with paragraphs (i)(2)(i) through (iii), (v) and (vi), and (viii) of this section if the coating lines served by that capture and control system have only always-controlled work stations; or

(B) In accordance with paragraphs (i)(2)(i) through (iii), (vi), and (o) of this section if the coating lines served by that capture and control system have one or more never-controlled or

intermittently-controllable work stations.

(3) *Oxidizer.* To demonstrate compliance through performance tests of capture efficiency and control device efficiency, continuous monitoring of capture system, and CPMS for control device operating parameters for each oxidizer used to control emissions from one or more coating lines, you must:

(i) Monitor the operating parameter established in accordance with § 63.3350(e) to ensure control device efficiency; and

(ii) For each capture system delivering emissions to that oxidizer, monitor the operating parameter established in accordance with § 63.3350(f) to ensure capture efficiency; and

(iii) Determine the organic HAP emissions for those coating lines served by each capture system delivering emissions to that oxidizer either:

(A) In accordance with paragraphs (k)(1)(i) through (v) and (vii) of this section if the coating lines served by that capture and control system have only always-controlled work stations; or

(B) In accordance with paragraphs (k)(1)(i) through (iii), (v), and (o) of this section if the coating lines served by that capture and control system have one or more never-controlled or intermittently-controllable work stations.

(4) *Uncontrolled coating lines.* If you own or operate one or more

uncontrolled coating lines, you must determine the organic HAP applied on those coating lines using Equation 8 of this section. The organic HAP emitted from an uncontrolled coating line is equal to the organic HAP applied on that coating line.

(5) Convert the information obtained under paragraphs (n)(1) through (4) of this section into the units of the selected compliance option using the calculation procedures specified in paragraphs (n)(5)(i) through (iv) of this section.

(i) *Organic HAP emitted, H_e .* Calculate the organic HAP emissions for the affected source for the month by summing all organic HAP emissions calculated according to paragraphs (n)(1), (2)(ii), (3)(iii), and (4) of this section.

(ii) *Solids applied, C_{asi} .* If demonstrating compliance on the basis of organic HAP emission rate based on solids applied or emission of less than the calculated allowable organic HAP, the owner or operator must determine the solids content of each coating material applied during the month following the procedure in § 63.3360(d).

(iii) *Organic HAP emission rate based on solids applied, L .* Calculate the organic HAP emission rate based on solids applied, L , for each month using Equation 11 of this section.

(iv) *Organic HAP based on materials applied, S .* Calculate the organic HAP

emission rate based on material applied, S , using Equation 12 of this section.

(6) *Compliance.* The affected source is in compliance with the emission limitations in § 63.3320(b) for the month if all operating parameters required to be monitored under paragraphs (n)(1) through (3) of this section were maintained at the values established under §§ 63.3350 and 63.3360; and

(i) The total mass of organic HAP emitted by the affected source based on solids applied, L , is no more than 0.20 kg organic HAP per kg solids applied at an existing source, and no more than 0.08 kg organic HAP per kg solids applied at a new source; or

(ii) The total mass of organic HAP emitted by the affected source based on material applied, S , is no more than 0.04 kg organic HAP per kg material applied at an existing source, and no more than 0.016 kg organic HAP per kg material applied at a new source; or

(iii) The total mass of organic HAP emitted by the affected source during the month, H_e , is less than the calculated allowable organic HAP, H_a , as determined using paragraph (l) of this section; or

(iv) The total mass of organic HAP emitted by the affected source was not more than 5 percent of the total mass of organic HAP applied for the month at an existing source, and no more than 2 percent of the total mass of organic HAP applied for the month at a new source.

The total mass of organic HAP applied by the affected source in the month must be determined by the owner or operator using Equation 8 of this section.

(o) *Intermittently-controllable and never-controlled work stations.* If you have been expressly referenced to this paragraph by paragraphs (n)(1)(ii), (n)(2)(ii)(B), or (n)(3)(iii)(B) of this section for calculation procedures to determine organic HAP emissions for your intermittently-controllable and never-controlled work stations you must:

(1) Determine the sum of the mass of all coating materials as-applied on intermittently-controllable work stations operating in bypass mode and the mass of all coating materials as-applied on never-controlled work stations during the month, M_{Bi} .

(2) Determine the sum of the mass of all coating materials as-applied on intermittently-controllable work stations operating in a controlled mode and the mass of all coating materials applied on always-controlled work stations during the month, M_{Ci} .

(3) *Liquid-liquid compliance demonstration.* For each coating line or group of coating lines for which you use the provisions of paragraph (n)(1)(ii) of this section, you must calculate the organic HAP emitted during the month using Equation 16:

$$H_e = \left[\sum_{i=1}^p M_{Ci} C_{ahi} \right] \left[1 - \frac{R_v}{100} \right] + \left[\sum_{i=1}^p M_{Bi} C_{ahi} \right] \quad \text{Eq 16}$$

(4) *Performance test to determine capture efficiency and control device efficiency.* For each coating line or

group of coating lines for which you use the provisions of paragraph (n)(2)(ii)(B) or (n)(3)(iii)(B) of this section, you must

calculate the organic HAP emitted during the month, H_e , using Equation 17:

$$H_e = \left[\sum_{i=1}^p M_{Ci} C_{ahi} \right] \left[1 - \left(\frac{E}{100} \frac{CE}{100} \right) \right] + \left[\sum_{i=1}^p M_{Bi} C_{ahi} \right] \quad \text{Eq 17}$$

(p) *Always-controlled work stations with more than one capture and control system.* If you operate more than one capture system or more than one control device, and only have always-controlled work stations, then you are in compliance with the emission limitation in § 63.3320(b)(1) for the month if for each coating line or group of coating lines controlled by a common control device:

(1) The volatile matter collection and recovery efficiency, R_v , as determined by paragraphs (i)(1)(i), (iii), (v), and (vi)

of this section, is at least 95 percent at an existing source and at least 98 percent at a new source; or

(2) The overall organic HAP control efficiency as determined by paragraphs (i)(2)(i) through (v) of this section for each coating line or group of coating lines served by that control device and a common capture system is at least 95 percent at an existing source and at least 98 percent at a new source; or

(3) The overall organic HAP control efficiency as determined by paragraphs (k)(1)(i) through (iii) and (k)(2)(i) of this

section for each coating line or group of coating lines served by that control device and a common capture system is at least 95 percent at an existing source and at least 98 percent at a new source.

Reports and Records

§ 63.3400 What reports must I submit?

(a) Each owner or operator of an affected source subject to this subpart must submit the reports specified in paragraphs (b) through (h) of this section to the Administrator:

(b) You must submit an initial notification as required by § 63.9(b).

(1) Initial notification for existing sources must be submitted no later than 1 year before the compliance date specified in § 63.3330(a).

(2) Initial notification for new and reconstructed sources must be submitted as required by § 63.9(b).

(3) For the purpose of this rule, a title V or part 70 permit application may be used in lieu of the initial notification required under § 63.9(b), provided the same information is contained in the permit application as required by § 63.9(b), and the State to which the permit application has been submitted has an approved operating permit program under part 70 of this chapter and has received delegation of authority from EPA to implement and enforce this subpart.

(4) If you are using a permit application in lieu of an initial notification in accordance with paragraph (b)(3) of this section, the permit application must be submitted by the same due date specified for the initial notification.

(c) You must submit a semi-annual compliance report according to paragraphs (c)(1) and (2) of this section.

(1) Compliance report dates.

(i) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in § 63.3330(a) and ending on June 30 or December 31, whichever date is the first date following the end of the calendar half immediately following the compliance date that is specified for your source in § 63.3330(a).

(ii) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the calendar half immediately following the compliance date that is specified for your affected source in § 63.3330(a).

(iii) 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.

(iv) 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.

(v) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and the permitting authority has established dates for submitting semiannual reports pursuant to § 70.6(a)(3)(iii)(A) or § 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 (c)(1)(i) through (iv) of this section.

(2) The compliance report must contain the following information in paragraphs (c)(2)(i) through (vi) of this section:

(i) Company name and address.

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

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

(iv) If there are no deviations from any emission limitations (emission limit or operating limit) that apply to you, a statement that there were no deviations from the emission limitations during the reporting period, and that no continuous monitoring system (CMS) was inoperative, inactive, malfunctioning, out-of-control, repaired, or adjusted.

(v) For each deviation from an emission limitation (emission limit or operating limit) that applies to you that occurs at an affected source where you are not using a CEMS to comply with the emission limitations in this subpart, the compliance report must contain the information in paragraphs (c)(2)(i) through (iii) of this section, and:

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

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

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

(vi) For each deviation from an emission limit occurring at an affected source where you are using a CEMS to comply with the emission limit in this subpart, you must include the information in paragraphs (c)(2)(i) through (iii) and (vi)(A) through (J) of this section.

(A) The date and time that each malfunction started and stopped.

(B) The date and time that each CEMS and CPMS, if applicable, was inoperative, except for zero (low-level) and high-level checks.

(C) The date and time that each CEMS and CPMS, if applicable, was out-of-control, including the information in § 63.8(c)(8).

(D) The date and time that each deviation started and stopped, and whether each deviation occurred during

a period of start-up, shutdown, or malfunction or during another period.

(E) A summary of the total duration (in hours) of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

(F) A breakdown of the total duration of the deviations during the reporting period into those that are due to start-up, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(G) A summary of the total duration (in hours) of CEMS and CPMS downtime during the reporting period, and the total duration of CEMS and CPMS downtime as a percent of the total source operating time during that reporting period.

(H) A breakdown of the total duration of CEMS and CPMS downtime during the reporting period into periods that are due to monitoring equipment malfunctions, nonmonitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes.

(I) The date of the latest CEMS and CPMS certification or audit.

(J) A description of any changes in CEMS, CPMS, or controls since the last reporting period.

(d) You must submit a Notification of Performance Tests as specified in §§ 63.7 and 63.9(e) if you are complying with the emission standard using a control device and you are required to conduct a performance test. This notification, and the site-specific test plan required under § 63.7(c)(2), must identify the operating parameters to be monitored to ensure that the capture efficiency of the capture system and the control efficiency of the control device measured during the performance test is maintained. Unless EPA objects to the parameter or requests changes, you may consider the parameter approved.

(e) You must submit a Notification of Compliance Status as specified in § 63.9(h).

(f) You must submit performance test reports as specified in § 63.10(d)(2) if you are using a control device to comply with the emission standard, and you have not obtained a waiver from the performance test requirement or you are not exempted from this requirement by § 63.3360(b). The performance test must be submitted as part of the notification of compliance status required in § 63.3400(i).

(g) You must submit start-up, shutdown, and malfunction reports as specified in § 63.10(d)(5), except that the provisions in subpart A of this part

pertaining to start-ups, shutdowns, and malfunctions do not apply unless a control device is used to comply with this subpart.

(1) If actions taken by an owner or operator during a start-up, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are not completely consistent with the procedures specified in the source's start-up, shutdown, and malfunction plan required by § 63.6(e)(3), the owner or operator must state such information in the report. The start-up, shutdown, or malfunction report must consist of a letter containing the name, title, and signature of the responsible official who is certifying its accuracy and must be submitted to the Administrator.

(2) Separate start-up, shutdown, or malfunction reports are not required if the information is included in the report specified in paragraph (c)(2)(vi) of this section.

§ 63.3410 What records must I keep?

(a) Each owner or operator of an affected source subject to this subpart must maintain the records specified in paragraphs (a)(1) through (3) of this section on a monthly basis in

accordance with the requirements of § 63.10(b)(1):

(1) Records specified in § 63.10(b)(2) of all measurements needed to demonstrate compliance with this standard, including:

(i) Continuous emission monitor data in accordance with the requirements of § 63.3350(d);

(ii) Control device and capture system operating parameter data in accordance with the requirements of § 63.3350(c), (e), and (f);

(iii) Organic HAP content data for the purpose of demonstrating compliance in accordance with the requirements of § 63.3360(c);

(iv) Volatile matter and solids content data for the purpose of demonstrating compliance in accordance with the requirements of § 63.3360(d);

(v) Overall control efficiency determination using capture efficiency test and oxidizer destruction efficiency test in accordance with the requirements of § 63.3360(e) and (f); and

(vi) Material usage, HAP usage, volatile matter usage, and solids usage and compliance demonstrations using these data in accordance with the requirements of § 63.3370(b), (c), and (e).

(2) Records specified in § 63.10(c) for each continuous monitoring system

operated by the owner or operator in accordance with the requirements of § 63.3350(b).

(b) Each owner or operator of an affected source subject to this subpart must maintain records of all liquid-liquid material balances performed in accordance with the requirements of § 63.3370. The records must be maintained in accordance with the requirements of § 63.10(b).

Delegation of Authority

§ 63.3420 What authorities may be delegated to the States?

(a) In delegating implementation and enforcement authority to a State under 40 CFR part 63, subpart E, the authorities contained in paragraph (b) of this section must be retained by the Administrator and not transferred to a State.

(b) Authority which will not be delegated to States: § 63.3360(c), approval of alternate test method for organic HAP content determination; § 63.3360(d), approval of alternate test method for volatile matter determination.

§§ 63.3421–63.3479 [Reserved]

Tables

TABLE 1 TO SUBPART JJJJ.—APPLICABILITY OF 40 CFR PART 63 GENERAL PROVISIONS TO SUBPART JJJJ

General provisions reference	Applicable to subpart JJJJ	Explanation
§ 63.1(a)(1)–(4)	Yes.	
§ 63.1(a)(5)	No	Reserved.
§ 63.1(a)(6)–(8)	Yes.	
§ 63.1(a)(9)	No	Reserved.
§ 63.1(a)(10)–(14)	Yes.	
§ 63.1(b)(1)	No	Subpart JJJJ specifies applicability.
§ 63.1(b)(2)–(3)	Yes.	
§ 63.1(c)(1)	Yes.	
§ 63.1(c)(2)	No	Area sources are not subject to emission standards of subpart JJJJ.
§ 63.1(c)(3)	No	Reserved.
§ 63.1(c)(4)	Yes.	
§ 63.1(c)(5)	Yes.	
§ 63.1(d)	No	Reserved.
§ 63.1(e)	Yes.	
§ 63.2	Yes	Additional definitions in subpart JJJJ.
§ 63.3(a)–(c)	Yes.	
§ 63.4(a)(1)–(3)	Yes.	
§ 63.4(a)(4)	No	Reserved.
§ 63.4(a)(5)	Yes.	
§ 63.4(b)–(c)	Yes.	
§ 63.5(a)(1)–(2)	Yes.	
§ 63.5(b)(1)	Yes.	
§ 63.5(b)(2)	No	Reserved.
§ 63.5(b)(3)–(6)	Yes.	
§ 63.5(c)	No	Reserved.
§ 63.5(d)	Yes.	
§ 63.5(e)	Yes.	
§ 63.5(f)	Yes.	
§ 63.6(a)	Yes	Applies only when capture and control system is used to comply with the standard.
§ 63.6(b)(1)–(5)	Yes.	
§ 63.6(b)(6)	No	Reserved.

TABLE 1 TO SUBPART JJJJ.—APPLICABILITY OF 40 CFR PART 63 GENERAL PROVISIONS TO SUBPART JJJJ—Continued

General provisions reference	Applicable to subpart JJJJ	Explanation
§ 63.6(b)(7)	Yes.	
§ 63.6(c)(1)–(2)	Yes.	
§ 63.6(c)(3)–(4)	No	Reserved.
§ 63.6(c)(5)	Yes.	
§ 63.6(d)	No	Reserved.
§ 63.6(e)	Yes	Provisions pertaining to start-ups, shutdowns, malfunctions, and CMS do not apply unless an add-on control system is used.
§ 63.6(f)	Yes.	
§ 63.6(g)	Yes.	
§ 63.6(h)	No	Subpart JJJJ does not require continuous opacity monitoring systems (COMS).
§ 63.6(i)(1)–(14)	Yes.	
§ 63.6(i)(15)	No	Reserved.
§ 63.6(i)(16)	Yes.	
§ 63.6(j)	Yes.	
§ 63.7	Yes	Except § 63.3330 specifies that performance tests at existing sources must be conducted by the compliance date.
§ 63.8(a)(1)–(2)	Yes.	
§ 63.8(a)(3)	No	Reserved.
§ 63.8(a)(4)	Yes.	
§ 63.8(b)	Yes.	
§ 63.8(c)(1)–(3)	Yes	§ 63.8(c)(1)(i) & (ii) only apply if you use capture and control systems and are required to have a start-up, shutdown, and malfunction plan.
§ 63.8(c)(4)	Yes.	
§ 63.8(c)(5)	No	Subpart JJJJ does Not require COMS.
§ 63.8(c)(6)–(c)(8)	Yes	Provisions for COMS are Not applicable.
§ 63.8(d)–(f)	Yes	§ 63.8(f)(6) only applies if you use CEMS.
§ 63.8(g)	Yes	Only applies if you use CEMS.
§ 63.9(a)	Yes.	
§ 63.9(b)(1)	Yes.	
§ 63.9(b)(2)	Yes	Except § 63.3400(b)(1)(i) requires submittal of initial notification for existing sources no later than 1 year before compliance date.
§ 63.9(b)(3)–(5)	Yes.	
§ 63.9(c)–(e)	Yes.	
§ 63.9(f)	No	Subpart JJJJ does not require opacity and visible emissions observations.
§ 63.9(g)	Yes	Provisions for COMS are not applicable.
§ 63.9(h)(1)–(3)	Yes.	
§ 63.9(h)(4)	No	Reserved.
§ 63.9(h)(5)–(6)	Yes.	
§ 63.9(i)	Yes.	
§ 63.9(j)	Yes.	
§ 63.10(a)	Yes.	
§ 63.10(b)(1)–(3)	Yes	§ 63.10(b)(2)(i) through (v) only apply if you use a capture and control system.
§ 63.10(c)(1)	Yes.	
§ 63.10(c)(2)–(4)	No	Reserved.
§ 63.10(c)(5)–(8)	Yes.	
§ 63.10(c)(9)	No	Reserved.
§ 63.10(c)(10)–(15)	Yes.	
§ 63.10(d)(1)–(2)	Yes.	
§ 63.10(d)(3)	No	Subpart JJJJ does not require opacity and visible emissions observations.
§ 63.10(d)(4)–(5)	Yes.	
§ 63.10(e)(1)–(2)	Yes	Provisions for COMS are not applicable.
§ 63.10(e)(3)	No.	
§ 63.10(f)	Yes.	
§ 63.11	Yes.	
§ 63.12	Yes.	
§ 63.13	Yes.	
§ 63.14	Yes.	
§ 63.15	Yes.	